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Quartz-crushing mill	G. T. and W. F. Kearsing	Butte City, Cal	July 26, 1859	24, 878
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Quartz-mill cam	O. P. Hart	Logtown, Cal	Feb. 7, 1871	111, 643
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Quartz-mills, Attaching the grinding-surfaces of	E. Coleman	New York, N. Y	Apr. 3, 1860	27, 695
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Quartz-pulverizer	R. H. Collyer	San Francisco, Cal	Jan. 3, 1854	10, 388
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Quartz pulverizing and crushing machinery	J. C. Dickey	Saratoga Springs, N. Y	Sept. 15, 1863	39, 899
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Quartz-pulverizing machine	C. Howell	Cleveland, Ohio	Jan. 6, 1863	37, 322
Quartz-rock, &c., Machine for breaking	S. F. Hodge	Detroit, Mich	Dec. 4, 1860	30, 822
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Quartz-stamp mill	P. M. Papin	Saint Louis, Mo	Apr. 28, 1868	77, 401
Quartz-stamp mill	W. Wright	New York, N. Y	Nov. 27, 1866	60, 110
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Quicksilver and amalgam saving apparatus, Electro-galvanic.	J. Potts	Treasure Hill, Nev	Aug. 20, 1872	130, 658
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Quicksilver, Apparatus for gathering	M. B. Dodge	New York, N. Y	Mar. 7, 1865	46, 645
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Quicksilver-furnace and condenser	T. W. Dresser	San Francisco, Cal	Dec. 29, 1868	85, 371
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Quicksilver, Purifying	J. B. Randol and C. W. Wright	New Almaden, Cal	Nov. 25, 1873	144, 923
Quicksilver to stamps and amalgamators, Feeding	G. C. Munson	Empire City, Colo	Feb. 7, 1871	111, 669
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Quilting-frame	B. Blackstone	Warren, Ill	Apr. 29, 1873	138, 369
Quilting-frame	A. Brown	Rochester, N. Y	June 15, 1858	20, 543
Quilting-frame	L. A. Collard	Plain View, Minn	July 7, 1868	79, 552
Quilting-frame	C. H. Cook	Coeyman's Hollow, N. Y	July 9, 1850	7, 488
Quilting-frame	J. A. Cookerly	Middletown, Md	June 7, 1870	103, 987
Quilting-frame	H. N. Dewey	Berlin Heights, Ohio	Nov. 10, 1857	18, 621
Quilting-frame	A. E. Ellis	Friendsville, Ill	Dec. 28, 1869	98, 361
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Quilting-frame	J. King	Little Falls, N. Y	June 29, 1858	20, 764
Quilting-frame	P. H. Mellon	Saint Louis, Mo	June 16, 1868	78, 989
Quilting-frame	S. H. Nesbit	Monmouth, Ill	Aug. 4, 1868	80, 760
Quilting-frame	J. L. Newton	Black Brook, N. Y	Aug. 28, 1860	29, 811
Quilting-frame	J. Odell	Petroleum Centre, Pa	Apr. 27, 1869	89, 427
Quilting-frame	A. Osborn	Morris, N. Y	Mar. 26, 1861	31, 821
Quilting-frame	B. F. Partridge	Syracuse, N. Y	Apr. 23, 1867	64, 137
Quilting-frame	G. Phillips	Biddeford, Me	Sept. 2, 1873	142, 411
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Quilting-frame	W. J. Simmons	Chariton, Iowa	May 4, 1869	89, 799
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Quilting-frame	D. F. Wallace	Ripley, Ohio	Aug. 25, 1868	81, 440
Quilting-frame	J. Wetherill	Manchester, Conn	Apr. 12, 1859	23, 631
Quilting-frame	A. S. Winner	Clark County, Ill	June 11, 1867	65, 627
Quilting-frame	G. C. Winters	Winfield, Mich	Aug. 17, 1869	93, 784
Quilting frame and apparatus	A. Kaufman	Orrstown, Pa	Jan. 1, 1851	7, 873
Quilting-frame and clothes-drier	J. G. Ishler	Martinsville, Ill	Feb. 9, 1869	86, 895
Quilting-frame and clothes-drier	J. G. Ishler	Martinsville, Ill	Dec. 28, 1869	98, 386
Quilting-frame and clothes-drier	G. A. Mallory and J. J. Fish	Oxford, N. Y	Nov. 12, 1867	70, 871
Quilting-frame and clothes-drier	M. Simpkins	East Florence, N. Y	Jan. 26, 1869	86, 254
Quilting-frame coupling	J. W. Webb	Mount Morris, N. Y	Mar. 30, 1843	3, 018
Quilting-frame holder	N. Young	Parma, Mich	Aug. 16, 1870	106, 446
Quilting-frame, table, and clothes-drier, Combined	B. Fagan	New Britain, Conn	Mar. 19, 1861	31, 706
Quilting-machine	I. Happe and W. Newman	New York, N. Y	Aug. 20, 1872	130, 715
Quilting-machine	W. J. Tate	Philadelphia, Pa	Aug. 22, 1871	118, 404

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Rabbeting-machine	J. J. and T. Clark	Elgin, Ill	Aug. 10, 1869	93, 519
Rachet-feed, Reversible	A. B. Bean	New Haven, Conn	Dec. 1, 1868	84, 527

Rack:

See Bath-room rack. Billiard-cue rack. Billiard-room rack. Blind-rack. Book-rack. Boot-rack. Bottle-rack. Brush-rack. Bundle-rack. Car-rack. Card-rack. Carding-engine rack. Chart-rack. Cloth-rack. Clothes-rack. Cow-rack. Cue-rack. Curtain-rack. Curtain-cord rack. Curtain-fixture rack. Dish-rack. Dry-goods rack. Feed-rack. Filter-rack. Flume-rack. Hat-rack. Hat and bundle rack. Hat and coat rack. Hat and dish rack. Hay-rack. Hay and grain rack. Journal-packingrack. Knife and fork rack. Lumber-rack. Map-rack. Milk-rack. Milk and cheese rack. Milk and provision rack. Milk-pan rack. Music-rack. Pen-rack. Photographer's dripping and drying rack. Pool-ball rack. Printer's lead-rack. Sheep-rack. Table-rack. Toast-rack. Toilet-rack. Towel-rack. Towel and clothes rack. Wagon-rack. Wagon-brake rack. Water-rack. Water-wheel rack. Wheel-rack. Whip-rack. Window-rack. Wood-rack. Wrench-rack.

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Rack and pinion	A. C. Semple	Cincinnati, Ohio	June 27, 1818	5, 647
Rack and store-shelf	J. Grilliford	Girard, Pa	Mar. 27, 1866	53, 441
Rack-bolt for doors, &c	J. Brown and G. W. Robinson	Providence, R. I	Feb. 24, 1826	....
Rack or shelf, Adjustable	G. Sickels	Boston, Mass	Feb. 19, 1867	62, 150
Rack-wrench	S. Merrick	Springfield, Mass	Apr. 18, 1834	....
Rack-wrench	J. C. Terry	Springfield, Mass	Feb. 20, 1843	2, 966
Radiating attachment for flue, Heat	W. P. Merrill	Milwaukee, Wis	Dec. 13, 1864	45, 425
Radiating-furnace, Portable	M. Mead	Lowell, Mass	Oct. 29, 1867	70, 347
Radiating-heat regulator	A. Edwards	Chicago, Ill	Sept. 13, 1864	44, 170
Radiating or boiler plate	A. L. Pennock	Philadelphia, Pa	Apr. 26, 1870	102, 312
Radiating-surface	J. K. Ingalls	Bushwick, N. Y	Nov. 4, 1851	8, 487
Radiation and conduction of heat, Composition for preventing	J. Spence	Newcastle, Great Britain	Nov. 9, 1869	96, 738
Radiator	E. S. Blake	Pittsburgh, Pa	Dec. 15, 1868	84, 989
Radiator	E. Bourne	Pittsburgh, Pa	Oct. 4, 1870	108, 001
Radiator	E. and J. Bourne	Pittsburgh, Pa	Aug. 5, 1862	36, 068
Radiator	L. Burnell	Milwaukee, Wis	June 9, 1863	38, 809

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Radiator	J. Gross	Ridgeville, Canada	Jan. 16, 1872	122, 720
Radiator	J. A. Lakin	Thompsonville, Conn	July 14, 1868	79, 841
Radiator	R. Robinson	Newburyport, Mass	July 25, 1848	5, 678
Radiator	W. Steffe	Philadelphia, Pa	Aug. 11, 1868	80, 883
Radiator	J. R. Supplee	Bridgeport, Pa	Feb. 19, 1861	31, 493
Radiator	W. Washburn	Boston, Mass	Aug. 9, 1864	43, 810
Radiator attachment, Heat	J. B. Hyzer	Janesville, Wis	Sept. 13, 1864	44, 197
Radiator for fire-place grates and Franklin stoves	W. Bennett	New York, N. Y	Jan. 27, 1857	16, 459
Radiator for hatters' kettle, Steam	J. S. Rice	Newark, N. J	Oct. 22, 1867	70, 021
Radiator for heating apartments, Portable steam	I. H. Chester	Cincinnati, Ohio	June 30, 1857	17, 666
Radiator for heating buildings, &c., by combustion of gas or alcohol.	I. H. Chester	Cincinnati, Ohio	July 13, 1858	20, 917
Radiator for steam-heaters	G. W. Walker	Boston, Mass	July 30, 1872	130, 088
Radiator for stove-pipes, Caloric	B. F. Miller	New York, N. Y	Jan. 22, 1867	61, 443
Radiator for stove-pipes, Heat	E. Detwiler	Milwaukee, Wis	Dec. 18, 1866	60, 490
Radiator for stove-pipes, Heat	N. W. Goodrich	Meriden, Conn	Sept. 19, 1865	50, 069
Radiator for stoves, Heat	W. E. Rennolds	Chicago, Ill	Mar. 21, 1865	46, 941
Radiator, Heat	A. Albee	Worcester, Mass	Oct. 26, 1869	96, 071
Radiator, Heat	W. Brown	Sandusky, Ohio	Oct. 12, 1869	95, 644
Radiator, Heat	W. B. Choate	Galt, Canada West	Nov. 17, 1868	84, 089
Radiator, Heat	M. Colvin	Rochester, N. Y	June 22, 1852	9, 048
Radiator, Heat	J. Conver and J. Bothwick	Philadelphia, Pa	Aug. 28, 1866	57, 481
Radiator, Heat	A. Edwards	Chicago, Ill	July 4, 1865	48, 540
Radiator, Heat	A. C. Edwards	Southampton, Mass	Jan. 5, 1864	41, 061
Radiator, Heat	D. G. Fletcher	Racine, Wis	Apr. 17, 1860	27, 950
Radiator, Heat	D. G. Fletcher	Racine, Wis	May 2, 1865	47, 535
Radiator, Heat	C. B. Hall	Racine, Wis	Dec. 13, 1864	45, 404
Radiator, Heat	J. B. Hyzer	Janesville, Wis	May 22, 1866	54, 912
Radiator, Heat	S. B. Lill	Three Rivers, Mich	Jan. 28, 1868	73, 842
Radiator, Heat	S. M. Pike	Cincinnati, Ohio	Nov. 9, 1869	96, 613
Radiator, Heat	H. Rugee	Milwaukee, Wis	Feb. 21, 1865	46, 500
Radiator, Heat	D. F. Sweet	Otsego, Mich	May 4, 1869	89, 701
Radiator, Hot-water	T. T. Tasker	Philadelphia, Pa	Mar. 9, 1858	19, 591
Radiator, Indirect steam	J. H. Mills	Boston, Mass	Dec. 30, 1873	145, 961
Radiator of steam-heating apparatus	A. S. Pelton	Clinton, Conn	Oct. 9, 1855	13, 654
Radiator, Steam	V. D. Anderson	Kewanee, Ill	May 16, 1871	114, 902
Radiator, Steam	A. C. Baker	Westfield, Mass	June 14, 1870	104, 246
Radiator, Steam	W. C. Baker	New York, N. Y	Apr. 21, 1863	28, 211
Radiator, Steam	T. B. Belfield	Philadelphia, Pa	Sept. 25, 1866	58, 202
Radiator, Steam	R. Berryman	Hartford, Conn	Feb. 11, 1873	135, 758
Radiator, Steam	G. W. Blake	New York, N. Y	Feb. 14, 1871	111, 721
Radiator, Steam	E. M. Bosley	Baltimore, Md	May 9, 1871	114, 522
Radiator, Steam	R. T. Crane	Chicago, Ill	Apr. 14, 1863	38, 154
Radiator, Steam	L. S. Daniels	Foxborough, Mass	Nov. 8, 1870	108, 978
Radiator, Steam	L. S. Daniels	Foxborough, Mass	Feb. 11, 1873	135, 633
Radiator, Steam	E. P. Doyen	Portland, Me	Dec. 19, 1871	122, 000
Radiator, Steam	H. W. Evans	Philadelphia, Pa	June 29, 1869	91, 834
Radiator, Steam	J. L. Frisbie	Brooklyn, N. Y	Jan. 24, 1871	111, 192
Radiator, Steam	A. S. Hart	Buffalo, N. Y	Feb. 16, 1864	41, 619
Radiator, Steam	L. M. Hills	New Haven, Conn	Jan. 6, 1863	37, 343
Radiator, Steam	E. L. Hinckley	Bath, Me	Feb. 11, 1873	135, 645
Radiator, Steam	J. H. Holt and J. H. Gerould	Chicago, Ill	Dec. 14, 1858	22, 289
Radiator, Steam	H. Howard	Springfield, Mass	Sept. 25, 1866	58, 258
Radiator, Steam	A. L. Ide	Springfield, Ill	Nov. 25, 1873	144, 981
Radiator, Steam	J. A. Morse and G. D. Hiscox	Englewood, N. J., and Brooklyn, N. Y.	Nov. 9, 1869	96, 607
Radiator, Steam	J. Nason and R. Briggs	New York and Brooklyn, N. Y.	Mar. 11, 1862	34, 643
Radiator, Steam	A. P. Pitkin	Hartford, Conn	June 12, 1860	28, 686
Radiator, Steam	S. Sanders	Springfield, Mass	June 21, 1870	104, 501
Radiator, Steam	J. Shackleton	Rahway, N. J	Apr. 5, 1870	101, 668
Radiator, Steam	J. J. Smith	New York, N. Y	Apr. 21, 1863	38, 247
Radiator, Steam	C. Whittier	Boston, Mass	Nov. 10, 1868	84, 037
Radiator, Steam	C. A. Wilson	Cincinnati, Ohio	July 26, 1859	24, 897
Radiator, Steam	J. P. Wilson	Yonkers, N. Y	May 6, 1873	138, 722
Radiator, Steam-heater	A. B. Smith	Geneva, N. Y	July 30, 1872	129, 994
Radiator, Steam-heating	G. W. Blake	New York, N. Y	Sept. 13, 1864	44, 156
Radiator, Stove	W. P. and H. A. Adams	Norwich, Conn	Mar. 14, 1865	46, 765
Radiator, Stove	E. A. Andrews	Boston, Mass	May 30, 1837	205
Radiator, Stove	C. P. Crossman and J. B. Brown	Warren, Mass	Oct. 9, 1860	30, 301
Radiator, Stove	J. C. Fletcher	Burlington, Iowa	May 24, 1853	9, 745
Radiator, Stove	S. D. Tillman	Seneca Falls, N. Y	Apr. 26, 1853	9, 690
Radiator, Stove	C. Williams	Vineland, N. J	May 7, 1872	126, 431
Radiator, Syphonic	C. Williams	Brooklyn, N. Y	Apr. 27, 1858	20, 132
Radiator tube, Steam	N. H. Bundy	New York, N. Y	July 30, 1872	130, 013
Raft	W. Deane	Pittsburgh, Pa	Nov. 4, 1805	....
Raft	D. Quinn	Chicago, Ill	Nov. 3, 1868	83, 662
Raft-clip	I. Corwin	Defiance, Ohio	July 25, 1871	117, 387
Raft-dog	C. C. Comstock	Grand Rapids, Mich	May 19, 1868	77, 961
Raft, Lumber	G. W. Towar	Detroit, Mich	Apr. 28, 1863	38, 343
Raft-towing apparatus	E. O. Shepardson	Saint Louis, Mo	Feb. 22, 1870	100, 197
Raft, Wreck	A. Du Buc Marentille	....	Mar. 18, 1803	....
Rafts, Connection for barrel	R. W. Park	Allegheny City, Pa	Feb. 23, 1864	41, 717
Rafts, Constructing	H. Babb	Westbrook, Me	Jan. 13, 1824	....
Rafts, Construction of	I. T. Moore and R. K. Hawley	Havre de Grace and Baltimore, Md.	Mar. 12, 1872	124, 504
Rafter-hook	J. N. Bebout	Oberlin, Ohio	Aug. 8, 1871	117, 729
Rafter-hook	C. G. Buttkereit	Toledo, Iowa	June 25, 1872	128, 281
Rafter press, Triple	R. Bradley	Natchez, Miss	June 4, 1834	....
Rafters, Instrument for laying out	L. Crofoot	Syracuse, N. Y	Aug. 26, 1856	15, 600
Rafting-dog	G. E. Dowling and S. F. Cone	Montague, Mich	Aug. 8, 1871	117, 752
Rafting logs and timber, Mode of	N. C. Bouk	Clinton, Iowa	Oct. 28, 1862	36, 764
Rafting-pin	T. B. Raymond	Saginaw, Mich	Oct. 23, 1866	59, 072
Rag-cleaner	G. L. Witsil	Saint Louis, Mo	Dec. 8, 1868	84, 850
Rag-cleaning and dusting machine	S. E. Foster	Brattleborough, Vt	June 1, 1832	....
Rag-cleaning machine	G. Carriel	Manchester, Conn	Feb. 7, 1832	....

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Invention.	Inventor.	Residence.	Date.	No.
Rag-cutter	J. W. Barbour	Winooski Falls, Vt	Jan. 11, 1870	98, 699
Rag-cutter-scythe holder	E. D. Aldrich	Pittsfield, Mass	Dec. 16, 1873	145, 475
Rag-cutting engine	E. Wilkinson	Paterson, N. J	Sept. 5, 1871	118, 767
Rag-cutting machine	A. Allen	Chicago, Ill	Mar. 10, 1868	75, 341
Rag-cutting machine	A. T. Bennett and W. O. Anderson.	Cincinnati, Ohio	Aug. 4, 1868	80, 531
Rag-cutting machine	J. Collins, jr	Detroit, Mich	Feb. 18, 1868	74, 506
Rag-cutting machine	J. Collins, jr., and N. R. Nixon	Richmond, Ind	Jan. 28, 1868	73, 695
Rag-cutting machine	A. E. Crosby	Glastenbury, Conn	Jan. 5, 1869	85, 512
Rag-cutting machine	A. E. Crosby	Hartford, Conn	Jan. 5, 1869	85, 513
Rag-duster	E. Burt	Manchester, Conn	Sept. 14, 1838	920
Rag-dusting machine	E. Burt and G. Carriel	Manchester, Conn	Nov. 28, 1836	93
Rag-engine of paper-making machine	J. Faw	Lockland, Ohio	June 2, 1863	38, 735
Rag or paper engines, Bed-plate for	G. A. Corser	Leicester, Mass	Feb. 11, 1873	135, 631
Rag or paper engines, Bed-plate for	A. Hankey	Leicester, Mass	Mar. 22, 1870	101, 008
Rags, Breaking or tearing	M. Marshall	Lowell, Mass	Dec. 10, 1872	133, 787
Rags, Cleaning	G. Carriel	Manchester, Conn	July 1, 1836	....
Rags, Dusting	E. Burt and G. Carriel	Manchester, Conn	Nov. 28, 1836	....
Rail and car wheel	J. Valentine	New York, N. Y	Apr. 6, 1852	8, 867
Rail and chair, Self-acting expansion	W. Close	Sacramento, Cal	July 2, 1872	128, 592
Rail-chair	L. S. Shreffer	Elmira, N. Y	Mar. 5, 1872	124, 226
Rail-clamp joint	F. Pidjeon	Saugerties, N. Y	Nov. 5, 1867	70, 606
Rail, Compound	B. H. Latrobe	Baltimore, Md	Sept. 5, 1848	5, 749
Rail, Compound	R. H. Middleton	Alexandria, Va	May 31, 1853	9, 755
Rail, Compound	E. R. Shepard	Scranton, Pa	Oct. 26, 1869	96, 276
Rail, Compound tubular	A. B. Seymour	New York, N. Y	Apr. 16, 1850	7, 295
Rail, Guard	W. Wharton, jr	Philadelphia, Pa	June 4, 1872	127, 665
Rail, Hand	M. M. Manley	Philadelphia, Pa	Apr. 23, 1872	125, 898
Rail-joint	W. F. Grassler	Muncy, Pa	May 2, 1871	114, 433
Rail-joint, Adjustable	J. R. Sullivan	Woodland, Cal	Oct. 31, 1871	120, 547
Rail joint or splice	J. C. Rupp	Newark, Del	June 27, 1871	116, 494
Rail joint, T	E. U. Benedict	Horicon, Wis	Sept. 14, 1858	21, 480
Rail joint, T	W. Harvey	Albany, N. Y	Nov. 2, 1858	21, 957
Rail-lifter	A. Wilson	Oxford, Pa	Aug. 22, 1871	118, 413
Rail-plate	A. M. McCaine	Montgomery, Ala	Mar. 31, 1836	....
Rail-rolling apparatus	H. Baines	Manchester, England	Sept. 17, 1867	68, 936
Rail-set	G. Patterson	Augusta, Mich	Jan. 7, 1868	73, 033
Rail-sharpening device	J. Ayres	Branchville, N. J	Dec. 29, 1868	85, 265
Rail splice, Bar	W. M. C. Cushman	Albany, N. Y	Feb. 1, 1859	22, 785
Rail-splicing chair	R. S. Potter	Chicago, Ill	Apr. 5, 1859	23, 493
Rail-ties, Bolt-fastening for	C. H. Crosby	Boston, Mass	Jan. 12, 1869	85, 794
Rail, Tubular two-part	J. Elgar	Baltimore, Md	Mar. 10, 1849	6, 164
Rails and tram-ways automatically, Operating	C. W. Hunt	West Brighton, N. Y	June 11, 1872	127, 885
Rails, Chair for round	P. S. Devlan	Reading, Pa	Oct. 24, 1854	11, 827
Rails for stairs, Machine for making hand	C. R. Shaeffer	Gettysburgh, Pa	July 12, 1859	24, 763
Rails for stairs, Sawing hand	J. Brown	Memphis, Tenn	Oct. 23, 1847	5, 336
Rails, Gage used in finishing spiral hand	C. Wooster	Philadelphia, Pa	Dec. 4, 1847	5, 380
Rails, Machine for cutting hand	G. B. Pullinger	Philadelphia, Pa	Aug. 24, 1852	9, 220
Rails, Machine for cutting hand	T. Rogers	Philadelphia, Pa	Jan. 3, 1854	10, 395
Rails, Machine for dressing wood	H. G. Angle	Chicago, Ill	Sept. 9, 1873	142, 608
Rails, Machine for straightening or curving	G. Williston	Brunswick, Me	Nov. 1, 1853	10, 200
Rails, Making steel-headed	L. M. Hart	Philadelphia, Pa	Jan. 1, 1867	60, 723
Rails, Manufacture of fagots for steel-headed	J. Absterdam	New York, N. Y	Jan. 4, 1870	98, 537
Rails, Method of manufacturing steel-capped	J. L. Booth	Rochester, N. Y	Feb. 27, 1872	123, 973
Rails or stair-wreaths, Machine for sawing hand	J. Davis	Cincinnati, Ohio	Dec. 29, 1857	18, 960
Rails, Roller for rolling old	J. P. Verree and W. A. Mitchell	Philadelphia, Pa	June 18, 1867	65, 968
Rails to railways, Mode of constructing and applying.	H. J. Lombaert	Philadelphia, Pa	July 15, 1862	35, 879
Rails, Transportation of merchandise on single	H. Sargent	Boston, Mass	May 6, 1825	....
Railing	S. Crowell	Reading, Pa	June 10, 1851	8, 149
Railing, Balcony	J. F. Holmes	Providence, R. I	Oct. 29, 1872	132, 662
Railing machine, Hand	G. Strowbuver and F. Sanxay	Cincinnati, Ohio	Sept. 1, 1817	....
Railing, Iron	S. S. Bent	Port Chester, N. Y	Mar. 21, 1871	112, 887
Railing, Iron	W. Hamilton	Philadelphia County, Pa	Feb. 26, 1850	7, 119
Railing, Iron	G. Hess	Easton, Pa	Jan. 6, 1852	8, 632
Railing, Iron	B. Kraft	Reading, Pa	Jan. 27, 1852	8, 688
Railing, Iron	J. Krauser	Reading, Pa	Apr. 15, 1851	8, 038
Railing, Iron	J. Krauser, S. Crowell, and C. Krauser.	Reading, Pa	Nov. 12, 1850	7, 774
Railing to posts, Mode of securing iron	S. Macferran	Philadelphia, Pa	Mar. 31, 1863	38, 049
Railings, Constructing iron	L. Homes	New Orleans, La	July 6, 1858	20, 797
Railings, Constructing strap-iron	M. Lachenmaier	Philadelphia, Pa	May 2, 1854	10, 845
Railings, Construction of iron	W. S. Fuller	Millbury, Mass	Oct. 12, 1858	21, 750
Railings, Construction of iron	J. Nuttall	New Orleans, La	Dec. 28, 1858	22, 448
Railings, Ornamenting top of iron and other	P. Hedl	New York	Feb. 21, 1822	....
Railway	J. Anthony	Greenbush, N. Y	Apr. 28, 1863	38, 274
Railway	W. C. Bibb	Madison, Ga	Aug. 22, 1871	118, 330
Railway	J. Brown and G. W. Robinson	Providence, R. I	June 6, 1826	....
Railway	H. Carpenter	New York, N. Y	Mar. 24, 1857	16, 898
Railway	H. Carpenter	New York, N. Y	Feb. 8, 1870	99, 531
Railway	J. B. Christian and J. Gunn	Mount Carroll and Salem Township, Ill.	May 5, 1868	77, 456
Railway	J. H. Connelly	Pittsburgh, Pa	May 14, 1872	126, 787
Railway	I. Cooper	Johnstown, Pa	July 22, 1837	293
Railway	E. Crew	Steubenville, Ohio	July 2, 1872	128, 597
Railway	R. Cromelien	New York, N. Y	Mar. 26, 1861	31, 786
Railway	J. G. Cross	Brattleborough, Vt	June 23, 1868	79, 054
Railway	E. Dunscomb	New York	July 13, 1830	....
Railway	Z. Eastman	Chicago, Ill	Oct. 9, 1866	58, 621
Railway	Z. Eastman	Chicago, Ill	Sept. 3, 1867	68, 421
Railway	J. Elgar	Brookville, Md	Mar. 12, 1845	3, 947
Railway	D. Fitzgerald	New York, N. Y	Dec. 5, 1871	121, 605
Railway	D. Harrison	Fayette, Miss	Oct. 5, 1869	95, 471
Railway	C. T. Harvey	Tarrytown, N. Y	July 17, 1866	56, 411
Railway	A. Hay	Philadelphia, Pa	Mar. 19, 1861	31, 717
Railway	H. T. Humphreys	West Limerick, Ireland	June 20, 1871	116, 059
Railway	A. Jeffery	Baltimore, Md	July 19, 1864	43, 536
Railway	B. F. Lee	New York, N. Y	Sept. 11, 1860	29, 978
Railway	E. G. Markley	Sunbury, Pa	Apr. 12, 1870	101, 750

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Railway	C. Marquette	Milan, Italy	June 2, 1868	78, 462
Railway	R. Montgomery	New York, N. Y	Feb. 21, 1865	46, 482
Railway	W. J. C. Muir	Westminster, England	July 20, 1869	92, 874
Railway	P. Osgood	Waterville, Me	July 25, 1865	48, 976
Railway	N. Reed	Belfast, Me	Mar. 31, 1836	......
Railway	E. Robbins	Worcester, Mass	Apr. 7, 1868	76,348
Railway	G. V. Sheffield and J. F. Coburn	Hopkinton, Mass	Sept. 21, 1869	95, 051
Railway	B. C. Smith	Burlington, N. J	July 9, 1861	32, 794
Railway	B. C. Smith	Burlington, N. J	Sept. 30, 1862	36, 579
Railway	J. E. Smith	New York, N. Y	May 9, 1848	5, 558
Railway	W. A. Sutton and E. Crowell	New York, N. Y., and San Francisco, Cal.	July 6, 1869	92, 397
Railway	H. S. Weaver	Freeport, Pa	Aug. 16, 1870	106, 434
Railway	C. H. White	Emmett Township, Mich	Sept. 20, 1870	107, 643
Railway	T. Whittemore	Cambridgeport, Mass	Oct. 8, 1867	69, 733
Railway	C. Williams	Boston, Mass	Nov. 16, 1821	......
Railway	C. G. Wilson	Brooklyn, N. Y	Sept. 14, 1869	94, 856
Railway	S. Winkley	New York, N. Y	Oct. 23, 1866	59, 112
Railway accidents, Electrical apparatus for preventing.	C. Verney and A. Veillet	Lille, France	Feb. 6, 1872	123, 527
Railway-alarm	G. Draper	Hopedale, Mass	Feb. 14, 1871	111, 824
Railway-alarm	H. Maule	Philadelphia, Pa	Jan. 4, 1859	22, 507
Railway-alarm	E. P. Morton	Chester, Pa	Apr. 11, 1865	47, 215
Railway-alarm, Electro-magnetic	E. H. Pursell	Galesburgh, Ill	Sept. 6, 1870	107, 101
Railway-alarm for trucks	F. E. Whiteside	Oxford, Pa	May 16, 1871	115, 003
Railway-alarm signal	J. H. Harris	Point Isabel, Ohio	Feb. 20, 1866	52, 710
Railway-alarm signal	S. Nicolson	Suffolk, Mass	June 26, 1841	2, 145
Railway and car	J. Richards	Elbridge, N. Y	Mar. 9, 1832	......
Railway and car	J. Wright	Columbia, Pa	Sept. 17, 1829	......
Railway and car, Circular	J. Rowe	Triana, Ala	Oct. 28, 1837	442
Railway and car, Safety	A. McGrew	Cincinnati, Ohio	June 13, 1831	......
Railway and carriage	I. Knight	Baltimore, Md	June 11, 1829	......
Railway and carriage	C. Williams	Richmond, Va	Jan. 18, 1820	......
Railway and locomotive cars up inclined planes, Cog-wheel for propelling.	W. Bent	Philadelphia, Pa	Oct. 25, 1832	......
Railway and other iron, Rolling	A. B. Seymour	Hudson, N. Y	Aug. 9, 1853	9, 928
Railway and other machinery, Bearings for	A. Hay	Philadelphia, Pa	Dec. 6, 1859	26, 352
Railway, Arcade	S. B. B. Nowlan	New York, N. Y	Jan. 21, 1868	73, 635
Railway, Atmospheric	A. Alison and J. Halliwell	London, England	Sept. 20, 1864	44, 376
Railway, Atmospheric	A. H. Caryl	Groton, Mass	May 7, 1867	64, 487
Railway, Atmospheric	J. Pilbrow	Tottenham, England	July 26, 1845	4, 124
Railway-axle	J. M. Cooper	Pittsburgh, Pa	Apr. 29, 1862	35, 083
Railway-axle	G. H. Hoagland	Port Jervis, N. Y	Oct. 20, 1868	83, 159
Railway-axle, Compound	H. Gardiner	New York, N. Y	June 1, 1858	20, 419
Railway-axle, Compound	I. P. Garrett and D. Steckel	Mercer County, Pa	Sept. 28, 1858	21, 604
Railway-axle, Compound	H. J. Lombaert	Philadelphia, Pa	June 7, 1859	24, 315
Railway-axle, Divided	D. M. Cummings, W. Pattee, and A. M. Shaw.	Enfield, N. H	Nov. 24, 1868	84, 264
Railway-axle, Divided	S. L. Denney	Christiana, Pa	Jan. 31, 1854	10, 471
Railway-axles from heating, Mode of preventing	A. B. Tripler	New Orleans, La	Sept. 5, 1871	118, 760
Railway-axles, Indicator for the springing or bending of.	L. E. Osborn	New Haven, Conn	Apr. 14, 1868	76, 803
Railway-bar	H. Webb	Cincinnati, Ohio	June 14, 1859	24, 436
Railway-bar, Combined	A. B. Seymour	Bordentown, N. J	Mar. 13, 1849	6, 171
Railway-bar joint	S. M. Longley	Hudson, N. Y	Oct. 16, 1866	58, 849
Railway bar or rail	H. Betts	Hamilton City, Canada	June 28, 1859	24, 533
Railway-bar roller	E. W. Stephens and R. Jenkins	Covington, Ky	June 1, 1858	20, 452
Railway-bar, Steel-surfaced	J. Myers, jr	Williamsburgh, N. Y	Apr. 27, 1869	89, 425
Railway-bars, Chair for	H. H. Graham	Paterson, N. J	Apr. 12, 1859	23, 565
Railway-bars, Finishing-case for	J. Burt	Detroit, Mich	Dec. 28, 1869	98, 224
Railway-bars for rerolling, Piling	J. Thomas	Indianapolis, Ind	Nov. 22, 1859	26, 237
Railway-bars, Lock-joint for	A. Douglas	Paterson, N. J	Aug. 21, 1860	29, 681
Railway-bars, Lock-joint for	J. R. Hilliard	Paterson, N. J	May 13, 1856	14, 868
Railway-bars, Machine for cutting	B. A. Mason	Newport, R. I	Dec. 13, 1859	26, 441
Railway-bars, Machine for punching	G. Shone	Saint Louis, Mo	Feb. 15, 1859	22, 983
Railway-bars, Machine for repairing	L. Beebe and G. F. Smith	Michigan City, Ind	June 9, 1857	17, 478
Railway-bars, Machine for straightening	T. M. Downing	Grafton, W. Va	Jan. 19, 1869	85, 917
Railway-bars, Making	T. E. Purchase	Reading, Pa	Feb. 2, 1858	19, 261
Railway-bars, Mode of connecting the ends of	J. Davis	New Bedford, Mass	July 12, 1859	24, 724
Railway-bars, Mode of constructing and fastening	E. Tilghman	Philadelphia, Pa	Dec. 5, 1839	1, 423
Railway-bars, Mold for casting	H. Jenkins	Brooklyn, N. Y	Oct. 10, 1865	50, 362
Railway-bars, Repairing	J. D. Cawood	Marshall, Mich	Sept. 9, 1856	15, 687
Railway-bars, Repairing	J. McLellan	Detroit, Mich	Apr. 15, 1856	14, 695
Railway-bars, Rolling	J. W. Brown	Mount Savage Iron-Works, Md.	Apr. 1, 1856	14, 552
Railway-bars, Rolling	G. Edwards	Johnstown, Pa	June 29, 1858	20, 702
Railway-bars, Securing	J. O. Montignani	Albany, N. Y	Feb. 16, 1864	41, 633
Railway-bars, Securing the ends of	C. E. Detmold	Orange, N. J	Nov. 30, 1858	22, 168
Railway-bars, Securing the ends of	J. F. Peabody	Salem, Mass	Nov. 30, 1858	22, 196
Railway-bars, Securing the ends of	A. Plinta	Albany, N. Y	Nov. 9, 1858	22, 031
Railway-bars, Welding and repairing	J. C. Park	Buffalo, N. Y	Mar. 24, 1863	37, 972
Railway-bed	J. W. Kern	Portland, Oreg	Feb. 18, 1873	136, 067
Railway-bolts, Lock for the nuts of	H. Lawrence and C. H. White	Melrose, N. Y	July 23, 1861	32, 880
Railway-bolts, Mode of fastening nuts on	G. W. R. Bayley	Brashear, La	July 24, 1860	29, 235
Railway box and journal	G. F. Lynch	Milwaukee, Wis	Feb. 19, 1867	62, 143
Railway box-rail	O. G. Warren	New York, N. Y	Dec. 19, 1865	51, 635
Railway-brake	E. R. Brown	Mauch Chunk, Pa	Feb. 27, 1866	52, 820
Railway-brake	C. R. Davidson	Brooklyn, N. Y	Feb. 7, 1860	27, 038
Railway-brake	W. Edge	Downington, Pa	Dec. 14, 1858	22, 280
Railway-brake	O. F. Fuller	Lamont, Mich	July 5, 1859	24, 696
Railway-brake	J. Harris	Allegheny, Pa	May 25, 1858	20, 396
Railway-brake	J. Harris	Allegheny, Pa	Oct. 18, 1859	25, 825
Railway-brake	N. Hodge	North Adams, Mass	June 12, 1860	28, 670
Railway-brake	C. F. Langford	Fall River, Mass	July 3, 1860	28, 990
Railway-brake	W. W. Loomis	Wilkesbarre, Pa	Oct. 12, 1869	95, 699
Railway-brake	J. C. F. Salomon	Baltimore, Md	Mar. 30, 1858	19, 795
Railway-brake	J. H. Steiner	Philadelphia, Pa	June 19, 1860	28, 817
Railway-brake	B. T. Trimmer	Parma, N. Y	Apr. 15, 1856	14, 681

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Invention.	Inventor.	Residence.	Date.	No.
Railway-brake, Automatic	A. F. Toulmin	Ellicott's Mills, Md	Nov. 24, 1857	18,715
Railway-brake block	R. Humphrey	Albany, N. Y	Aug. 10, 1869	93,443
Railway-brake block and shoe	B. P. Lamason and S. W. Murray.	Milton, Pa	Sept. 24, 1867	69,226
Railway-brake, Hydraulic	G. P. Renshaw	Park Valley, England	Mar. 11, 1873	136,617
Railway-brake, Operating	P. Perry	Troy, N. Y	Oct. 27, 1857	18,516
Railway-brake, Self-acting	E. F. Burrows	Mystic River, Conn	Apr. 29, 1862	35,078
Railway-brake, Self-acting apparatus for working	E. Guerin	Paris, France	Apr. 26, 1859	23,768
Railway-brake shoe, Steel	E. H. Zitsman	Philadelphia, Pa	Feb. 1, 1870	99,515
Railway-brake, Traction	R. D'Heureuse	San Francisco, Cal	June 9, 1868	78,723
Railway-breakers, Application of power to	J. K. Smith	Port Clinton, Pa	Dec. 2, 1835	....
Railway bumping-post	S. Love	Indianapolis, Ind	Jan. 29, 1867	61,548
Railway-car heaters, Steam-pipe coupling for	H. R. Robbins	Baltimore, Md	May 19, 1868	78,134
Railway-cars against "snake-heads," Protecting	E. Tolles	New York, N. Y	Feb. 20, 1844	3,450
Railway-cars, Machinery for operating friction-brakes for.	J. S. Clark	Nashua, N. H	Apr. 11, 1840	1,548
Railway-cars operating upon rails, Transmitting power by.	C. Foster	Galesburgh, Ill	Aug. 14, 1866	57,112
Railway-car-signal holder	W. W. Colley and W. H. Deitrick.	Philadelphia, Pa	Sept. 21, 1869	95,086
Railway-carriage	J. C. Blauvelt	Rockland County, N. Y	July 11, 1832	....
Railway-carriage	N. F. Bryant	East Boston, Mass	Aug. 18, 1863	39,454
Railway-carriage	N. F. Bryant	East Boston, Mass	Dec. 8, 1863	40,813
Railway-carriage	W. Bryant and I. Hiett	Davidson County, Tenn	June 13, 1831	....
Railway-carriage	I. Cooper	Baltimore, Md	Oct. 25, 1832	....
Railway-carriage	W. Howard	Baltimore, Md	Nov. 22, 1828	....
Railway-carriage	J. P. Hughes	Pottsville, Pa	June 25, 1830	....
Railway-carriage	I. Knight	Baltimore, Md	Mar. 18, 1829	....
Railway-carriage	I. Knight	Baltimore, Md	July 10, 1834	....
Railway-carriage	A. R. Lock	Boston, Mass	Aug. 16, 1870	106,378
Railway-carriage	R. P. Morgan	Stockbridge, Mass	July 27, 1827	....
Railway-carriage	W. P. Orrick	Reading, Pa	Mar. 2, 1830	....
Railway-carriage	B. L. Randall	Roxbury, Mass	Dec. 24, 1867	72,679
Railway-carriage, &c	J. J. Reckery	Baltimore, Md	Dec. 11, 1829	....
Railway-carriage	J. L. Sullivan	Philadelphia, Pa	Apr. 6, 1829	....
Railway-carriage	L. H. West	Cambridge, Mass	Sept. 12, 1865	49,942
Railway-carriage	T. West	Roxbury, Mass	Apr. 4, 1865	47,143
Railway-carriage	R. Winans	Vernon, N. J	Oct. 11, 1828	....
Railway carriage and wagon	W. Howard	Baltimore, Md	Apr. 23, 1831	....
Railway carriage, car, wagon, &c	J. Herron	Richmond, Va	Mar. 25, 1835	....
Railway-carriage, Cylindrical	P. Fleming	Albany, N. Y	May 4, 1829	....
Railway-carriage running-gear	D. W. Eames	West Turin, N. Y	July 1, 1851	8,197
Railway-carriage wheel	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
Railway-carriage wheel, Iron for	J. Finlay	Baltimore, Md	Mar. 1, 1830	....
Railway-carriage wheels, Rail or plate for	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
Railway-carriages by horse-power, Propelling	J. Stimpson	Baltimore, Md	Feb. 16, 1830	....
Railway carriages or wagons, Application of friction-wheels to the axles of.	H. B. Chew	Baltimore, Md	Apr. 9, 1829	....
Railway-carriages, Propelling	A. Pawling	Philadelphia, Pa	Mar. 9, 1831	....
Railway-carriages, Reduction of friction in	H. Finlay	Baltimore, Md	Oct. 27, 1829	....
Railway cattle-gate	W. A. Pugh and J. F. Bigger	Rushville, Ind	Sept. 19, 1871	119,178
Railway cattle-guard	W. Darrah and J. Cutshall	Coshocton, Ohio	Dec. 12, 1871	121,709
Railway cattle-guard	T. D. Kline	Opelika, Ala	Aug. 5, 1873	141,566
Railway cattle-guard	G. W. Newton	Hubbard, Ohio	Mar. 18, 1873	137,021
Railway cattle-guard	D. B. Shirk	Brunnerville, Pa	Oct. 27, 1868	83,556
Railway cattle-guard	I. C. Tunison and A. Reeve	Roodhouse and Pike County, Ill.	Sept. 9, 1873	142,596
Railway cattle-stop	T. J. West	White Hall, Va	Mar. 11, 1837	146
Railway-chair	S. T. Alexander	Pittsburgh, Pa	Sept. 1, 1868	81,573
Railway-chair	P. Allen	Rutland, Vt	Nov. 5, 1867	70,497
Railway-chair	R. Anthony	Pittston, Pa	Feb. 1, 1870	99,279
Railway-chair	J. Armitage	Troy, N. Y	Feb. 17, 1863	37,668
Railway-chair	W. H. Balding and J. H. Blake	Brandon, Vt	July 9, 1867	66,443
Railway-chair	E. B. Banker	Schaghticoke, N. Y	Jan. 8, 1861	31,071
Railway-chair	E. Barnes	Dorchester, Mass	June 1, 1858	20,464
Railway-chair	E. R. Barnes	Brookfield, Conn	June 22, 1858	20,617
Railway-chair	G. W. R. Bayley	Algiers, La	Dec. 29, 1868	85,357
Railway-chair	T. G. Bering	Harrisburgh, Pa	Jan. 4, 1870	98,546
Railway-chair	L. B. Bidwell	Hartford, Conn	Feb. 25, 1868	74,882
Railway-chair	D. D. Bigelow	White House, N. J	Jan. 19, 1869	86,053
Railway-chair	D. E. Bishop	New York, N. Y	July 12, 1859	24,713
Railway-chair	J. Bishop	Owego, N. Y	Jan. 19, 1858	19,124
Railway-chair	R. C. Blackall	Albany, N. Y	Oct. 5, 1869	95,555
Railway-chair	I. W. Bowers	Cincinnati, Ohio	Mar. 13, 1860	27,424
Railway-chair	J. Bridger	Newark, N. Y	Oct. 12, 1869	95,643
Railway-chair	S. Brisack	Walton, N. Y	June 23, 1863	38,944
Railway-chair	F. A. Brown	Ithaca, N. Y	Apr. 29, 1862	35,076
Railway-chair	S. S. Burt	Marquette, Mich	June 11, 1867	65,540
Railway-chair	H. Carpenter	New York, N. Y	Oct. 30, 1866	59,180
Railway-chair	M. Carpenter	Cincinnati, Ohio	June 21, 1859	24,443
Railway-chair	J. Cochrane	Wall Township, N. J	Sept. 5, 1865	49,722
Railway-chair	D. W. Crocker	Deposit, N. Y	Jan. 25, 1859	22,708
Railway-chair	D. W. Crocker	Deposit, N. Y	May 22, 1866	54,868
Railway-chair	W. M. C. Cushman	Albany, N. Y	Jan. 18, 1859	22,631
Railway-chair	N. L. Davis and R. O. Hewitt	Rutland, Vt	July 31, 1866	56,726
Railway-chair	T. Donahy	Empire City, Nev	Oct. 31, 1871	120,421
Railway-chair	J. H. Downing	Salem, Mass	Dec. 10, 1867	72,010
Railway-chair	J. W. Draper	Wilmington, Del	Sept. 4, 1866	57,816
Railway-chair	W. B. Dunning	Geneva, N. Y	June 7, 1859	24,289
Railway-chair	D. D. Eldridge	La Fayette, Ind	Mar. 4, 1873	136,426
Railway-chair	A. Elms	North Granville, N. Y	Mar. 31, 1868	76,062
Railway-chair	B. M. Evans	Lancaster, Pa	Dec. 27, 1839	1,442
Railway-chair	S. Ferris	New York, N. Y	Dec. 30, 1873	145,936
Railway-chair	W. Foster	Logansport, Ind	July 30, 1867	67,280
Railway-chair	M. G. Freeman	Bloomington, Ill	June 4, 1872	127,588
Railway-chair	G. P. Fuller	Philadelphia, Pa	May 18, 1869	90,161
Railway-chair	B. F. Gossin	Cincinnati, Ohio	Apr. 14, 1863	38,159
Railway-chair	J. W. Gould	Elmira, N. Y	Feb. 1, 1859	22,797

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Invention.	Inventor.	Residence.	Date.	No.
Railway-chair	D. M. Graham	Evansville, Ind	Nov. 4, 1873	144, 332
Railway-chair	H. W. Gray	Cleveland, Ohio	Sept. 20, 1859	25, 545
Railway-chair	S. M. Guest	Ypsilanti, Mich	Mar. 21, 1871	112, 805
Railway-chair	O. J. Hall	Pittsford, N. Y	Mar. 4, 1862	34, 612
Railway-chair	P. F. Hall	Troy, N. Y	Nov. 2, 1858	21, 956
Railway-chair	W. Hall	Springfield, Mass	July 6, 1858	20, 793
Railway-chair	A. Hamill	Baltimore, Md	June 19, 1866	55, 650
Railway-chair	T. C. Hargrave	Boston, Mass	July 2, 1867	66, 329
Railway-chair	C. A. Harris	Owego, N. Y	June 1, 1869	90, 745
Railway-chair	H. A. Harvey	New York, N. Y	Dec. 20, 1859	26, 492
Railway-chair	A. Hay	Newark, N. J	Sept. 7, 1858	21, 471
Railway-chair	N. Headington	Cincinnati, Ohio	Oct. 30, 1866	59, 218
Railway-chair	W. Hendershott	Batavia, N. Y	Apr. 26, 1864	42, 480
Railway-chair	G. A. H. Hertzer	Waterford, Mich	Sept. 28, 1869	95, 227
Railway-chair	J. L. Hills	New York, N. Y	Aug. 1, 1865	49, 107
Railway-chair	A. L. Holley	New York, N. Y	Apr. 19, 1859	23, 683
Railway-chair	D. A. Hopkins	Bergen, N. J	Oct. 23, 1860	30, 470
Railway-chair	I. B. Howe	Northfield, Vt	July 5, 1859	24, 639
Railway-chair	S. Huber	Danville, Pa	July 29, 1873	141, 275
Railway-chair	W. Huffman	Millgrove, Ind	Aug. 26, 1873	142, 235
Railway-chair	G. E. Jarvis	Grafton, W. Va	Oct. 3, 1871	119, 520
Railway-chair	J. H. Jones	Ironton, Ohio	Mar. 14, 1865	46, 803
Railway-chair	C. R. Joyce	Alexandria, Va	Nov. 22, 1870	109, 418
Railway-chair	T. Krausch	Susquehannah Depot, Pa	June 1, 1858	20, 472
Railway-chair	H. A. Landry	Camden, N. J	Jan. 18, 1859	22, 656
Railway-chair	I Leonard	Lowell, Mass	Feb. 4, 1862	34, 307
Railway-chair	J. Lidderd	Manchester, Great Britain	Nov. 7, 1871	120, 753
Railway-chair	D. Loomis and E. Rhodes, jr	Clyde, Ohio	Apr. 2, 1872	125, 310
Railway-chair	A. P. Lord	Friendship, N. Y	Oct. 3, 1871	119, 624
Railway-chair	J. H. Mabbett	Mechanicsville, N. Y	Dec. 2, 1862	37, 045
Railway-chair	E. D. Mann	Elyria, Ohio	Jan. 28, 1873	135, 230
Railway-chair	B. McDevitt	Belvidere, Ill	Sept. 11, 1866	57, 943
Railway-chair	G. R. McDonald	Louisville, Ky	Mar. 29, 1864	42, 098
Railway-chair	A. McGuffie	Rochester, N. Y	Mar. 26, 1861	31, 816
Railway-chair	B. T. Milburn	Wilmington, Del	July 18, 1865	48, 873
Railway-chair	J. Mohn	Detroit, Mich	July 2, 1867	66, 242
Railway-chair	J. H. Morley	Saint Louis, Mo	Dec. 2, 1856	16, 147
Railway-chair	M. C. Murray	West Acton, Mass	Jan. 22, 1867	61, 445
Railway-chair	F. Micklin	Troy, N. Y	Oct. 19, 1869	95, 928
Railway-chair	W. A. Nugent	Susquehannah Depot, Pa	Sept. 20, 1859	25, 520
Railway-chair	N. F. Page	Rutland, Vt	Nov. 12, 1867	70, 886
Railway-chair	S. N. Park	Bloomsbury, N. J	Dec. 21, 1869	98, 186
Railway-chair	J. F. Peabody	Salem, Mass	May 31, 1859	24, 234
Railway-chair	W. H. Peckham	New York, N. Y	May 16, 1865	47, 747
Railway-chair	D. C. Pierce	Washington, D. C	Sept. 21, 1869	95, 041
Railway-chair	L. Pollock	Matteawan, N. Y	Dec. 10, 1867	72, 080
Railway-chair	A. Rank	Salem, Ohio	Sept. 27, 1864	44, 455
Railway-chair	J. S. Robinson, L. Herendeen, and G. Shelden.	Canandaigua, N. Y	Oct. 27, 1857	18, 519
Railway-chair	T. C. Robinson	Boston, Mass	Apr. 20, 1869	89, 079
Railway-chair	J. A. Roebling and T. McNurty	Trenton, N. J., and Lexington, Ky.	Oct. 31, 1865	50, 776
Railway-chair	B. J. Romaine	Hackensack, N. J	Oct. 29, 1867	70, 271
Railway-chair	W. A. Rowland	Waverly, N. Y	May 6, 1873	138, 698
Railway-chair	T. Selleck	Greenwich, Conn	May 7, 1867	64, 453
Railway-chair	L. Shearer	Duncannon, Pa	Dec. 27, 1859	26, 624
Railway-chair	O. L. Shepherd	United States Army	Feb. 9, 1869	86, 874
Railway-chair	J. W. Shively	New York, N. Y	June 4, 1867	65, 439
Railway-chair	W. S. Shotwell	Paterson, N. J	Mar. 10, 1868	75, 475
Railway-chair	J. H. Simmons	Painted Post, N. Y	Nov. 2, 1858	21, 986
Railway-chair	D. B. Skelly	Lockport, N. Y	Aug. 3, 1869	93, 239
Railway-chair	L. J. Smith	Whitehall, N. Y	Dec. 28, 1869	98, 312
Railway-chair	S. H. Smith	Altoona, Pa	July 19, 1870	105, 504
Railway-chair	W. H. Staats	Crescent, N. Y	Jan. 3, 1871	110, 797
Railway-chair	E. St. John	Elmira, N. Y	May 19, 1863	38, 612
Railway-chair	E. St. John	Elmira, N. Y	May 24, 1864	42, 885
Railway-chair	J. W. Sutherland	Indianapolis, Ind	Jan. 9, 1866	52, 005
Railway-chair	J. H. Teahl	Eberly's Mill, Pa	Aug. 3, 1869	93, 367
Railway-chair	G. Tefft	Salem, N. Y	Mar. 2, 1869	87, 525
Railway-chair	A. B. Thompson	Owego, N. Y	Sept. 7, 1869	94, 528
Railway-chair	I. Tillson	South Abington, Mass	Jan. 7, 1868	73, 053
Railway-chair	L. B. Tyng	Lowell, Mass	Sept. 2, 1873	142, 359
Railway-chair	W. Van Anden	Poughkeepsie, N. Y	Dec. 29, 1868	85, 347
Railway-chair	J. C. Wands	Nashville, Tenn	Mar. 12, 1872	124, 646
Railway-chair	H. W. Warner	Greenfield, Mass	Oct. 3, 1865	50, 309
Railway-chair	G. Webb	Williamsport, Pa	Jan. 22, 1867	61, 491
Railway-chair	E. Weight	Charlestown, Mass	Jan. 29, 1861	31, 283
Railway-chair	J. S. Weimer	Pleasant Hill, Ohio	May 31, 1870	103, 692
Railway-chair	J. W. Wetmore	Erie, Pa	Apr. 19, 1859	23, 731
Railway-chair	J. W. Wetmore	Erie, Pa	Aug. 23, 1859	25, 228
Railway-chair	J. W. Wetmore	Erie, Pa	Dec. 27, 1859	26, 634
Railway-chair	J. W. Wetmore	Erie, Pa	May 15, 1860	28, 321
Railway-chair	J. W. Wetmore	Erie, Pa	Apr. 24, 1866	54, 236
Railway-chair	T. Whittemore	Cambridgeport, Mass	Sept. 18, 1866	58, 184
Railway-chair	W. Wickersham	Urbana, Ill	June 2, 1868	78, 630
Railway-chair	W. Wickersham	Boston, Mass	July 28, 1868	80, 310
Railway-chair	W. Wickersham	Boston, Mass	Mar. 16, 1869	87, 893
Railway-chair	J. E. Williams	Xenia, Ohio	Apr. 25, 1865	47, 484
Railway-chair	L. M. Woodcock	Auburn, N. Y	July 16, 1867	66, 930
Railway-chair	J. E. Wootten	Reading, Pa	July 2, 1867	66, 437
Railway-chair	J. Young	West Galway, N. Y	Jan. 18, 1859	22, 685
Railway-chair	R. Zider	El Paso, Ill	May 12, 1868	77, 794
Railway chair and clamp	L. J. Smith	New York, N. Y	Oct. 18, 1870	108, 402
Railway chair and coupling	W. Hendershott	Batavia, N. Y	May 23, 1865	47, 820
Railway-chair and cross-tie, Iron	L. G. Marshall	Philadelphia, Pa	Nov. 3, 1863	40, 541
Railway chair and fastening	D. N. Clark	Eastport, Me	Mar. 10, 1868	75, 370
Railway-chair and fish-joint	D. C. Pierce	Chicago, Ill	Feb. 1, 1870	99, 345
Railway chair and joint	J. M. Orr	Leesburgh, Va	June 7, 1870	104, 657

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Invention.	Inventor.	Residence.	Date.	No.
Railway chair and rail	N. W. Northrup	Greene, N. Y	June 10, 1862	35, 537
Railway chair and sleeper	J. Gregory	Lisbon, Portugal	Aug. 17, 1869	93, 875
Railway chair and sleeper	R. M. Holland	Philadelphia, Pa	July 16, 1867	66, 711
Railway chair and sleeper	L. Reepsher	Camden, N. J	Nov. 19, 1867	71, 063
Railway chair and splice	E. F. Barnes	Brooklyn, N. Y	Apr. 23, 1861	32, 114
Railway-chair and splice-piece, Securing combined	W. W. Knox	Sheridan, N. Y	Nov. 10, 1863	40, 567
Railway chair and support	A. Van Guysling	West Albany, N. Y	Nov. 10, 1868	84, 023
Railway chair and tie	T. F. Fouts	Albia, Iowa	Apr. 27, 1869	89, 397
Railway-chair clamp	W. Morehouse	Buffalo, N. Y	Jan. 24, 1871	111, 135
Railway-chair, Edge	W. B. Mitchell	Philadelphia, Pa	Feb. 27, 1833	....
Railway-chair machine	M. M. Gray	Philadelphia, Pa	Feb. 28, 1854	10, 571
Railway-chair machine	J. B. Harris	Cincinnati, Ohio	Jan. 2, 1855	12, 131
Railway-chair machine	C. Winch	Jersey City, N. J	Apr. 28, 1857	17, 178
Railway-chair machinery	B. F. Gossin	Covington, Ky	Oct. 10, 1854	11, 783
Railway-chair manufacture	P. P. R. Hayden	Columbus, Ohio	Jan. 6, 1852	8, 631
Railway-chair, Reversible	W. H. Joeckel	New York, N. Y	Sept. 29, 1868	82, 527
Railway chair, Street	J. F. Stileman	Philadelphia, Pa	Feb. 23, 1869	87, 308
Railway chair, Street	W. Warner	Philadelphia, Pa	July 23, 1872	129, 697
Railway-chair, Wrought-iron	E. S. Renwick	Washington, D. C	Oct. 22, 1850	7, 734
Railway-chairs, Elastic bearings for	D. L. Davis	Dedham, Mass	June 3, 1856	15, 036
Railway-chairs, Lock-nut attachment for	G. W. R. Bayley	Algiers, La	Mar. 2, 1869	87, 460
Railway-chairs, Machine for bending the lips of wrought-iron.	S. A. Cox	Malden, Mass	Aug. 28, 1849	6, 683
Railway-chairs, Machine for making	R. Archer	Richmond, Va	July 14, 1857	17, 773
Railway-chairs, Machine for making	B. F. Gossin	Cincinnati, Ohio	Dec. 1, 1863	40, 748
Railway-chairs, Machine for making	R. Griffiths and G. Shield	Newport, Ky., and Cincinnati, Ohio.	Oct. 18, 1853	10, 131
Railway-chairs, Machine for making	J. Kelven	Canton, Mass	July 24, 1855	13, 313
Railway-chairs, Machine for making	W. Van Anden	Poughkeepsie, N. Y	July 13, 1869	92, 494
Railway-chairs, Machine for making wrought-iron.	R. Griffiths	Newport, Ky	Aug. 17, 1852	9, 195
Railway-chairs, Machine for making wrought-iron.	J. H. Mabbett	Mechanicsville, N. Y	Feb. 14, 1865	46, 370
Railway-chairs, Machine for making wrought-iron.	W. Van Anden	Poughkeepsie, N. Y	Apr. 30, 1850	7, 330
Railway-chairs, Machine for making wrought-iron.	W. Van Anden	Poughkeepsie, N. Y	Apr. 19, 1870	102, 068
Railway-chairs, Machine for removing the burrs from.	D. Eynon	Richmond, Va	May 18, 1869	90, 249
Railway-chairs, Machine for rolling	D. Eynon	Richmond, Va	Feb. 15, 1870	99, 868
Railway-chairs, Machine for slotting	D. Eynon	Richmond, Va	Feb. 15, 1870	99, 869
Railway-chairs, Machinery for making	W. Van Anden	Poughkeepsie, N. Y	Aug. 2, 1853	9, 906
Railway-chairs, Machinery for making	W. Van Anden	Poughkeepsie, N. Y	Sept. 18, 1866	58, 155
Railway-chairs, Machinery for making	J. F. Winslow and J. Snyder	Troy, N. Y	Dec. 28, 1852	9, 510
Railway-chairs, Making	D. Eynon	Philadelphia, Pa	Nov. 20, 1860	30, 673
Railway-chairs, Making	J. C. Ogden	Philadelphia, Pa	Apr. 4, 1854	10, 751
Railway-chairs, Manufacture of wrought-iron	J. Milliken	Philadelphia, Pa	Feb. 9, 1858	19, 306
Railway-chairs, Method of slotting the lips of	D. Eynon	Richmond, Va	Oct. 15, 1867	69, 786
Railway-chairs, Rolling	J. H. Snyder	Troy, N. Y	July 13, 1858	20, 901
Railway-chairs, Rolling	J. H. Swett	Pittsburgh, Pa	Aug. 31, 1858	21, 380
Railway-chairs, Rolling-apparatus for rolling	D. Eynon	Richmond, Va	Sept. 24, 1867	69, 085
Railway-chairs, Screw-bolt for fastening	R. J. Dewhurst	New York, N. Y	July 4, 1865	48, 531
Railway-chairs, Seat-arm for	W. G. Creamer	Brooklyn, N. Y	Feb. 18, 1868	74, 510
Railway choke-block	J. Donaldson, G. Reavely, and J. Francis.	Galashiels, Scotland	Dec. 28, 1869	98, 358
Railway, City	P. Andrew	Cincinnati, Ohio	June 25, 1861	32, 606
Railway, City	W. C. Grimes	Philadelphia, Pa	May 14, 1861	32, 286
Railway, City	E. F. Hyde	Brooklyn, N. Y	June 11, 1861	32, 518
Railway claw-bar	W. Cornelius	Cheviot, Ohio	Feb. 12, 1867	62, 012
Railway, Coal	W. Youdan and D. Thomas	West Elizabeth, Pa	July 2, 1861	32, 732
Railway cog-rail	S. Marsh	Littleton, N. H	Jan. 15, 1867	61, 221
Railway-coupling	D. H. Hise	Salem, Ohio	Jan. 3, 1865	45, 713
Railway-coupling chair	R. S. Potter	Chicago, Ill	Mar. 29, 1859	23, 390
Railway-coupling chair	B. C. Smith	Burlington, N. J	Oct. 1, 1861	32, 404
Railway coupling, City	G. Collyer and A. H. Patterson	Appoquinimink Hundred, Del., and Philadelphia, Pa.	Sept. 11, 1860	29, 954
Railway-coupling links, Machine for forming	P. H. Healy	Chicago, Ill	May 20, 1873	139, 005
Railway-coupling links, Machine for making	C. E. Kleinschmidt and G. P. Schneider.	Cleveland, Ohio	Oct. 15, 1872	132, 293
Railway-couplings, Buffer-head for	M. C. Gardner	Rochester, N. Y	Apr. 27, 1858	20, 057
Railway cross-tie	D. C. Kellam	Pontiac, Mich	Nov. 12, 1872	132, 966
Railway cross-ties, Machine for ramming earth around.	R. C. Bailey	Greensborough, N. C	Dec. 4, 1860	30, 792
Railway-crossing	G. W. Billings	Chicago, Ill	Nov. 4, 1871	120, 933
Railway-crossing	J. Brahn	Jersey City, N. J	Dec. 23, 1873	145, 781
Railway-crossing	G. Elliot	Saint Louis, Mo	Feb. 25, 1873	136, 227
Railway-crossing	G. W. Harris and G. Elliot	Aurora, Ind	Oct. 15, 1867	69, 912
Railway-crossing	E. Hiserodt	Washington, Ill	Mar. 19, 1867	63, 048
Railway-crossing	R. J. Hughes	Rynear, Ind	June 10, 1873	139, 716
Railway-crossing	W. R. Hunter	Erie, Pa	Mar. 5, 1872	124, 210
Railway-crossing	S. Macferran and S. Kneass	Philadelphia, Pa	Mar. 1, 1859	23, 101
Railway-crossing	S. Perkins	Fairfield, England	Dec. 10, 1867	72, 077
Railway-crossing	J. L. Shaw	Fort Wayne, Ind	Sept. 4, 1866	57, 779
Railway-crossing	H. F. Thiemeyer	Baltimore, Md	Nov. 5, 1861	33, 670
Railway-crossing	R. P. Williams	Westminster, England	July 26, 1870	105, 754
Railway-crossing	J. Wood	Red Bank, N. J	Dec. 12, 1871	121, 836
Railway-crossing	J. Wood	Red Bank, N. J	June 3, 1873	139, 643
Railway-crossing for cone-wheels	H. Baines	Manchester, England	Sept. 7, 1869	94, 541
Railway-crossing gate	J. H. Clark	Flemington, N. J	July 19, 1870	105, 429
Railway-crossing gate	J. Nason and J. F. Wilson	Boston, Mass	Aug. 27, 1867	68, 306
Railway-crossing gate and signal, Combined	A. Orlich	South Norwalk, Conn	July 2, 1872	128, 649
Railway-crossing guard	A. Hill	North Providence, R. I	Sept. 4, 1866	57, 715
Railway crossing, Street	C. W. Jones	Philadelphia, Pa	Oct. 15, 1867	69, 814
Railway-crossings, Automatic signal for	R. Walker	Milford, Mass	Apr. 15, 1873	137, 808
Railway-crossings, Frog for	E. T. Conner	East Mauch Chunk, Pa	Apr. 27, 1858	20, 040
Railway-crossings, Frog for	S. L. Phelps	Sturgis, Mich	July 23, 1872	129, 680
Railway-crossings, Method of forming bifurcated ends of.	J. Armstrong	Brinsworth, England	Oct. 18, 1870	108, 429
Railway-crossing points, Die for making	H. Baines	Manchester, England	Dec. 12, 1865	51, 527
Railway-crossing signal	C. M. Bowman	Washington, D. C	Dec. 28, 1869	98, 342
Railway-crossing signal	E. F. Pike	Providence, R. I	Mar. 26, 1873	134, 974

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Invention.	Inventor.	Residence.	Date.	No.
Railway-curve	V. D. Beach	Battle Creek, Mich	Feb. 9, 1869	86, 631
Railway-curves, Construction of	R. Bourne	Lancaster, Mass	Oct. 10, 1835	....
Railway-curves, Turning short	J. Stinson	Baltimore, Md	Sept. 26, 1835	....
Railway danger-signal	S. C. Hendrickson	Brooklyn, E. D., N. Y	June 6, 1871	115, 610
Railway draft-cable	A. E. Beach	Stratford, Conn	Sept. 5, 1865	49, 696
Railway drawing-heads, Stop motion for	H. Tabor	Hopkinton, R. I	Sept. 8, 1863	39, 845
Railway dust-preventer	J. Wellby	Fredericton, Canada	Feb. 18, 1873	136, 013
Railway, Elevated	J. M. Abbott	Hillsdale, Mich	Mar. 29, 1870	101, 204
Railway, Elevated	E. M. Barnum	New York, N. Y	Aug. 4, 1868	80, 530
Railway, Elevated	R. A. Cheesebrough	New York, N. Y	July 14, 1868	79, 952
Railway, Elevated	O. Gsantner	East Orange, N. Y	Nov. 3, 1868	83, 772
Railway, Elevated	J. M. Hannahs	Chicago, Ill	Aug. 2, 1870	106, 056
Railway, Elevated	C. T. Harvey	Tarrytown, N. Y	June 18, 1867	65, 908
Railway, Elevated	C. T. Harvey	Tarrytown, N. Y	June 18, 1867	65, 909
Railway, Elevated	C. T. Harvey	Tarrytown, N. Y	Jan. 7, 1868	73, 003
Railway, Elevated	C. T. Harvey	Tarrytown, N. Y	July 7, 1868	79, 753
Railway, Elevated	C. T. Harvey	Tarrytown, N. Y	July 7, 1868	79, 754
Railway, Elevated	B. L. and H. O. Hood and E. W. Clark, jr.	Washington, D. C	Mar. 15, 1870	100, 883
Railway, Elevated	W. Hyde	New York, N. Y	Feb. 8, 1870	99, 679
Railway, Elevated	R. Montgomery	New York, N. Y	Jan. 5, 1869	85, 684
Railway, Elevated	R. Montgomery	New York, N. Y	Apr. 27, 1869	89, 541
Railway, Elevated	R. P. Morgan, jr	Dwight, Ill	Apr. 20, 1869	89, 233
Railway, Elevated	J. B. Newbrough	New York, N. Y	July 4, 1871	116, 740
Railway, Elevated	J. B. Newbrough	New York, N. Y	Dec. 5, 1871	121, 538
Railway, Elevated	W. H. Rand	Brooklyn, N. Y	Nov. 9, 1869	96, 727
Railway, Elevated	J. E. Serrell	New York, N. Y	Jan. 9, 1872	122, 667
Railway. Elevated	W. A. Sutton and E. Crowell	New York, N. Y., and San Francisco, Cal.	Feb. 16, 1869	87, 677
Railway, Elevated	S. Warren and W. M. Blume	New York, N. Y	Nov. 26, 1867	71, 432
Railway, Elevated	W. H. Williams	Little Falls, N. Y	Nov. 5, 1867	70, 666
Railway, Elevated-arch	E. J. Hulbert and A. N. N. Aubin	Portland, Me	Apr. 8, 1873	137, 552
Railway-elevator, Portable	W. T. Nichols	Rutland, Vt	Feb. 11, 1868	74, 408
Railway, Endless	J. Frye	Brooklyn, N. Y	Oct. 15, 1872	132, 152
Railway, Endless-chain	S. Lane	Hallowell, Me	May 17, 1830	....
Railway engine, City	A. Irwin	Pittsburgh, Pa	Sept. 2, 1862	36, 352
Railway-fagot	S. L. Potter	Wyandotte, Mich	Jan. 29, 1867	61, 565
Railway, Ferry	O. Cogsil	Harlem Springs, Ohio	Apr. 20, 1869	89, 201
Railway-ferry-track platform	W. P. Halliday	Cairo, Ill	Feb. 4, 1873	135, 545
Railway for hauling up and launching vessels, Marine.	J. Riggin	Baltimore, Md	Aug. 30, 1838	901
Railway for hauling up vessels, Marine	W. Van Dusen	Kensington, Pa	Apr. 14, 1835	....
Railway, Forest	A. Pinkus and T. R. Williams.	London, England	Apr. 27, 1836	....
Railway foundation, Marine	J. Ronaldson and J. S. Neill	Philadelphia, Pa	May 22, 1830	....
Railway-frog	E. G. Allen	Boston, Mass	Apr. 24, 1866	54, 086
Railway-frog	E. G. Allen	Boston, Mass	Sept. 25, 1866	58, 196
Railway-frog	W. B. Atkinson	Philadelphia, Pa	May 13, 1873	138, 835
Railway-frog	G. W. Billings	Chicago, Ill	Apr. 15, 1873	137, 882
Railway-frog	N. P. Bowler	Cleveland, Ohio	Mar. 26, 1867	63, 203
Railway-frog	J. Brahn	Jersey City, N. J	Dec. 3, 1872	133, 559
Railway-frog	J. Brahn	Jersey City, N. J	May 27, 1873	139, 291
Railway-frog	F. J. Calhoun	Boston, Mass	Nov. 23, 1869	97, 163
Railway-frog	E. M. Caulkins	Worcester, Mass	Nov. 29, 1864	45, 295
Railway-frog	H. S. Chapin	Delhi, Ohio	June 2, 1868	78, 439
Railway-frog	T. J. and G. M. Clark	Higgaunum, Conn	July 8, 1873	140, 574
Railway-frog	W. Close	Sacramento, Cal	Nov. 5, 1872	132, 750
Railway-frog	J. M. Dick	Buffalo, N. Y	Aug. 3, 1858	21, 067
Railway-frog	G. Douglass	Scranton, Pa	Apr. 7, 1863	38, 098
Railway-frog	J. H. Dow and D. J. Riker	Chicago, Ill	Feb. 4, 1868	73, 959
Railway-frog	W. B. Gage and W. H. Staats	Saratoga Springs and Crescent, N. Y.	July 27, 1869	93, 076
Railway-frog	J. Gray	Chicago, Ill	Oct. 13, 1868	82, 937
Railway-frog	G. S. Griggs	Roxbury, Mass	July 31, 1837	337
Railway-frog	F. Gübser	Newport, Ky	Aug. 31, 1869	94, 410
Railway-frog	J. P. Hart	Chicago, Ill	Mar. 12, 1867	62, 745
Railway-frog	G. G. Hickman	Downington, Pa	June 27, 1865	48, 400
Railway-frog	J. W. Hoffman	Philadelphia, Pa	Dec. 4, 1849	6, 921
Railway-frog	J. H. Lakey	Turner, Ill	Mar. 25, 1873	137, 085
Railway-frog	D. D. Lewis	Tamaqua, Pa	May 17, 1859	24, 034
Railway-frog	W. Morris	Harrison, N. J	Jan. 9, 1872	122, 634
Railway-frog	W. H. Nobles	Saint Paul, Minn	Oct. 13, 1868	82, 977
Railway-frog	S. N. Park	Bloomsburgh, N. J	Dec. 10, 1867	71, 905
Railway-frog	S. Parker	Chicago, Ill	Jan. 15, 1867	61, 243
Railway-frog	S. Parker	Chicago, Ill	Jan. 12, 1869	85, 758
Railway-frog	J. Patterson	Hornellsville, N. Y	Sept. 21, 1869	94, 970
Railway-frog	A. Philippi	Elizabethport, N. J	Aug. 20, 1867	67, 903
Railway-frog	D. C. Pierce	Clayton, N. Y	Feb. 1, 1870	99, 346
Railway-frog	D. C. Pierce	Clayton, N. Y	Mar. 12, 1872	124, 623
Railway-frog	D. C. Pierce	Chicago, Ill	Apr. 23, 1872	126, 082
Railway-frog	P. Quinn	Philadelphia, Pa	Apr. 3, 1866	53, 673
Railway-frog	J. M. Rabb	Charleston, S. C	Sept. 25, 1860	30, 155
Railway-frog	A. Robbins	Orange, Mass	July 10, 1866	56, 271
Railway-frog	J. C. Rupp	Newark, Del	Nov. 29, 1870	109, 670
Railway-frog	T. Sharp	Chicago, Ill	Dec. 1, 1863	40, 771
Railway-frog	T. Sharts	Auburn, N. Y	Aug. 1, 1865	49, 162
Railway-frog	H. J. Skinner and S. G. Gifford	Dunkirk, N. Y	May 27, 1873	139, 271
Railway-frog	A. B. Thompson	Owego, N. Y	Feb. 23, 1869	87, 124
Railway-frog	G. Westinghouse, jr	Schenectady, N. Y	Apr. 7, 1868	76, 365
Railway-frog	W. Wharton, jr	Philadelphia, Pa	July 18, 1865	48, 859
Railway-frog	W. Wharton, jr	Philadelphia, Pa	Jan. 16, 1866	52, 019
Railway-frog	W. Wharton, jr	Philadelphia, Pa	Feb. 11, 1868	74, 461
Railway-frog	J. Wixted	Port Carbon, Pa	Oct. 22, 1867	70, 061
Railway-frog	J. Wood	Red Bank, N. J	Dec. 24, 1861	34, 022
Railway-frog	J. Wood	Red Bank, N. J	June 24, 1873	140, 332
Railway-frog	J. Wood	Red Bank, N. J	Nov. 25, 1873	145, 041
Railway-frog	J. Woodville	Washington, Ind	June 24, 1873	140, 230
Railway-frog and rail-coupling	J. W. Close	Buffalo, N. Y	May 2, 1871	114, 409
Railway-frog, Elastic	G. P. Sanborn and W. Mansfield	New Haven, Conn	July 5, 1859	24, 664

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Railway-frog guard	H. W. Farley	East Boston, Mass	Apr. 4, 1854	10, 735
Railway-frog, Oscillating self-adjusting	J. W. Hoffman	Philadelphia, Pa	Apr. 2, 1850	7, 243
Railway-frogs, Methods of securing movable points of.	M. S. Curtis and E. St. John	Binghamton, N. Y	Aug. 10, 1852	9, 180
Railway-frogs, Substitute for	S. A. Black and F. C. Ford	Erie, Pa	Sept. 25, 1860	30, 117
Railway-gage	L. Kayser	Hamburg, Germany	Sept. 30, 1873	143, 287
Railway-gate	J. Beamisdarfer, sr	Campbellstown, Pa	Feb. 11, 1873	135, 620
Railway-gate	L. Butler	Kenosha, Wis	July 17, 1860	29, 214
Railway-gate	P. Campbell	Carrolltown, Pa	Dec. 14, 1869	97, 760
Railway-gate	E. P. Carter	Yorkshire, N. Y	Feb. 17, 1852	8, 736
Railway-gate	D. W. Comstock	Chicago, Ill	Nov. 8, 1859	26, 018
Railway-gate	C. S. Currie	Caldwell, Ohio	Apr. 8, 1873	137, 534
Railway-gate	S. N. Cushing	Waltham, Mass	Mar. 21, 1865	46, 884
Railway-gate	E. K. Gardner	Orville, Ohio	Nov. 12, 1867	70, 828
Railway-gate	A. C. Goodman and H. Fessler	Canton, Ohio	Dec. 3, 1867	71, 737
Railway-gate	A. Hartman	Canton, Ohio	Mar. 3, 1868	75, 013
Railway-gate	S. H. Heatwole	Bridgewater, Va	May 16, 1871	114, 940
Railway-gate	N. Houck	Canton, Ohio	July 2, 1867	66, 344
Railway-gate	A. Houts	Salona, Pa	Sept. 2, 1873	142, 466
Railway-gate	T. R. and W. W. Huntington	Minneapolis, Minn	Aug. 4, 1868	80, 547
Railway-gate	R. W. Jenks, jr	Providence, R. I	Feb. 7, 1860	27, 055
Railway-gate	G. A. Kristie and S. Horn	Fort Seneca, Ohio	June 11, 1872	127, 775
Railway-gate	S. Liggett	Staunton, Va	Mar. 15, 1859	23, 256
Railway-gate	J. E. McNair and J. C. Elliott	Augusta County, Va	July 17, 1860	29, 186
Railway-gate	W. F. Morgan	New York, N. Y	May 6, 1873	138, 677
Railway-gate	D. Percival	Middletown, Del	Apr. 4, 1846	4, 435
Railway-gate	J. B. Powell	Philadelphia, Pa	May 6, 1873	138, 527
Railway-gate	R. Ramsey	New Wilmington, Pa	July 4, 1871	116, 754
Railway-gate	R. Ramsey and C. Stafford	New Wilmington, Pa	Mar. 29, 1870	101, 311
Railway-gate	J. B. Rittenhouse and J. Collins	Locust Lane, Pa	June 14, 1870	104, 355
Railway-gate	I. Robbins	Hughesville, Pa	July 26, 1859	24, 887
Railway-gate	O. Sherwood, jr	Independence, Iowa	Mar. 20, 1860	27, 575
Railway-gate	S. M. Snyder	Brady, Pa	Mar. 15, 1870	100, 943
Railway-gate	D. J. Waltz, H. A. Soliday, and W. Hamsher.	Doylestown, Ohio	June 1, 1869	90, 708
Railway-gate	D. S. Weise	Brecknock Township, Pa	Aug. 25, 1868	81, 444
Railway-gate	E. Woodbury	Sharon, Pa	Oct. 25, 1870	108, 670
Railway-gate, Automatic	H. Conrad	New Columbia, Pa	June 18, 1872	128, 121
Railway-gate, Automatic	R. P. and E. B. Crane	Beloit, Wis., and Worcester, Mass.	June 1, 1869	90, 821
Railway-gate, Automatic safety	W. H. Emmons and J. H. Lee	New York, N. Y., and Boston, Mass.	Mar. 12, 1872	124, 561
Railway-gate for cattle-guards	J. T. McIntyre	Middletown, Del	Dec. 16, 1856	16, 243
Railway-gates by means of the locomotive, Machines for operating.	R. Coffin	West Haverhill, Mass	June 5, 1849	6, 513
Railway-girder	R. M. Upjohn	New York, N. Y	Mar. 12, 1872	124, 521
Railway-guard rail to be used with pronged cow-catchers.	H. D. Searles	Rockford, Ill	June 12, 1855	13, 051
Railway, Inclined	J. G. Taylor	Baltimore, Md	July 2, 1872	128, 674
Railway-indicator	G. R. Lillibridge	Wayne County, Mich	Sept. 7, 1858	21, 426
Railway-indicator	M. T. Ridout	Milwaukee, Wis	Apr. 9, 1861	32, 000
Railway-iron straightener and curver	D. Bolton	Springfield, Ill	Sept. 15, 1863	39, 876
Railway-irons, Machinery for straightening	J. Anderson	Phœnixville, Pa	Aug. 29, 1848	5, 733
Railway-irons, Roll for rolling piles of	J. Thomas	Indianapolis, Ind	May 13, 1862	35, 281
Railway-irons, Rolling	J. Fritz	Johnstown, Pa	Oct. 5, 1858	21, 666
Railway-jack	A. D. Fox	Oil City, Pa	Dec. 3, 1867	71, 598
Railway-jack	F. H. Furniss	Cleveland, Ohio	May 15, 1860	28, 268
Railway-jack	M. Kelley	Philadelphia, Pa	Jan. 19, 1864	41, 304
Railway-jack	T. J. Todd	Raritan, N. J	Aug. 6, 1872	130, 338
Railway-jack and pinch-bar	M. G. Collins	Meadville, Pa	Nov. 29, 1870	109, 590
Railway-joint	L. Behymer	Indianapolis, Ind	Feb. 4, 1868	74, 037
Railway-joint	J. M. Heard	Prairie Station, Miss	Nov. 13, 1860	30, 629
Railway-joint	A. S. McClure	Duncannon, Pa	Mar. 19, 1867	63, 069
Railway-joint	J. H. Swett	Birmingham, Pa	June 30, 1868	79, 515
Railway-joint	L. B. Tyng	Lowell, Mass	Sept. 11, 1860	30, 014
Railway-joint chair	J. H. Banta	Piermont, N. Y	Mar. 20, 1860	27, 512
Railway-joint, Compensating	F. Oakley	Toronto, Canada	Sept. 24, 1872	131, 554
Railway joint or chair	L. B. Tyng	Lowell, Mass	Feb. 18, 1862	34, 452
Railway-joints, Mode of securing	L. Fay	Fall River, Mass	June 17, 1862	35, 597
Railway, Marine	W. F. Channing	Providence, R. I	Mar. 21, 1865	46, 878
Railway, Marine	J. G. Colley	Norfolk, Va	Sept. 1, 1831	....
Railway, Marine	C. H. Edwards	Quincy, Mass	Feb. 2, 1864	41, 426
Railway, Marine	P. Emerson	Carondelet, Mo	Aug. 17, 1869	93, 868
Railway, Marine	A. Flannigain	Baltimore, Md	Jan. 16, 1843	2, 911
Railway, Marine	J. H. Gosline	Hampton, Va	Sept. 26, 1871	119, 345
Railway, Marine	J. H. Green	Providence, R. I	May 26, 1828	....
Railway, Marine	J. Rodgers	Washington, D. C	June 24, 1822	....
Railway, Marine	D. Rogers	Mobile, Ala	Apr. 3, 1829	....
Railway, Marine	W. Talbert	Washington, D. C	Feb. 2, 1864	41, 452
Railway, Marine	R. Ward	New York	Dec. 28, 1826	....
Railway, Marine	J. Webb	New York	May 14, 1827	....
Railway, Marine	L. White	Norfolk, Va	Nov. 15, 1832	....
Railway-moving machine	W. Ball	Wilmington, Ohio	Oct. 19, 1869	95, 968
Railway on which carriages may be made to turn in and out.	J. Wright	Columbia, Pa	June 11, 1829	....
Railway, Permanent	R. Watson	Chatham, Ill	May 14, 1861	32, 321
Railway-pick	J. E. Barstow and E. K. Ingoldsby.	Van Buren Centre, N. Y	Mar. 19, 1867	62, 928
Railway-pilot, Revolving	E. and A. Wyckoff	Elmira, N. Y	May 19, 1863	38, 622
Railway-platform, Revolving	J. Elgar	Philadelphia, Pa	Apr. 12, 1833	....
Railway-platform, Revolving	J. Tustin	Philadelphia, Pa	Sept. 9, 1835	....
Railway-platform, Turning	D. Evans	Penn Township, Pa	Nov. 26, 1835	....
Railway, Pneumatic	A. E. Beach	Stratford, Conn	May 7, 1867	64, 402
Railway, Pneumatic	A. E. Beach	Stratford, Conn	Nov. 5, 1867	70, 544
Railway, Pneumatic	T. W. Rammell	London, England	Apr. 26, 1864	42, 509
Railway, Portable	T. Bootsman	Tompkinsville, N. Y	Mar. 21, 1871	112, 893
Railway, Portable	J. N. Peteler	Sheppach, Bavaria	Sept. 4, 1866	57, 826
Railway, Portable endless	J. Price	New York	Sept. 15, 1836	....

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Railway-propeller	R. G. and O. P. Hatfield	New York, N. Y	Apr. 17, 1849	6,334
Railway-propeller, Reciprocating	H. Boynton	Hinesburgh, Vt	June 19, 1855	13,078
Railway pushing-jack	A. Freeman	Peoria, Ill	Jan. 11, 1870	98,683
Railway pushing-jack	J. Hamme	York, Pa	Nov. 9, 1869	96,694
Railway-rail	J. Adams	Fair Haven, Vt	Dec. 4, 1866	60,112
Railway-rail	W. W. Alter	Saint Louis, Mo	Aug. 19, 1873	141,979
Railway-rail	H. G. Angle	Chicago, Ill	Apr. 1, 1873	137,337
Railway-rail	R. Anthony	Scranton, Pa	Dec. 22, 1868	85,198
Railway-rail	P. Ashcroft and G. F. L. Meakin.	Richmond Road, Dalton, and London, England.	Jan. 14, 1868	73,282
Railway-rail	G. S. Avery	Cross River, N. Y	Sept. 13, 1859	25,376
Railway-rail	L. Ball	Auburn, N. Y	Mar. 23, 1858	19,675
Railway-rail	G. W. R. Bayley	Brashear, La	Nov. 1, 1859	25,942
Railway-rail	S. A. Beers	Brooklyn, N. Y	Aug. 24, 1858	21,241
Railway-rail	S. A. Beers	Brooklyn, N. Y	May 10, 1864	42,636
Railway-rail	H. Belfield	Philadelphia, Pa	Dec. 7, 1869	97,393
Railway-rail	T. S. Blair	Pittsburgh, Pa	May 19, 1863	38,548
Railway-rail	J. L. Booth	Rochester, N. Y	Aug. 28, 1866	57,467
Railway-rail	J. L. Booth	Rochester, N. Y	Apr. 30, 1872	126,175
Railway-rail	R. M. Brooks	Griffin, Ga	June 30, 1868	79,309
Railway-rail	J. S. Butterfield and M. S. Green.	Philadelphia, Pa	May 22, 1866	54,853
Railway-rail	A. G. Buzby	Philadelphia, Pa	June 2, 1868	78,422
Railway-rail	R. Chambers	Cincinnati, Ohio	Jan. 15, 1867	61,158
Railway-rail	J. Cochrane	New York, N. Y	Nov. 16, 1858	22,103
Railway-rail	C. H. Collins	New York, N. Y	Jan. 26, 1869	86,281
Railway-rail	W. Crandell	Westfield, N. Y	July 16, 1872	129,535
Railway-rail	J. F. Cranston	Springfield, Mass	June 22, 1869	91,719
Railway-rail	L. and M. Day and A. Mercer.	Carroll County and Howard County, Md.	Nov. 12, 1861	33,696
Railway-rail	A. B. Dean and T. C. Coleman.	Louisville, Ky	Feb. 18, 1873	136,043
Railway-rail	J. A. Dickson	Scranton, Pa	Sept. 12, 1865	49,864
Railway-rail	J. Downey	Johnstown, Pa	Oct. 22, 1872	132,451
Railway-rail	T. Dwight	New Haven, Conn	Nov. 10, 1857	18,577
Railway-rail	B. M. Esterle	San Francisco, Cal	Apr. 30, 1867	64,297
Railway-rail	B. F. Farrar	Springfield, Mass	Sept. 5, 1865	49,742
Railway-rail	J. C. Hagan	Nashville, Tenn	Apr. 5, 1870	101,611
Railway-rail	A., sr., and R. J. B. Hamill	Baltimore, Md	Oct. 3, 1865	50,243
Railway-rail	A. Hanmer and D. Grim	Pittsburgh, Pa	Feb. 22, 1870	100,030
Railway-rail	A. A. Hein	Port Washington, Wis	Dec. 10, 1872	133,777
Railway-rail	J. H. Herman	Boston, Mass	Apr. 21, 1868	77,039
Railway-rail	R. B. Holdredge	Corry, Pa	Dec. 31, 1872	134,475
Railway-rail	W. S. Hunter	Stanstead, Canada	Jan. 14, 1873	134,749
Railway-rail	I. B. Hymer	Warsaw, Ind	Apr. 9, 1867	63,640
Railway-rail	I. B. Hymer	Warsaw, Ind	May 7, 1867	64,536
Railway-rail	A. Johnson	New York, N. Y	Oct. 28, 1873	144,029
Railway-rail	J. B. Johnston	New York, N. Y	Oct. 1, 1872	131,880
Railway-rail	J. B. Johnston	New York, N. Y	Sept. 9, 1873	142,701
Railway-rail	T. F. Jones	Ballston Spa, N. Y	Nov. 6, 1866	59,401
Railway-rail	R. V. Jones	Canton, Ohio	July 31, 1866	56,760
Railway-rail	G. W. King	Georgetown, D. C	Jan. 5, 1869	85,673
Railway-rail	J. Maitland	Newburgh, Ohio	Oct. 24, 1871	120,295
Railway-rail	R. M. Marchant	Wellington, New Zealand	July 28, 1868	80,417
Railway-rail	M. F. McIntyre	Girard, Pa	Apr. 1, 1873	137,463
Railway-rail	A. McKenney	Maumee City, Ohio	July 11, 1871	116,975
Railway-rail	A. McKenney	Maumee City, Ohio	Aug. 1, 1871	117,658
Railway-rail	F. A. Mered th	Mount Airy, Md	Aug. 2, 1870	105,962
Railway-rail	J. Millholland	Reading, Pa	Mar. 15, 1870	100,917
Railway-rail	J. Montgomery	Croton Landing, N. Y	Dec. 14, 1869	97,792
Railway-rail	R. Montgomery	New York, N. Y	Sept. 27, 1870	107,798
Railway-rail	J. H. Moore	Chicago, Ill	Jan. 19, 1869	86,093
Railway-rail	G. C. Morgan	Chicago, Ill	June 6, 1871	115,765
Railway-rail	G. C. Morgan	Chicago, Ill	Mar. 18, 1873	136,852
Railway-rail	B. Myers	Chicago, Ill	Oct. 14, 1873	143,708
Railway-rail	W. D. O'Brien	Brooklyn, N. Y	July 19, 1864	43,599
Railway-rail	C. Osgood	Cape Elizabeth, Me	Dec. 17, 1867	72,222
Railway-rail	W. Peckham	Middletown, R. I	Aug. 5, 1873	141,515
Railway-rail	M. R. Perkins	Portsmouth, N. H	Nov. 4, 1873	144,221
Railway-rail	D. C. Pierce	Clayton, N. Y	Mar. 27, 1866	53,479
Railway-rail	D. C. Pierce	Clayton, N. Y	Apr. 20, 1869	89,070
Railway-rail	A. Plinta	Albany, N. Y	Dec. 21, 1858	22,376
Railway-rail	J. Potter	Portland, Me	Nov. 10, 1868	83,880
Railway-rail	S. B. Prindle	Litchfield, Conn	Apr. 21, 1868	76,942
Railway-rail	E. D. Pritchard	Boston, Mass	Dec. 31, 1867	72,902
Railway-rail	S. J. Reeves	Philadelphia, Pa	May 11, 1869	90,023
Railway-rail	P. O. Reilly	Reading, Pa	May 3, 1853	9,703
Railway-rail	H. Resley	Cumberland, Md	May 24, 1864	42,875
Railway-rail	J. Ruggles	Thomaston, Me	May 22, 1837	202
Railway-rail	E. Sampson	Lansingburgh, N. Y	Mar. 5, 1867	62,691
Railway-rail	R. S. Sanborn	Rockford, Ill	Aug. 8, 1871	117,933
Railway-rail	R. S. Sanborn	Rockford, Ill	Dec. 12, 1871	121,732
Railway-rail	R. S. Sanborn	Rockford, Ill	Mar. 26, 1872	124,977
Railway-rail	G. V. Sheffield and B. Whitcomb.	Worcester, Mass	Nov. 26, 1867	71,417
Railway-rail	E. R. Shepard	Scranton, Pa	Mar. 3, 1868	75,906
Railway-rail	E. R. Shepard	Scranton, Pa	Oct. 6, 1868	82,881
Railway-rail	E. R. Shepard	Scranton, Pa	May 3, 1870	102,601
Railway-rail	J. H. Shiveley	New York, N. Y	July 10, 1866	56,279
Railway-rail	A. F. Smith	Norwich, Conn	May 25, 1869	90,597
Railway-rail	R. Steel	Philadelphia, Pa	Aug. 26, 1873	142,179
Railway-rail	J. D. Steele	Pottstown, Pa	May 3, 1853	9,704
Railway-rail	E. W. Stephens and R. Jenkins.	Covington, Ky	Apr. 20, 1858	20,007
Railway-rail	E. W. Stevens and R. Jenkins.	Covington, Ky	Aug. 18, 1857	18,023
Railway-rail	J. F. Tallant	Burlington, Iowa	Dec. 14, 1869	97,832
Railway-rail	J. B. Tarr	Chicago, Ill	Jan. 29, 1867	61,579
Railway-rail	G. D. Teller	Buffalo, N. Y	Oct. 4, 1864	44,569

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Railway-rail	T. R. Timby	Tarrytown, N. Y	Feb. 27, 1872	124, 174
Railway-rail	T. R. Timby	Tarrytown, N. Y	Feb. 27, 1872	124, 175
Railway-rail	L. B. Tyng	Jersey City, N. J	Jan. 5, 1858	19, 053
Railway-rail	Z. B. Wakeman	Rockford, Ill	May 26, 1868	78, 404
Railway-rail	J. H. Wales and H. S. Cushman.	Marlborough and Milford, Mass.	Aug. 26, 1873	142, 182
Railway-rail	W. Watson	Tonica, Ill	Oct. 15, 1861	33, 503
Railway-rail	E. Wiley	Philadelphia, Pa	Apr. 2, 1872	125, 368
Railway-rail	E. Williams	Batavia, N. Y	May 23, 1871	115, 142
Railway-rail	J. A. Woodbury	Boston, Mass	Mar. 5, 1872	124, 240
Railway-rail	J. A. Woodbury	Boston, Mass	Apr. 9, 1872	125, 648
Railway-rail	G. W. N. Yost	Corry, Pa	Apr. 9, 1872	125, 426
Railway-rail	H. Zahn	Toledo, Ohio	Nov. 24, 1868	84, 401
Railway-rail and base-plate	H. Cooke	Paterson, N. J	Jan. 25, 1870	99, 165
Railway-rail and bearing-plate	E. Myrich	Ayer, Mass	Aug. 22, 1871	118, 260
Railway rail and chair	W. Foster	Goodland, Ind	June 11, 1872	127, 860
Railway rail and chair	W. E. Winby	Edgbaston, England	Mar. 21, 1871	112, 998
Railway rail and splice	J. and D. Hall	Chicago, Ill	June 29, 1869	92, 045
Railway-rail-bending apparatus	G. D. Emerson	Calumet, Mich	Oct. 11, 1870	108, 123
Railway-rail-bending device	G. D. Emerson	Calumet, Mich	Nov. 9, 1869	96, 684
Railway-rail-bolt holder	D. C. Baker	Fulton, N. Y	May 14, 1872	126, 772
Railway-rail, Cast-iron	J. E. Russell	Brooklyn, N. Y	Mar. 15, 1859	23, 269
Railway-rail clamp	W. B. Atkinson	Pittsburgh, Pa	Sept. 22, 1868	82, 271
Railway-rail clamp or chair	J. E. Watkins	Smithfield, Ky	Jan. 21, 1868	73, 679
Railway-rail cleaner	C. Ortiz and H. Valladares	Matanzas, Cuba	July 19, 1870	105, 593
Railway-rail, Compound	W. B. Dunning	Geneva, N. Y	Jan. 18, 1870	98, 935
Railway-rail, Compound	H. J. Ferguson	Manchester, N. J	June 22, 1869	91, 532
Railway-rail, Compound	W. J. Holman	Indianapolis, Ind	May 13, 1856	14, 870
Railway-rail, Compound	E. E. Lewis, W. B. Dunning, and C. Wheat.	Geneva, N. Y	July 27, 1858	21, 007
Railway-rail, Compound	C. T. Liernur	Mobile, Ala	Jan. 27, 1857	16, 490
Railway-rail, Compound	D. R. Pratt	New York, N. Y	Feb. 15, 1870	99, 787
Railway-rail, Compound	E. R. Shepard	Scranton, Pa	May 3, 1870	102, 602
Railway-rail coupling	H. J. Gilman	Buffalo, N. Y	July 25, 1865	48, 926
Railway-rail coupling	A. N. Gray	Cleveland, Ohio	Aug. 13, 1861	33, 036
Railway-rail coupling	W. S. Mallory	Batavia, N. Y	Feb. 11, 1868	74, 393
Railway-rail coupling	J. Newham	Kent, Ohio	July 2, 1867	66, 246
Railway-rail coupling	T. E. Sexton	Wilmington, Del	July 23, 1867	66, 994
Railway-rail coupling	S. Vanstone	Providence, R. I	Aug. 4, 1863	39, 435
Railway-rail coupling	J. T. Wilson	Pittsburgh, Pa	Nov. 17, 1868	84, 152
Railway-rail fagot	H. Davis	Troy, N. Y	Jan. 15, 1867	61, 168
Railway-rail fagot	W. Leighton	Wyandotte, Mich	Nov. 26, 1867	71, 523
Railway-rail fagot	W. Leighton	Wyandotte, Mich	Mar. 10, 1868	75, 433
Railway-rail fagot	S. L. Potter	Wyandotte, Mich	Jan. 1, 1867	60, 783
Railway-rail fagot	H. Rowe	Marietta, Pa	May 5, 1868	77, 659
Railway-rail fagot	W. A. Sweet	Syracuse, N. Y	Aug. 13, 1867	67, 683
Railway-rail fastening	J. Cochrane	Farmingdale, N. J	Aug. 9, 1870	106, 256
Railway-rail fastening	J. Cochrane	Wall Township, N. J	May 21, 1867	64, 843
Railway-rail fastening	E. B. Graff	Baltimore, Md	Aug. 28, 1866	57, 498
Railway-rail fastening	N. Headington	Cincinnati, Ohio	Jan. 21, 1868	73, 529
Railway-rail fastening	H. T. Love	Virmillion Township, Kans	Jan. 1, 1867	60, 756
Railway-rail fastening	W. Palliser	Pall Mall, England	Feb. 8, 1870	99, 587
Railway-rail fastening	A. M. Rouse	Saint Louis, Mo	Nov. 25, 1873	145, 015
Railway-rail fastening	M. Seaman	Middleport, N. Y	Mar. 17, 1868	75, 583
Railway-rail fastening	G. Shatswell	Waukegan, Ill	May 10, 1870	102, 873
Railway-rail fastening	E. R. Shepard	Scranton, Pa	Sept. 14, 1869	94, 783
Railway-rail fastening	G. W. Wright	Salem, Ohio	Nov. 19, 1872	133, 283
Railway-rail fish-joint	H. Cook	Norwich, Conn	Feb. 15, 1870	99, 849
Railway-rail joint	J. Adams	Newark, Del	Dec. 10, 1872	133, 818
Railway-rail joint	T. V. Allis	New York, N. Y	Apr. 8, 1873	137, 587
Railway-rail joint	R. Anthony and F. A. Seabert	Kingston, Pa	Apr. 15, 1873	137, 819
Railway-rail joint	J. Bishop	Oswego, N. Y	July 15, 1873	140, 760
Railway-rail joint	W. R. Clark	Thellertown, Pa	Feb. 25, 1873	136, 307
Railway-rail joint	J. M. Clem	Opelika, Ala	Jan. 21, 1873	135, 082
Railway-rail joint	W. Crandell	Westfield, N. Y	June 10, 1873	139, 660
Railway-rail joint	H. Decker	Cochecton, N. Y	Sept. 23, 1873	142, 996
Railway-rail joint	W. G. Dunn	Fairfield, Ind	Dec. 9, 1873	145, 339
Railway-rail joint	E. P. Dwight	Philadelphia, Pa	Mar. 15, 1870	100, 738
Railway-rail joint	J. Freeland and D. Ward	New York, N. Y	Mar. 22, 1870	100, 896
Railway-rail joint	R. French	Seymour, Conn	Apr. 16, 1861	32, 057
Railway-rail joint	J. Fritz and R. H. Sayre	Bethlehem, Pa	June 22, 1869	91, 736
Railway-rail joint	N. Hill	Leavenworth City, Kans	Nov. 15, 1870	109, 210
Railway-rail joint	G. A. Huddart	Brynkir, Wales	Oct. 11, 1870	108, 142
Railway-rail joint	J. L. Hudson	Cumming, Ga	Aug. 19, 1873	142, 020
Railway-rail joint	G. E. Jarvis	Grafton, W. Va	July 20, 1869	92, 833
Railway-rail joint	W. Johnston	Havelock, Pa	Sept. 7, 1869	94, 607
Railway-rail joint	K. W. King and T. G. Hargraves	Boston, Mass	Sept. 5, 1865	49, 763
Railway-rail joint	R. H. Lamborn	Altoona, Pa	Feb. 2, 1864	41, 437
Railway-rail joint	W. D. Lindsley	Wathena, Kans	Aug. 19, 1873	142, 030
Railway-rail joint	M. F. McIntyre	Girard, Pa	Mar. 4, 1873	136, 530
Railway-rail joint	A. McKenney	Maumee City, Ohio	Dec. 24, 1872	134, 298
Railway-rail joint	W. Morehouse	Buffalo, N. Y	Dec. 20, 1870	110, 384
Railway-rail joint	G. E. Morris and C. W. Gregory	Danville, Ill	June 6, 1871	115, 630
Railway-rail joint	S. Nunamaker	Nineveh, Pa	Jan. 14, 1873	134, 924
Railway-rail joint	G. Palmer	Littlestown, Pa	Oct. 20, 1868	83, 303
Railway-rail joint	E. G. Patterson	Pithole City, Pa	Oct. 6, 1868	82, 744
Railway-rail joint	G. M. Ramsay	New York, N. Y	Feb. 14, 1865	46, 388
Railway-rail joint	S. J. Reeves	Philadelphia, Pa	Mar. 24, 1868	75, 977
Railway-rail joint	D. M. Reynolds	Port Deposit, Md	Sept. 17, 1872	131, 402
Railway-rail joint	W. W. Robinson	Ripon, Wis	Jan. 17, 1871	111, 006
Railway-rail joint	T. Rodes	Pulaski, Tenn	Oct. 7, 1873	143, 553
Railway-rail joint	J. S. Schoonover	Corry, Pa	Sept. 29, 1868	82, 645
Railway-rail joint	B. Scott	New Brighton, Pa	Aug. 27, 1867	68, 122
Railway-rail joint	G. W. Skaats	Cincinnati, Ohio	Mar. 25, 1873	137, 253
Railway-rail joint	W. H. Skidmore	Philadelphia, Pa	Sept. 16, 1873	142, 954
Railway-rail joint	T. Slaughter	Lawrence Mass	Nov. 12, 1872	132, [illegible]
Railway-rail joint	C. E. Spooner and A. Huddart	Port Madoc and Brynkir, Wales.	Apr. 26, 1870	102, 329

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Railway-rail joint	J. M. Staughton	Riverton, Ky	Nov. 12, 1872	132, 990
Railway-rail joint	J. W. Stell	Gonzales, Tex	May 28, 1872	127, 385
Railway rail joint	A. B. Stone	Cleveland, Ohio	Dec. 24, 1872	134, 174
Railway-rail joint	G. A. Sturges	Delhi, N. Y	May 27, 1873	139, 276
Railway-rail joint	W. Thompson	Gardiner, Me	Dec. 9, 1873	145, 312
Railway-rail joint	H. Williams	Grass Lake, Mich	Dec. 3, 1872	133, 612
Railway-rail-joint fastening	B. W. Buchheit	East Liverpool, Ohio	Sept. 9, 1873	142, 610
Railway-rail-joint fastening	T. B. McConaughey and J. Adams.	Newark, Del	May 24, 1870	103, 480
Railway-rail-joint fastening	G. A. Sturges	Delhi, N. Y	Oct. 21, 1873	143, 790
Railway-rail-joint fastening	S. Vanstone	North Providence, R. I	Mar. 11, 1873	136, 683
Railway-rail-joint splice	J. Anthony	Greenbush, N. Y	Aug. 13, 1867	67, 626
Railway-rail-joint splice	E. H. Eberman	Lampeter Square, Pa	Feb. 25, 1868	74, 900
Railway-rail-joint stiffener	H. Harding	Tuscaloosa, Ala	Dec. 16, 1873	145, 649
Railway-rail joints, Elastic seat for	L. Scofield, jr	Atlanta, Ga	Sept. 30, 1873	143, 304
Railway-rail joints, Splice for	M. Fisher	Trenton, N. J	Mar. 9, 1858	19, 555
Railway-rail lock-joint	A. Douglass	Paterson, N. J	May 2, 1865	47, 328
Railway-rail patch	J. T. Barnett	Decatur Ill	Mar. 28, 1871	113, 004
Railway-rail-patching machine	J. R. Moore and J. G. Mills	Chicago, Ill	Aug. 20, 1872	130, 587
Railway-rail-notching roll	H. Baines	Toronto, Canada	May 23, 1871	115, 149
Railway-rail rolling and notching apparatus	W. Hoffman	Pittsburgh, Pa	May 4, 1869	89, 831
Railway-rail splice	H. P. Adams	Cleveland, Ohio	Mar. 4, 1873	136, 402
Railway-rail splice	J. F. Bartlett	Boston, Mass	Nov. 16, 1869	96, 769
Railway-rail splice	S. A. Beers	Brooklyn, N. Y	Oct. 27, 1868	83, 446
Railway-rail splice	D. J. Clark	Evansville, Ind	June 4, 1872	127, 570
Railway-rail splice	A. B. Davis	Philadelphia, Pa	Apr. 23, 1872	126, 035
Railway-rail splice	A. B. Davis	Philadelphia, Pa	July 16, 1872	129, 109
Railway-rail splice	G. E. Dering	Lockleys, England	June 29, 1869	92, 021
Railway-rail splice	R. Elliott	Chester, Pa	Apr. 28, 1868	77, 180
Railway-rail splice	W. C. Gould	New York, N. Y	Apr. 16, 1872	125, 673
Railway-rail splice	W. E. Henry	Joliet, Ill	July 6, 1869	92, 310
Railway-rail splice	J. P. Herron	Wilmington, Del	July 2, 1872	129, 487
Railway-rail splice	P. Prettyman	Paradise Spring Farm, Oreg.	Mar. 16, 1869	87, 873
Railway-rail splice	R. Randolph	Washington, D. C	Feb. 15, 1870	99, 948
Railway-rail splice	B. Robinson	Boston, Mass	Sept. 7, 1869	94, 516
Railway-rail splice	G. P. Rose	Elmira, N. Y	Apr. 19, 1870	102, 043
Railway-rail splice	J. C. Rupp	Newark, Del	Aug. 17, 1869	93, 909
Railway-rail splice	W. S. Shoemaker and E. H. Shoemaker.	Towsontown, Md., and Lancaster, Ohio.	June 29, 1869	91, 877
Railway-rail splice	J. Snell and J. M. Crosland	Pottsville, Pa	Nov. 9, 1869	96, 628
Railway-rail splice	G. O. Taylor	Hamilton, Va	July 26, 1870	105, 863
Railway-rail splice	J. Valentine, F. Harris, jr., and C. Barnes.	Bound Brook and Elizabethtown, N. J., and New York, N. Y.	Mar. 8, 1870	100, 693
Railway-rail splice	J. Wixted	Port Carbon, Pa	Nov. 3, 1868	83, 813
Railway-rail splice-piece	R. French	Seymour, Conn	Apr. 9, 1872	125, 448
Railway-rail splice-piece	E. Morris	Philadelphia, Pa	July 27, 1858	21, 014
Railway-rail splice-piece	C. Roosevelt	New York, N. Y	Mar. 19, 1872	124, 856
Railway-rail splice-piece	H. Williams	Grass Lake, Mich	July 16, 1872	129, 505
Railway rail, Street	G. Eaton	Boston, Mass	May 1, 1860	28, 067
Railway rail, Street	M. L. Ghirardini	Providence, R. I	July 29, 1873	141, 217
Railway rail, Street	J. B. Henck	Boston, Mass	Apr. 20, 1858	19, 992
Railway rail, Street	S. Nicolson	Boston, Mass	Feb. 10, 1857	16, 605
Railway rail, Street	S. Nicolson	Boston, Mass	Oct. 26, 1858	21, 899
Railway rail, Street	S. Nicolson	Boston, Mass	Apr. 26, 1859	23, 778
Railway rail, Street	A. Reese	Pittsburgh, Pa	Dec. 20, 1859	26, 523
Railway rail, Street	T. M. Schleier	Nashville, Tenn	Dec. 20, 1864	45, 525
Railway rail, Street	L. F. Whitney	Charlestown, Mass	Sept. 9, 1862	36, 432
Railway-rail support	W. S. Mallory	Batavia, N. Y	May 3, 1864	42, 586
Railway-rail tie	W. F. Serjeant	Saint Louis, Mo	June 16, 1868	79, 016
Railway rails and wheels, Testing the wear of	C. T. Liernur	Mobile, Ala	Apr. 17, 1860	27, 915
Railway-rails, Chair for coupling	H. L. Beach	Montrose, Pa	Feb. 16, 1869	86, 897
Railway-rails, Connecting	M. J. Waldron	Dunkirk, N. Y	Aug. 3, 1858	21, 097
Railway-rails, Connecting the ends of	K. H. Allen	Worcester, Mass	July 20, 1858	20, 928
Railway-rails, Connections for the ends of	H. H. Graham	Paterson, N. J	Mar. 13, 1860	27, 444
Railway-rails, Construction of piles for	T. and J. W. Richardson and A. Spencer.	West Hartlepool, England	Sept. 19, 1871	119, 049
Railway-rails, Excluding dirt from grooved	C. M. Eakin	West Philadelphia, Pa	Mar. 13, 1855	12, 505
Railway-rails, Fagot or pile for manufacturing	W. Hayward and J. Lees	Danville, Pa	July 14, 1868	79, 904
Railway-rails, Fagoting	W. Lewis, J. Price, and F. Naylor.	Danville, Pa	July 19, 1864	43, 593
Railway-rails, Fastening	S. A. Beers	Kings County, N. Y	May 18, 1858	20, 248
Railway-rails, Fastening	T. Grenell	Newark, N. J	Feb. 13, 1847	4, 967
Railway-rails, Insulated bolt for	J. W. Cochran	New York, N. Y	Jan. 10, 1871	110, 826
Railway-rails, Joint-connection for hollow	R. S. Sanborn	Rockford, Ill	Sept. 9, 1873	142, 654
Railway-rails, Machine for making fish-bars for	J. Reese	Pittsburgh, Pa	June 18, 1867	65, 831
Railway-rails, Machine for making joint-fastenings for.	B. F. Gossin	Cincinnati, Ohio	Oct. 28, 1862	36, 778
Railway-rails, Machine for punching	A. Sower and M. Payne	Troy, N. Y	May 12, 1863	38, 509
Railway-rails, Machine for rolling	A. J. Suffern	Suffern, N. Y	May 8, 1855	12, 837
Railway-rails, Machine for straightening	G. I. Kinzel	Knoxville, Tenn	Mar. 26, 1872	125, 055
Railway-rails, Machine for welding and cutting	J. Stone	Keeseville, N. Y	June 8, 1869	91, 178
Railway-rails, Machine for welding ends of	H. Baines	Manchester, Great Britain	Feb. 6, 1866	52, 502
Railway-rails, &c., Manner of clinching spikes, &c., to be used in securing iron.	W. Emmons	New York	Sept. 3, 1842	2, 772
Railway-rails, Manner of connecting cast-iron	J. M. Bay	Harrisburgh, Pa	Apr. 13, 1844	3, 539
Railway-rails, Manner of punching bolt-holes in steel.	T. Critchlow	Baldwin, Pa	Feb. 18, 1873	136, 037
Railway-rails, Manufacture of	J. L. Booth	Rochester, N. Y	Nov. 5, 1867	70, 399
Railway-rails, Manufacture of	J. L. Booth	Rochester, N. Y	Nov. 5, 1867	70, 400
Railway-rails, Manufacture of	C. Hewitt	Hamilton Township, N. J	Apr. 13, 1869	88, 786
Railway-rails, Manufacture of	J. S. Hunter	Lowellville, Ohio	June 15, 1869	91, 339
Railway-rails, Manufacture of	H. Lee	Beloit, Wis	Apr. 26, 1870	102, 283
Railway-rails, Manufacture of	Z. Street	Salem, Ohio	Apr. 3, 1866	53, 701
Railway-rails, Manufacture of	E. Wheeler	Hudson, Mass	June 14, 1870	104, 238
Railway-rails, Mechanism for sawing off and straightening.	C. White and G. Wostenholm.	East Saint Louis, Ill., and Saint Louis, Mo.	Mar. 19, 1872	124, 867

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Railway-rails, Method of constructing piles for	W. E. C. Coxe	Reading, Pa	Sept. 28, 1869	95, 199
Railway-rails, Method of piling, heating, and fluxing fagots for.	A. J. Hindermeyer	Rohrerstown, Pa	Oct. 29, 1867	70, 212
Railway-rails, Method of raising and leveling	S. L. Porter	Rochelle, Ill	May 28, 1867	65, 269
Railway-rails, Method of repairing	J. B. Deck	Martinsburgh, W. Va	May 14, 1867	64, 751
Railway-rails, Method of securing	H. H. May	Galesburgh, Ill	Nov. 26, 1850	7, 799
Railway-rails, Method of splicing	D. R. Pratt	Worcester, Mass	Aug. 6, 1867	67, 451
Railway-rails, Mode of connecting and supporting	M. O. Davidson	New York, N. Y	Apr. 26, 1859	23, 758
Railway-rails, Mode of constructing chairs for sustaining and holding.	W. Dripps	Coatesville, Pa	Apr. 8, 1840	1, 542
Railway-rails on the timbers, Mode of constructing and fastening iron.	P. H. Dreyer	New York	Oct. 18, 1837	430
Railway-rails, Pile for	J. Price and W. Lewis	Danville, Pa	Oct. 28, 1862	36, 795
Railway-rails, Pile for	T. R. Taylor	Brodhead, Wis	Dec. 8, 1868	84, 779
Railway-rails, Piling old	J. Griffin and M. P. Weeks	Buffalo, N. Y	May 10, 1864	42, 656
Railway-rails, Plant for repairing	H. Baines	Toronto, Canada	May 23, 1871	115, 148
Railway-rails, Process of utilizing old	G. Fritz	Johnstown, Pa	Dec. 2, 1873	145, 166
Railway-rails, Repairing	O. Chanute	Chicago, Ill	Jan. 22, 1867	61, 397
Railway rails, Roll for making street	G. A. Springer	Chicago, Ill	May 3, 1870	102, 609
Railway-rails, Roll for manufacturing three-headed	J. Gower	Ironton, Ohio	May 1, 1866	54, 329
Railway-rails, Roll for rolling	J. W. Cooper	Hubbard, Ohio	Mar. 18, 1873	136, 816
Railway-rails, Roll for rolling	A. J. Gustin	Worcester, Mass	Nov. 7, 1865	50, 816
Railway-rails, Roll for rolling	S. L. Potter	Wyandotte, Mich	Aug. 27, 1867	68, 233
Railway rails, Roll for splitting	A. Howells	Newburgh, Ohio	Jan. 23, 1872	123, 021
Railway-rails, Roll for splitting	W. A. Sweet	Syracuse, N. Y	Sept. 28, 1869	95, 284
Railway-rails, Roll for utilizing the fag-ends of	H. Chisholm	Cleveland, Ohio	Feb. 27, 1872	124, 116
Railway-rails, Securing fish-plates to	A. E. Braymer	Chicago, Ill	Aug. 20, 1872	130, 562
Railway-rails, Splicing	B. A. Mason	Newport, R. I	Apr. 16, 1861	32, 074
Railway-rails, Straightening	J. Johnston	Alexandria, Va	Apr. 11, 1865	47, 208
Railway-rails, Straightening	F. Nelson	Wyandotte, Mich	Mar. 5, 1867	62, 669
Railway-rails, Straightening	T. J. Todd	Somerville, N. J	Feb. 11, 1873	135, 676
Railway rails, Tempering steel	J. A. Woodbury	Boston, Mass	Apr. 9, 1872	125, 650
Railway-rails to chairs, Key for fastening	B. Butterfield	Kensington, Pa	Aug. 21, 1844	3, 712
Railway-rails to iron ties, Mode of securing	J Newton	Marengo, Mich	Dec. 19, 1871	121, 956
Railway-rails to the cross-ties, Securing	S. H. Witmer	Cincinnati, Ohio	Nov. 20, 1860	30, 702
Railway-rails, Uniting iron and steel for the manufacture of.	W. Batty	Troy, N. Y	Aug. 7, 1866	57, 059
Railway rolling-stock	J. W. Grover	Westminster, England	Aug. 1, 1871	117, 535
Railway, Rope	J. A. Müller	Vienna, Austria	Apr. 2, 1872	125, 210
Railway safety-attachment	H. S. Blood	Jefferson, La	Sept. 15, 1868	82, 199
Railway safety-brake	D. Pohlmann	Baltimore, Md	Mar. 19 1861	31, 737
Railway safety-frog	W. M. Shawen	Bellaire, Ohio	Aug. 22, 1871	118, 285
Railway safety-guard	C. L. Heywood	Boston, Mass	Feb. 19, 1867	62, 197
Railway safety-guard	C. Latimer	Saint Joseph, Mich	Apr. 8, 1873	137, 694
Railway safety-guard	T. Stewart	Pittsburgh, Pa	Sept. 11, 1860	30, 006
Railway safety-switch	G. S. Appleton	Burlington, Vt	Feb. 8, 1859	22, 844
Railway safety-switch	A. Conarro and Z. Gemmill	Warren, Pa	Aug. 3, 1869	93, 177
Railway safety-switch	R. M. Johnson and E. Stiles	Bridgeport, Conn	Mar. 30, 1869	88, 302
Railway safety-switch	G. A. Nicolls	Reading, Pa	Dec. 19, 1844	3, 865
Railway safety-switch	C. H. White	Emmett, Mich	May 5, 1863	38, 435
Railway safety-switch	J. Wood	Jersey City, N. J	Feb. 16, 1858	19, 397
Railway-scale platform	C. C. Warren	Earl, Ill	May 20, 1873	139, 216
Railway-seats, Composition for dyeing the covers of.	A. A. Grandelle	New York, N. Y	July 7, 1863	39, 199
Railway, Self-adjusting	W. T. James	New York	Oct. 27, 1835	....
Railway-signal	J. D. Akley and F. P. Patterson.	Mifflin and Patterson, Pa	Feb. 9, 1869	86, 624
Railway-signal	J. F. Andrews	Nashua, N. H	Apr. 23, 1872	125, 925
Railway-signal	A. Bugbee	Charlton, Mass	Sept. 7, 1852	9, 245
Railway-signal	J. Busser	Philadelphia, Pa	Aug. 7, 1855	13, 378
Railway-signal	J. P. Coulter	Bloomington, Ill	Dec. 28, 1869	98, 233
Railway-signal	L. Fitzpatrick and W. W. Gardner.	Nicholasville, Ohio	Aug. 16, 1864	43, 841
Railway-signal	J. Fogarty	Brooklyn, N. Y	Apr. 18, 1871	113, 756
Railway-signal	F. J. B. Hubert and F. C. A. Derocquigny.	New York, N. Y	Jan. 19, 1864	41, 341
Railway-signal	C. H. Hudson	Chicago, Ill	July 16, 1872	129, 135
Railway-signal	J. H. Johnson and J. E. Layton	Springfield, Ohio	June 24, 1873	140, 200
Railway-signal	A. W. Livingston	Sidney, Ohio	Jan. 9, 1866	51, 952
Railway-signal	E. R. Marshall	Grand Rapids, Mich	Nov. 25, 1873	144, 854
Railway-signal	A. S. Miller	Zanesfield, Ohio	Dec. 10, 1867	71, 896
Railway-signal	P. F. Milligan	Baltimore, Md	Dec. 18, 1860	30, 979
Railway-signal	P. F. Milligan	Washington, D. C	Apr. 3, 1866	53, 651
Railway-signal	G. Matcher	Sidney, Ohio	June 6, 1865	48, 085
Railway-signal	A. Pell	New York, N. Y	Oct. 10, 1865	50, 382
Railway-signal	A. F. B. Rocke and W. H. McLeod.	Jersey City, N. J	Sept. 7, 1869	94, 652
Railway-signal	J. F. Ross	Hamilton, Canada	Sept. 16, 1873	142, 944
Railway-signal	T. Stead	Cleveland, Ohio	Oct. 16, 1866	58, 910
Railway-signal	D. F. Sweet	Otsego, Mich	Jan. 23, 1872	122, 924
Railway-signal	S. C. Thornton	Moorestown, N. J	June 23, 1868	79, 163
Railway-signal	C. D. Tisdale	Boston, Mass	Dec. 26, 1871	122, 202
Railway-signal	E. H. Tobey and C. A. Nott	Watertown, N. Y	June 25, 1867	66, 056
Railway-signal	J. Townend, B. Chamberlain, and T. M. Walker.	Bellefontaine, Ohio	July 2, 1872	128, 679
Railway-signal	N. Whitney	Bellingham, Mass	July 5, 1870	105, 154
Railway-signal	W. Wickersham	Boston, Mass	July 23, 1872	129, 877
Railway-signal	W. Wickersham	Boston, Mass	Oct. 7, 1873	143, 483
Railway signal and alarm	A. C. Twining	New Haven, Conn	Apr. 7, 1868	76, 550
Railway signal and switch	D. Fitzgerald	New York, N. Y	June 22, 1869	91, 732
Railway-signal and switch-tender, Electro-magnetic.	H. S. L. Bryan	Liberty, Mo	Feb. 6, 1872	123, 449
Railway-signal apparatus	W. Green	Yonkers, N. Y	July 11, 1871	116, 831
Railway-signal apparatus	E. Vincenzie	Parma, Italy	Oct. 20, 1863	40, 373
Railway-signal apparatus, Automatic	D. W. Brown and C. A. Campbell.	Woodbridge, N. J	Aug. 1, 1871	117, 598
Railway-signal apparatus, Electric	F. L. Pope	Elizabeth, N. J	July 15, 1873	140, 790
Railway-signal apparatus, Electric	H. W. Spang	Reading, Pa	July 29, 1873	141, 395

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Railway-signaling apparatus, Electric	F. L. Pope	Elizabeth, N. J	Dec. 9, 1873	145, 308
Railway-signal apparatus, Electro-magnetic	A. J. Elder	Chicago, Ill	Sept. 20, 1870	107, 601
Railway-signal apparatus, Electro-magnetic	T. S. Hall	Stamford, Conn	June 7, 1870	103, 875
Railway-signal, Automatic	H. S. Evans	West Chester, Pa	Aug. 22, 1871	118, 223
Railway-signal, Automatic	H. S. Evans	West Chester, Pa	Oct. 21, 1873	143, 815
Railway-signal box	J. Durand	Cincinnati, Ohio	Nov. 3, 1868	93, 700
Railway-signal box	E. B. Westfall	Williamsport, Pa	Feb. 1, 1871	99, 382
Railway-signal circuit, Electric	F. L. Pope	Elizabeth, N. J	July 1, 1873	140, 536
Railway-signal, Electric	J. D. and T. Digney, H. Lartique, and H. Forest.	Paris, France	May 27, 1873	139, 376
Railway-signal, Electric	T. Hall	Boston, Mass	Apr. 27, 1869	89, 308
Railway-signal, Electric	S. C. Hendrickson	Brooklyn, N. Y	Oct. 14, 1873	143, 694
Railway-signal, Electric	G. M. Phelps and R. Stewart	Brooklyn, N. Y., and Bordentown, N. J.	Aug. 3, 1869	93, 342
Railway-signal, Electric	D. Rosseau	New York, N. Y	July 29, 1873	141, 387
Railway-signal, Electric	H. W. Spang	Reading, Pa	July 8, 1873	140, 737
Railway-signal, Electric	E. P. Warner and J. P. Odell	Galesburgh, Ill	Aug. 20, 1872	130, 612
Railway-signal, Electric	E. P. Warner and J. P. Odell	Galesburgh, Ill	Aug. 20, 1872	130, 776
Railway-signal, Electro-magnetic	T. S. Hall	Stamford, Conn	Dec. 7, 1869	97, 505
Railway-signal, Electro-magnetic	W. Robinson	Brooklyn, N. Y	Oct. 25, 1870	108, 633
Railway-signal, Musical	R. A. Filkins	Cheshire, Mass	July 29, 1873	141, 266
Railway-signal, Pneumatic	J. Olmstead	Providence, R. I	Mar. 5, 1872	124, 378
Railway-signal, Pneumatic	W. E. Prall	Washington, D. C	Dec. 9, 1873	145, 309
Railway-signal switch	H. H. Barnes	Mexico, N. Y	Dec. 15, 1863	40, 898
Railway-signals, Circuit-breaker for electric	D. Rousseau	New York, N. Y	Nov. 11, 1873	144, 598
Railway-signals, Circuit-closer for	D. Rousseau	New York, N. Y	July 15, 1873	140, 953
Railway-signals, Circuit-closer for	G. H. Snow	West Meriden, Conn	Oct. 21, 1873	143, 935
Railway-signals, Circuit-closer for electro-magnetic	A. W. Platt	New York, N. Y	Mar. 1, 1870	100, 442
Railway-signals, Circuit for	R. K. Boyle	Brooklyn, N. Y	Dec. 24, 1872	134, 246
Railway-signals, Electric circuit and device for	F. L. Pope	Elizabeth, N. J	Oct. 7, 1873	143, 529
Railway-signals, Electric circuit and instrument for.	T. S. Hall	Stamford, Conn	May 17, 1870	103, 174
Railway-signals, Electro-magnetic apparatus for	T. S. Hall	West Meriden, Conn	Aug. 29, 1871	118, 606
Railway-signals, Mechanism for compressed-air	J. W. Fowble	Cincinnati, Ohio	Aug. 5, 1856	15, 480
Railway-signals, Operating	R. Gidley	Moore's Mills, N. Y	Mar. 19, 1872	124, 806
Railway-signals, Track-circuit for electric	S. C. Hendrickson	Brooklyn, N. Y	Oct. 21, 1873	143, 903
Railway-signaling apparatus, Circuit-closer for	H. W. Spang	Reading, Pa	Aug. 26, 1873	142, 131
Railway-signaling apparatus, Electric	R. K. Boyle	New York, N. Y	Aug. 12, 1873	141, 755
Railway-signaling apparatus, Electric	S. C. Hendrickson and F. L. Pope.	Brooklyn, N. Y., and Elizabeth, N. J.	July 16, 1872	129, 408
Railway-signaling apparatus, Electric	F. L. Pope	Elizabeth, N. J	July 16, 1872	129, 425
Railway-signaling apparatus, Electric	F. L. Pope	Elizabeth, N. J	Aug. 27, 1872	130, 941
Railway-signaling apparatus, Electric	W. Robinson	Brooklyn, N. Y	Aug. 20, 1872	130, 661
Railway-signaling device	G. F. Folsom	Boston, Mass	Oct. 3, 1871	119, 456
Railway-signal lever	J. W. Hoffman	Philadelphia, Pa	June 19, 1849	6, 548
Railway sill and chair	J. Snell	Pottsville, Pa	Apr. 21, 1868	77, 119
Railway-sleeper	E. H. Woodsum and F. H. Whitman.	Harrison, Me	June 29, 1869	91, 893
Railway-sleeper, Iron	F. Vester	Newark, N. J	Mar. 27, 1866	53, 507
Railway-sleeper, Metallic	C. Fisher	Canton, Mass	Nov. 22, 1870	109, 504
Railway snow-ram	W. C. A. Frerichs	Tottenville, N. Y	Jan. 7, 1873	134, 595
Railway-spike	P. J. Dwyer	Elizabethport, N. J	Oct. 5, 1869	95, 443
Railway-spike	M. Foster	Cleveland, Ohio	Dec. 17, 1867	72, 276
Railway-spike	C. Gaylord	Washington, D. C	Apr. 4, 1871	113, 510
Railway-spike	C. L. Heywood	Boston, Mass	Sept. 7, 1869	94, 601
Railway-spike	J. Montgomery	New York, N. Y	Feb. 22, 1870	100, 055
Railway-spike	L. Postawka	Boston, Mass	July 23, 1867	67, 071
Railway-spike	W. S. and E. H. Shoemaker	Towsontown, Md., and Columbus, Ohio.	Nov. 23, 1869	97, 239
Railway-spike	W. M. Storm	Harlem, N. Y	June 27, 1865	48, 494
Railway-spike	T. R. Timby	Tarrytown, N. Y	Nov. 14, 1871	121, 023
Railway-spikes, Instrument for drawing	J. Ells	Pittsburgh, Pa	Jan. 2, 1866	51, 818
Railway-spikes, Machine for making	J. W. Bartlett and D. P. Bosworth.	Harmar, Ohio	Sept. 7, 1869	94, 544
Railway-spikes, Machine for making	L. Thomas	Pittsburgh, Pa	Dec. 28, 1869	98, 444
Railway-splice	W. R. Arthur	Chicago, Ill	Dec. 2, 1862	37, 067
Railway splice and chair	T. J. Adams	Portsmouth, Ohio	Aug. 10, 1869	93, 393
Railway-splice and nut-lock	J. Miner and S. Merrick	New Brighton, Pa	July 12, 1870	105, 357
Railway-splice for railway-track bar	C. Hilton	Albany, N. Y	Feb. 22, 1859	23, 026
Railway-station water-column	R. T. H. Stileman	Philadelphia, Pa	Dec. 17, 1872	134, 013
Railway-stations, Device for utilizing power at	W. J. Plecker	Bushnell, Ill	Jan. 9, 1872	122, 648
Railway-stations, Machinery for obtaining and preserving power from trains until passing.	E. T. Bussell	Shelbyville, Ind	Jan. 26, 1858	19, 183
Railway-stations, Machinery for supplying tenders with water at.	B. M. Van Deveer	Clyde, N. Y	Apr. 27, 1859	20, 108
Railway stop-chair	J. A. Wilson	Altoona, Pa	Aug. 17, 1869	93, 779
Railway, Street	A. E. Beach	Stratford, Conn	Mar. 22, 1864	42, 039
Railway, Street	J. R. Beckett	Cushing, Me	Sept. 9, 1873	142, 668
Railway, Street	S. A. Beers	Brooklyn, N. Y	May 10, 1859	23, 891
Railway, Street	J. Haworth	Manchester, England	Apr. 15, 1862	34, 957
Railway, Street	T. R. Lovett	Philadelphia, Pa	Jan. 14, 1873	134, 906
Railway, Street	W. M. Smith	Augusta, Ga	Aug. 3, 1869	93, 361
Railway, Street	A. Thompson	Newark, N. J	Oct. 1, 1872	131, 913
Railway, Street	A. Van Camp and M. M. Hodgman.	Washington, D. C., and Saint Louis, Mo.	Nov. 16, 1869	97, 020
Railway, Submarine	J. Thomas	New York	Nov. 6, 1826	....
Railway-superstructure	S. H. Long	United States Army, Louisville, Ky.	Mar. 23, 1858	19, 704
Railway-superstructure	J. A. Maxwell	Savannah, Ga	Nov. 12, 1867	70, 875
Railway-supply apparatus	D. Harrison	Fayette, Miss	Nov. 2, 1869	96, 428
Railway-support	B. F. Gossin	Cincinnati, Ohio	Jan. 19, 1864	41, 293
Railway-sweeper	E. A. F. Olmstead	New York, N. Y	July 10, 1866	56, 256
Railway sweeping-machine	E. A. F. Olmstead	New York, N. Y	May 14, 1867	67, 695
Railway-switch	J. R. Adams	Sacramento, Cal	May 13, 1873	138, 834
Railway-switch	J. B. Alexander	Washington, D. C	Apr. 30, 1867	64, 185
Railway-switch	J. B. Alexander	Washington, D. C	Nov. 11, 1873	144, 379
Railway-switch	S. Allen and J. P. Snow	Newton and Roxbury, Mass	Oct. 15, 1867	69, 741
Railway-switch	N. Ames	Saugus Centre, Mass	July 21, 1863	39, 269

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Railway-switch	J. L. Arms	Saint Louis, Mo	Feb. 22, 1870	100, 101
Railway-switch	D. J. Arnold	Brownsville, Nebr	Mar. 18, 1873	136, 895
Railway-switch	M. Ball	Canton, Ohio	July 11, 1865	48, 640
Railway-switch	A. F. Ballas	Pottstown, Pa	Apr. 21, 1868	76, 973
Railway-switch	L. M. Batty	Canton, Ohio	July 2, 1867	66, 283
Railway-switch	C. J. Bayer	Poughkeepsie, N. Y	Sept. 4, 1866	57, 661
Railway-switch	G. E. Beach	Jersey City, N. J	Sept. 25, 1860	30, 116
Railway-switch	J. Beachler	Anderson, Ind	July 19, 1859	24, 839
Railway-switch	G. F. Beatty	Boston, Mass	Oct. 28, 1873	144, 014
Railway-switch	H. Beckwith	Grass Lake, Mich	Oct. 20, 1868	83, 242
Railway-switch	T. G. Beecher	Beaver Dam, N. Y	Jan. 7, .868	73, 071
Railway-switch	G. W. Billings	Chicago, Ill	Mar. 25, 1873	137, 050
Railway-switch	H. Black	Lewisburgh, Ohio	Feb. 25, 1873	136, 126
Railway-switch	J. Bradt and J. Hayes	Avon and Rochester, N. Y	June 12, 1866	55, 456
Railway-switch	J. M. Brahn	Red Bank, N. J	Feb. 19, 1861	31, 439
Railway-switch	J. F. Brickley	Huntsville, Ind	Dec. 6, 1864	45, 313
Railway-switch	D. E. Brockett	Wheeling, W. Va	Aug. 13, 1872	130, 356
Railway-switch	D. E. Brockett	Wheeling, W. Va	Sept. 9, 1873	142, 673
Railway-switch	M. Brockway, jr	Jonesville, Mich	June 18, 1872	128, 105
Railway-switch	J. S. Brothers	Duncannon, Pa	May 21, 1867	64, 833
Railway-switch	P. W. Burnett	Sacramento, Cal	Jan. 7, 1862	34, 056
Railway-switch	P. Carrigan	Sturgeon, Mo	Mar. 19, 1872	124, 719
Railway-switch	W. H Clark and P. Chaney, jr	Oregon, Ill	Sept. 16, 1873	142, 837
Railway-switch	J. W. Colwell	Macedonia, Ohio	Apr. 4, 1865	47, 069
Railway-switch	J. C. Conkey	North Washington, Ohio	Sept. 24, 1872	131, 505
Railway-switch	C. L. Cooke	Shortsville, N. Y	Nov. 21, 1871	121, 158
Railway-switch	J. B. Cox, J. O'Connor, and M. Cahalan.	Columbus, Ga	Aug. 3, 1869	93, 278
Railway-switch	J. B. Cox, J. O'Connor, and M. Cahalan.	Columbus, Ga	Dec. 14, 1869	97, 886
Railway-switch	A. W. Cram	Saint Louis, Mo	Feb. 27, 1872	124, 118
Railway-switch	A. W. Cram	Litchfield, Ill	Feb. 4, 1873	135, 527
Railway-switch	M. V. Cummings	Winthrop, Me	Feb. 14, 1865	46, 338
Railway-switch	J. Dampman	Lebanon, Pa	July 14, 1868	79, 812
Railway-switch	J. Davis	New Orleans, La	Aug. 9, 1870	106, 131
Railway-switch	S. F. Denise	Branchport, N. J	Dec. 18, 1866	60, 487
Railway-switch	H. S. Dewey	Chicago, Ill	Apr. 8, 1873	137, 535
Railway-switch	J. M. Dick	Buffalo, N. Y	Sept. 27, 1853	10, 058
Railway-switch	C. C. Dodge	Marshall, Mich	Oct. 5, 1858	21, 658
Railway-switch	M. H. Dooly	Atlanta, Ga	Jan. 28, 1868	73, 700
Railway-switch	T. Dougherty	Macon, Ga	Aug. 16, 1859	25, 101
Railway-switch	G. Douglass	Luzerne, Pa	Oct. 24, 1865	50, 564
Railway-switch	J. E. P. Doyle	New York, N. Y	May 8, 1866	54, 513
Railway-switch	G. L. Dulaney and J. A. Kaufman.	Mechanicsburgh, Pa	Mar. 24, 1868	75, 741
Railway-switch	N. Eaton	Worcester, Mass	Sept. 3, 1840	1, 759
Railway-switch	H. W. Elliott and G. S. Conkling.	Goshen, N. Y	Jan. 3, 1869	86, 660
Railway-switch	S. A. Emery and F. A. Prince	Portland, Me	Apr. 3, 1866	53, 593
Railway-switch	M. and J. W. Fels	Cincinnati, Ohio	July 15, 1873	140, 909
Railway-switch	H. Fitzsimmons	Houston, Tex	July 16, 1872	129, 328
Railway-switch	H. Fitzsimmons	Houston, Tex	Oct. 22, 1872	132, 460
Railway-switch	T. Fogg	Detroit, Mich	Oct. 29, 1867	70, 187
Railway-switch	S. French	Boston, Mass	May 16, 1871	114, 936
Railway-switch	B. C. Galvin	New York, N. Y	Dec. 17, 1867	72, 185
Railway-switch	A. C. Garratt	Boston, Mass	July 15, 1873	140, 770
Railway-switch	M. J. Gaskill, W. Yost, and J. Ferris.	Pleasant Plain, Ohio	Dec. 21, 1869	98, 051
Railway-switch	W. W. Gelatt	Keokuk, Iowa	June 11, 1872	127, 759
Railway-switch	C. Greenman	Scott Township, Pa	Aug. 3, 1869	93, 298
Railway-switch	J. T. Guthrie and L. Pausch	Leesburgh, Ohio	Aug. 16, 1870	106, 420
Railway-switch	D. Haldeman	Mahanoy City, Pa	Sept. 14, 1869	94, 738
Railway-switch	B. Hall	Saint Louis, Mo	July 15, 1873	140, 915
Railway-switch	S. S. Hamill	East Cambridge, Mass	Nov. 12, 1861	33, 701
Railway-switch	F. P. Hanchett	Nepeuskun, Wis	July 15, 1873	140, 917
Railway-switch	L. W. Harris	Oriskany Falls, N. Y	July 16, 1872	129, 132
Railway-switch	A. Hartman	Canton, Ohio	Oct. 16, 1866	58, 818
Railway-switch	A. Hartman	Canton, Ohio	May 14, 1867	64, 764
Railway-switch	C. H. Haskins	Saint Louis, Mo	May 31, 1864	42, 944
Railway-switch	N. F. Hawkins	Chicot County, Ark	June 14, 1870	104, 305
Railway-switch	E. Heasbey	Perth Amboy, N. J	July 16, 1872	128, 962
Railway-switch	J. P. Herron	Atlanta, Ga	Aug. 9, 1870	106, 266
Railway-switch	J. P. Herron	Atlanta, Ga	July 2, 1872	128, 488
Railway-switch	J. A. Heyl	Boston, Mass	Apr. 16, 1867	63, 794
Railway-switch	J. A. Heyl	Boston, Mass	Sept. 1, 1868	81, 634
Railway-switch	S. Heywood	Claremont, N. H	Oct. 26, 1858	21, 880
Railway-switch	B. Hinkley	Troy, N. Y	May 30, 1871	115, 470
Railway-switch	A. B. Hitchcock	Juneau, Wis	May 18, 1869	90, 264
Railway-switch	A. Hodge	Adams, Mass	Feb. 10, 1852	8, 722
Railway-switch	S. H. Hodges	Rutland, Vt	Feb. 7, 1860	27, 051
Railway-switch	J. and R. Hollen	Allemans, Pa	Aug. 6, 1872	130, 221
Railway-switch	W. Howard	Baltimore, Md	Aug. 2, 1838	....
Railway-switch	J. R. Howell	Atlanta, Ga	June 14, 1870	104, 156
Railway-switch	S. H. Jenkins	Nashville, Tenn	Oct. 28, 1873	144, 102
Railway-switch	C. W. Jones	Philadelphia, Pa	Nov. 26, 1867	71, 308
Railway-switch	C. W. Jones	Philadelphia, Pa	Feb. 16, 1869	86, 930
Railway-switch	R. V. Jones	Canton, Ohio	July 3, 1866	56, 060
Railway-switch	F. H. Joyner	Richmond, Vt	Nov. 29, 1859	26, 270
Railway-switch	J. E. Kea	Magnolia, N. C	May 9, 1871	114, 687
Railway-switch	C. F. Keller	Upper Sandusky, Ohio	Feb. 6, 1872	123, 482
Railway-switch	M. Kelley	Saint Charles, Mo	Oct. 27, 1868	83, 510
Railway-switch	M. Kerr	New Florence, Pa	May 18, 1869	90, 272
Railway-switch	J. F. Klein	Trenton, N. J	Apr. 27, 1852	8, 906
Railway-switch	S. P. Kittle	Buffalo, N. Y	Dec. 5, 1854	12, 024
Railway-switch	E. B. Lake	Bridgeport, N. J	Aug. 22, 1865	49, 536
Railway-switch	E. B. Lake	Bridgeport, N. J	Feb. 12, 1867	61, 041
Railway-switch	G. T. Lape and J. Leathe	New York, N. Y	Jan. 22, 1867	61, 437
Railway-switch	C. B. Lashar	New York, N. Y	Nov. 24, 1863	40, 694

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Railway-switch	G. W. Lee, J. A. Lafontain, and A. L. Harris.	Barlow County and Atlanta, Ga.	Jan. 28, 1870	104, 860
Railway-switch	H. K. Leech	Harrisburgh, Pa	Mar. 3, 1868	75, 171
Railway-switch	H. C. Lewis	Miller Township, Pa	Dec. 3, 1867	71, 769
Railway-switch	W. E. Lewis	Cleveland, Ohio	Apr. 30, 1872	126, 310
Railway-switch	R. Lezott	Plattsburgh, N. Y	Oct. 4, 1864	44, 537
Railway-switch	J. F. Linthicum	Vallejo, Cal	June 3, 1873	139, 589
Railway-switch	O. W. Marshall	Windsor Locks, Conn	June 18, 1861	32, 573
Railway-switch	W. L. Martin	Rienzi, Miss	Dec. 26, 1871	122, 271
Railway-switch	W. H. Masterman and A. Jackson.	Stockton, Cal	Jan. 2, 1872	122, 327
Railway-switch	H. Maxell and E. and H. Fessler	Canton, Ohio	Sept. 4, 1866	57, 744
Railway-switch	J. M. Maxwell	Webster, W. Va	May 9, 1871	114, 584
Railway-switch	T. Mayhew	Poughkeepsie, N. Y	May 10, 1859	23, 931
Railway-switch	J. C. McCarty	Grafton, W. Va	Feb. 4, 1868	74, 108
Railway-switch	J. McLaughlin	Duncannon, Pa	Apr. 23, 1867	64, 124
Railway-switch	J. McLaughlin and C. W. Jones	Duncannon, Pa	Aug. 6, 1867	67, 443
Railway-switch	J. McLaughlin and B. F. Dean	Columbia, Pa	Mar. 2, 1869	87, 351
Railway-switch	S. C. Megill	Newark, N. J	Dec. 24, 1867	72, 519
Railway-switch	E. Mercier	Springfield, Mass	May 5, 1868	77, 510
Railway-switch	E. Mercier	Springfield, Mass	Nov. 7, 1871	120, 592
Railway-switch	E. Mercier	Springfield, Mass	June 25, 1872	128, 413
Railway-switch	E. Mercier	Springfield, Mass	Dec. 16, 1873	145, 518
Railway-switch	A. S. Miller	Republic, Ohio	Jan. 27, 1852	8, 689
Railway-switch	J. Miner and S. Merrick	New Brighton, Pa	Nov. 8, 1870	109, 141
Railway-switch	T. S. Mitchell	Pittsburgh, Pa	July 17, 1866	56, 432
Railway-switch	T. Newman	New Orleans, La	July 18, 1871	117, 198
Railway-switch	T. Newman	New Orleans, La	Dec. 16, 1873	145, 678
Railway-switch	L. S. Packard	West Stockbridge, Mass	Feb. 19, 1867	62, 217
Railway-switch	J. J. Pardee	New York, N. Y	Apr. 9, 1872	125, 611
Railway-switch	H. E. Passmore and G. A. Heckert.	York, Pa	Apr. 23, 1867	64, 138
Railway-switch	W. P. Patton	Harrisburgh, Pa	Jan. 28, 1868	73, 752
Railway-switch	F. P. Perdue	Atlanta, Ga	Apr. 13, 1869	88, 898
Railway-switch	A. Philippi and D. Moore	Elizabethport, N. J	Jan. 7, 1862	34, 119
Railway-switch	D. F. Phillips	Republic, Ohio	Nov. 18, 1851	8, 531
Railway-switch	H. H. Potter	Sterlingville, N. Y	Nov. 4, 1873	144, 224
Railway-switch	N. Pullman	New Oregon, Iowa	May 25, 1858	20, 367
Railway-switch	T. B. Purves	Greenbush, N. Y	May 15, 1866	54, 770
Railway-switch	P. Quinn	Philadelphia, Pa	Apr. 3, 1866	53, 674
Railway-switch	W. N. Raines	Thomson, Ga	Dec. 2, 1851	8, 557
Railway-switch	A. and J. C. Ranto	Fort Recovery, Ohio	Oct. 29, 1872	132, 600
Railway-switch	P. V. M. Raymond	Charles City, Iowa	Apr. 25, 1871	114, 196
Railway-switch	I. Reynolds	Republic, Ohio	Jan. 27, 1852	8, 694
Railway-switch	T. J. Reynolds	Nashville, Ill	Oct. 8, 1872	132, 023
Railway-switch	T. J. Reynolds	Irvington, Ill	Nov. 25, 1873	145, 013
Railway-switch	J. G. Rockwell	Shell Rock, Iowa	Sept. 30, 1873	143, 302
Railway-switch	W. L. Rogers and W. E. Crane	North Cornwall and New Britain, Conn.	Jan. 7, 1868	73, 200
Railway-switch	A. Rosewater	Omaha, Nebr	May 4, 1869	89, 691
Railway-switch	I. S. Sanson	Philadelphia, Pa	Jan. 31, 1860	27, 009
Railway-switch	C. H. Sawyer	Hollis, Me	June 26, 1866	55, 913
Railway-switch	W. F. Serjeant	Saint Louis, Mo	Aug. 27, 1867	68, 315
Railway-switch	J. J. Shaeffer and C. C. Steinmetz.	Middletown, Pa	Mar. 8, 1870	100, 707
Railway-switch	J. Shafer	Tunnel Hill, Pa	July 16, 1872	129, 063
Railway-switch	J. H. Shedd and W. Edson	Boston, Mass	Jan. 24, 1860	26, 933
Railway-switch	C. C. Shelby	Spring Valley, N. Y	June 10, 1873	139, 827
Railway-switch	D. H. Shirley	Boston, Mass	Feb. 25, 1862	34, 532
Railway-switch	B. Shiverick and T. L. Calkins	Philadelphia, Pa	Jan. 22, 1867	61, 475
Railway-switch	C. S. and L. R. Shute	Springfield, Mass	Mar. 11, 1873	136, 776
Railway-switch	D. Simmons	New York, N. Y	Oct. 1, 1867	69, 496
Railway-switch	W. A. Slingerland	New York, N. Y	Nov. 25, 1873	144, 930
Railway-switch	C. S. Smith	Seneca Falls, N. Y	Sept. 6, 1870	107, 113
Railway-switch	G. R. Smith	Ithaca, N. Y	July 20, 1858	20, 959
Railway-switch	C. L. Spencer	Providence, R. I	Sept. 28, 1858	21, 631
Railway-switch	J. B. Spurgin and T. A. Kirk	Kansas City, Mo	Jan. 21, 1868	73, 551
Railway-switch	W. H. Staats	Crescent, N. Y	Oct. 15, 1867	69, 945
Railway-switch	W. H. Staats	Crescent, N. Y	Dec. 3, 1867	71, 807
Railway-switch	W. H. Staats	Crescent, N. Y	May 3, 1870	102, 724
Railway-switch	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
Railway-switch	J. H. Stockton	Thomson, Ga	Aug. 16, 1870	106, 423
Railway-switch	W. J. Stowell	Baltimore, Md	Mar. 20, 1866	53, 357
Railway-switch	W. J. Stowell	Baltimore, Md	June 19, 1866	55, 736
Railway-switch	W. J. Stowell	Baltimore, Md	Feb. 25, 1868	74, 951
Railway-switch	W. J. Stowell	Baltimore, Md	Aug. 11, 1868	81, 022
Railway-switch	W. J. Stowell	Baltimore, Md	Aug. 11, 1868	81, 028
Railway-switch	H. Strait	Cincinnati, Ohio	May 9, 1871	114, 622
Railway-switch	H. F. Thiemeyer	Baltimore, Md	Nov. 5, 1861	33, 669
Railway-switch	W. H. Thompson	Cleveland, Ohio	Feb. 11, 1862	34, 382
Railway-switch	J. Tillinghast	Buffalo, N. Y	Mar. 26, 1867	63, 337
Railway-switch	C. D. Tisdale	Boston, Mass	May 27, 1873	139, 279
Railway-switch	W. Tracy	Chicago, Ill	Feb. 26, 1867	62, 510
Railway-switch	E. A. Trapp	San Francisco, Cal	Dec. 12, 1871	121, 824
Railway-switch	H. Tupper	Buffalo, N. Y	Dec. 4, 1860	30, 845
Railway-switch	T. Turner	Clifton, Canada	Mar. 5, 1872	124, 395
Railway-switch	P. B. Tyler	New Orleans, La	May 9, 1846	4, 511
Railway-switch	W. H. Van Gieson	Whitewater, Wis	June 3, 1873	139, 635
Railway-switch	D. Warren	Gettysburgh, Pa	Aug. 22, 1865	49, 574
Railway-switch	A. Watson and G. W. Miller	Springfield, Mass	Nov. 14, 1865	50, 972
Railway-switch	G. Westinghouse, jr	Schenectady, N. Y	Feb. 12, 1867	61, 967
Railway-switch	W. Wharton, jr	Philadelphia, Pa	June 27, 1865	48, 470
Railway-switch	W. Wharton, jr	Philadelphia, Pa	Aug. 29, 1865	49, 668
Railway-switch	W. Wharton, jr	Philadelphia, Pa	Dec. 5, 1865	51, 373
Railway-switch	W. Wharton, jr	Philadelphia, Pa	Oct. 8, 1867	69, 599
Railway-switch	W. Wharton, jr	Philadelphia, Pa	May 19, 1868	78, 165
Railway-switch	W. Wharton, jr	Philadelphia, Pa	June 2, 1868	78, 500
Railway-switch	W. Wharton, jr	Philadelphia, Pa	Mar. 2, 1869	87, 529

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Railway-switch	W. Wharton, jr	Philadelphia, Pa	Apr. 12, 1870	101, 951
Railway-switch	W. Wharton, jr	Philadelphia, Pa	Jan. 3, 1871	110, 808
Railway-switch	E. P. Wheeler	Corinth, Miss	Oct. 28, 1873	144, 007
Railway-switch	J. Whitcomb	Detroit, Mich	Feb. 12, 1856	14, 264
Railway-switch	E. H. White	White Station, Mich	May 20, 1873	139, 220
Railway-switch	J. M. Whiting	Providence, R. I	Dec. 17, 1867	72, 251
Railway-switch	J. C. Whitson	Marion, N. C	July 17, 1860	29, 208
Railway-switch	J. A. Williamson	La Fayette, Ind	June 26, 1866	55, 943
Railway-switch	W. L. Yantis	Brownsville, Mo	Nov. 30, 1869	97, 334
Railway-switch	E. Yardley	Pittsburgh, Pa	Dec. 21, 1869	98, 138
Railway-switch	J. Youngman	Sunbury, Pa	May 17, 1859	24, 074
Railway-switch	J. W. Zinn	Caldwell, N. J	Mar. 13, 1866	53, 213
Railway-switch alarm	T. S. Hall	Stamford, Conn	Feb. 26, 1867	62, 414
Railway-switch alarm	J. F. Morsell	Stamford, Conn	Jan. 7, 1868	73, 113
Railway-switch alarm, Electro-magnetic	T. A. B. Putnam	New York, N. Y	Jan. 25, 1870	99, 233
Railway switch and frog combined	P. Quinn	Philadelphia, Pa	Apr. 3, 1866	53, 675
Railway switch and signal	J. A. Anderson	Lambertville, N. J	Nov. 7, 1871	120, 694
Railway switch and signal	T. Daly	Erie, Pa	May 18, 1869	90, 241
Railway switch and signal	G. L. Warner	Rochester, N. Y	June 4, 1867	65, 518
Railway switch and signal apparatus	A. Schnabel and T. Henning	Bruchsal, Baden	Jan. 24, 1871	111, 261
Railway-switch, Automatic	L. E. Kurtz	Baltimore, Md	May 17, 1870	103, 202
Railway-switch, Automatic	J. A. Lanzirotti	Paris, France	Jan. 5, 1864	41, 074
Railway-switch, Automatic	G. W. Starr	Clarksburgh, W. Va	Oct. 15, 1867	69, 856
Railway-switch, Automatic	J. P. Woodbury and N. Ames	Boston, Mass	Mar. 8, 1864	41, 883
Railway-switch chair	G. H. Scougale	Carson City, Nev	Apr. 25, 1871	114, 207
Railway switch, City	T. Newman	New Orleans, La	June 9, 1868	78, 680
Railway-switch for street-cars	J. A. Heyl	Boston, Mass	Apr. 10, 1866	53, 822
Railway-switch for street cars, Self-adjusting	W. L. Yantis	Brownsville, Mo	June 1, 1869	90, 803
Railway-switch frog	T. Sharp	Chicago, Ill	June 16, 1863	38, 917
Railway-switch lock	J. L. Anderson	Bucyrus, Ohio	Dec. 3, 1872	133, 556
Railway-switch lock	W. L. Cawthron	Harper's Ferry, Va	June 9, 1857	17, 492
Railway-switch lock	A. Thomson	Saint Louis, Mo	Mar. 28, 1871	113, 112
Railway-switch-locking apparatus	J. Saxby and J. S. Farmer	Kilburn, England	Oct. 22, 1872	132, 416
Railway-switch plate	A. Philippi	Elizabethport, N. J	May 19, 1868	78, 126
Railway-switch plate, City	W. Ebbitt	New York, N. Y	July 24, 1860	29, 255
Railway-switch, Portable	P. Daniels	Le Roy, N. Y	June 14, 1864	43, 103
Railway-switch, Portable	J. C. Mather	New York, N. Y	Jan. 19, 1858	19, 146
Railway-switch, Safety	B. F. Farrar	Springfield, Mass	June 25, 1867	66, 136
Railway-switch, Safety	H. N. Rhodes	Richmond, Vt	Aug. 28, 1860	29, 821
Railway-switch, Self-acting	E. I. Stearns	Ellicott's Mills, Md	Sept. 5, 1848	5, 752
Railway-switch, Self-acting	J. Wilson	Hartford, Conn	Mar. 7, 1854	10, 621
Railway-switch, Self-acting	L. B. Woods	Bradford, N. H	May 8, 1849	6, 427
Railway-switch, Self-adjusting	E. C. Matthewson	Hartford, Conn	Mar. 20, 1849	6, 206
Railway-switch, Self-adjusting	J. C. Past	Morrisville, Pa	Aug. 21, 1839	1, 294
Railway-switch, Self-closing	T. K. Hubbell and G. H. Gregory	Wilton, Conn	Nov. 25, 1873	144, 848
Railway-switch signal	A. W. Cram	Saint Louis, Mo	June 13, 1871	115, 936
Railway-switch signal	J. Cullen	Oxford, Miss	May 20, 1873	139, 046
Railway-switch signal	I. F. Morsell	Stamford, Conn	Dec. 15, 1868	84, 896
Railway-switch signal	C. W. Spayd	Wilkesbarre, Pa	Dec. 9, 1873	145, 456
Railway-switch stand	T. Dougherty	Macon, Ga	Sept. 13, 1859	25, 396
Railway-switch stand and lock	A. W. Cram	Saint Louis, Mo	Sept. 19, 1871	119, 124
Railway switch, Street	G. L. Bailey	Portland, Me	July 14, 1868	79, 940
Railway switch, Street	J. E. Pattison	New Orleans, La	July 1, 1873	140, 433
Railway switch, Street	W. Tuttle	Boston, Mass	Nov. 3, 1868	83, 803
Railway switches and signals, Working and locking	J. Brunton	Kensington, England	May 3, 1870	102, 483
Railway-switches, Apparatus for operating	J. Alcorn	Charlestown, Mass	Mar. 28, 1871	113, 002
Railway-switches, Arrangement of fixed rails as a substitute for.	J. T. Davenport	Augusta, Ga	Jan. 13, 1857	16, 376
Railway-switches, Constructing and shifting	J. La Rue	Bristol, Pa	Nov. 10, 1840	1, 852
Railway-switches, Dispensing with	W. Wharton, jr	Philadelphia, Pa	Dec. 13, 1859	26, 454
Railway-switches, Method of fastening	F. G. Woodward	Worcester, Mass	Apr. 24, 1849	6, 394
Railway-switches, Method of shifting	R. W. Sheckels	Baltimore, Md	Oct. 22, 1840	1, 833
Railway-switches, Operating	G. M. Cole	Folsom City, Cal	Mar. 26, 1867	63, 218
Railway-switches, Operating	A. C. Devlan	Altoona, Pa	Dec. 26, 1871	122, 233
Railway-switches, Operating	C. Foster	Eldridge's Hill, N. J	June 14, 1859	24, 384
Railway-switches, Operating	S. Heywood	Claremont, N. H	Aug. 28, 1860	29, 786
Railway-switches, Operating	J. M. Hickman and H. Staufer	Richmond, Ind., and Cincinnati, Ohio.	Jan. 2, 1872	122, 319
Railway-switches, Operating	W. C. Hicks	Rutland, Vt	May 8, 1849	6, 429
Railway-switches, Operating	G. K. Hyde	Brooklyn, N. Y	Aug. 28, 1860	29, 792
Railway-switches, Operating	A. Ralston	West Middletown, Pa	Feb. 20, 1847	4, 977
Railway-switches, Operating	J. Wood	Red Bank, N. J	Nov. 25, 1873	144, 880
Railway-switching apparatus	D. Pike	New Orleans, La	June 22, 1869	91, 663
Railway-tank feeder	R. J. Gibbons	Saint Louis, Mo	June 24, 1873	140, 132
Railway-tank feeder	A. Grochau	Du Luth, Minn	Feb. 4, 1873	135, 473
Railway-tank, Self-feeding	B. D. Moody	Darksville, Mo	June 24, 1873	140, 294
Railway-tanks, Watering-column for	J. N. Poage	Cincinnati, Ohio	Dec. 2, 1873	145, 236
Railway-tanks with water, Apparatus for filling	S. Love	Indianapolis, Ind	Mar. 24, 1868	75, 939
Railway-tenders, Dumper for	D. C. Hendry	Union Point, Ga	Feb. 6, 1872	123, 344
Railway-ticket, Self-canceling	J. Dyer	Chicago, Ill	Apr. 7, 1868	76, 311
Railway-tie	J. L. Boone	San Francisco, Cal	July 30, 1872	130, 010
Railway-tie	D. B. Day	Ridgway, Pa	June 4, 1872	127, 581
Railway-tie	P. S. Devlan	Jersey City, N. J	Oct. 7, 1873	143, 407
Railway-tie	H. L. De Zeng	Geneva, N. Y	Dec. 30, 1873	145, 991
Railway-tie	E. J. Fenn	Medina, Ohio	May 7, 1872	126, 453
Railway-tie	G. Keech	Centreville, Mich	Nov. 4, 1873	144, 207
Railway-tie	W. A. Nichols	Mattawamkeag, Me	July 25, 1871	117, 449
Railway-tie	W. Peck and H. C. Richman	Lombard, Ill	June 3, 1873	139, 518
Railway-tie	G. R. Richardson	Earlville, Ill	July 15, 1873	140, 952
Railway-tie	W. H. Sterling	San Francisco, Cal	May 20, 1873	139, 031
Railway-tie	T. R. Timby	Tarrytown, N. Y	Dec. 2, 1873	145, 258
Railway-tie	A. B. Tripler	Philadelphia, Pa	Apr. 23, 1872	126, 127
Railway tie and chair	L. E. Towne	Brodhead, Wis	Feb. 6, 1872	123, 526
Railway tie and chair, Metallic	A. Teal	Aurora, Ill	Jan. 6, 1857	16, 343
Railway-tie, Composition	J. L. Boone	San Francisco, Cal	June 4, 1872	127, 5[illegible]3
Railway-tie, Iron	C. W. Gulick	New Brunswick, N. J	July 1, 1873	140, 411

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Railway-tie lifter	W. C. Bomar and A. Troxler	Wartrace, Tenn	May 31, 1870	103, 710
Railway-ties, bridges, buildings, &c., of galvanized iron, Manufacture of.	S. P. Townsend	New Providence, N. J	Mar. 26, 1867	63, 339
Railway-ties, Machine for dressing	J. P. Derner	Honesdale, Pa	Oct. 10, 1871	119, 829
Railway-ties, Preserving	B. S. Foreman	Morrison, Ill	June 21, 1864	43, 491
Railway-ties, Process of restoring and preserving decaying.	W. Dripps	Coatesville, Pa	Nov. 2, 1869	96, 405
Railway-timber	J. Stimpson	Baltimore, Md	June 3, 1830	....
Railway-time signal	G. B. Cummings	Cambridge, Mass	Oct. 7, 1873	143, 405
Railway-time signal	J. Fend and J. W. Stevenson	Johnstown, Pa	Dec. 2, 1873	145, 057
Railway-time signal	H. H. Ford	Sanford, Me	Sept. 23, 1873	143, 135
Railway-time signal	J. W. Stover and J. Polsey	Boston, Mass	June 25, 1872	128, 435
Railway-time-signaling apparatus	J. G. Johnson	Combe-Fields, England	Nov. 1, 1870	108, 792
Railway-track	H. Baines	Manchester, England	Mar. 13, 1866	53, 240
Railway-track	A. E. Beach	Stratford, Conn	Sept. 5, 1865	49, 698
Railway-track	J. Calkins	Long Branch, N. J	Dec. 31, 1872	134, 418
Railway-track	J. H. Connelly	Pittsburgh, Pa	June 18, 1872	128, 120
Railway-track	M. B. Edson	New York, N. Y	Mar. 30, 1869	88, 284
Railway-track	J. N. Farrar and J. Stone	Pepperell, Mass., and Belvidere, N. J.	Oct. 18, 1870	108, 342
Railway-track	B. B. Hotchkiss	New York, N. Y	Mar. 26, 1867	63, 161
Railway-track	J. Y. Kepler	Marion, Ind	Dec. 3, 1872	133, 586
Railway-track	Baron L. Lo Presti	Vienna, Austria	Oct. 26, 1869	96, 127
Railway-track	H. McCan	Hanover, Ohio	Nov. 12, 1867	70, 731
Railway-track	G. Palmer	Littlestown, Pa	Feb. 2, 1869	86, 583
Railway-track	L. H. Peteler	New Brighton, N. Y	Feb. 11, 1873	135, 839
Railway-track	S. M. Richards	Saint Louis, Mo	July 12, 1870	105, 371
Railway-track	A. D. Rock	Hamilton, Nev	Feb. 11, 1873	135, 667
Railway-track	D. S. Tuthill	Newburgh, N. Y	Jan. 28, 1873	135, 300
Railway-track anchor	J. T. Clark	Galesburgh, Ill	Sept. 24, 1872	131, 501
Railway-track and cast-iron pavement, Combined.	W. Bryent	Boston, Mass	June 22, 1858	20, 620
Railway track and switch, Street	W. Wharton, jr	Philadelphia, Pa	Feb. 10, 1863	37, 654
Railway track and wheel	E. C. Hyde	Natchez, Miss	Dec. 3, 1834	....
Railway track and wheel, Combination of	H. R. Campbell	Lebanon, N. H	June 6, 1854	11, 003
Railway track, City	S. M. Fox	New York, N. Y	Apr. 24, 1860	27, 978
Railway track, City	E. S. Gardner	Philadelphia, Pa	Mar. 23, 1858	19, 736
Railway track, City	J. H. Garel	Philadelphia, Pa	July 15, 1862	35, 909
Railway-track frog	W. Ebbitt	New York, N. Y	Oct. 1, 1861	33, 381
Railway-track gage	W. S. Huntington	Byron, Mich	May 9, 1871	114, 563
Railway-track joint	E. U. Benedict	Horicon, Wis	Sept. 7, 1858	21, 406
Railway-track joint	C. A. Wakefield	New Haven, Conn	Jan. 19, 1858	19, 165
Railway-track rail	W. M. C. Cushman	Albany, N. Y	Jan. 16, 1845	3, 889
Railway-track raiser	H. Patterson	Augusta, Mich	June 25, 1867	66, 170
Railway-track, Street	R. H. Lecky	McClure, Pa	Apr. 5, 1864	42, 202
Railway-track wrench	P. L. Gibbs	Chicago, Ill	Apr. 15, 1873	137, 910
Railway-tracks, Device for shooting gravel at cows upon.	S. Scotton	Richmond, Ind	May 15, 1866	54, 783
Railway-tracks, Implement for sighting	G. W. Plumb	Milford, Conn	Sept. 28, 1869	95, 264
Railway-tracks, Machine for raising	W. Henney	Wapello, Ill	May 24, 1859	24, 121
Railway-tracks, Machine for removing snow from.	C. Lombaert	Philadelphia, Pa	Mar. 31, 1840	1, 530
Railway-tracks, Machinery for cleaning snow and ice from.	S. Streeter	Detroit, Mich	Oct. 30, 1847	5, 347
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Railway-tracks, Mode of raising	J. Temple	Selin's Grove, Pa	Dec. 12, 1865	51, 523
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Railway-train-heater coupling	J. R. Guy	Springfield, Ohio	Oct. 27, 1868	83, 488
Railway-train indicator	S. W. Hemenway	Lansing, Iowa	Feb. 25, 1873	136, 242
Railway-train-signal apparatus	R. K. Boyle	Brooklyn, N. Y	Oct. 22, 1872	132, 434
Railway-train-signaling apparatus, Electric	R. K. Boyle	New York, N. Y	Oct. 14, 1873	143, 663
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Railway-trains, Smoke and spark conductor for	H. D. Ohlsen	Chicago, Ill	Dec. 24, 1872	134, 139
Railway-trains, Smoke and spark conveyer for	L. Powell	Milford, Conn	Dec. 14, 1869	97, 807
Railway-trains, Traction and connecting apparatus for.	C. Arnoux	Paris, France	July 28, 1863	39, 332
Railway-trains with water, Mode of supplying	L. H. Lezott	Washington, D. C	Sept. 19, 1865	50, 013
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Railway turn or circular switch, Miner's	E. B. Lowman	Bellaire, Ohio	Nov. 2, 1858	21, 971
Railway turn-about	J. Myers	Attleborough, Mass	May 8, 1837	189
Railway turn-about	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
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Railway turn-out	C. Dutton	Rochester, N. Y	June 5, 1849	6, 493
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Railway turn-out	S. A. Otis	Boston, Mass	Nov. 27, 1866	60, 044
Railway turn-out	I. N. Pillsbury and N. E. Warren.	Cleveland, Ohio	Dec. 22, 1863	41, 018
Railway turn-out	J. Talbot	Portsmouth, Va	Oct. 11, 1836	48
Railway turn-out, Street	H. Tupper	Buffalo, N. Y	Dec. 18, 1860	30, 940
Railway turn-out, Street	W. Tuttle	Boston, Mass	Aug. 17, 1869	93, 928
Railway water-crane	H. S. Cubberley and D. Mann	Bloomington, Ill	Aug. 26, 1873	142, 150
Railway water-tank	J. L. Shaw	Grand Rapids, Mich	Apr. 1, 1873	137, 388
Railway water-tanks, Filling	C. Weed	Milledgeville, Ill	Sept. 14, 1858	21, 530
Railway water-tanks, Watering column for	J. N. Poage	Cincinnati Ohio	May 20, 1873	139, 188
Railway watering-device	D. Cheney	Brookfield, Mo	Dec. 19, 1871	121, 991
Railway wedge-rail	W. M. Martin	New York, N. Y	Aug. 28, 1866	57, 530
Railway-wheel	A. Cameron and D. Matthew	Charleston, S. C., and Philadelphia, Pa.	Sept. 6, 1859	25, 317
Railway-wheel	H. Dircks	Liverpool, England	June 26, 1841	2, 147
Railway wheel and axle to run on different-gaged tracks.	O. Tufts	Boston, Mass	Oct. 1, 1861	32, 407
Railway-wheels, Construction of	J. Rae and G. Miller	London, England, and Glasgow, Scotland.	Mar. 23, 1869	88, 207
Railway-wheels, Machine for forming corrugated wrought-iron plates for.	C. Hewitt	Trenton, N. J	Apr. 24, 1866	54, 154

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Invention.	Inventor.	Residence.	Date.	No.
Railway with a lift of 16 feet	E. Baldwin	Harrisburgh, Pa	May 6, 1826	....
Railway, Wooden	J. Y. Smith	Pittsburgh, Pa	Mar. 2, 1869	87, 517
Railway wrecking-frog	S. M. Hudson	Saint Louis, Mo	Dec. 12, 1871	121, 875
Railways, and means of applying power to propel carriages on, Construction of.	J. Rangeley	Camberwell, England	Dec. 28, 1840	1, 916
Railways and streets, Steam-heater to remove snow from.	R. B. Miller	Utica, N. Y	Apr. 2, 1872	125, 141
Railways, &c., Apparatus for attaining a high degree of velocity on.	J. Nollner	Washington, D. C	Apr. 13, 1838	690
Railways, Apparatus for constructing	E. Thompson	Hokah, Minn	Nov. 26, 1867	71, 553
Railways, Apparatus for preventing cattle from getting on.	D. Green	Greenfield, N. Y	Aug. 25, 1838	895
Railways, Apparatus for removing snow from	C. T. Geslain	Brooklyn, N. Y	July 2, 1872	128, 611
Railways, Apparatus for transporting trains on inclined planes of.	S. McElfatrick	Dauphin, Pa	Oct. 12, 1852	9, 329
Railways, Apparatus for watering and sweeping	W. C. Allison	Philadelphia, Pa	Sept. 6, 1859	25, 359
Railways, Cast or wrought iron plates for	J. Stimpson	Baltimore, Md	Sept. 26, 1835	....
Railways, Constructing single	U. Emmons	Freehold, N. J	Apr. 17, 1837	167
Railways, Construction of	S. A. Beers	Brooklyn, N. Y	Oct. 27, 1857	18, 494
Railways, Construction of	H. Carpenter	New York, N. Y	May 6, 1862	35, 198
Railways, Construction of	E. Gray	Boston, Mass	Mar. 15, 1825	....
Railways, Construction of	A. Hay	Philadelphia, Pa	Aug. 21, 1860	29, 693
Railways, Construction of	J. Herron	Baltimore, Md	Apr. 18, 1840	1, 558
Railways, Construction of	J. S. Hyde	Brooklyn, N. Y	Jan. 2, 1867	51, 904
Railways, Construction of	E. Johnson	Rochester, N. Y	Nov. 23, 1835	....
Railways, Construction of	W. S. Morrow	Newville, Pa	June 11, 1872	127, 910
Railways, Construction of	J. H. Phillips	Washington, D. C	Nov. 23, 1869	97, 224
Railways, Construction of	J. Stevens	Hoboken, N. Y	June 8, 1824	....
Railways, Construction of	T. R. Timby	Tarrytown, N. Y	Jan. 9, 1872	122, 682
Railways, Construction of	A. Webb	Savannah, Ga	July 26, 1859	24, 895
Railways, Construction of	S. Winkley	New York, N. Y	Oct. 2, 1866	58, 565
Railways, Construction of	T. Yates	Milwaukee, Wis	Dec. 20, 1864	45, 552
Railways, Construction of	J. Young	West Galway, N. Y	Apr. 26, 1859	23, 804
Railways, Construction of street	Z. Eastman	Chicago, Ill	Apr. 20, 1869	89, 210
Railways, Construction of the permanent way of	J. E. McConnell and W. Seaton	Wolverton and Regent's Park, England.	Feb. 23, 1858	19, 433
Railways, Construction-train for	H. Baines	Toronto, Canada	Aug. 29, 1871	118, 667
Railways, Crossing-plate for street	J. E. Ridgway	Philadelphia, Pa	Feb. 23, 1869	87, 293
Railways, Device for removing snow from	J. A. Bryant	Pottsville, Pa	Dec. 16, 1873	145, 623
Railways, Device for transferring freight on	L. Savage	Ashtabula, Ohio	Apr. 27, 1869	89, 437
Railways, Endless rolling-gear for	J. Frye	Brooklyn, N. Y	Feb. 18, 1873	136, 052
Railways, Flexible rack for marine	J. Wood and P. A. Sabbatam	New York	Oct. 6, 1827	....
Railways from ice and snow, Clearing the rails of	T. S. Ridgway	Pottsville, Pa	Oct. 31, 1839	1, 384
Railways, Hose-jumper for street	J. Rue	Philadelphia, Pa	Jan. 9, 1872	122, 660
Railways, Implement for shooting missiles at cows, &c., on.	S. Scotton	Richmond, Ind	May 11, 1858	20, 218
Railways, Iron rail for street	S. A. Beers	Brooklyn, N. Y	June 19, 1860	28, 731
Railways, Lock-joint for street	W. C. Gould	New York, N. Y	Feb. 9, 1864	41, 501
Railways, Machine for ramming under the cross-ties of.	R. B. Harrison	Vicksburgh, Miss	Sept. 8, 1859	18, 144
Railways, Machine for removing snow and ice from.	M. C. Bogia	Philadelphia, Pa	Mar. 17, 1863	37, 897
Railways, Machine for removing snow from	G. Sewell	Brooklyn, N. Y	June 11, 1872	127, 930
Railways, Machine for removing snow from	D. Townsend	Morrison, Ill	Oct. 22, 1872	132, 502
Railways, Machine for constructing timber	J. Stimpson	Baltimore, Md	Aug. 13, 1838	879
Railways, Manner of constructing	W. Russell	New York, N. Y	May 8, 1840	1, 594
Railways, Method of preventing accidents on	M. Wallwork	Shelbyville, Tenn	Jan. 29, 1867	61, 693
Railways, Mode of ascending and descending inclined planes on.	J. Drummond	Elizabethtown, N. J	June 21, 1839	1, 184
Railways, Mode of ascending and descending inclined planes on.	W. F. Ketchum	Buffalo, N. Y	Mar. 20, 1839	1, 107
Railways, Mode of ascending and descending inclined planes on.	J. Mercer	Harrisville, Ohio	June 21, 1839	1, 182
Railways, Mode of cleaning snow from	J. H. Moore and B. Woodworth	Worcester and Boston, Mass.	Oct. 31, 1840	1, 843
Railways, Mode of constructing	J. Stevens	Hoboken, N. J	Oct. 23, 1824	....
Railways, Mode of constructing	J. Stimpson	Baltimore, Md	July 26, 1839	1, 262
Railways, Mode of constructing the chairs of and attaching rails to.	M. Robinson	Philadelphia, Pa	Mar. 16, 1839	1, 105
Railways, Mode of diminishing effect of collisions on.	J. R. Rowand	Philadelphia, Pa	Nov. 5, 1861	33, 665
Railways, Mode of preventing collisions on	T. A. Davies	New York, N. Y	Feb. 10, 1852	8, 719
Railways, Mode of propulsion and construction of elevated.	C. T. Harvey	Tarrytown, N. Y	July 7, 1868	79, 755
Railways, Platform-carrier for endless	J. Frye	Brooklyn, N. Y	Feb. 18, 1873	136, 054
Railways, Preventing collisions on	A. Dehuff	York, Pa	Mar. 15, 1859	23, 232
Railways, Progressive pile-driving and grading machine for making.	S. Cram	New York, N. Y	June 14, 1838	785
Railways, Rail and wheel for turning curves of	I. F. B. Flagg	Philadelphia, Pa	Jan. 23, 1849	6, 042
Railways, Self-acting switch for horse	J. A. Heyle	Boston, Mass	Oct. 8, 1861	32, 434
Railways, Self adjusting and locking switch for	J. C. Past	White Haven, Pa	June 3, 1851	8, 128
Railways, Sliding draft-cable for	A. E. Beach	Stratford, Conn	Sept. 5, 1865	49, 697
Railways, Support for elevated	F. A. Williams	Cloverville, N. Y	June 25, 1867	66, 197
Railways, Supporting-column for elevated	C. T. Harvey	Tarrytown, N. Y	Feb. 1, 1870	99, 435
Railways, Turning curves of	G. Collyer	Philadelphia, Pa	June 11, 1867	65, 544
Railways, Turning short curves on	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
Railways, Ventilating underground and subsurface	O. Vandenburgh	New York, N. Y	Mar. 4, 1873	136, 563
Railways, Wheel for endless	J. Frye	Brooklyn, N. Y	Feb. 18, 1873	136, 053
Railways with canals, Combining	S. S. Walley	Charlestown, Pa	Dec. 11, 1845	4, 304
Railways, Wood and coal dumper for	R. B. Robbins	Adrian, Mich	Nov. 15, 1870	109, 346
Railways, Wooden splice-piece for	I. R. Trimble	Baltimore, Md	Apr. 10, 1855	12, 704
Rain-conductor, Automatic	J. B. Hudson	Fayetteville, Pa	Dec. 17, 1867	72, 298
Rain-leader, Non-freezing	J. F. McNee	Philadelphia, Pa	May 4, 1869	89, 677
Rain-troughs, Machine for making	W. H. Henderson	Franklin, Ind	May 22, 1860	28, 369
Rain-water conductor	J. D. Field	Wataga, Ill	Apr. 6, 1869	88, 618
Rain-water conductor and filter	J. C. Hall	Battle Creek, Mich	June 21, 1870	104, 450
Rain-water conductor, Two-way	F. M. Buckles	Altona, Ill	July 6, 1869	92, 155
Rain-water spouting	G. Williams	West Middleburgh, Ohio	July 27, 1869	93, 152

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Invention.	Inventor.	Residence.	Date.	No.
Rain-water switch and reversible valve for cisterns, &c.	L. Goudreau	Kankakee, Ill	Jan. 21, 1873	135, 035
Raisin-seeder	J. B. Crosby	Boston, Mass	July 31, 1866	56, 721
Raisin-seeder	W. Curtiss, jr	Wolcottville, Conn	May 2, 1871	114, 417
Raisin-seeder	G. Pratt	West Roxbury, Mass	June 13, 1871	115, 893
Raisin-seeder	C. L. Spencer	Providence, R. I	Dec. 6, 1864	45, 355
Raisin-seeding machine	H. Locke	South Boston, Mass	Nov. 28, 1865	51, 201
Raisin-seeding machine	S. C. Moore	Boston, Mass	Apr. 10, 1866	53, 855
Raisin-stoner	R. Carpenter	Portsmouth, N. H	Mar. 1, 1864	41, 757
Raising heavy bodies, Machinery for	G. Kilburn	Walpole, N. H	Aug. 25, 1838	894
Rake: *See* Apple-rake. Garden-rake. Gleaner-rake. Grain-rake. Grain and hay rake. Hand-rake. Harvester-rake. Harvester-reel rake. Harvesting-rake. Harvesting-machine rake. Hay-rake. Hay and grain rake. Horse-rake. Iron-tooth rake. Oyster-rake. Pea-rake. Power-rake. Reaper's rake. Revolving rake.				
Rake	A. J. Blodgett	Newport, N. H	Sept. 1, 1857	18, 079
Rake	J. H. Butler	Scottsville, Ky	Mar. 3, 1868	74, 987
Rake	H. Chatfield	Waterbury, Conn	Apr. 17, 1855	12, 750
Rake	T. Crane	Fort Atkinson, Wis	June 7, 1859	24, 286
Rake	D. M. Cummings	Enfield, N. H	Aug. 15, 1854	11, 519
Rake	B. F. Gladding	Providence, R. I	Mar. 26, 1867	63, 154
Rake	H. Haynes	Middletown, Vt	June 18, 1839	1, 176
Rake	A. A. and A. Hotchkiss	Sharon Valley, Conn	Oct. 6, 1857	18, 339
Rake	J. O. Jones	Boston, Mass	Oct. 14, 1873	143, 578
Rake	J. C. Klein	Birmingham, Pa	June 8, 1869	91, 027
Rake	A. B. Lewis	Brooklyn, Wis	Sept. 21, 1852	9, 275
Rake	L. A. Powers	West Meriden, Conn	Nov. 18, 1873	144, 791
Rake	E. Sirret	Buffalo, N. Y	Jan. 2, 1855	12, 169
Rake and elevator	A. H. Gaston and J. Smith	Sunbury, Ohio	Mar. 20, 1855	12, 547
Rake and hay-elevator	W. J. Keeney and J. R. Tarbox	Switzerland County, Ind	Apr. 3, 1855	12, 632
Rake and hoe blank, Combined	N. Harper	Philadelphia, Pa	May 25, 1869	90, 448
Rake and hoe combined	H. Thacker	Oneida, N. Y	Nov. 17, 1868	84, 231
Rake and hoe handles, Machine for turning	W. Shepardson and J. C. Sperry	Hamilton, N. Y	Dec. 3, 1827	....
Rake and seeder combined	R. J. Colvin	Lancaster, Pa	Mar. 12, 1867	62, 818
Rake and spade, Combined	W. H. Miller	Brandenburgh, Ky	Oct. 23, 1866	59, 050
Rake and spade, Combined	W. H. Miller	Brandenburgh, Ky	Sept. 17, 1867	69, 011
Rake and tedder combined	R. J. Colvin	Lancaster, Pa	Apr. 22, 1873	138, 132
Rake and tedder, Combined	C. La Dow	South Galway, N. Y	Sept. 23, 1873	143, 166
Rake and tedder combined	J. M. Low	Portlandville, N. Y	Feb. 15, 1870	99, 923
Rake and tedder combined	S. Perry	Newport, N. Y	Mar. 4, 1873	136, 539
Rake and tedder combined	R. H. Russell	Lima, Pa	May 28, 1872	127, 370
Rake-handles, Machine for turning	A. Sperry	Rotterdam, N. Y	Dec. 26, 1827	....
Rake-head	J. C. Stoddard	Worcester, Mass	Feb. 12, 1861	31, 414
Rake-head attachment	T. D. Little	Salisbury, N. H	Apr. 7, 1868	76, 477
Rake-shoe, Revolving	A. J. Taylor	Rome, Pa	Feb. 25, 1873	136, 189
Rake-teeth-bending machine	C. Coleman	Allegheny City, Pa	Feb. 8, 1870	99, 638
Rake-teeth-bending machine	C. Coleman	Allegheny City, Pa	Mar. 29, 1870	101, 230
Rake-teeth-bending machine	J. Sugden	Pittsburgh, Pa	Sept. 13, 1870	107, 305
Rake-teeth, &c., bending machine	J. and E. J. Sugden	Pittsburgh, Pa	Mar. 19, 1872	124, 863
Rake-teeth machine	G. Dayton and W. Stedman	Blanford and Springham, Mass.	Jan. 13, 1835	....
Rake-teeth, Machine for bending wire for	J. N. Ayres	Stamford, Conn	June 22, 1869	91, 592
Rake-teeth, Machine for driving	N. M. and A. T. Barnes	Tiffin, Ohio	Oct. 26, 1869	96, 185
Rake-teeth, Machine for making	C. R. Soule	Fairfield, Vt	June 24, 1856	15, 195
Rake-teeth, Machine for turning tenons for	J. W. Sweet and W. Stedman	Berkshire, Mass	Mar. 5, 1827	....
Rake, weeder, and smoother, Combined	A. F. Dückwitz	New York, N. Y	Nov. 30, 1869	97, 368
Rakes to handles, Device for attaching	A. Boyden	Foxborough, Mass	May 22, 1866	55, 000
Ram for naval offense or defense, Battering or piercing.	J. B. Woodruff	Washington, D. C	Feb. 23, 1864	47, 736
Ram for naval warfare	W. Brown	Portsmouth, England	Oct. 3, 1871	119, 566
Ram for naval warfare	C. Perley	New York, N. Y	Feb. 24, 1863	37, 769
Ram for vessels	W. Hagerty	Monongahela, Pa	Dec. 17, 1867	72, 391
Ram, Marine-battery	J. F. H. King	Port Richmond, N. Y	Mar. 3, 1863	37, 817
Ram, Steam	T. Hill	Vallejo, Cal	June 7, 1870	103, 883
Ram, &c., Steam marine	R. J. Gatling	Indianapolis, Ind	Sept. 9, 1862	36, 402
Ramie and other fibrous stalks, Machine for crushing.	E. B. Bigelow	Boston, Mass	Mar. 22, 1870	101, 089
Ramie and other plants, Preparing the fiber of	S. M. Allen	Boston, Mass	May 24, 1870	103, 275
Ramie and other textile plants, Machine for treating.	E. Lefranc and J. Nagona	New Orleans, La	Aug. 23, 1870	106, 700
Rammer for street-paving	W. Beach	Philadelphia, Pa	Sept. 18, 1860	30, 042
Rammer, Molder's	E. H. Meigs	East Berlin, Conn	June 21, 1870	104, 620
Rammer, Paver's	T. Robjohn	New York, N. Y	Aug. 31, 1869	94, 443
Ramrod-stop	S. W. Porter	Springfield, Mass	Aug. 16, 1870	106, 405
Ramrods, Adjustable wormer for	G. E. Baldwin	West Meriden, Conn	Mar. 15, 1859	23, 223
Ramrods, Machine for making	C. C. Barstow	Exeter, N. H	Nov. 21, 1820	....
Range	D. K. Boswell	Columbus, Ohio	Feb. 11, 1868	74, 291
Range	B. W. Dunklee	Boston, Mass	Mar. 13, 1860	27, 436
Range	E. K. Edwards	New York, N. Y	July 20, 1869	92, 711
Range	W. A. Green	Troy, N. Y	Aug. 25, 1868	81, 362
Range	J. P. Hayes	Philadelphia, Pa	Sept. 22, 1868	82, 311
Range	E. Hosford	Chicago, Ill	July 28, 1868	80, 484
Range	L. Meyer	Saint Louis, Mo	Dec. 16, 1873	145, 674
Range	S. Pierce	Troy, N. Y	June 23, 1863	38, 989
Range	P. Rollhaus, jr	New York, N. Y	June 6, 1871	115, 642
Range	E. Whiteley	Cambridge, Mass	Nov. 14, 1865	50, 977
Range and air-heater, Cooking	J. Fink	Philadelphia, Pa	Oct. 30, 1855	13, 717
Range and air-heating furnace	W. H. Armstrong	New Brunswick, N. J	Apr. 23, 1867	64, 059
Range and air-heating furnace combined, Cooking	J. MacGregor, jr	New York, N. Y	Mar. 5, 1850	7, 142
Range and furnace combined	W. A. Greene	Troy, N. Y	July 3, 1866	56, 041
Range and gas-generator, Combination cooking	A. Hendrickx	Morrisania, N. Y	Apr. 27, 1858	20, 064
Range and heater combined	N. A. Boynton	New York, N. Y	Nov. 26, 1867	71, 446

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Invention.	Inventor.	Residence.	Date.	No.
Range and heating air, Cooking	E. T. Beers	Honesdale, Pa	Apr. 2, 1850	7, 231
Range and heating apparatus, Combined cooking	C. Kane	New York, N. Y	Sept. 28, 1858	21, 608
Range and side oven, Hot-air	J. H. Cahill	Philadelphia, Pa	Aug. 15, 1854	11, 516
Range and stove	J. G. Treadwell	Albany, N. Y	Sept. 11, 1860	30, 013
Range and stove attachment	D. Stuart	Philadelphia, Pa	Feb. 21, 1871	112, 089
Range back, Cooking	H. H. Stimpson	Boston, Mass	May 16, 1846	4, 516
Range, Base-burning cooking	J. B. Gardner	New York, N. Y	Nov. 2, 1869	96, 420
Range-boiler	A. Bennett	Brooklyn, N. Y	June 22, 1869	91, 596
Range-boiler	W. Hopkin, jr	Philadelphia, Pa	Sept. 17, 1872	131, 350
Range boiler, Kitchen	J. H. Ash	Brooklyn, N. Y	May 23, 1865	47, 783
Range, Cooking	J. Albee	Chelsea, Mass	Oct. 4, 1870	107, 849
Range, Cooking	E. Backus	Stuyvesant, N. Y	Nov. 29, 1859	26, 241
Range, Cooking	A. C. Barstow	Providence, R. I	Jan. 26, 1864	41, 355
Range, Cooking	C. H. Blanchard	Saint Louis, Mo	July 16, 1872	129, 454
Range, Cooking	D. Bosworth	New York, N. Y	Aug. 2, 1870	106, 027
Range, Cooking	J. Brereton	New York	Apr. 21, 1842	2, 569
Range, Cooking	P. N. Burke	Brooklyn, N. Y	Oct. 22, 1872	132, 437
Range, Cooking	J. H. Burtis	Brooklyn, N. Y	July 4, 1871	116, 681
Range, Cooking	G. Chilson	Boston, Mass	Jan. 4, 1859	22, 489
Range, Cooking	G. Cooper	Concord, N. H	Nov. 29, 1859	26, 257
Range, Cooking	R. E. Deane	New York, N. Y	July 23, 1867	66, 955
Range, Cooking	R. E. Deane	New York, N. Y	Oct. 25, 1870	108, 691
Range, Cooking	J. M. Dearborn	Boston, Mass	Mar. 20, 1849	6, 198
Range, Cooking	D. Donovan and M. G. Hallman	Philadelphia, Pa	June 6, 1854	11, 048
Range, Cooking	B. W. Dunklee	Boston, Mass	Apr. 12, 1859	23, 665
Range, Cooking	B. W. Dunklee	Boston, Mass	May 10, 1870	102, 925
Range, Cooking	F. Falls and J. P. Hayes	Philadelphia, Pa	Apr. 13, 1869	88, 862
Range, Cooking	R. R. Finch, jr	New York, N. Y	Aug. 30, 1864	44, 041
Range, Cooking	J. Fink	Philadelphia, Pa	May 30, 1846	4, 550
Range, Cooking	W. A. Goodher	Burlington, N. J	Jan. 1, 1867	60, 877
Range, Cooking	W. H. Graham	La Crosse, Wis	Apr. 7, 1868	76, 437
Range, Cooking	W. D. Granger	Providence, R. I	Nov. 30, 1869	97, 291
Range, Cooking	W. Hall	Quincy, Ill	Dec. 27, 1870	110, 566
Range, Cooking	J. Harrison	New York, N. Y	Nov. 23, 1858	22, 120
Range, Cooking	J. P. Hayes	Boston, Mass	Aug. 26, 1846	4, 720
Range, Cooking	J. P. Hayes	Boston, Mass	Jan. 27, 1852	8, 685
Range, Cooking	J. P. Hayes	Boston, Mass	Oct. 4, 1853	10, 097
Range, Cooking	W. Hopkin, jr	Philadelphia, Pa	Oct. 21, 1873	143, 762
Range, Cooking	M. C. Hull	New York, N. Y	Nov. 14, 1865	50, 933
Range, Cooking	M. C. Hull	New York, N. Y	Feb. 19, 1867	62, 270
Range, Cooking	M. C. Hull	New York, N. Y	Sept. 3, 1867	68, 366
Range, Cooking	W. M. Kepler	Cincinnati, Ohio	Mar. 22, 1864	42, 002
Range, Cooking	N. P. Kingsley	Boston, Mass	Oct. 11, 1841	2, 310
Range, Cooking	J. Magee	Chelsea, Mass	July 16, 1872	129, 416
Range, Cooking	H. Martin	Duncan, Pa	Oct. 1, 1872	131, 823
Range, Cooking	N. Mason	Roxbury, Mass	Dec. 4, 1849	6, 923
Range, Cooking	N. Mason	Roxbury, Mass	Aug. 19, 1851	8, 302
Range, Cooking	N. Mason	Roxbury, Mass	Sept. 27, 1853	10, 046
Range, Cooking	J. McCloskey	New York, N. Y	June 9, 1868	78, 751
Range, Cooking	A. McPherson	New York, N. Y	Apr. 19, 1853	9, 674
Range, Cooking	F. S. Merritt	New York, N. Y	Apr. 3, 1849	6, 264
Range, Cooking	F. S. Merritt	New York, N. Y	May 1, 1860	28, 099
Range, Cooking	F. S. Merritt	New York, N. Y	Jan. 21, 1862	34, 212
Range, Cooking	E. Mingay	Boston, Mass	July 18, 1871	117, 096
Range, Cooking	J. H. Mitchell	San Francisco, Cal	June 10, 1873	139, 728
Range, Cooking	E. Moneuse and L. Duparquet	New York, N. Y	Dec. 29, 1868	85, 468
Range, Cooking	J. L. Mott	New York, N. Y	Nov. 1, 1845	4, 248
Range, Cooking	C. D. Newton	Troy, N. Y	Nov. 23, 1869	97, 216
Range, Cooking	E. G. Niles	Cincinnati, Ohio	Aug. 21, 1860	29, 711
Range, Cooking	E. G. Niles	Cincinnati, Ohio	July 11, 1865	48, 712
Range, Cooking	W. Pettet	New York, N. Y	Nov. 8, 1859	26, 051
Range, Cooking	J. L. Pfau, jr	Quincy, Ill	May 20, 1873	139, 187
Range, Cooking	S. Pierce	Troy, N. Y	Aug. 21, 1847	5, 248
Range, Cooking	S. Pierce	Troy, N. Y	Aug. 25, 1857	18, 035
Range, Cooking	J. Plant and C. G. Ball	Washington, D. C	Apr. 8, 1856	14, 591
Range, Cooking	M. Pond	Boston, Mass	Mar. 4, 1843	2, 990
Range, Cooking	M. Pond	Boston, Mass	May 29, 1845	4, 064
Range, Cooking	M. Pond	Boston, Mass	Oct. 29, 1846	4, 830
Range, Cooking	M. Pond	Boston, Mass	Feb. 25, 1851	7, 946
Range, Cooking	M. Pond	Boston, Mass	Aug. 13, 1861	33, 050
Range, Cooking	M. Pond	Boston, Mass	July 25, 1865	49, 001
Range, Cooking	J. A. Price	Scranton, Pa	Feb. 14, 1871	111, 870
Range, Cooking	W. Resor	Cincinnati, Ohio	June 28, 1859	24, 577
Range, Cooking	H. R. Robbins	Baltimore, Md	May 25, 1869	90, 563
Range, Cooking	E. F. Rodgers	Chelsea, Mass	Oct. 31, 1871	120, 459
Range, Cooking	P. Rollhaus	New York, N. Y	Sept. 11, 1849	6, 715
Range, Cooking	P. Rollhaus	Port Chester, N. Y	Nov. 16, 1869	96, 939
Range, Cooking	W. G. Ruggles	Worcester, Mass	June 21, 1859	24, 492
Range, Cooking	C. J. Shepard	Brooklyn, N. Y	June 2, 1857	17, 456
Range, Cooking	C. J. Shepard	Brooklyn, N. Y	Mar. 28, 1865	47, 045
Range, Cooking	N. M. Simonds	Saint Louis, Mo	July 1, 1873	140, 550
Range, Cooking	O. Smith	Chicago, Ill	May 1, 1866	54, 427
Range, Cooking	T. B. Smith	New York	Aug. 27, 1835	....
Range, Cooking	A. Spaulding	New York	Nov. 12, 1841	2, 354
Range, Cooking	G. S. G. Spence	Boston, Mass	Nov. 9, 1852	9, 393
Range, Cooking	G. S. G. Spence	Boston, Mass	Oct. 4, 1853	10, 076
Range, Cooking	W. Steffe	Philadelphia, Pa	Feb. 9, 1869	86, 785
Range, Cooking	F. H. Stimpson	Boston, Mass	Mar. 5, 1850	7, 151
Range, Cooking	H. H. Stimpson	Boston, Mass	Mar. 14, 1840	1, 515
Range, Cooking	H. H. Stimpson	Boston, Mass	May 17, 1844	3, 587
Range, Cooking	H. H. Stimpson	Boston, Mass	Apr. 5, 1859	23, 509
Range, Cooking	D. Stuart and L. Bridge	Philadelphia, Pa	Oct. 25, 1870	108, 736
Range, Cooking	J. Van	Cincinnati, Ohio	May 14, 1867	64, 725
Range, Cooking	G. W. Walker	Boston, Mass	Apr. 18, 1871	113, 959
Range, Cooking	T. C. Walter	San Francisco, Cal	Feb. 19, 1867	62, 169
Range, Cooking	S. Wilks	Chicago, Ill	Nov. 3, 1868	83, 679
Range, Cooking	C. J. Wood	Baltimore, Md	June 6, 1871	115, 800
Range, Cooking and heating	P. W. McKenzie	Jersey City, N. J	Dec. 13, 1864	45, 418

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Range, Cooking and heating	S. Teets	New York, N. Y	May 6, 1873	138, 543
Range, Cooking and heating	J. M. Wilson	Philadelphia, Pa	Oct. 22, 1872	132, 320
Range-door	R. E. Deane and T. Shedd	New York, N. Y	Jan. 3, 1871	110, 747
Range, Fire-place	W. Sanford	Brooklyn, N. Y	June 6, 1871	115, 644
Range for using anthracite coal, Kitchen	E. Nott	Schenectady, N. Y	Apr. 22, 1835	....
Range, Gas	A. L. Bogart	New York, N. Y	Nov. 9, 1869	96, 666
Range, Gas-cooking	D. G. Haskins	Cambridge, Mass	Nov. 5, 1867	70, 432
Range, Heater	A. K. Sanders	Brooklyn, N. Y	Apr. 28, 1868	77, 325
Range, Heating	J. Lawlor	New York, N. Y	June 24, 1873	140, 205
Range, Heating and cooking	J. S. Clark	Philadelphia, Pa	Oct. 4, 1870	107, 876
Range, Heating and cooking	E. Edwards	Boston, Mass	May 16, 1865	47, 706
Range, Heating and cooking	W. A. Green	Brooklyn, N. Y	May 14, 1872	126, 695
Range, Heating and cooking	H. L. Palmer	New York, N. Y	Jan. 28, 1873	135, 356
Range, Kitchen	E. Barrows	Rochester, Mass	July 18, 1840	1, 694
Range, Kitchen	T. S. Clogston	Boston, Mass	Jan. 7, 1862	34, 121
Range, Kitchen	J. Fink	Philadelphia, Pa	Apr. 10, 1844	3, 533
Range, Kitchen	G. Johnson	Philadelphia, Pa	May 23, 1836	....
Range, Kitchen	A. W. Thompson	Philadelphia, Pa	Mar. 20, 1844	3, 501
Range, Kitchen	A. S. Wolcott	New York, N. Y	June 27, 1864	4, 599
Range or receptacle, Dust	A. Brigham	Coldbrook, Mass	June 12, 1866	55, 458
Range, Oven cooking	D. P. Weeks	Malden, Mass	Dec. 19, 1854	12, 110
Range, Oven of cooking	J. S. Williams	Saint Louis, Mo	May 13, 1856	14, 895
Range, Portable cooking	J. Van	Cincinnati, Ohio	Sept. 19, 1871	119, 066
Range, Portable cooking	E. Young	Cincinnati, Ohio	Mar. 5, 1872	124, 412
Range, Setting	A. F. Barry	New York, N. Y	Aug. 8, 1871	117, 727
Range, Steam-cooking	J. Ashcroft	Brooklyn, N. Y	Apr. 4, 1871	113, 241
Ranges and stoves, Cooking-boiler for	J. Schmadel	Dayton, Ohio	Oct. 5, 1858	21, 702
Ranges and stoves, Shield for protecting water-back in.	M. J. Wellman	New York, N. Y	May 14, 1867	64, 815
Ranges, Hot-water boiler for	P. Lesson	Newark, N. J	Dec. 10, 1872	133, 866
Ranges, Hot-water-heating apparatus for	H. L. Palmer	New York, N. Y	Jan. 14, 1873	134, 765
Ranges, Mode of constructing and arranging the flues of cooking.	E. Barrows, jr	Boston, Mass	Dec. 31, 1829	1, 456
Ranges, Mode of constructing flues, &c., of kitchen.	S. Pierce	New York, N. Y	Feb. 21, 1838	613
Ranges or stoves, Ironing-pan for	J. Spear	Philadelphia, Pa	July 5, 1859	24, 667
Ranges, Steam-heating apparatus combined with	E. M. Deey	New York, N. Y	Jan. 16, 1872	122, 710
Ranges, Water-back for	T. Bradford	Boston, Mass	Aug. 30, 1864	43, 967
Ranges, Water-back for	J. Ingram	New York, N. Y	Feb. 16, 1858	19, 368
Ranges, Water-back for	W. S. Mayo	New York, N. Y	May 1, 1860	28, 096
Ranges, Water-back for cooking	J. Ingram	New York, N. Y	Jan. 8, 1861	31, 083
Ranges, Water-back for cooking	H. H. and F. H. Stimpson	Boston, Mass	May 28, 1850	7, 401
Rapid-boat	F. W. Geissenhainer	New York	Jan. 14, 1814	....
Rapid-jack for ascending rapids	A. Sacket	New York	July 3, 1809	....
Rasp	I. Fisher	Saint Louis, Mo	Apr. 14, 1868	76, 618
Rasp	W. T. Nicholson	Providence, R. I	Sept. 7, 1869	94, 503
Rasp	I. F. Thompson	Providence, R. I	Sept. 20, 1870	107, 565
Rasp-cutting machine	W. T. Nicholson	Providence, R. I	Aug. 11, 1868	80, 993
Rasp-cutting machine	A. N. Redman	Boston, Mass	Aug. 9, 1864	43, 795
Rasp-cutting machine	D. and J. S. Shattuck	Cambridge and Malden, Mass.	Apr. 7, 1863	38, 135
Rasp-cutting machine	T. Smith and A. B. Southwick	Charlestown and Ballardvale, Mass.	Sept. 1, 1863	39, 781
Rasp-cutting machine	A. B. Southwick and H. E. Grandy.	Ballardvale, Mass	Feb. 17, 1863	37, 725
Rasp-cutting machine	A. Weed	Boston, Mass	Aug. 14, 1866	57, 230
Rasp-cutting machine	J. B. West	Geneseo, N. Y	June 15, 1869	91, 293
Rasp-making machine	M. H. Fisher	Bridgeport, Conn	June 30, 1868	79, 461
Rasps, files, &c., Chill for casting	E. Ripley	Troy, N. Y	June 5, 1849	6, 510
Rat and mouse trap	L. F. George	San Francisco, Cal	Oct. 3, 1871	119, 598
Rat-trap	R. Beem	Antrim, Ohio	Apr. 14, 1868	76, 700
Rat-trap	J. Borton	Middlebourne, Ohio	July 12, 1859	24, 715
Rat-trap	L. B. Bradley	Watertown, Conn	May 22, 1855	12, 892
Rat-trap	W. H. Cox	Virden, Ill	Apr. 27, 1858	20, 042
Rat-trap	E. H. Crane	Burr Oak, Mich	Aug. 23, 1859	25, 179
Rat-trap	J. W. Fifield	Franklin, N. H	Sept. 28, 1869	95, 216
Rat-trap	E. D. Fink	Columbus, Ohio	Feb. 16, 1858	19, 355
Rat-trap	M. D. Fowler	Vincennes, Ind	Aug. 18, 1868	81, 268
Rat-trap	H. Gortner	Irville, Ohio	May 10, 1859	23, 917
Rat-trap	J. C. Guerrant and B. J. Field	Leaksville, N. C	Jan. 21, 1868	73, 527
Rat-trap	T. Hebb	Great Mills, Md	Mar. 18, 1873	136, 995
Rat-trap	S. S. Henderson	Oxford, Ohio	Dec. 20, 1859	26, 495
Rat-trap	J. M. Henrie	Vandalia, Iowa	Aug. 17, 1869	93, 714
Rat-trap	A. Hunter	Hereford's, Va	Jan. 24, 1860	26, 947
Rat-trap	T. Kell	Alexandria, D. C	Mar. 3, 1838	621
Rat-trap	L. Kittinger	East Greenville, Ohio	Aug. 8, 1846	4, 681
Rat-trap	W. C. Marquis	Burgettstown, Pa	May 5, 1868	77, 631
Rat-trap	C. R. Morehouse	Cardington, Ohio	Feb. 18, 1862	34, 442
Rat-trap	T. Neill	Herkersvilles, Ohio	Jan. 23, 1836	....
Rat-trap	E. Oliver	Philadelphia, Pa	Oct. 22, 1842	2, 828
Rat-trap	L. Parker	Winterset, Iowa	July 17, 1860	29, 190
Rat-trap	H. A. Ridley	Somerville, Tenn	Feb. 7, 1860	27, 071
Rat-trap	J. Sheward	Somerset, Ohio	Mar. 30, 1852	8, 846
Rat-trap	H. Stafford	Mount Pulaski, Ill	Apr. 11, 1854	10, 758
Rat-trap	J. Toll	Locust Grove, Ohio	Apr. 11, 1854	10, 764
Rat-trap	J. I. Vedder	Schenectady, N. Y	June 8, 1852	9, 009
Rat-trap	I. M. Watson	Grand Rapids, Mich	Mar. 10, 1863	37, 883
Rat-trap, Self-setting	S. Beaumont	New York, N. Y	Mar. 25, 1856	14, 531
Ratchet	T. Searls	Pottstown, Pa	July 9, 1872	128, 819
Ratchet and pawl	J. H. Durran	Aurora, Ill	Mar. 8, 1870	100, 510
Ratchet and pawl, Automatic	O. Gilder	Kinsman, Ohio	Mar. 14, 1865	46, 791
Ratchet and pawl mechanism	J. Garfield	Groton, Mass	Oct. 13, 1868	82, 935
Ratchet-brace	W. Brown	Hoboken, N. Y	Oct. 1, 1867	69, 399
Ratchet-brace	W. F. Cornell	Adrian, Mich	Aug. 18, 1868	81, 145
Ratchet-brace	L. H. Olmsted	Yonkers, N. Y	Mar. 24, 1863	37, 971
Ratchet-brace	L. H. Olmsted	Newark, N. J	Apr. 25, 1865	47, 446
Ratchet-brace	T. A. Weston	Buffalo, N. Y	Mar. 3, 1868	75, 091
Ratchet brace or lever	T. A. Weston	Buffalo, N. Y	Mar. 3, 1868	75, 092

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Ratchet brace or lever	T. A. Weston	Buffalo, N. Y	Mar. 3, 1868	75, 093
Ratchet-drill	E. H. Ashcroft	Lynn, Mass	Mar. 28, 1865	46, 981
Ratchet-drill	L. R. Billard	Norfolk, Va	July 31, 1860	29, 353
Ratchet-drill	G. W. Bishop	Stamford, Conn	Aug. 28, 1866	57, 466
Ratchet-drill	J. C. Chapman	Charlestown, Mass	May 3, 1864	42, 560
Ratchet-drill	W. Frankel	Springfield, Ohio	May 9, 1871	114, 545
Ratchet-drill	B. Gallagher	Saint John, Canada	Apr. 1, 1873	137, 432
Ratchet-drill	H. Getty	Brooklyn, N. Y	June 14, 1864	43, 109
Ratchet-drill	J. Gray	Litchfield, Ill	Oct. 29, 1867	70, 199
Ratchet-drill	I. S. Hamilton	Hamilton, Ohio	July 11, 1871	116, 955
Ratchet-drill	G. Hutchins	New York, N. Y	May 25, 1869	90, 547
Ratchet-drill	S. Ingersoll	Brooklyn, N. Y	June 14, 1870	104, 317
Ratchet-drill	J. Laubser	Milwaukee, Wis	Mar. 29, 1870	101, 278
Ratchet-drill	T. J. Lavery	Boston, Mass	Aug. 20, 1872	130, 645
Ratchet-drill	J. W. Mahlon	Brooklyn, N. Y	July 11, 1871	116, 847
Ratchet-drill	W. Mathews	Bridgeport, Conn	June 4, 1867	65, 410
Ratchet-drill	E. A. Raymond	Brooklyn, N. Y	Aug. 11, 1863	39, 496
Ratchet-drill	C. Sinclair	New York, N. Y	Sept. 1, 1868	81, 694
Ratchet-drill	T. J. Sloan	Tuckahoe, N. Y	Sept. 2, 1873	142, 356
Ratchet-drill	F. Stein	New York, N. Y	Oct. 1, 1872	131, 832
Ratchet-drill	J. Swank	Delano, Pa	Feb. 4, 1873	135, 451
Ratchet-drill	J. J. Switzer	Williamsburgh, N. Y	Jan. 9, 1872	122, 677
Ratchet-drill	A. C. Vottier	Charlestown, Mass	July 23, 1872	129, 696
Ratchet-feed	A. B. Bean	Hew Haven, Conn	Jan. 8, 1869	91, 072
Ratchet-feed mechanism	A. Turnbull	New Britain, Conn	Sept. 20, 1870	107, 567
Ratchet for driving-wheel	W. W. Smith	Strongsville, Ohio	Oct. 29, 1867	70, 371
Ratchet head and lever	T. A. Weston	Buffalo, N. Y	Mar. 3, 1868	75, 089
Ratchet head and lever	T. A. Weston	Buffalo, N. Y	Mar. 3, 1868	75, 090
Ratchet and pawl mechanism	M. D. Myers	Frankfort, N. Y	Mar. 1, 1870	100, 315
Ratchet-pinion	J. F. Kingsvill	Chicago, Ill	Feb. 18, 1873	135, 991
Ratchet-power	W. T. Elliott	Metamora, Ill	May 31, 1870	103, 727
Ratchet-press	P. H. Raiford	Mobile, Ala	June 8, 1858	20, 509
Ratchet-rod, Adjustable	E. H. Smith	Worcester, Mass	Oct. 7, 1873	143, 538
Ratchet-wheel	M. B. Parmellee	Newton, Conn	Sept. 21, 1808	....
Ratchet-wrench	Z. W. Avery	New Berlin, N. Y	Mar. 13, 1847	5, 009
Ratchet-wrench	I. C. Colbert	Marysville, Ohio	Dec. 9, 1873	145, 399
Ratchet-wrench	C. G. Everitt	Brooklyn, N. Y	Jan. 9, 1855	12, 198
Ratchet-wrench	W. Pirsson	Newark, N. J	Feb. 6, 1866	52, 444
Ratchet-wrench	W. Pirsson	Newark, N. J	May 29, 1866	55, 157
Ratchet-wrench	R. S. Sanborn	Rockford, Ill	Jan. 23, 1872	122, 916
Ratlins, Attachment for	J. C. Knowlton	Rockport, Mass	Dec. 27, 1870	110, 476
Ratlins, Attachment for	J. P. Manton	Providence, R. I	July 11, 1871	116, 848
Rations for army use, &c., Feed	W. H. Page	New York, N. Y	June 2, 1863	38, 798
Ratoon and cane cutter	N. Lauve	Plaquemines, La	Sept. 17, 1844	3, 748
Rattan-cutter	J. Murphy	Green Point, N. Y	June 14, 1870	104, 338
Rattan-cutter	J. B. Sawyer	East Templeton, Mass	July 27, 1869	93, 126
Rattan-dressing machine	N. H. Richardson	Fitchburgh, Mass	Oct. 8, 1867	69, 589
Rattan for chair-seats, Preparing	G. A. Watkins	Gardner, Mass	Sept. 19, 1871	119, 090
Rattan for chair-seats, &c., Preparing	G. A. Watkins	Gardner, Mass	Dec. 12, 1871	121, 919
Rattan into strands, Mode of cutting	T. J. Mayall	Roxbury, Mass	July 2, 1861	32, 737
Rattan-machine	L. Heywood	Gardner, Mass	Feb. 25, 1868	74, 913
Rattan-machine	L. Hull	Charlestown, Mass	May 29, 1860	28, 481
Rattan-machine	N. H. Richardson	Fitchburgh, Mass	Jan. 25, 1861	32, 658
Rattan-machine	S. Sawyer	Fitchburgh, Mass	Dec. 12, 1854	12, 073
Rattan-machine	S. Sawyer	Fitchburgh, Mass	May 26, 1868	78, 238
Rattan-machines, Device for returning in proper position the splitting-knife in.	G. S. Colburn	South Reading, Mass	Jan. 12, 1858	19, 110
Rattan, Machine for shaving	L. Heywood	Gardner, Mass	July 14, 1868	79, 976
Rattan-machinery	T. J. Mayall	Boston, Mass	July 29, 1862	36, 056
Rattan-machinery	T. J. Mayall	Boston, Mass	July 29, 1862	39, 057
Rattan-machinery	T. J. Mayall	Boston, Mass	July 29, 1862	36, 058
Rattan-machinery	C. W. Trow	South Reading, Mass	July 8, 1862	35, 859
Rattan, &c., Machinery for cutting	S. Sawyer	Templeton, Mass	June 24, 1851	8, 178
Rattan, &c., Machinery for preparing	C. C. Reed	Philadelphia, Pa	Oct. 2, 1855	13, 627
Rattan, Machinery for splitting and dressing	S. Sawyer	Templeton, Mass	Nov. 13, 1849	6, 874
Rattan, Mode of treating	L. Klein	Dansville, N. Y	July 30, 1867	67, 320
Rattan-sawing machine	S. Hull	Charlestown, Mass	July 31, 1855	13, 354
Rattan-splitting machine	L. Heywood	Gardner, Mass	Dec. 17, 1867	72, 291
Rattan-splitting machine	A. M. Sawyer	Templeton, Mass	Mar. 7, 1854	10, 614
Rattan-splitting machine	J. Sawyer	Royalston, Mass	Jan. 20, 1852	8, 664
Rattan-splitting machine	J. Sawyer	South Royalston, Mass	Mar. 7, 1854	10, 613
Rattan-splitting machine	S. Sawyer	Fitchburgh, Mass	Jan. 2, 1855	12, 141
Rattan-ware	S. H. Penley	Chelsea, Mass	Nov. 11, 1873	144, 563
Rattan-waste, Utilization of	C. Wakefield	South Reading, Mass	Sept. 13, 1864	44, 242
Razor	G. Carr	New York, N. Y	Aug. 6, 1867	67, 411
Razor	E. A. Freeman	Moscow, Pa	Feb. 11, 1873	135, 793
Razor	J. Kinloch	Philadelphia, Pa	Mar. 8, 1864	41, 891
Razor case and sharpener	E. M. Pomeroy	Wallingsford, Conn	Oct. 19, 1836	....
Razor-case, Portable	H. Wright	Bristol, Conn	Nov. 19, 1833	....
Razor hone or strap	W. D. Boardman	Rensselaerville, N. Y	Jan. 20, 1843	2, 925
Razor-honing machine	W. Brown	Thomaston, Conn	Jan. 4, 1870	98, 551
Razor-strap	S. M. Briggs	Woonsocket, R. I	May 21, 1872	126, 870
Razor-strap	A. F. Chatman	New York, N. Y	Sept. 20, 1853	10, 028
Razor-strap	H. Croft	Springfield, Ohio	Oct. 1, 1872	131, 856
Razor-strap	J. Demerit	Montpelier, Vt	Mar. 30, 1852	8, 839
Razor-strap	A. D. Ditmars	Lancaster, Pa	Feb. 9, 1869	86, 653
Razor-strap	F. Eichner	Chicago, Ill	Feb. 12, 1867	62, 019
Razor-strap	W. D. Evans	Philadelphia, Pa	May 10, 1870	102, 790
Razor-strap	J. M. Fors	Baltimore, Md	Oct. 2, 1821	....
Razor-strap	C. L. Fowle	Boston, Mass	Nov. 28, 1848	5, 938
Razor-strap	E. K. Godfrey	New York, N. Y	Feb. 10, 1857	16, 583
Razor-strap	W. M. Green	Gallatin, Tenn	Aug. 1, 1871	117, 621
Razor-strap	J. P. Hall	Wallingford, Conn	Feb. 18, 1868	74, 684
Razor-strap	C. Y. Haynes	Philadelphia, Pa	Oct. 25, 1859	25, 932
Razor-strap	G. Holloway	Chester, Ohio	Apr. 3, 1829	....
Razor-strap	J. Houck	New Market, Md	Jan. 24, 1822	....
Razor-strap	O. B. Howard	Westbrook, Me	July 25, 1871	117, 421
Razor-strap	J. Jenkins	Philadelphia, Pa	July 27, 1869	93, 091

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Razor-strap	J. B. Lucas	Portland, Me	May 20, 1873	139, 011
Razor-strap	J. B. Lucas	Portland, Me	Dec. 23, 1873	145, 742
Razor-strap	T. J. Mayall	Roxbury, Mass	Feb. 28, 1860	27, 301
Razor-strap	C. T. Melvin	Providence, R. I	Apr. 16, 1867	63, 919
Razor-strap	J. W. Osborn	Terre Haute, Ind	Jan. 21, 1829	....
Razor-strap	E. M. Pomeroy	Wallingford, Conn	Sept. 6, 1833	....
Razor-strap	M. Posz	Shelbyville, Ind	Jan. 25, 1859	22, 746
Razor-strap	J. Wolf	Fort Madison, Iowa	Mar. 3, 1863	37, 840
Razor strap and case	A. and L. Hill	Stoneham, Mass	July 17, 1839	1, 248
Razor strap and polishing wheel	J. M. Taylor	Laurel Point, W. Va	Feb. 27, 1872	124, 173
Razor-strap composition	F. B. Atwood and A. Elston	Lowell, Mass., and Port Jervis, N. Y.	Jan. 9, 1866	51, 909
Razor-strap composition	D. Ritter	New Haven, Conn	Mar. 9, 1822	....
Razor-strap holder	G. Scott	Steubenville, Ohio	Mar. 10, 1868	75, 471
Razor-strap holder	L. Talcott	Ilion, N. Y	Aug. 20, 1872	130, 599
Razor-strap, Magnetic	D. Earle	Palmyra, Ohio	Apr. 7, 1863	38, 101
Razor-strap, Metallic	M. A. Holcomb	Granby, Conn	Aug. 30, 1859	25, 265
Razor-strap paste	E. M. Pomeroy	New Haven, Conn	Jan. 24, 1821	....
Razor-straps, Making	J. Crumbacker	Frederick County, Md	Dec. 24, 1819	....
Razors, Application of polishing-slate for sharpening	W. Child	Baltimore, Md	Dec. 15, 1835	....
Razors, Making	J. Brown	Providence, R. I.	June 28, 1824	....
Raw-hides and leather into strips for the manufacture of ropes, Machinery for cutting	P. B. Holmead and W. Pedrick	Charlestown, Mass	Jan. 9, 1841	1, 927
Raw-hides, Machine for cutting	W. Marshall and J. B. Thursby	Brooklyn, N. Y	Sept. 14, 1844	3, 743
Reacting or lever wheel	L. Davis	Northampton, Mass	Nov. 4, 1825	....
Reacting steam-engine	A. Foster and W. Avery	Brutus and Salina, N. Y	Sept. 28, 1831	....
Reading and drawing case	W. F. Baade	Buffalo, N. Y	Aug. 22, 1871	118, 180
Reading and writing stand	E. Hidden	New York, N. Y	July 4, 1854	11, 224
Reading and writing stand	G. Howell	Baltimore, Md	Jan. 18, 1870	98, 869
Reading-gage	R. S. Hildreth	Laurens, N. Y	June 24, 1873	140, 135
Reading-glass	J. H. Smith	Brooklyn, N. Y	Oct. 4, 1870	107, 969
Reading-stand	A. C. Flint	Chelsea, Mass	May 31, 1870	103, 593
Reading-table	C. Folsom	Cambridge, Mass	July 25, 1854	11, 366
Reading-table, Rotating	T. Cartwright	New York, N. Y	Nov. 12, 1872	132, 950
Reamer	C. Allardice	Cohoes, N. Y	Dec. 10, 1867	71, 943
Reamer	W. H. Bechtel, W. H. Strahan, and T. Hardy.	Philadelphia, Pa	Aug. 13, 1867	67, 708
Reamer	R. J. Croacher	Little Compton, R. I	Aug. 13, 1872	130, 488
Reamer	J. K. Derby	Jamestown, N. Y	June 27, 1871	116, 418
Reamer	A. J. Prescott	Catawissa, Pa	July 27, 1869	93, 119
Reamer	A. J. Prescott	Catawissa, Pa	Oct. 19, 1869	96, 035
Reamer	E. Sullivan	Pittsburgh, Pa	June 23, 1868	79, 276
Reamer, Adjustable	E. H. Adgate	Mittineague, Mass	Jan. 31, 1871	111, 296
Reamer, Adjustable	R. M. Faburn	Young America, Ill	June 25, 1872	128, 379
Reamer, Adjustable	H. James	Hudson, N. Y	Mar. 30, 1869	88, 389
Reamer, Adjustable	A. Shedlock	New York, N. Y	May 20, 1873	139, 087
Reaming and countersinking tool	T. Reaney	Chester, Pa	Jan. 17, 1871	111, 085
Reamer and tap	S. Glasson	New York, N. Y	Sept. 19, 1868	82, 618
Reamer, Bung-hole	L. Gray	Pittsburgh, Pa	Dec. 12, 1865	51, 451
Reamer, Expanding	W. F. Patterson	Charlestown, Mass	July 2, 1867	66, 250
Reamer, Wood	E. Young	Stoutsville, Pa	Apr. 16, 1867	63, 822
Reamers, Making	W. Burlingame	Exeter, N. H	Jan. 1, 1867	60, 683
Reaming-tool	A. Conklin	Hartford, Conn	Mar. 17, 1868	75, 628
Reaming-tool	J. B. Miller	Pittsburgh, Pa	Oct. 17, 1871	119, 989
Reaming-tool	E. Sullivan	Pittsburgh, Pa	Jan. 5, 1869	85, 545
Reaming-tool	C. F. Sylvester and J. Brooks	North Bridgewater, Mass	Nov. 26, 1867	71, 339
Reaper	O. Dorsey	Triadelphia, Md	June 24, 1856	15, 174
Reaper and mower	D. Hitchings	Richfield, N. Y	Apr. 30, 1861	32, 189
Reaper and mower	G. A. Stephenson	Paw Paw, Mich	Oct. 2, 1860	30, 262
Reaper and mower, Hand	J. P. Cook	Rockville, Ind	Oct. 1, 1867	69, 409
Reaper, Hand	J. W. Beltzly and W. Hobson	Pana, Ill	Jan. 19, 1858	19, 118
Reaper-knives, Machine for grinding	F. Judson	Castleton, N. Y	Sept. 1, 1868	81, 646
Reaper-knives, Machine for grinding	C. Richardson	Auburn, N. Y	Feb. 25, 1868	74, 942
Reaper-knives, Machine for grinding	E. M. Scott	Auburn, N. Y	July 30, 1867	67, 355
Reaper-knives, Machine for sharpening	C. C. Hardy	Rutland, N. Y	July 26, 1870	105, 802
Reaper-rake	M. C. Brelsford	Girard, Ill	Jan. 15, 1861	31, 106
Reaper-rake, Automatic	P. Manny	Waddam's Grove, Ill	Nov. 4, 1856	16, 016
Reapers and mowers, Heel for knives of	R. Allstatter	Hamilton, Ohio	Jan. 14, 1873	134, 831
Reapers and mowers, Tongue for	D. Fasig	Rowsburgh, Ohio	Oct. 15, 1872	132, 270
Reapers and mowers, Wrist-pin for	J. H. Elward	Chicago, Ill	Apr. 28, 1868	77, 181
Reapers, Binding-attachment for	A. F. French	Franklin, Vt	Mar. 23, 1858	19, 687
Reapers, Binding-attachment for	W. D. Harrah and H. P. Jones	Davenport, Iowa	June 30, 1863	39, 096
Reapers, Binding-attachment for	J. M. King	Quincy, Minn	Sept. 12, 1865	49, 889
Reapers, Coupling-joint for	G. W. Sylvester	Plain View, Minn	May 6, 1873	138, 709
Reapers, &c., Coupling-joint for	G. W. Sylvester	Plain View, Minn	Sept. 23, 1873	143, 195
Reapers, Rake-attachment for	M. C. Chamberlin	Plain View, Minn	June 28, 1870	104, 827
Reapers, Rake-attachment for	M. C. Chamberlin and A. Clawson.	Plain View, Minn	Jan. 4, 1870	98, 557
Reapers, Raking and binding attachment to	M. D. Higley and D. L. Columbia.	Morrison, Ill	Sept. 4, 1866	57, 714
Reapers, Raking-attachment for	P. Harnist	Marinetown, Ill	Feb. 10, 1857	16, 582
Reapers, Raking-attachment for	J. C. Hicks	Rockaway, N. Y	July 1, 1856	15, 237
Reapers, Raking-attachment for	M. G. Hubbard	Penn Yan, N. Y	Sept. 2, 1856	15, 655
Reapers, Raking-attachment for	J. H. Thompson	Newark, N. J	Jan. 6, 1857	16, 342
Reaping and cutting machine	J. Ten Eyk	Bridgewater Township, N. J.	Nov. 2, 1825	....
Reaping and mowing machine	C. Beach	Penn Yan, N. Y	Apr. 13, 1858	19, 904
Reaping and mowing machine	J. W. Brokaw	Springfield, Ohio	May 18, 1858	20, 251
Reaping and mowing machine	J. W. Brokaw and T. Harding	Springfield, Ohio	Dec. 8, 1857	18, 833
Reaping and mowing machine	R. Brown	Dayton, Ohio	Aug. 7, 1866	56, 893
Reaping and mowing machine	T. D. Burrall	Geneva, N. Y	Dec. 16, 1856	16, 258
Reaping and mowing machine	J. M. Canfield, H. E. Coleman, and E. P. Wheeler.	Lawrence, Kans	Mar. 13, 1866	53, 110
Reaping and mowing machine	M. Clark	Castalia, Iowa	June 12, 1866	55, 467
Reaping and mowing machine	C. Crook	New Hope, Pa	May 5, 1857	17, 205
Reaping and mowing machine	A. Dietz and J. G. Dunham	Raritan, N. J	June 5, 1855	12, 999
Reaping and mowing machine	J. G. Dunham	Raritan, N. J	Sept. 22, 1857	18, 238

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Invention.	Inventor.	Residence.	Date.	No.
Reaping and mowing machine	M. Easterbrook	Geneva, N. Y	May 22, 1866	54, 875
Reaping and mowing machine	M. E. Ellsworth	Hudson, Ohio	Oct. 6, 1857	67, 329
Reaping and mowing machine	L. Erpelding	Chicago, Ill	Oct. 1, 1861	33, 416
Reaping and mowing machine	A. A. Henderson	Philadelphia, Pa	Aug. 14, 1860	29, 593
Reaping and mowing machine	L. B. Hoit	Cedar Falls, Iowa	Jan. 23, 1866	52, 167
Reaping and mowing machine	O. T. Holbrook	Rushville, N. Y	Jan. 10, 1865	45, 827
Reaping and mowing machine	C. Howell	Cleveland, Ohio	Feb. 16, 1857	19, 367
Reaping and mowing machine	C. Howell	Cleveland, Ohio	May 18, 1858	20, 275
Reaping and mowing machine	H. R. Lavey	Bristol, Wis	May 1, 1866	54, 374
Reaping and mowing machine	F. T. Somont and J. Grojean	Massillon, Ohio	Mar. 27, 1860	27, 641
Reaping and mowing machine	C. H. McCormick	Chicago, Ill	Nov. 5, 1861	33, 658
Reaping and mowing machine	L. J., W. S., and C. H. McCormick.	Chicago, Ill	May 11, 1858	20, 212
Reaping and mowing machine	C. Moul	Hanover, Pa	July 13, 1858	20, 887
Reaping and mowing machine	J. W. Mulley	Amsterdam, N. Y	Feb. 10, 1857	16, 599
Reaping and mowing machine	J. Reily	Heart Prairie, Wis	July 1, 1856	15, 252
Reaping and mowing machine	G. S. Reynolds	Tunbridge, Vt	Sept. 11, 1866	58, 026
Reaping and mowing machine	D. Sheets, S. H. Du Bois, and J. B. Pressey.	Suisun City, Cal	June 19, 1860	28, 782
Reaping and mowing machine	D. C. Smith	Tecumseh, Mich	Dec. 16, 1856	16, 251
Reaping and mowing machine	E. M. Smith	Burlington, N. J	Aug. 7, 1860	29, 528
Reaping and mowing machine	T. Swan	Manlius, N. Y	Jan. 3, 1865	45, 798
Reaping and mowing machine	D. H. Thayer	Ludlowville, N. Y	Mar. 13, 1866	53, 198
Reaping and mowing machine	J. S. Truxel	Mount Pleasant, Pa	Nov. 15, 1864	45, 094
Reaping and mowing machine	H. G. Vanderwerken	Greenbush, N. Y	Dec. 8, 1857	18, 829
Reaping and mowing machine	H. Waterman	Williamsburgh, N. Y	Aug. 28, 1855	13, 512
Reaping and mowing machine	D. Watson	Newark, N. J	Jan. 13, 1857	16, 413
Reaping and mowing machine	T. Welch	Churchville, N. Y	Aug. 1, 1865	49, 184
Reaping and mowing machine	C. Wheeler, jr	Poplar Ridge, N. Y	Mar. 12, 1861	31, 686
Reaping and mowing machine	W. P. Wood	Washington, D. C	Sept. 23, 1856	15, 796
Reaping and mowing machine	G. W. N. Yost	Pittsburgh, Pa	June 10, 1856	15, 096
Reaping and mowing machine	M. Young, jr	Frederick, Md	Oct. 2, 1860	30, 276
Reaping and mowing machine, Combined	T. H. Dodge	Washington, D. C	Jan. 31, 1860	26, 972
Reaping and mowing machine cutter	W. S. McCormick	Chicago, Ill	Nov. 5, 1861	33, 681
Reaping and mowing machines, Cutting-apparatus for.	W. S. McCormick	Chicago, Ill	Nov. 5, 1861	33, 680
Reaping and mowing machines, Cutting-device for.	T. Harding	Springfield, Ohio	Apr. 6, 1858	19, 894
Reaping and mowing machines, Finger-bar for	J. T. Whitaker and C. D. Read.	Saint Charles, Ill	Aug. 11, 1857	17, 990
Reaping and mowing machines, Guard-finger for	C. Howell	Cleveland, Ohio	Oct. 6, 1857	18, 340
Reaping and mowing machines, Guard or finger for	S. Copeland	Worcester, Mass	Feb. 19, 1861	31, 440
Reaping and mowing machines, Metallic finger-beam of.	C. H. McCormick	Chicago, Ill	Nov. 5, 1861	33, 657
Reaping and raking grain and mowing grass, Machine for.	A. A. Henderson	Huntingdon County, Pa	Aug. 14, 1860	29, 594
Reaping and thrashing machine, Grain	S. Lane	Hallowell, Me	Aug. 8, 1828	....
Reaping-machine	H. W. Bill	Cuyahoga Falls, Ohio	Mar. 7, 1865	46, 630
Reaping-machine	J. W. Brokaw	Springfield, Ohio	Apr. 20, 1858	20, 017
Reaping-machine	J. O. Brown, A. Ingham, and F. T. Lomont.	Massillon, Ohio	Aug. 1, 1865	49, 077
Reaping-machine	R. Bryson	Schenectady, N. Y	July 24, 1866	56, 522
Reaping-machine	G. H. Clark	Cleveland, Ohio	May 2, 1871	114, 408
Reaping-machine	O. P. Crawford	Wabashaw County, Minn	June 14, 1864	43, 101
Reaping-machine	S. A. Cummings	Vienna, N. J	Nov. 3, 1863	40, 463
Reaping machine	J. Darling	Adrian, Mich	Mar. 7, 1846	4, 408
Reaping-machine	O. Dorsey	Newark, Ohio	July 24, 1866	56, 534
Reaping-machine	J. H. Edward	Ottawa, Ill	Nov. 1, 1864	44, 858
Reaping-machine	G. Esterly	Heart Prairie, Wis	Apr. 7, 1857	16, 971
Reaping-machine	H. Fisher	Canton, Ohio	Aug. 1, 1865	49, 194
Reaping-machine	H. Fisher and M. Ball	Canton, Ohio	July 24, 1866	56, 545
Reaping-machine	C. Foster	La Porte, Ind	Apr. 18, 1846	4, 461
Reaping-machine	R. Hoffheins	Dover, Pa	May 5, 1868	77, 486
Reaping-machine	R. Hornsby	Spittlegate, England	June 5, 1866	55, 440
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847	5, 227
Reaping-machine	W. F. Ketchum	Buffalo, N. Y	Nov. 18, 1844	3, 831
Reaping-machine	W. F. Ketchum	Buffalo, N. Y	Mar. 7, 1846	4, 401
Reaping-machine	W. F. Ketchum	Buffalo, N. Y	July 10, 1847	5, 189
Reaping-machine	J. J. and H. F. Mann	Westville, Ind	June 3, 1856	15, 044
Reaping-machine	E. W. and W. W. Marsh	Shabbona, Ill	Aug. 17, 1858	21, 207
Reaping-machine	J. S. Marsh	Lewisburgh, Pa	Oct. 16, 1866	58, 856
Reaping-machine	C. H. McCormick	Rockbridge, Va	Jan. 31, 1845	3, 895
Reaping-machine	C. H. McCormick	Steel's Tavern, Va	Oct. 23, 1847	5, 335
Reaping-machine	J. B. McCormick	Saint Louis, Mo	Jan. 26, 1864	41, 383
Reaping-machine	R. Morris	Salem, Ind	Aug. 28, 1866	57, 549
Reaping-machine	J. Read	New York	Mar. 12, 1842	2, 488
Reaping-machine	E. P. Russell	Manlius, N. Y	June 26, 1866	55, 910
Reaping-machine	W. Sprague	Farnham, N. Y	Aug. 6, 1861	33, 021
Reaping-machine	W. S. Stetson	Baltimore, Md	Sept. 25, 1860	30, 167
Reaping-machine	P. Thayer	Lansingburgh, N. Y	Apr. 29, 1856	14, 781
Reaping-machine	J. Tustin	Petaluma, Cal	Nov. 12, 1861	33, 719
Reaping-machine	H. Whiting	New York, N. Y	Oct. 9, 1866	58, 702
Reaping-machine	D. Wolf	Lebanon, Pa	Jan. 31, 1865	46, 169
Reaping-machine	F. Woodward	Upper Freehold, N. J	Sept. 30, 1845	4, 216
Reaping-machine binding-attachment	J. Behel	Rockford, Ill	Sept. 19, 1865	49, 970
Reaping-machine binding-attachment	J. S. Jones	Covington, Ind	July 11, 1865	48, 690
Reaping-machine binding-attachment	J. Mitchell	Osceola, Iowa	Sept. 7, 1858	21, 434
Reaping-machine binding-attachment	T. W. Peirce	Minneapolis, Minn	Jan. 23, 1866	52, 195
Reaping-machine gleaner-rake	J. V. Bryson	Greenupsburgh, Ky	Aug. 29, 1871	118, 430
Reaping-machine guard-finger	A. Winterburn	Albany, N. Y	June 27, 1865	48, 473
Reaping-machine rake	J. R. Byler	Salisbury, Pa	Nov. 27, 1860	30, 756
Reaping-machine rake	J. R. Byler	Salisbury Township, Pa	Dec. 4, 1860	30, 852
Reaping-machine rake	T. N. Lupton	Winchester, Va	Sept. 25, 1855	13, 596
Reaping-machine raker	C. Lee	Knox Township, Ohio	Mar. 3, 1857	16, 735
Reaping-machine raking-attachment	A. H. Caryl	Sandusky, Ohio	Sept. 15, 1857	18, 188
Reaping-machine raking-attachment	C. Yost	Leacock Township, Pa	Sept. 15, 1857	18, 221
Reaping-machine reel	J. H. Keller	Boalsburgh, Pa	Aug. 31, 1869	94, 418
Reaping-machine teeth	M. G. Hubbard	Penn Yan, N. Y	Dec. 9, 1856	16, 183
Reaping-machines, Automatic rake for	B. G. Fitzhugh and M. Young, jr	Frederick, Md	Sept. 6, 1859	25, 327
Reaping-machines, Hand-rake for	G. Esterly	Whitewater, Wis	Jan. 15, 1861	31, 113

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Invention.	Inventor.	Residence.	Date.	No.
Reaping-machines, Raking and binding apparatus for.	A. B. Smith	Clinton, Pa	July 28, 1863	39, 358
Receptacle	T. H. Kane	New York, N. Y	Dec. 24, 1872	134, 146
Recessing-tool	J. Rose	New York, N. Y	Mar. 16, 1869	87, 974
Reciprocating engine	G. H. and C. P. Deane	Springfield, Mass	May 28, 1872	127, 154
Reciprocating engine	W. D. Grimshaw	Newark, N. J	May 21, 1867	64, 972
Reciprocating engine	S. J. Jones	Helena, Mont	Oct. 21, 1873	143, 827
Reciprocating engine	J. Scott	Brooklyn, N. Y	Nov. 19, 1872	133, 260
Reciprocating engine	A. Staley	San Francisco, Cal	Sept. 9, 1873	142, 747
Reciprocating engine	S. D. Tillman	Jersey City, N. J	July 23, 1872	129, 694
Reciprocating engine, Compound	H. Bertieaux	Antwerp, Belgium	Feb. 20, 1872	123, 857
Reciprocating steam-engine	A. E. Baker	Providence, R. I	Mar. 25, 1873	137, 167
Reciprocating steam-engine	J. R. Eichenberger	Baughman, Ohio	Oct. 15, 1872	132, 267
Reciprocating steam-engine	A. C. F. Franklin	Bayswater, England	Sept. 1, 1868	81, 766
Reciprocating steam-engine	W. H. and J. H. Johns	Cincinnati, Ohio	June 25, 1872	128, 400
Reciprocating steam-engine	C. E. Lamb	Wauseon, Ohio	Dec. 10, 1872	133, 784
Reciprocating steam-engine	T. Moy and R. E. Shill	London and Mile End, England.	Nov. 26, 1872	133, 380
Reciprocating steam-engine	R. G. Nicoll and G. H. Hollmann.	Hazlehurst, Miss	May 27, 1873	139, 258
Reciprocating steam-engine	F. S. Pease	Buffalo, N. Y	Sept. 22, 1868	82, 437
Reciprocating steam-engine	J. B. Pedrick	Lowell Mills, Ind	Sept. 8, 1868	82, 027
Reciprocating steam-engine	J. B. Root	New York, N. Y	Nov. 23, 1869	97, 231
Reciprocating steam-engine	J. Shepherd and C. A. Clark	Bloomfield, Iowa	Mar. 26, 1872	124, 980
Reciprocating steam-engine	W. Simpson and A. Gardner	Ilford, England	Feb. 11, 1873	135, 670
Reciprocating steam-engine	S. Smith	Little Rock, Ark	June 18, 1872	128, 186
Reciprocating steam-engine	D. Stoddart	San Francisco, Cal	June 23, 1868	79, 274
Reciprocating steam-engine	S. Torrey	Toledo, Ohio	Dec. 10, 1872	133, 813
Reciprocating steam-engine	J. W. Wilbraham	Philadelphia, Pa	Mar. 25, 1873	137, 273
Reciprocating steam-engine and saw-mill combined.	J. Brown	Glenville, Md	May 27, 1873	139, 233
Reclining and extension chair	J. Dunn	Charlestown, Mass	Jan. 18, 1870	98, 934
Reclining and folding chair	E. W. Hastings	Boston, Mass	Dec. 19, 1871	121, 941
Reclining and rocking chair	S. Hayward	Boston, Mass	Jan. 3, 1871	110, 653
Reclining-chair	J. M. Baird and L. F. Smith	Wheeling, Va., and Stonington, Conn.	Nov. 15, 1859	26, 077
Reclining-chair	E. Bartels	New York, N. Y	Nov. 1, 1870	108, 750
Reclining-chair	H. N. Black	Philadelphia, Pa	Sept. 17, 1872	131, 419
Reclining-chair	C. Brada	Charlestown, Mass	Aug. 11, 1868	80, 802
Reclining-chair	H. B. Braman	Boston, Mass	Mar. 24, 1868	75, 727
Reclining-chair	G. Buchanan	Washington, Pa	July 29, 1873	141, 318
Reclining-chair	W. A. Bury	Grosse Isle, Mich	Feb. 22, 1870	100, 011
Reclining-chair	S. D. Carman	Middletown, N. Y	Mar. 20, 1860	27, 521
Reclining-chair	E. Dietz	Philadelphia, Pa	May 16, 1871	114, 777
Reclining-chair	W. Donoghue	Philadelphia, Pa	July 18, 1871	117, 056
Reclining-chair	J. B. Duane	Schenectady, N. Y	Sept. 25, 1866	58, 231
Reclining-chair	A. Eliaers	Boston, Mass	May 11, 1858	20, 198
Reclining-chair	G. D. Goss	Boston, Mass	Mar. 25, 1873	137, 069
Reclining-chair	W. Heath	Bath, Me	Sept. 5, 1871	118, 719
Reclining-chair	W. Heath	Bath, Me	Feb. 6, 1872	123, 343
Reclining-chair	W. C. Hornfager and E. A. Warren.	Brooklyn, N. Y	Apr. 5, 1870	101, 463
Reclining-chair	G. Hunzinger	Brooklyn, N. Y	Oct. 1, 1861	33, 392
Reclining-chair	G. Hunzinger	New York, N. Y	Feb. 6, 1866	52, 416
Reclining-chair	A. Iske	Lancaster, Pa	Aug. 10, 1869	93, 445
Reclining-chair	A. E. Kendall and P. K. Keyes	New York, N. Y	Nov. 23, 1858	22, 145
Reclining-chair	J. Kline and A. Schmacker	Cincinnati, Ohio	Aug. 14, 1866	57, 153
Reclining-chair	G. C. Paine	Boston, Mass	Aug. 12, 1873	141, 662
Reclining-chair	E. C. Ranks	Boston, Mass	Feb. 23, 1869	87, 111
Reclining-chair	E. C. Ranks	Boston, Mass	Sept. 30, 1873	143, 299
Reclining-chair	B. L. Southack	New York, N Y	Jan. 28, 1868	73, 845
Reclining-chair	H. Thompson	New York, N. Y	Apr. 25, 1865	47, 469
Reclining-chair	H. Thompson	New York, N. Y	Oct. 17, 1871	120, 127
Reclining-chair	W. C. Van Nortwick	Bordentown, N. J	Aug. 5, 1862	36, 130
Reclining-chair	W. H. Van Nortwick	Bordentown, N. J	Jan. 5, 1864	41, 129
Reclining-chair	L. Van Orden	Cincinnati, Ohio	July 25, 1871	117, 351
Reclining-chair	J. W. Wetherbee	Charlestown, Mass	Oct. 13, 1868	83, 012
Reclining-chair	S. D. Woodbury	Lynn, Mass	Mar. 27, 1860	27, 663
Reclining-chair, Adjustable	C. H. D'Arcus	Detroit, Mich	Jan. 18, 1870	98, 851
Reclining-chair, Adjustable	J. J. Hartman	Saint Louis, Mo	Dec. 16, 1873	145, 651
Reclining-chair, Adjustable	G. A. Schastey	New York, N. Y	Dec. 16, 1873	145, 595
Reclining-chair, Railway	J. P. Curry	New York, N. Y	Dec. 6, 1870	109, 808
Reclining chair, Self	G. Niderkorn	West Mount Vernon, N.Y.	Aug. 19, 1873	142, 039
Reclining-chair, Self-adjusting	M. Stevens	Detroit, Mich	Mar. 13, 1860	27, 483
Reclining-chair, Stop for hinged frame of	J. G. Holmes	Charleston, S. C	Jan. 18, 1870	98, 867
Reconductor	J. Sargeant	Vernon, N. Y	Apr. 23, 1816	....
Recorder: *See* Fare-recorder. Note-recorder. Passenger-recorder. Vote-recorder.				
Rectangular cans, Head for	E. T. Covell	Brooklyn, N. Y	Dec. 5, 1871	121, 490
Rectifier and condenser for alcoholic and other spirits.	J. F. Collins	New York, N. Y	Feb. 23, 1869	87, 144
Rectifier and condenser for alcoholic spirits	J. F. Collins	New York, N. Y	Jan. 21, 1868	73, 579
Rectifier and filter, Combined	J. C. Schnell	Cincinnati, Ohio	May 9, 1871	114, 610
Rectifier for alcoholic and other liquids, Compound vacuum.	T. Simmons	New York, N. Y	Feb. 5, 1867	61, 770
Rectifying alcohol and other spirits, Apparatus and process for.	J. G. Bequet	Paris, France	Jan. 22, 1867	61, 388
Rectifying alcoholic liquors, Apparatus for	C. L. Fleischmann	Cincinnati, Ohio	May 24, 1870	103, 320
Rectifying alcoholic liquors, Apparatus for	C. L. Fleischmann	Cincinnati, Ohio	Aug. 16, 1870	106, 530
Rectifying alcoholic spirits, Apparatus for	J. R. Neil	Brooklyn, N. Y	Oct. 17, 1871	119, 943
Rectifying and distilling, Apparatus for	G. Bequet, jr	New York, N. Y	Sept. 3, 1867	68, 409
Rectifying and distilling spirits, &c	E. F. Prentiss	Philadelphia, Pa	Nov. 12, 1872	133, 053
Rectifying and distilling spirits and other volatile liquids, Apparatus for.	E. F. and T. D. Prentiss	Philadelphia, Pa	Mar. 16, 1869	87, 792
Rectifying and flavoring spirits, Apparatus for	L. Wolf	Chicago, Ill	July 13, 1869	92, 685
Rectifying and improving alcoholic spirits	D. Worthen	Brooklyn, N. Y	Sept. 20, 1870	107, 645

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Invention.	Inventor.	Residence.	Date.	No.
Rectifying and refining spirits, Apparatus for	F. Measey	Philadelphia, Pa	Mar. 7, 1871	112, 476
Rectifying and refining whisky and other spirits	H. Webster	New York, N. Y	Sept. 14, 1869	94, 799
Rectifying-apparatus	E. Campbell	Cambridgeport, Mass	June 29, 1858	20, 760
Rectifying-apparatus	T. Simmons	Chicago, Ill	Apr. 10, 1866	53, 895
Rectifying-apparatus	G. Waters and J. W. Harnett	Cincinnati, Ohio	July 20, 1858	20, 967
Rectifying distilled liquids, Apparatus for	C. Gresiuchna and L. Jarchow	New York, N. Y	July 2, 1867	66, 323
Rectifying distilled spirits by steam	J. Shaw	Southport, N. Y	June 21, 1825	....
Rectifying high wines	A. K. Lee	Galveston, Tex	Mar. 21, 1871	112, 818
Rectifying or improving spirits	B. Allison		May 17, 1803	....
Rectifying spirits	O. Parsons	Hudson City, N. Y	June 23, 1808	....
Rectifying spirits, Apparatus for	W. G. Barrette	Canton, Md	Sept. 8, 1868	81, 868
Rectifying spirits, Apparatus for	L. C. and P. Bodmann	Baltimore, Md	Sept. 30, 1825	....
Rectifying spirits, &c., Apparatus for	J. G. Guenther	Buffalo, N. Y	Dec. 26, 1871	122, 115
Rectifying spirits, Apparatus for	A. Roos	New York, N. Y	Aug. 20, 1867	67, 912
Rectifying spirits, Apparatus for	L. S. Snediker	New York, N. Y	May 31, 1870	103, 790
Rectifying spirits, Apparatus for	J. Springer	Lancaster, Pa	May 5, 1868	77, 671
Rectifying spirits, Apparatus for	W. H. Ware	Philadelphia, Pa	Aug. 8, 1871	117, 836
Rectifying whisky, &c	H. Fake	Brooklyn, N. Y	July 26, 1870	105, 788
Rectifying whisky during distillation	H. Fake	Williamsburgh, N. Y	Jan. 25, 1870	99, 175
Rectum-supporter	S. P. Mervine, jr	Philadelphia, Pa	Nov. 2, 1869	96, 460
Recumbent-chair	D. Buzzell	Charlestown, Mass	Aug. 31, 1858	21, 320
Recumbent-chair	D. B. Hall	Bucksport, Me	Sept. 25, 1866	58, 343
Recumbent-chair	P. J. Hardy	Boston, Mass	Aug. 2, 1859	24, 935
Recumbent-chair	P. J. Hardy	New York, N. Y	Dec. 11, 1860	30, 877
Recumbent-chair	H. P. Kennedy	Philadelphia, Pa	May 22, 1841	2, 100
Recumbent-chair	T. Winter	Boston, Mass	June 23, 1868	79, 174
Reducing-mill	T. Blanchard	Boston, Mass	Mar. 9, 1858	19, 541
Reed-instrument, Steam	G. G. Ray	Boston, Mass	Sept. 4, 1860	29, 915
Reed-instruments, Socket-board for	D. Marshall	Pittsburgh, Pa	May 26, 1868	78, 219
Reed-instruments, Tremolo-attachment for	E. P. Needham	New York, N. Y	Aug. 1, 1871	117, 666
Reed-making machine	J. A. Wilkinson	Providence, R. I	May 23, 1836	....
Reed-plates, Machine for making socketed	C. Austin	Concord, N. H	Oct. 1, 1867	69, 303
Reed-setting machine	J. Browning	Philadelphia, Pa	Oct. 4, 1870	107, 865
Reefing-apparatus	A. R. Tiffin	New Haven, Conn	Nov. 1, 1864	44, 919
Reel:				
See Angler's reel. Angling-reel. Bolting-reel. Chalk-line reel. Clothes-reel. Clothes-line reel. Dyeing-reel. Fishing-reel. Fishing-line reel. Fishing-rod reel. Flour-bolting reel. Flour-drying reel. Foot-straightening reel. Grain-binder's reel. Harvester-reel. Harvester dumping-reel. Hose-reel. Oven-reel. Pump-reel. Reaping-machine reel. Serving-reel. Silk-reel. Twine-reel. Velvet-reel. Yarn-reel. Yarn-winding reel.				
Reel	E. Baker	Lorraine, N. Y	Nov. 17, 1868	84, 156
Reel	F. A. Balch	Hingham, Wis	Sept. 17, 1867	68, 831
Reel	J. H. Barker	Washington, D. C	Oct. 12, 1869	95, 632
Reel	G. Bradway and N. Bradley	Maquoketa, Iowa	Mar. 31, 1868	76, 043
Reel	J. Brown	Portland, Mich	Apr. 28, 1868	77, 253
Reel	W. G. Brown	Canton, N. Y	Dec. 22, 1868	85, 065
Reel	C. H. Carnes	New York, N. Y	Apr. 9, 1861	31, 953
Reel	J. S. Fenner	Warren, R. I	Oct. 20, 1868	83, 270
Reel	D. H. McLean	Ilion, N. Y	Nov. 20, 1868	59, 801
Reel	J. F. Palmer	Auburn, N. Y	Oct. 8, 1867	69, 579
Reel	A. H. Saunders	Nashua, N. H	Sept. 1, 1868	81, 825
Reel	R. Simon	Paterson, N. J	July 22, 1873	141, 084
Reel and swift	W. V. Brigham	Mannsville, N. Y	Aug. 31, 1869	94, 180
Reel and swift	E. Hutson	Brockport, N. Y	Nov. 12, 1867	70, 853
Reel and swift	W. G. Ricker and O. B. Webber	Rochester, N. Y	Feb. 23, 1869	87, 113
Reel and swift	L. Weins	Rhine, Wis	July 23, 1872	129, 770
Reel or swift	A. Rohm and P. Guetlich	Lancaster, N. Y	Nov. 27, 1866	60, 061
Reeling-machine	J. Briggs	Higganum, Conn	Oct. 25, 1870	108, 680
Reeling-machine	G. Levan	West Earl Towship, Pa	Mar. 7, 1854	10, 509
Reeling-machine	E. and S. Macy	Laurel, Ind	Apr. 13, 1852	8, 875
Reeling-machinery	B. H. Jenks	Bridesburgh, Pa	Nov. 24, 1868	84, 424
Refining and ageing liquors	S. H. Gilman	Galveston, Tex	May 10, 1870	102, 806
Refining and decolorizing sirups and other liquids, and in the material for the same.	D. Hull	Brooklyn, N. Y	Dec. 13, 1870	110, 042
Refining and puddling furnace	S. M. Fales	Baltimore, Md	May 14, 1861	32, 280
Refining and purifying spirituous liquors	W. P. Valentine	Buffalo, N. Y	July 7, 1868	79, 616
Refining and smelting furnace	S. M. Fales	Baltimore, Md	May 14, 1861	32, 279
Refining coal-oil	H. Pemberton	East Tarentum, Pa	Aug. 2, 1859	24, 952
Refining furnace, Iron	J. C. McManaway	Portsmouth, Ohio	June 22, 1842	2, 688
Refining furnace, Iron	J. Sharp	Liverpool, Pa	June 23, 1838	805
Refining hydrocarbon	H. L. Smith	Gambier, Ohio	Dec. 18, 1866	60, 585
Refining hydrocarbon-oils	W. Archer	New York, N. Y	Sept. 27, 1864	44, 481
Refining hydrocarbon-oils	H. W. C. Tweddle	Pittsburgh, Pa	Oct. 24, 1871	120, 349
Refining hydrocarbon-oils, Apparatus for	H. W. Faucett and T. McGowan	Titusville and Meredith, Pa	Nov. 26, 1872	133, 426
Refining hydrocarbon-oils, Process of	P. Weisenberger	Pittsburgh, Pa	May 22, 1866	54, 984
Refining lamp-oil	E. Fourestier	Philadelphia, Pa	Nov. 17, 1808	....
Refining liquors	J. S. Oliver	New York, N. Y	Sept. 29, 1868	82, 633
Refining oil from cotton-waste, &c	E. T. Jarrold	Tottensville, N. Y	Dec. 27, 1870	110, 469
Refining oil from the acid residuum of oil-works, Process of.	A. Farrar	Longwood, Mass	July 16, 1872	129, 014
Refining oil, Mode of	C. E. Ruggles	New York	July 20, 1829	....
Refining oil, Process for	E. G. Sutherland	San Francisco, Cal	July 3, 1866	56, 121
Refining oil, Restoring waste alkali used in	W. Goodaine and G. Stead	Cleveland, Ohio	Mar. 22, 1870	101, 003
Refining petroleum	R. Eaton	Montreal, Canada	Jan. 3, 1871	110, 638
Refining petroleum, &c	F. Huot	Perth Amboy, N. J	Mar. 19, 1867	63, 051
Refining petroleum	F. Sylvester	New York, N. Y	Sept. 10, 1867	68, 669
Refining petroleum	J. A. Tatro	Hartford, Conn	Aug. 9, 1870	106, 233
Refining petroleum	H. C. Van Tine	Pittsburgh, Pa	Dec. 4, 1866	60, 290
Refining petroleum and lubricating-oils	P. H. Vander Weyde	Philadelphia, Pa	Jan. 8, 1867	61, 125

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Invention.	Inventor.	Residence.	Date.	No.
Refining petroleum and other oils	W. P. Downer	New York, N. Y	Oct. 4, 1864	44, 519
Refining petroleum, Apparatus for	W. H. Sangster	Buffalo, N. Y	May 1, 1866	54, 414
Refining petroleum by filtration	R. A. Chesebrough	New York, N. Y	Dec. 19, 1865	51, 557
Refining petroleum by filtration	R. A. Chesebrough	New York, N. Y	Dec. 19, 1865	51, 558
Refining petroleum, &c., Process for the recovery and purification of sulphuric acid used in.	M. Barrett	Toronto, Canada	Nov. 6, 1866	59, 531
Refining petroleum, &c., Process of	H. M. Baker	Williamsburgh, N. Y	Nov. 26, 1872	133, 399
Refining petroleum, Process of	A. Farrar	Brookline, Mass	Apr. 29, 1873	138, 237
Refining sulphur, Process in	R. Oxland	San Francisco, Cal	May 8, 1866	54, 586
Refining turpentine	N. L. Martin	New York, N. Y	Mar. 13, 1847	5, 004
Refining wine, cider, &c., Compound for	O. Schaffer	Dayton, Ohio	May 3, 1870	102, 715
Reflector	J. O. Belknap	Mobile, Ala	May 13, 1873	138, 843
Reflector	E. C. Blakeslee	Waterbury, Conn	Jan. 11, 1870	98, 662
Reflector	W. H. Crawford	New York, N. Y	Aug. 19, 1862	36, 205
Reflector	F. P. Doyle	New York, N. Y	Feb. 21, 1871	111, 919
Reflector	C. F. Jacobson	New York, N. Y	Apr. 29, 1873	138, 255
Reflector	J. A. J. Logan	Moline, Ill	Mar. 3, 1868	75, 033
Reflector	W. M. Marshall	Philadelphia, Pa	Jan. 14, 1868	73, 355
Reflector	S. Meadows	Toronto, Canada	Nov. 2, 1869	96, 336
Reflector	L. Portner	Chicago, Ill	July 28, 1868	80, 499
Reflector	W. G. Schmidlin and J. W. Driscoll.	New York, N. Y	Apr. 28, 1868	77, 408
Reflector	F. Sinour	Newport, Ky	June 17, 1873	139, 923
Reflector	W. Ulrich	Newark, N. J	Dec. 24, 1867	72, 570
Reflector	H. B. Walbridge	Brooklyn, N. Y	June 24, 1873	140, 325
Reflector, Corrugated	B. Goetz	Philadelphia, Pa	Oct. 2, 1855	13, 615
Reflector, Corrugated	B. Goetz	Philadelphia, Pa	Dec. 7, 1869	97, 628
Reflector, Double-cone	J. W. Bliss	Hartford, Conn	July 16, 1872	129, 088
Reflector, Dressing-glass	C. Furber	London, England	Dec. 15, 1868	84, 943
Reflector-fastening, Adjustable	S. D. Ingram	Harrisburgh, Pa	Aug. 22, 1865	49, 525
Reflector for cooking	J. Burch	Jefferson County, N. Y	Apr. 22, 1835	....
Reflector for cooking-stoves	J. Burch	Jefferson County, N. Y	Apr. 22, 1835	....
Reflector for gas-lights, lamps, &c	J. Stratton	Brooklyn, N. Y	Feb. 9, 1864	41, 547
Reflector for lamps	H. W. Hayden	Waterbury, Conn	Apr. 14, 1863	38, 163
Reflector for lamps	W. G. Schmidlin and J. W. Driscoll.	New York, N. Y	July 2, 1861	32, 722
Reflector for lamps and gas-burners	J. Olding	San Francisco, Cal	Dec. 5, 1875	51, 344
Reflector for lanterns, &c	W. A. Butler	New York, N. Y	Sept. 25, 1866	58, 212
Reflector for locomotive and other lamps	I. Carleton	Brooklyn, N. Y	Mar. 3, 1857	16, 769
Reflector for public halls, &c	O. E. Dodge	Saint Paul, Minn	Nov. 24, 1868	84, 270
Reflector for street-lamps	J. N. Aronson	New York, N. Y	Oct. 19, 1869	95, 966
Reflector for street-lamps	J. W. Cremin	New York, N. Y	Sept. 7, 1869	94, 570
Reflector for street-lamps	H. and J. Sangster	Buffalo, N. Y	Jan. 14, 1851	7, 904
Reflector for vaults	E. R. Pickler	Boston, Mass	Jan. 20, 1857	16, 451
Reflector, Gas-light	I. P. Frink	Newark, N. J	Apr. 17, 1860	27, 898
Reflector, Head-light	C. D. Gibson	New York, N. Y	May 26, 1863	38, 668
Reflector, Head-light	C. D. Gibson	New York, N. Y	Mar. 6, 1866	52, 987
Reflector, Head-light	H. L. Hervey	Philadelphia, Pa	Mar. 9, 1869	87, 671
Reflector, Lamp	E. C. Blakeslee	Waterbury, Conn	May 18, 1869	90, 069
Reflector, Lamp	E. Brown	Dover, N. H	Oct. 1, 1830	....
Reflector, Lamp	W. G. Schmidlin and J. W. Driscoll.	New York, N. Y	Dec. 17, 1861	33, 962
Reflector, Light	W. F. Shaw	Boston, Mass	June 15, 1858	20, 589
Reflector, Metallic	A. Farrar	Boston, Mass	Apr. 4, 1844	3, 518
Reflector, Mirror	H. W. Leslie	New York, N. Y	July 16, 1872	128, 967
Reflector, Mirror	H. S. Wood and J. W. Morrison.	Chicago, Ill	Apr. 25, 1871	114, 243
Reflector, Night-light	J. Wyberd	New York, N. Y	Apr. 10, 1860	27, 855
Reflector, Street	A. K. Grim and A. D. Moore	San Francisco, Cal	Apr. 5, 1870	101, 470
Reflector, Window	C. G. Smith	North Bridgewater, Mass.	Aug. 20, 1867	67, 916
Reflectors, Device for adjusting	M. F. Gale	Boston, Mass	Oct. 18, 1864	44, 717
Reflectors, &c., Manufacture of foil-lined	J. B. Hyde	New York, N. Y	July 16, 1872	129, 478
Reflectors, Method of taking likenesses by	A. S. Wolcott	New York, N. Y	May 8, 1840	1, 582
Reflectors, mirrors, &c., Preparing mica for making.	W. M. Marshall	Philadelphia, Pa	Apr. 26, 1864	42, 497
Reflectors to lamp, Applying	G. F. J. Colburn	Newark, N. J	Sept. 2, 1862	36, 339
Refreshment fountain, Portable	A. J. Ohmer	Hamilton, Ohio	Nov. 22, 1864	45, 170
Refrigerating and preserving apparatus	D. E. Somes	Washington, D. C	Mar. 8, 1870	100, 681
Refrigerating and ventilating apparatus	B. F. Smith	New Orleans, La	Aug. 1, 1871	117, 572
Refrigerating-apparatus	J. L. Alberger	Buffalo, N. Y	Aug. 11, 1863	39, 456
Refrigerating-apparatus	J. J. Bailey	New York, N. Y	July 16, 1872	129, 308
Refrigerating-apparatus	J. Gravenstine	Philadelphia, Pa	July 25, 1871	117, 408
Refrigerating-apparatus	A. Guthrie	Chicago, Ill	Feb. 15, 1870	99, 881
Refrigerating-apparatus	J. L. Tripler	Merchantville, N. J	June 24, 1873	140, 321
Refrigerating-apparatus for vessels, cars, &c	W. Bray	Lambertville, N. J	Mar. 4, 1873	136, 484
Refrigerating-car	C. L. Hoag and E. Ely	Lockport, N. Y	Oct. 10, 1871	119, 847
Refrigerating-car	A. S. Lyman	New York, N. Y	Dec. 5, 1871	121, 530
Refrigerating-car	A. L. McCrea	Chicago, Ill	Mar. 2, 1869	87, 348
Refrigerating-car	T. L. Rankin	Granville, Ill	Dec. 20, 1870	110, 394
Refrigerating-car	G. K. Wood	Morristown, N. J	Mar. 31, 1868	76, 285
Refrigerating-chamber	J. H. Racy, jr	New York, N. Y	Aug. 4, 1868	80, 766
Refrigerating, cooling, and preserving apparatus	P. Lawson	Lowell, Mass	Mar. 12, 1867	62, 860
Refrigerating-cupboard	J. M. Blaisdell	Sanbornton, N. H	Jan. 16, 1872	122, 799
Refrigerating-cupboard	J. H. Polhamus	Albany, N. Y	Feb. 4, 1873	135, 442
Refrigerating-house	T. L. Rankin	New Richmond, Ohio	Oct. 20, 1868	83, 316
Refrigerating liquids, Vessel for	J. V. B. Carter and C. F. Orcutt	Albany, N. Y	Oct. 4, 1864	44, 514
Refrigerating oyster-can	A. Booth	Chicago, Ill	May 31, 1870	103, 551
Refrigerating oyster-can	A. Booth	Chicago, Ill	Feb. 14, 1871	111, 722
Refrigerating, preserving, and ventilating, Apparatus and process for.	D. E. Somes	Washington, D. C	May 10, 1870	102, 986
Refrigerating preserving-house	H. A. Roberts	Boston, Mass	Feb. 27, 1872	124, 012
Refrigerating provision-car	J. J. Bate	Brooklyn, N. Y	Jan. 30, 1872	123, 077
Refrigerating provision-car	J. J. Bate	Brooklyn, N. Y	Jan. 30, 1872	123, 078
Refrigerating provision-chest	J. F. Madden	Boston, Mass	Dec. 31, 1872	134, 386
Refrigerating show-case	T. L. Rankin	Lyndon, Kans	Mar. 8, 1871	112, 493
Refrigerating-vessel	L. Klee and A. Patterson	Pittsburgh, Pa	May 24, 1870	103, 473
Refrigerator	J. V. S. Adriance and J. W. Clark.	Buffalo, N. Y	Jan. 3, 1860	26, 729
Refrigerator	I. Allegretti	Philadelphia, Pa	July 26, 1870	105, 763

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Invention.	Inventor.	Residence.	Date.	No.
Refrigerator	E. L. Allen	Fair Haven, Vt	Dec. 17, 1872	133, 961
Refrigerator	A. M. Almqvist and F. G. Conradson.	Long Island City and Brooklyn, N. Y.	Nov. 21, 1871	121, 037
Refrigerator	C. L. Anderson and A. Bogardus.	Yonkers, N. Y	June 13, 1871	115, 804
Refrigerator	R. Armiger	Baltimore, Md	Dec. 2, 1873	145, 081
Refrigerator	S. Ayres	Danville, Ky	Dec. 21, 1869	98, 010
Refrigerator	B. T. Averill	Dunkirk, N. Y	June 18, 1872	127, 946
Refrigerator	J. J. Bailey	New York, N. Y	Aug. 6, 1872	130, 271
Refrigerator	J. J. Bailey	New York, N. Y	Apr. 29, 1873	138, 364
Refrigerator	W. M. Baker	Walpole, Ind	Apr. 3, 1860	27, 681
Refrigerator	W. M. Baker	Walpole, Ind	Aug. 18, 1863	39, 610
Refrigerator	W. M. Baker	Walpole, Ind	Dec. 15, 1863	40, 976
Refrigerator	W. M. Baker	Fortville, Ind	Dec. 24, 1872	134, 191
Refrigerator	W. M. Baker	Fortville, Ind	May 6, 1873	138, 553
Refrigerator	W. M. Baker	Fortville, Ind	Oct. 14, 1873	143, 607
Refrigerator	G. A. Banta	New York, N. Y	Nov. 29, 1864	45, 217
Refrigerator	G. A. Banta	New York, N. Y	Jan. 1, 1867	60, 665
Refrigerator	A. Bardell	New York, N. Y	Aug. 26, 1873	142, 191
Refrigerator	J. J. Barrett	Georgetown, D. C	May 13, 1862	35, 208
Refrigerator	A. H. Bartlett	Spuyten Duyvil, N. Y	Nov. 23, 1858	22, 104
Refrigerator	A. H. Bartlett	Spuyten Duyvil, N. Y	Mar. 3, 1863	37, 801
Refrigerator	T. S. Blake and O. E. Mosher	New York, N. Y	Jan. 3, 1865	45, 690
Refrigerator	W. Bogk	Milwaukee, Wis	Nov. 14, 1871	120, 934
Refrigerator	F. Borchard	Detroit, Mich	Dec. 10, 1867	71, 844
Refrigerator	H. R. Bozorth	Philadelphia, Pa	May 11, 1869	89, 846
Refrigerator	J. Bragdon	Boston, Mass	May 7, 1867	64, 405
Refrigerator	E. D. Brainard	Albany, N. Y	Sept. 1, 1868	81, 588
Refrigerator	E. D. Brainard	Albany, N. Y	July 27, 1869	93, 046
Refrigerator	W. Bray	Stockton, N. J	Sept. 15, 1868	82, 076
Refrigerator	J. W. Bronaugh and J. Talbot	Georgetown, D. C	Mar. 16, 1813	....
Refrigerator	L. D. Bunn	Morristown, N. J	May 9, 1865	47, 617
Refrigerator	B. I. Burnett	Mount Vernon, N. Y	Jan. 1, 1861	31, 007
Refrigerator	R. D. Burns	Baltimore, Md	Nov. 11, 1837	463
Refrigerator	T. B. Burtis	Chicago, Ill	Oct. 11, 1859	25, 719
Refrigerator	J. D. Burton	Charlestown, Mass	June 22, 1858	20, 621
Refrigerator	M. Burton	Darlington, Pa	Oct. 5, 1869	95, 562
Refrigerator	T. Byrne	Baton Rouge, La	Oct. 23, 1860	30, 461
Refrigerator	H. C. Cain	Cleveland, Ohio	May 14, 1872	126, 784
Refrigerator	C. Camp	Mott Haven, N. Y	Sept. 23, 1873	143, 059
Refrigerator	J. C. Campbell	New York, N. Y	June 7, 1870	103, 842
Refrigerator	A. J. Chase	Boston, Mass	Oct. 5, 1869	95, 428
Refrigerator	A. J. Chase	Boston, Mass	Apr. 5, 1870	101, 582
Refrigerator	A. J. Chase	Boston, Mass	Dec. 13, 1870	110, 112
Refrigerator	A. J. Chase	Boston, Mass	Mar. 14, 1871	112, 547
Refrigerator	A. J. Chase	Boston, Mass	Dec. 12, 1871	121, 751
Refrigerator	T. W. Chatfield	Utica, N. Y	Mar. 26, 1861	31, 782
Refrigerator	S. Child	Baltimore, Md	Sept. 29, 1868	82, 597
Refrigerator	E. S. Colton	Boston, Mass	Apr. 5, 1870	101, 588
Refrigerator	E. S. Colton	Boston, Mass	Sept. 3, 1872	130, 981
Refrigerator	S. E. Condon	Brooklyn, N. Y	Oct. 22, 1872	132, 443
Refrigerator	S. E. Condon	Brooklyn, N. Y	Jan. 7, 1873	134, 644
Refrigerator	H. T. Cosgrove	Louisville, Ky	Oct. 29, 1872	132, 524
Refrigerator	E. J. Creasey	Philadelphia, Pa	Aug. 10, 1869	93, 601
Refrigerator	D. Cromwell	Saint Louis, Mo	Oct. 3, 1871	119, 508
Refrigerator	H. Davis and R. Alden	Erie, Pa	Oct. 3, 1871	119, 453
Refrigerator	T. M. Davis	Philadelphia, Pa	Aug. 26, 1862	36, 282
Refrigerator	R. P. Dewey	Chicago, Ill	Oct. 15, 1872	132, 144
Refrigerator	R. P. Dewey	Chicago, Ill	Oct. 15, 1872	132, 145
Refrigerator	E. Dexter	Holmes' Hole, Mass	Aug. 6, 1861	32, 987
Refrigerator	J. F. Dick	New Orleans, La	Nov. 28, 1871	121, 280
Refrigerator	H. M. Diggins	Cincinnati, Ohio	Feb. 15, 1870	99, 862
Refrigerator	J. J. Doepken	Lima, Ohio	Sept. 14, 1869	94, 724
Refrigerator	S. A. Dunnington	New York, N. Y	June 18, 1872	128, 028
Refrigerator	B. R. Du Val	Portsmouth, Va	May 6, 1873	138, 488
Refrigerator	E. S. Earley	Philadelphia, Pa	Jan. 28, 1873	135, 209
Refrigerator	H. F. Eberts	Detroit, Mich	Dec. 6, 1870	109, 811
Refrigerator	J. N. Ehesam	Hoboken, N. J	Feb. 23, 1864	41, 690
Refrigerator	J. P. Ellicott	Washington, D. C	Jan. 7, 1862	34, 122
Refrigerator	D. Evans	Philadelphia, Pa	Mar. 26, 1844	3, 506
Refrigerator	T. Fairbanks	Saint Johnsbury, Vt	Aug. 12, 1856	15, 545
Refrigerator	C. Falck	Middlesex County, England	May 1, 1866	54, 475
Refrigerator	W. Ferris, P. Garrett, and J. Megratten.	Wilmington, Del	Apr. 6, 1858	19, 837
Refrigerator	A. J. and J. Fink	Reading, Pa	Dec. 23, 1873	145, 855
Refrigerator	J. H. Fisher	Chicago, Ill	Nov. 19, 1872	133, 147
Refrigerator	J. W. Fisher	Islip, N. Y	Nov. 14, 1871	120, 867
Refrigerator	A. Forbes and J. Macbeth	Cleveland, Ohio	Nov. 21, 1865	51, 035
Refrigerator	S. M. Fort	Syracuse, N. Y	Aug. 12, 1873	141, 781
Refrigerator	G. A. Fountain	Newark, N. J	May 4, 1869	89, 756
Refrigerator	A. Fuller and L. P. Reichert	Buffalo, N. Y	Feb. 25, 1868	74, 813
Refrigerator	T. Gates	Worcester, Mass	Nov. 5, 1861	33, 642
Refrigerator	L. Giebrich	Ottumwa, Iowa	June 4, 1872	127, 593
Refrigerator	R. S. Godfrey	Philadelphia, Pa	Mar. 30, 1869	88, 468
Refrigerator	J. Gohn and F. Heim	Saint Louis, Mo., and East Saint Louis, Ill.	Sept. 17, 1862	131, 396
Refrigerator	J. S. Gold	Philadelphia, Pa	Mar. 12, 1841	1, 998
Refrigerator	J. C. Gove	Cleveland, Ohio	May 29, 1866	55, 085
Refrigerator	J. Gravenstine	Philadelphia, Pa	June 11, 1872	27, 863
Refrigerator	J. Gravenstine	Philadelphia, Pa	June 11, 1872	127, 864
Refrigerator	W. Gregg	Philadelphia, Pa	Sept. 2, 1862	36, 346
Refrigerator	R. A. Harris	Philadelphia, Pa	Feb. 5, 1867	61, 734
Refrigerator	A. H. Hastings	New York, N. Y	Jan. 21, 1862	34, 205
Refrigerator	B. N. Hatcheson	Green Point, N. Y	Aug. 20, 1872	130, 635
Refrigerator	D. S. Heffron	Utica, N. Y	Aug. 7, 1860	29, 487
Refrigerator	A. Heinz	Buffalo, N. Y	Feb. 22, 1870	100, 034
Refrigerator	S. Hickok	Buffalo, N. Y	June 17, 1856	15, 132
Refrigerator	S. Hickok	Buffalo, N. Y	Feb. 8, 1859	22, 871

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Refrigerator	A. A. Hinkley	Boston, Mass	June 19, 1866	55, 655
Refrigerator	W. G. Holden, jr	Covington, Ky	May 3, 1870	102, 680
Refrigerator	J. H. Hollingsworth	Philadelphia, Pa	May 19, 1868	77, 980
Refrigerator	D. Howarth	Portland, Me	Jan. 8, 1869	91, 021
Refrigerator	F. W. Hunt	Brooklyn, N. Y	May 24, 1870	103, 336
Refrigerator	F. W. Hunt	East Orange, N. J	Sept. 2, 1873	142, 469
Refrigerator	E. B. Jewett	Buffalo, N. Y	Mar. 26, 1872	124, 957
Refrigerator	J. C. Jewett	Buffalo, N. Y	Oct. 15, 1867	69, 812
Refrigerator	T. D. Kellogg	New York, N. Y	Nov. 17, 1868	84, 196
Refrigerator	M. W. Kidder and M. W. Shorey.	Lowell, Mass	Apr. 30, 1867	64, 330
Refrigerator	T. H. King	New York, N. Y	June 20, 1845	4, 086
Refrigerator	T. D. Kingan	Indianapolis, Ind	Sept. 16, 1873	142, 796
Refrigerator	E. Larrabee	Baltimore, Md	Feb. 26, 1850	7, 121
Refrigerator	W. Law	New York, N. Y	Mar. 5, 1867	62, 643
Refrigerator	W. H. Lazelle	Boston, Mass	May 31, 1859	24, 262
Refrigerator	J. H. Lester	Niantic, Conn	Feb. 21, 1871	111, 950
Refrigerator	W. H. Lewis	New York, N. Y	May 20, 1873	139, 168
Refrigerator	A. Lippinann	New York, N. Y	Nov. 23, 1858	22, 127
Refrigerator	H. D. Little	Rockford, Ill	July 23, 1872	129, 671
Refrigerator	I. A. Livingston	Minneapolis, Minn	July 30, 1872	129, 897
Refrigerator	M. C. Longacre	Cleveland, Ohio	Mar. 15, 1864	41, 931
Refrigerator	J. Lorenz and H. F. W. Bender	Hamilton, Ohio	Dec. 2, 1873	145, 066
Refrigerator	W. D. Ludlow	New York, N. Y	Feb. 16, 1858	19, 373
Refrigerator	R. H. MacMunn	Philadelphia, Pa	July 2, 1872	128, 643
Refrigerator	A. Maish	Cincinnati, Ohio	Apr. 20, 1852	8, 891
Refrigerator	J. Martin	Philadelphia, Pa	July 21, 1868	80, 080
Refrigerator	J. Marx	New York, N. Y	Apr. 5, 1859	23, 478
Refrigerator	J. Marx	New York, N. Y	May 14, 1872	126, 820
Refrigerator	W. B. Mason	Boston, Mass	Aug. 2, 1870	105, 959
Refrigerator	J. Matthews, jr	New York, N. Y	Aug. 15, 1871	118, 137
Refrigerator	H. L. McAvoy	Baltimore, Md	Jan. 9, 1855	12, 210
Refrigerator	H. L. McAvoy	Baltimore, Md	Mar. 8, 1859	23, 184
Refrigerator	P. McBride	New York, N. Y	June 13, 1871	115, 879
Refrigerator	J. McKelvey	Buffalo, N. Y	Feb. 6, 1866	52, 436
Refrigerator	J. McKelvey	Ogdensburgh, N. Y	May 22, 1866	54, 931
Refrigerator	M. Meyers, jr	Philadelphia, Pa	May 26, 1868	78, 308
Refrigerator	W. Mootry	New York, N. Y	July 24, 1855	13, 329
Refrigerator	O. E. Mosher	New York, N. Y	Apr. 4, 1865	47, 123
Refrigerator	D. Mulcahy	Boston, Mass	Apr. 22, 1873	138, 095
Refrigerator	J. H. Munday	Parkersburgh, W. Va	July 23, 1872	129, 854
Refrigerator	C. E. Munroe	Cambridge, Mass	June 27, 1871	116, 344
Refrigerator	J. Naughten	Cincinnati, Ohio	Oct. 26, 1858	21, 897
Refrigerator	P. Nunan	Sandusky, Ohio	Apr. 2, 1872	125, 323
Refrigerator	B. M. Nyce	Kingston, Ind	Nov. 2, 1858	21, 977
Refrigerator	J. P. Oeth	Canton, Mo	Dec. 5, 1871	121, 655
Refrigerator	C. G. Page	Washington, D. C	Apr. 2, 1861	31, 901
Refrigerator	C. O. Peck	Pittsfield, Mass	June 11, 1872	127, 919
Refrigerator	C. O. Peck	Pittsfield, Mass	Apr. 1, 1873	137, 477
Refrigerator	E. Perkins	Fond du Lac, Wis	Aug. 16, 1870	106, 401
Refrigerator	A. H. Phelps	Trenton, Mich	Oct. 18, 1870	108, 386
Refrigerator	C. F. Pike	Providence, R. I	Jan. 1, 1867	60, 934
Refrigerator	E. Piper	Camden, Me	June 2, 1868	78, 606
Refrigerator	J. H. Racey	New York, N. Y	Apr. 20, 1869	89, 243
Refrigerator	T. L. Rankin	Peru, Ill	Aug. 17, 1869	93, 904
Refrigerator	C. B. Reeves and J. B. Tevis	Philadelphia, Pa	July 3, 1866	56, 094
Refrigerator	H. Rehahn	New York, N. Y	July 13, 1858	20, 895
Refrigerator	H. A. Roberts	Boston, Mass	Apr. 21, 1868	77, 098
Refrigerator	J. Rohrer	Lancaster, Pa	Dec. 12, 1871	121, 899
Refrigerator	J. Rohrer	Lancaster, Pa	Oct. 14, 1873	143, 591
Refrigerator	E. S. Root	Providence, R. I	Dec. 2, 1873	145, 127
Refrigerator	D. W. C. Sanford	Cincinnati, Ohio	Nov. 13, 1855	13, 802
Refrigerator	B. Sauter	Danbury, Conn	June 14, 1870	104, 209
Refrigerator	J. F. Schneider	Brooklyn, N. Y	Oct. 11, 1864	44, 663
Refrigerator	J. C. Schooley	Cincinnati, Ohio	June 16, 1857	17, 588
Refrigerator	J. C. Schooley	Cincinnati, Ohio	Jan. 1, 1861	31, 039
Refrigerator	J. C. Schooley	New York, N. Y	Jan. 6, 1863	37, 307
Refrigerator	J. C. Schooley	New York, N. Y	Jan. 5, 1864	41, 098
Refrigerator	J. C. Schooley	New York, N. Y	Jan. 5, 1864	41, 099
Refrigerator	S. R. Scoggins	Baltimore, Md	July 27, 1869	93, 128
Refrigerator	S. R. Scoggins	Baltimore, Md	Sept. 27, 1870	107, 821
Refrigerator	J. G. Seltzer and A. J. Fink	Reading, Pa	Jan. 14, 1873	134, 937
Refrigerator	M. Shaw	Lawrence, Kans	May 27, 1873	139, 428
Refrigerator	W. Sims	Dayton, Ohio	Feb. 8, 1859	22, 897
Refrigerator	T. B. Smith	Philadelphia, Pa	Sept. 19, 1848	5, 772
Refrigerator	A. B. Spencer	Cleveland, Ohio	Jan. 28, 1873	135, 251
Refrigerator	K. Spencer	Minneapolis, Minn	Sept. 25, 1860	30, 164
Refrigerator	W. W. Stannard	Buffalo, N. Y	July 31, 1860	29, 415
Refrigerator	A. B. Sweetland	Fitchburgh, Mass	Aug. 27, 1867	68, 258
Refrigerator	A. B. Sweetland	Fitchburgh, Mass	July 7, 1868	79, 704
Refrigerator	A. B. Sweetland	Fitchburgh, Mass	Apr. 19, 1870	102, 064
Refrigerator	H. R. Taylor	Roxbury, Mass	Dec. 4, 1866	60, 281
Refrigerator	R. Taylor	New York, N. Y	Mar. 25, 1873	137, 112
Refrigerator	R. Thomson	Springfield, Ohio	Dec. 9, 1873	145, 317
Refrigerator	J. R. Torres	New Orleans, La	July 18, 1871	117, 221
Refrigerator	J. S. Tough and J. T. Craddock	Baltimore, Md	Mar. 14, 1848	5, 471
Refrigerator	J. C. Vanpelt	Cincinnati, Ohio	Aug. 24, 1869	94, 151
Refrigerator	P. A. Vogt	Buffalo, N. Y	May 22, 1866	54, 980
Refrigerator	P. A. Vogt	Buffalo, N. Y	Sept. 24, 1867	69, 278
Refrigerator	G. W. Walker	Malden, Mass	May 3, 1870	102, 735
Refrigerator	J. Waring	Port Tobago, Va	June 12, 1835	....
Refrigerator	N. Waterman	Boston, Mass	Sept. 19, 1848	5, 793
Refrigerator	N. Waterman	Boston, Mass	July 13, 1858	20, 907
Refrigerator	J. B. Webster	Saint Louis, Mo	Oct. 3, 1871	119, 548
Refrigerator	J. H. Welsh	Erie, Pa	Mar. 14, 1871	112, 659
Refrigerator	J. D. Wemple	Albany, N. Y	Aug. 27, 1867	68, 269
Refrigerator	S. and D. B. Wheat	New York, N. Y	Dec. 8, 1868	84, 785
Refrigerator	C. Winship	New Haven, Conn	Dec. 23, 1856	16, 320

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Invention.	Inventor.	Residence.	Date.	No.
Refrigerator	J. Worrall	New Haven, Conn	July 3, 1866	56, 154
Refrigerator	J. Yerkes	Philadelphia, Pa	Feb. 21, 1860	27, 255
Refrigerator	A. Yost	New York, N. Y	Apr. 26, 1859	23, 803
Refrigerator	C. Zoncada	Indianapolis, Ind	Aug. 6, 1872	130, 267
Refrigerator and beer-cooler, Combined	G. Nuss	New York, N. Y	July 8, 1873	140, 636
Refrigerator and condenser	S. B. Ellithorp	New York, N. Y	Jan. 30, 1866	52, 277
Refrigerator and condenser, Cook-room	P. D. Van Deventer	Wright City, Mo	Nov. 8, 1870	109, 081
Refrigerator and cooler	L. R. Comstock and J. N. Cherry	Keokuk, Iowa	Oct. 27, 1868	83, 467
Refrigerator and cooler	A. B. Ely	Newton, Mass	Apr. 26, 1870	102, 382
Refrigerator and cooler	C. D. Hicks	Bowling Green, Ohio	Oct. 14, 1873	143, 625
Refrigerator and mode of cooling	J. F. Schneider	Brooklyn, N. Y	May 20, 1873	139, 197
Refrigerator and refrigerator-car	T. Hyatt	New York, N. Y	Apr. 12, 1870	101, 879
Refrigerator and sideboard	W. H. Kern and T. M. Davis	Philadelphia, Pa	Sept. 6, 1860	107, 180
Refrigerator and sideboard	J. A. Thompson	Auburn, N. Y	Sept. 22, 1868	82, 365
Refrigerator and sideboard, Combined	G. L. Packard	Everett, Mass	May 20, 1873	139, 186
Refrigerator and soda-apparatus combined	J. M. Cohen	Bloomfield, Iowa	June 18, 1872	127, 958
Refrigerator and soda-water apparatus, Combined	T. W. Johnson	Fort Madison, Iowa	July 8, 1873	140, 629
Refrigerator and water and wine cooler	L. M. Goldsborough	Washington, D. C	Oct. 26, 1869	96, 101
Refrigerator and water-cooler	H. G. Dayton	Maysville, Ky	Feb. 19, 1857	62, 187
Refrigerator and water-cooler	A. Godley	Ithaca, N. Y	Apr. 9, 1861	31, 968
Refrigerator and water-cooler	A. Iske	Lancaster, Pa	Mar. 28, 1871	113, 056
Refrigerator and water-cooler, Combined	J. S. Bateman	Baltimore, Md	Apr. 8, 1873	137, 650
Refrigerator and water-cooler, Combined	H. W. B. Hervey	Philadelphia, Pa	July 22, 1873	141, 141
Refrigerator and weighing-apparatus	J. Buckman, jr	Williamsburgh, N. Y	Mar. 30, 1869	88, 442
Refrigerator-building	W. S. Bate	Philadelphia, Pa	Sept. 30, 1873	143, 317
Refrigerator-building	W. M. Mixer	New York, N. Y	Apr. 29, 1873	138, 427
Refrigerator-building	A. Pfund	New York, N. Y	Aug. 6, 1872	130, 311
Refrigerator-building	J. J. Schillinger	New York, N. Y	Jan. 4, 1870	98, 638
Refrigerator-building for preserving fruit, &c	J. A. Boyer	Greensburgh, Ind	Sept. 4, 1866	57, 670
Refrigerator-building, &c., Floor for	R. A. Smith and A. Schmid	Fond du Lac and Green Bay, Wis	Sept. 9, 1873	142, 745
Refrigerator-car	J. B. Sutherland	Detroit, Mich	Nov. 26, 1867	71, 423
Refrigerator-car	R. J. Tunstall	Saint Louis, Mo	Sept. 24, 1872	131, 722
Refrigerator-chamber for ships, &c	J. F. Baldwin	Provincetown, Mass	July 2, 1872	128, 581
Refrigerator, cooler, and filter	W. B. Burwell	Chicago, Ill	July 16, 1867	66, 674
Refrigerator-door	P. A. Vogt	Buffalo, N. Y	Mar. 11, 1873	136, 629
Refrigerator drip-pan	D. Mulcahy	Boston, Mass	May 28, 1872	127, 184
Refrigerator drip-pipe trap	C. Durant	Jersey City, N. J	Oct. 22, 1872	132, 391
Refrigerator for brewers	A. H. Tait and J. W. Avis	New York, N. Y	Nov. 5, 1867	70, 647
Refrigerator for condensing vapors from fermenting vats in breweries.	L. Angster	Newark, N. J	Nov. 30, 1869	97, 264
Refrigerator for condensing vapors from fermenting vats in breweries, &c.	L. Angster	Newark, N. J	June 28, 1870	104, 814
Refrigerator for cooling liquid	B. H. Bartol	Philadelphia, Pa	June 28, 1853	9, 813
Refrigerator for cooling oil, &c	C. F. Pike	Providence, R. I	June 12, 1866	55, 532
Refrigerator for cooling the condensing water in and condensed steam of steam-engines.	W. A. Lighthall	New York, N. Y	Feb. 26, 1861	31, 547
Refrigerator for domestic uses	T. Moore		Jan. 27, 1803	
Refrigerator for liquids	R. W. McClelland	Springfield, Ill	Sept. 4, 1866	57, 746
Refrigerator for preserving articles of food	D. E. Somes	Washington, D. C	Feb. 7, 1865	46, 277
Refrigerator for preserving butter, &c	G. B. Rohrer	Oxford, Ohio	Jan. 21, 1873	135, 159
Refrigerator for preserving oysters, &c	J. B. Hemmerle	Pittsburgh, Pa	Dec. 31, 1872	134, 378
Refrigerator for restaurants, &c	W. F. Byrne	Vicksburgh, Miss	June 24, 1873	140, 243
Refrigerator for soda-water and sirups	J. W. Tufts	Medford, Mass	June 30, 1863	39, 082
Refrigerator for steam-engines	W. A. Lighthall	New York, N. Y	May 6, 1862	35, 162
Refrigerator for steam-engines	W. A. Lighthall	New York, N. Y	May 12, 1863	38, 494
Refrigerator for transporting ice-cream, &c	J. Moos	Philadelphia, Pa	Sept. 16, 1873	142, 806
Refrigerator for transporting oysters, &c	J. C. Jones	New York, N. Y	Sept. 9, 1873	142, 703
Refrigerator, Ice	H. T. Yaryan	Nashville, Tenn	May 17, 1870	103, 271
Refrigerator ice-box	J. Gravenstine	Philadelphia, Pa	June 11, 1872	127, 762
Refrigerator ice-boxes, Bottom for	L. H. Mace and F. S. Gwyer	Westchester and New York, N. Y.	Mar. 3, 1868	75, 175
Refrigerator ice-chamber	J. W. Hazlett	New York, N. Y	Mar. 8, 1870	100, 527
Refrigerator ice-chamber	J. H. Lynch	New York, N. Y	July 5, 1870	105, 101
Refrigerator, Ice-cream	E. S. Colton	Boston, Mass	Oct. 22, 1867	69, 971
Refrigerator ice-rack	H. Pennil	New York, N. Y	Nov. 26, 1867	71, 530
Refrigerator, Milk	J. Chappel	Chenango Forks, N. Y	Oct. 31, 1871	120, 491
Refrigerator, Milk	A. F. Jennings	Sherman, N. Y	Feb. 26, 1867	62, 424
Refrigerator, Milk and cream	J. Burchnall and J. T. Johnson	Kalamazoo, Mich	Apr. 24, 1866	54, 105
Refrigerator of wort	A. Hammer	Philadelphia, Pa	Sept. 7, 1852	9, 243
Refrigerator or beer-cooler	J. Schmelzer	Cincinnati, Ohio	July 16, 1872	129, 177
Refrigerator or house for preserving animal or vegetable substances.	J. H. Fisher	Chicago, Ill	Aug. 1, 1865	49, 098
Refrigerator, Revolving	F. Allen	Erie, Pa	Dec. 20, 1870	110, 328
Refrigerator, Revolving	C. Avery	Erie, Pa	Oct. 3, 1871	119, 443
Refrigerator, Revolving	C. Avery and G. D. Atkins	Erie, Pa	May 14, 1872	126, 771
Refrigerator, sideboard, and room-cooler	D. E. Somes	Washington, D. C	Oct. 5, 1869	95, 612
Refrigerator, Slaughter-house	H. A. Roberts	Boston, Mass	Dec. 30, 1873	145, 968
Refrigerator, Table	C. A. McEvoy	Richmond, Va	Feb. 23, 1858	19, 432
Refrigerator, Tubular	A. Reid	Buffalo, N. Y	Dec. 7, 1869	97, 696
Refrigerator water-cooler	T. Smith	Brooklyn, N. Y	Apr. 15, 1873	137, 867
Refrigerator, Well	D. Hyre	Union, Ohio	Dec. 24, 1867	72, 496
Refrigerators, Alarm-tank for	H. Pennie	Brooklyn, N. Y	Jan. 26, 1869	86, 246
Refrigerators, Bar or slat for	J. C. Jewett	Buffalo, N. Y	Dec. 18, 1866	60, 523
Refrigerators, Constructing	H. V. Hill	Washington, D. C	May 25, 1838	750
Refrigerators, Construction of	L. H. Mace and F. S. Gwyer	New York, N. Y	Mar. 23, 1869	88, 190
Refrigerators, Construction of	J. Scott	Philadelphia, Pa	July 10, 1840	1, 684
Refuse-burning furnace	G. and B. J. Goodsell and J. Bean, jr.	Pent Water, Mich	July 11, 1871	116, 829
Refuse-matter, Process of treating	C. Whittier	Boston, Mass	Oct. 7, 1873	143, 482
Regenerating-apparatus for heating-furnace	G. H. Sellers	Wilmington, Del	July 16, 1872	129, 428
Regenerator-furnace	H. Frank	Pittsburgh, Pa	Feb. 11, 1873	135, 640
Regenerator-furnace	W. Sellers	Philadelphia, Pa	July 16, 1872	129, 429
Regenerator-furnace	C. W. and F. Siemens	London, England	Mar. 1, 1864	41, 788

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Register: *See* Addition and subtraction register. Air-register. Air-flue register. Alarm-register. Automatic register. Billiard-register. Billiard-game register. Car-register. Circular register. Cloth-measuring register. Counting-register. Electro-magnetic register. Electro-magnetic watchman's register. Fare-register. Furnace-register. Galvanic register. Game-register. Gas and water meter register. Gas-meter register. Grain-register. Grain-weighing register. Hot-air register. Hotel-register. Knitting-machine register. Library-register. Low-water register. Lumber-register. Machinery-register. Measuring-register. Mileage-register. Odometer-register. Office-register. Omnibus-register. Package-register. Passenger-register. Perpetual register. Portable alarm-register. Printing-register. Railway-fare register. Roller-register. School-register. Speed and distance register. Steam-register. Stove-register. Tallying-register. Teacher's register. Telegraph-register. Telegraph-receiving register. Telegraphic register. Ticket-register. Tide-wall register. Time-register. Time-keeper register. Valve-register. Ventilator-register. Voting-register. Warm-air register. Watchman's register. Weighing-register.				
Register	G. Crompton	Worcester, Mass	July 16, 1872	129,006
Register	H. Gilbert	New York, N. Y	Apr. 7, 1868	76,485
Register	J. McLaughlin	Brooklyn, N. Y	July 2, 1867	66,374
Register	H. M. Phinney	Cambridgeport, Mass	Apr. 28, 1868	77,403
Register and indicator	E. P. Wheeler	Corinth, Miss	Oct. 14, 1873	143,651
Register and stove-pipe thimble, Combined	C. Hilton	Lockport, N. Y	Mar. 25, 1873	137,203
Register and furnace-piece, Combined	S. S. Bent	New York, N. Y	Jan. 3, 1865	45,688
Register and ventilator	E. A. Tuttle	Williamsburgh, N. Y	June 10, 1856	15,093
Register for counting revolutions	V. Girond	New York, N. Y	July 25, 1865	48,927
Register for furnace	G. Pollock	New York, N. Y	Dec. 4, 1847	5,382
Register-frame	B. Gommenginger and C. W. Trotter.	Rochester, N. Y	Mar. 9, 1869	87,560
Register-point	J. W. Cliff	Rochester, N. Y	July 31, 1860	29,359
Register-point perforating-device	W. Overend	Cincinnati, Ohio	Sept. 30, 1873	143,374
Register-press, Double-cylinder	S. Newton	New York	Feb. 26, 1833	....
Registering-apparatus	J. A. Wilkinson	Brooklyn, N. Y	Sept. 20, 1859	25,543
Registering-die	E. Spencer	Saint Louis, Mo	Apr. 5, 1864	42,235
Registering-machine	G. W. Atkins and W. B. Aitken	Milton, Del., and Philadelphia, Pa.	Dec. 6, 1859	26,391
Registering steam-gage	G. H. Crosby	East Somerville, Mass	June 17, 1873	140,018
Regulator: *See* Blind-slat regulator. Boiler-feed regulator. Boiler-feed-water regulator. Burner-regulator. Cistern-regulator. Cistern-influx regulator. Clock-regulator. Damper-regulator. Draft-regulator. Electrical regulator. Electro-magnetic regulator. Exhaust-regulator. Fan-blast regulator. Feed-regulator. Feed-water regulator. Filter-regulator. Fire-regulator. Fluid-regulator. Fluid-pressure regulator. Furnace-regulator. Furnace-door regulator. Furnace-draft regulator. Gas-regulator. Gas-burner regulator. Gas-pressure regulator. Gas, steam, and fluid regulator. Grinding-mill regulator. Grinding-mill-feed regulator. Grain-regulator. Heat-regulator. Heating-apparatus regulator. Hydraulic regulator. Hydraulic-pressure regulator. Hygrometric regulator. Incubator-regulator. Lamp-wick regulator. Machinery-regulator. Mercurial regulator. Mill-feed regulator. Millstone-feed regulator. Motive-power regulator. Pipe-regulator. Plow-draft regulator. Pressure-regulator. Pump-regulator. Sawing-mill-feed regulator. Speed-regulator. Spirit-meter regulator. Steam-engine regulator. Steam-heater regulator. Steam-pressure regulator. Tank-regulator. Telegraph-regulator. Temperature-regulator. Time-piece regulator. Valve-regulator. Watch-regulator. Water-regulator. Water-closet automatic-supply regulator. Water-supply regulator. Water-wheel regulator. Wick-regulator. Windmill-regulator.				

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Regulating and dispensing machanism	S. Scholfield	Providence, R. I	May 12, 1868	77, 924
Regulator	J. F. Mascher	Philadelphia, Pa	Nov. 6, 1849	6, 849
Regulator for machinery	L. B. Pitcher	Syracuse, N. Y	Dec. 11, 1847	5, 392
Rein and back-strap holder, Combined	J. Bullene, jr	Chicago, Ill	Dec. 12, 1865	51, 420
Rein and bridle, Driving	W. H. Wall	Boston, Mass	May 18, 1869	90, 139
Rein and shaft support	J. P. Crutcher and T. Y. Vancleave.	Cornersville, Tenn	Nov. 14, 1871	120, 861
Rein attachment, Automatic check	J. Schofield	Worcester, Mass	Nov. 21, 1871	121, 202
Rein attachment, Check	M. A. Gates	Troy, Pa	Dec. 17, 1867	72, 284
Rein attachment, Check	A. Thayer and W. A. Hastings	Thorndike, Mass	June 14, 1870	104, 377
Rein attachment, Driving	W. P. Whittier	Dayton, Me	Nov. 19, 1872	133, 134
Rein, Bridle	W. D. Andrews	New York, N. Y	Aug. 20, 1867	67, 837
Rein, Bridle	K. Goddard	Philadelphia, Pa	July 24, 1855	13, 306
Rein, Bridle	A. C. Graham	Richland, Ind	May 21, 1867	64, 970
Rein, Bridle	W. O. Williams	Washington, D. C	Mar. 13, 1860	27, 492
Rein, Check	R. B. Robbins	Adrian, Mich	Jan. 2, 1872	122, 491
Rein, Check	R. B. Robbins	Adrian, Mich	May 14, 1872	126, 746
Rein, Check	S. Schofield	Worcester, Mass	Nov. 7, 1871	120, 779
Rein, Check	G. J. Townley	Parma, Mich	Oct. 21, 1873	143, 860
Rein, Check and driving	E. R. Ferry	New Haven, Conn	Dec. 31, 1867	72, 831
Rein, Check and harness	W. Clark	Valatie, N. Y	Jan. 28, 1868	73, 875
Rein connector, Check	A. H. Rockwell	Harpersville, N. Y	Sept. 20, 1870	107, 547
Rein, Detaching check	A. Westbrook and S. O. Doan	Leona, Pa	Feb. 25, 1868	74, 780
Rein, Driving	P. Jones	Newark, N. J	Aug. 13, 1867	67, 768
Rein, Elastic check	J. Nealy, jr., and T. P. Kemp	Bangor, Me	Feb. 25, 1873	136, 256
Rein fastener, Check	B. L. Budd	Fairfield, Conn	Oct. 24, 1871	120, 238
Rein fastener, Check	B. L. Budd	Fairfield, Conn	Oct. 24, 1871	120, 239
Rein fastener, Hand	L. C. Chase	Boston, Mass	June 15, 1869	91, 308
Rein-fastening	R. L. Fraser	Westernville, N. Y	July 23, 1872	129, 808
Rein-fastening	R. L. Fraser	Westernville, N. Y	July 23, 1872	129, 809
Rein for bridles, Safety	R. A. Nathurst and J. L. Stewart.	Nashville, Tenn	Aug. 16, 1859	25, 135
Rein-guard for vehicles	E. B. Guy	Elkader, Iowa	Nov. 21, 1865	51, 041
Rein guard, Horse	G. C. Worth	Upper Sandusky, Ohio	Nov. 11, 1862	36, 930
Rein-guide for vehicles	J. Reynolds	Baltimore, Md	Sept. 24, 1872	131, 704
Rein-guide for vehicles	A. D. Smith	Grafton, Ohio	Aug. 26, 1873	142, 127
Rein, Harness	W. Clark	Valatie, N. Y	Nov. 20, 1866	59, 819
Rein-holder	J. R. Achenbach	Saddle River, N. J	June 7, 1870	103, 820
Rein-holder	J. R. Achenback	Saddle River, N. J	Mar. 14, 1871	112, 524
Rein-holder	R. H. Bacot	Saint Charles, Mo	Sept. 24, 1872	131, 492
Rein-holder	W. Barstow	San Francisco, Cal	Jan. 3, 1871	110, 725
Rein-holder	A. T. Boon and L. Mills	Galesburgh, Ill	Feb. 16, 1869	86, 900
Rein-holder	C. A. and W. Bradford	Crown Point Centre, N. Y	Jan. 28, 1868	73, 772
Rein-holder	T. L. Braynard	New York, N. Y	Mar. 19, 1861	31, 698
Rein-holder	J. Chittock	Chicago, Ill	Dec. 1, 1868	84, 478
Rein-holder	J. W. Clark	Pittsburgh, Pa	Oct. 14, 1873	143, 668
Rein-holder	W. H. Cooper	Glover, Vt	July 26, 1870	105, 651
Rein-holder	E. Fahrney	Deep River, Iowa	Oct. 7, 1873	143, 409
Rein-holder	L. Fawcett	Salem, Ohio	Dec. 16, 1873	145, 559
Rein-holder	B. S. Fletcher	Cornish, N. Y	Sept. 10, 1867	68, 618
Rein-holder	G. W. Fosdick	Dowagiac, Mich	Oct. 29, 1867	70, 332
Rein-holder	J. Gibson, jr	Albany, N. Y	Dec. 28, 1869	98, 246
Rein-holder	L. D. Gillett and H. W. Inman	Rochester and Detroit, Mich.	Oct. 20, 1868	83, 150
Rein-holder	C. M. Grannis and L. M. Fitch	Morrisville, N. Y	Sept. 23, 1873	143, 140
Rein-holder	J. Harding	Detroit, Mich	Jan. 4, 1870	98, 492
Rein-holder	M. C. Heptinstall	Enfield, N. C	July 20, 1869	92, 824
Rein-holder	J. Herkimer	San Francisco, Cal	June 14, 1870	104, 308
Rein-holder	T. A. Huffer	Indianapolis, Ind	Sept. 17, 1867	68, 988
Rein-holder	I. Hull	Stamford, Conn	Nov. 17, 1868	84, 061
Rein-holder	D. Hurd	Lockport, N. Y	Dec. 21, 1869	98, 062
Rein-holder	D. Hurd	Lockport, N. Y	Oct. 25, 1870	108, 597
Rein-holder	P. Jones	Newark, N. J	Feb. 11, 1868	74, 373
Rein-holder	C. A. Messenger	Syracuse, N. Y	Oct. 31, 1871	120, 389
Rein-holder	C. B. Neff	Dallastown, Pa	June 4, 1872	127, 634
Rein-holder	S. J. Olmsteed	Binghamton, N. Y	June 6, 1865	48, 090
Rein-holder	H. D. Page	Morenci, Mich	Sept. 5, 1871	118, 775
Rein-holder	B. D. Pease	Madison, Pa	Oct. 1, 1867	69, 474
Rein-holder	A. W. Potter and J. A. Barling	Monroe, Wis	Oct. 15, 1867	69, 935
Rein-holder	J. S. Russ	Rensselaerville, N. Y	June 25, 1867	66, 043
Rein-holder	F. B. Scott	Lancaster, N. Y	Oct. 25, 1870	108, 638
Rein-holder	J. L. Shillits and W. M. Walker	Wellsville, Pa	May 25, 1869	90, 399
Rein-holder	T. L. Tripp	Prescott, Wis	Sept. 5, 1865	49, 806
Rein-holder	E. C. E. Vile	Santa Clara, Cal	Oct. 8, 1872	132, 122
Rein-holder	J. W. Wadsworth	Durham, Conn	July 28, 1868	80, 434
Rein-holder	C. Whittaker	Milwaukee, Wis	Nov. 24, 1868	84, 328
Rein holder, Carriage	L. D. Howard	Saint Johnsbury, Vt	May 7, 1872	126, 549
Rein holder, Carriage	E. C. Patterson	Bochester, N. Y	Mar. 12, 1867	62, 879
Rein holder, Check	M. Darrow	Gates, N. Y	Aug. 27, 1867	68, 172
Rein holder, Check	D. C. Watson	Manchaster, N. H	Apr. 23, 1867	64, 174
Rein holder, Driving	M. Whipple	Medina, N. Y	Sept. 4, 1866	57, 803
Rein holder, Harness	T. Byrd, jr	Williamsville, Mich	Feb. 6, 1872	123, 828
Rein-holders, Mode of bending the edges of	L. J. Parsons	New Bedford, Mass	Oct. 20, 1868	83, 201
Rein-holding device, Harness	E. C. Mackinney	Peekskill, N. Y	Mar. 18, 1862	34, 720
Rein-holding device, Horse	J. A. and F. Dunworth	Dobb's Ferry, N. Y	Feb. 16, 1858	19, 354
Rein-hook	G. Blake	Taunton, Mass	May 17, 1870	103, 008
Rein hook, Check	J. S. Campbell	Newton, N. J	Jan. 28, 1868	73, 777
Rein hook, Check	A. Ladd	Saint Lawrence, N. Y	Mar. 28, 1871	113, 065
Rein hook, Check	F. W. Stokes	Cincinnati, Ohio	Jan. 14, 1868	73, 406
Rein, Horse	G. T. Chapman	New York, N. Y	Nov. 27, 1866	59, 965
Rein, Over-check driving	L. G. Sayre	Cincinnati, Ohio	July 24, 1866	56, 619
Rein-pressing machine	G. H. Kendall	Springfield, Mass	Nov. 26, 1867	71, 310
Rein pull, Elastic	J. G. Pugsley	New York, N. Y	Nov. 26, 1867	71, 412
Rein retainer, Check	C. H. Perrin	New York, N. Y	Aug. 12, 1873	141, 814
Rein-rounder	D. Webber	Houlton, Me	June 20, 1871	116, 123
Rein-rounding machine	D. Webber	Houlton, Me	Nov. 19, 1872	133, 274
Rein runner, Check	A. P. Mason	Franklinville, N. Y	June 18, 1872	128, 652
Rein, Safety	I. Stanbery	Saint Louis, Mo	Sept. 24, 1867	69, 269

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Rein-shackle	J. Hale and W. Hall	Somerville and Brookline, Mass.	May 5, 1868	77, 608
Rein slide, Check	W. B. Potter	Boston, Mass	Apr. 28, 1868	77, 318
Rein slide, Safety	F. W. Brooks	Washington, D. C	June 11, 1867	65, 721
Rein-snap	W. H. Benham	New Haven, Conn	Jan. 21, 1868	73, 432
Rein-snap	P. L. Butler	Utica, N. Y	Sept. 24, 1867	69, 072
Rein-snap	J. Ives	Mount Carmel, Conn	May 17, 1864	42, 775
Rein snap, Wire	W. B. Hayden	Columbus, Ohio	Feb. 19, 1867	62, 194
Rein support and protector, Driving	W. N. C. Wilson	Summit Point, W. Va	June 10, 1873	139, 842
Rein-supporter	R. Townsend	Liberty Township, Ohio	Jan. 24, 1871	111, 279
Rein swivel, Check	A. P. Mason	Franklinville, N. Y	May 23, 1871	115, 224
Relay instrument, Electro-magnetic	C. Durant	Jersey City, N. J	Dec. 8, 1868	84, 806
Relisher and wedge-cutter	W. J. Hoskins and A. D. Rowe	Essex, N. Y	June 10, 1873	139, 715
Relishing-machine	D. G. Arnold	Winona, Mich	July 18, 1871	117, 032
Rendering and drying animal matters and burning the gases, Apparatus for.	M. J. Stein	New York, N. Y	Apr. 16, 1872	125, 854
Rendering and drying animal matter, Apparatus for.	J. J. Craven	Jersey City, N. J	Oct. 29, 1872	132, 636
Rendering and drying animal matter, Apparatus for.	M. J. Stein	New York, N. Y	Mar. 26, 1872	125, 111
Rendering and drying animal matter, Process and apparatus for.	C. G. Bruce and M. J. Stein	New York, N. Y	Oct. 15, 1872	132, 242
Rendering and drying apparatus in treatment of animal matter.	J. J. Craven	Jersey City, N. J	Sept. 17, 1872	131, 429
Rendering and refining lard, oil, &c	A. Broadnax	Mont Clair, N. J	Sept. 1, 1868	81, 744
Rendering and treating offal and other animal substances.	D. Bruce	Brooklyn, N. Y	Jan. 3, 1871	110, 627
Rendering animal fat	H. E. Gotleb	New York, N. Y	Nov. 2, 1869	96, 423
Rendering animal matters, Apparatus for	M. J. Stein	New York, N. Y	Apr. 16, 1872	125, 853
Rendering-apparatus	C. J. Everett	New York, N. Y	Feb. 13, 1866	52, 640
Rendering-apparatus	C. J. Everett	New York, N. Y	Oct. 30, 1866	59, 312
Rendering-apparatus	C. E. Gray	New York, N. Y	Mar. 14, 1865	46, 793
Rendering, drying, and deodorizing animal matter, Apparatus for.	J. J. Craven	Bergen, N. J	Oct. 15, 1872	132, 256
Rendering, drying, and pulverizing animal matters	M. J. Stein	New York, N. Y	Mar. 26, 1872	125, 112
Rendering fats and deodorizing the gases, Apparatus for.	H. S. Firman	New York, N. Y	Mar. 18, 1873	136, 827
Rendering fats, Apparatus for	P. Tompert and J. Coyle	Louisville, Ky	July 3, 1860	29, 018
Rendering fats, offal, &c., Apparatus for	A. Broadnax	Mont Clair, N. J	Feb. 25, 1873	136, 129
Rendering fats, &c., Process and apparatus for	M. J. Stein	New York, N. Y	Mar. 26, 1872	124, 983
Rendering fatty animal matter, Apparatus for	A. Smith	Baltimore, Md	Jan. 25, 1870	99, 252
Rendering lard	J. W. Patterson	New York, N. Y	May 17, 1870	103, 234
Rendering lard and tallow, Apparatus for	A. Broadnax	New York, N. Y	Oct. 15, 1867	69, 897
Rendering lard and tallow, Apparatus for	J. Turner	Chicago, Ill	Sept. 3, 1861	33, 219
Rendering lard and tallow, Process of	J. Turner	Chicago, Ill	Dec. 17, 1861	33, 969
Rendering lard, &c., Apparatus for	T. Hopkins	Cincinnati, Ohio	Jan. 17, 1865	45, 960
Rendering lard, Apparatus for	J. J. Johnston	Allegheny City, Pa	Dec. 22, 1863	41, 010
Rendering lard, &c., Apparatus for	S. Marsh	Chicago, Ill	Mar. 1, 1864	41, 781
Rendering lard, Apparatus and process for	W. C. Marshall	New York, N. Y	Apr. 8, 1873	137, 698
Rendering lard, Machine for cutting up fat meat for	J. Weber and W. C. Siefert	Lancaster, Pa	Jan. 7, 1873	134, 717
Rendering lard, Method of	E. Wilson	Cincinnati, Ohio	Oct. 9, 1844	3, 784
Rendering lard, &c., Steam-digester for	L. Thorn	New York, N. Y	Jan. 18, 1870	98, 897
Rendering lard, tallow, and other fats, Process of	A. Smith	Baltimore, Md	Jan. 25, 1870	99, 250
Rendering lard, tallow, &c., Apparatus for	A. Broadnax	Mont Clair, N. J	Sept. 1, 1868	81, 743
Rendering lard, tallow, &c., Apparatus for	C. J. Everett	New York, N. Y	Mar. 2, 1869	87, 482
Rendering lard, tallow, &c., Apparatus for	C. E. Gray	New York, N. Y	Jan. 31, 1865	46, 103
Rendering lard, treating offal, &c., Apparatus for	J. N. B. Bond	New York, N. Y	Feb. 25, 1873	136, 208
Rendering oils and fats, Apparatus for	C. E. Gray	Saint Louis, Mo	Aug. 18, 1863	39, 565
Rendering-pan	A. Black	New York, N. Y	May 23, 1865	47, 788
Rendering rancid animal fats and for disinfecting the gases evolved, Process for.	A. Smith	Baltimore, Md	Jan. 25, 1870	99, 253
Rendering tallow	L. Moutrop	Baltimore, Md	June 27, 1842	2, 694
Rendering tallow, &c., Apparatus for	P. W. Dalton	Jersey City, N. J	Mar. 4, 1873	136, 420
Rendering tallow, Apparatus for	J. J. Eckel and I. S. Schuyler	New York, N. Y	Aug. 14, 1866	57, 104
Rendering tallow, lard, &c., Apparatus for	J. J. Eckel and I. S. Schuyler	New York, N. Y	Aug. 14, 1866	57, 103
Rendering tank, Lard	D. Pinger	Saint Joseph, Mo	Feb. 22, 1870	100, 063
Rendering-tanks, Drawing off tallow, lard, &c., from.	J. H. Archer	Beaumont, Tex	June 7, 1870	103, 823
Reservatory for groceries, &c	O. R. Cowgill	Pana, Ill	July 12, 1870	105, 310
Reservoir, Air-pressure water	J. W. Prendergast	New York, N. Y	Oct. 5, 1869	95, 512
Reservoir for beer, wine, &c	M. Tschirgi	Dubuque, Iowa	Apr. 18, 1865	47, 347
Reservoir for compressed air	L. Ransom	Lansingburgh, N. Y	Sept. 5, 1865	49, 787
Reservoir for cooling grain and flour	H. Stanley	Saint Johnsbury, Vt	Mar. 26, 1867	63, 325
Reservoirs, &c., Apparatus for discharging	D. Bedford	New York, N. Y	Sept. 25, 1855	13, 590
Resin and gum from wood, Extracting	W. Adamson	Philadelphia, Pa	July 18, 1871	117, 135
Resin and other substances from pine wood, Extracting.	D. Hull	Newburgh, N. Y	Sept. 20, 1864	44, 314
Resin and spirits of turpentine, Manufacture of	N. U. Chafee	Charleston, S. C	Mar. 14, 1846	4, 412
Resin and spirits of turpentine, Manufacture of	J. F. Griffen	New York, N. Y	Aug. 24, 1869	93, 988
Resin, Bleaching	J. W. Harmon	Newark, N. J	Feb. 20, 1847	4, 970
Resin box and cooler	A. K. Lee	Galveston, Tex	May 13, 1873	138, 809
Resin-manufacture	D. Fehrman	Liverpool, England	Mar. 13, 1860	27, 624
Resin-manufacture	H. Napier	Brooklyn, N. Y	Mar. 27, 1860	27, 646
Resin, Preparation of	E. Hunt and H. D. Pochin	Talford, England	Jan. 11, 1859	22, 558
Resin, Substitute for	D. F. Willson	Harrisburgh, Pa	July 4, 1865	48, 634
Resinous compounds for covering ham	C. Van Vleck	Macomb, Ill	June 30, 1857	17, 709
Respirator	B. W. James	Philadelphia, Pa	Dec. 23, 1873	145, 874
Respirator	T. A. Hoffmann	Beardstown, Ill	Sept. 25, 1866	58, 255
Respirator	R. Brayton and S. Curtis	Fremont, Ohio	Oct. 1, 1867	69, 396
Respirator, Medical	E. M. Murphy	Lexington, Ill	Nov. 11, 1856	16, 066
Respirator, Nasal	B. W. James	Philadelphia, Pa	Sept. 2, 1873	142, 477
Respiring-apparatus	B. I. Lane	Cambridge, Mass	July 2, 1850	7, 476
Resuscitation, Apparatus for	E. Welchman	Cold Spring, N. Y	Apr. 11, 1842	2, 547
Retaining and releasing hook	G. J. Nereil	Philadelphia, Pa	Dec. 3, 1867	71, 779
Retaining and releasing hook	T. E. Purchase	Reading, Pa	Feb. 14, 1865	46, 385
Retaining-box	H. Barton	Rochester, N. Y	July 22, 1834	....
Reticule, Lady's	W. Winning	New York, N. Y	Nov. 7, 1821	....
Retort, Coal	F. W. Willard	New York, N. Y	Jan. 3, 1860	26, 739

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Retort, Coal-oil	W. Smith	Pittsburgh, Pa	Apr. 19, 1859	23, 719
Retort-cover	J. R. Floyd	New York, N. Y	July 21, 1857	17, 854
Retort, Enameled cast-iron	T. D. and T. S. Phillips	Cassadaga and Buffalo, N. Y.	Nov. 29, 1870	109, 658
Retort for chemical-furnace, Construction of	J. Akrill	Williamsburgh, N. Y	June 8, 1852	8, 993
Retort for concentrating sulphuric acid	J. D. Perrin and J. Saunders	Brooklyn, N. Y	June 9, 1868	78, 760
Retort for distillation of coal	J. L. Stewart	East Boston, Mass	June 28, 1859	24, 587
Retort for distilling coal-oil	H. P. Gengembre	Allegheny, Pa	June 21, 1859	24, 454
Retort for distilling coal-oil	N. B. Hatch	Lawrenceville, Pa	Feb. 1, 1859	22, 798
Retort for distilling coal-oil	R. W. Hazlett and J. H. Hobbs	Wheeling, Va	May 31, 1859	24, 211
Retort for distilling coal-oil	M. Hodkinson	Pittsburgh, Pa	Nov. 29, 1859	26, 326
Retort for distilling coal-oil	J. E. Holmes	Newark, Ohio	Mar. 29, 1859	23, 427
Retort for distilling coal-oil	J. E. Holmes	Newark, Ohio	May 31, 1859	24, 212
Retort for distilling coal-oil	J. Nicholson	Allegheny, Pa	Feb. 15, 1859	22, 973
Retort for distilling coal-oil, Revolving	J. Gillespie	Freeport, Pa	Mar. 29, 1859	23, 362
Retort for distilling coal, &c., Revolving	D. Alter and S. A. Hill	Freeport, Pa	Apr. 27, 1858	20, 026
Retort for distilling oil from coal	W. G. W. Jaeger	Baltimore, Md	May 31, 1859	24, 217
Retort for distilling oils from coal	J. and W. B. McCue	Freeport, Pa	Aug. 10, 1858	21, 143
Retort for distilling oil from coal	J. O'Hara	Pittsburgh, Pa	Jan. 11, 1859	22, 573
Retort for distilling oil from coal	T. D. Sargent	Washington, D. C	June 15, 1858	20, 587
Retort for producing bisulphide of carbon	T. Sim	Baltimore, Md	Mar. 7, 1871	112, 390
Retort for roasting ores, Revolving	W. F. Goodwin	East New York, N. Y	Dec. 31, 1867	72, 813
Retort-furnace	A. F. Du Faur	Newark, N. J	Oct. 25, 1870	108, 695
Retort-furnace for separating zinc from gold, silver, &c.	E. Balbach, jr	Newark, N. J	June 3, 1873	139, 449
Retort, Gas	H. K. Symmes	Newton, Mass	Jan. 11, 1859	22, 591
Retort-lid fastening	G. Stancliff	New York, N. Y	May 28, 1872	127, 280
Retort-stand	J. D. O'Donnell	Washington, D. C	Sept. 27, 1864	44, 447
Retorts, Construction of	A. Monnier	Camden, N. J	Apr. 7, 1857	17, 011
Retorts, stills, &c., Furnace for	C Brison	Chalons, France	May 13, 1862	35, 212
Revenue derived from spirits and malt liquors, Mode of preventing fraud on the.	E. Johnson and A. Stenernagel	Washington, D. C	Feb. 5, 1867	61, 913
Revenue, High-wine cistern for preventing fraud on the.	G. B. Bingham	Patoka, Ind	Feb. 13, 1872	123, 668
Reverberating furnace	W. Kendrick	New York, N. Y	Oct. 31, 1865	50, 718
Reverberatory and cupola furnace	J. D. Greene and J. A. Kay	Cambridge, Mass., and Columbia, S. C.	Aug. 13, 1867	67, 646
Reverberatory and melting furnace, Construction of.	A. Elliot	South Wolfborough, N. H.	May 25, 1869	90, 515
Reverberatory furnace	G. Atkins	Youngtown, Ohio	Feb. 18, 1873	136, 017
Reverberatory furnace	C. G. Best	Albany, N. Y	Aug. 31, 1852	9, 227
Reverberatory furnace	J. Davis	Pittsburgh, Pa	May 16, 1871	114, 774
Reverberatory furnace	A. Ellicott and J. McCrone	Baltimore, Md	May 16, 1846	4, 516
Reverberatory furnace	J. R. Grout	Detroit, Mich	July 24, 1866	56, 552
Reverberatory furnace	W. Hoyland	Newcastle, Pa	May 6, 1873	138, 564
Reverberatory furnace	H. McDonald	Pittsburgh, Pa	June 10, 1873	139, 683
Reverberatory furnace	J. Morrison	Joliet, Ill	July 29, 1873	141, 371
Reverberatory furnace	S. C. Salisbury	New York, N. Y	Mar. 23, 1869	88, 082
Reverberatory furnace	J. Westerman	Sharon, Pa	Dec. 3, 1872	133, 688
Reverberatory furnace	J. M. Whiteside	San Francisco, Cal	Dec. 18, 1866	60, 654
Reverberatory furnace and heating rims of car-wheels.	T. W. Lyon	Bennett, Pa	May 9, 1871	114, 696
Reverberatory furnace, Anthracite coal	C. S. Quilliard	Rondout, N. Y	Jan. 8, 1842	2, 416
Reverberatory furnace for smelting or puddling iron.	S. Broadmeadow	Manayunk, Pa	Jan. 20, 1844	3, 409
Reverberatory furnace, Revolving	A. S. Beadleston	Au Sable Forks, N. Y	Dec. 9, 1851	8, 573
Reverberatory furnaces, Construction of the fire-chambers and in operating the fire of.	J. Reese	Pittsburgh, Pa	Feb. 5, 1861	31, 327
Reversible chair	W. H. Joeckel	New York, N. Y	Dec. 28, 1869	98, 267
Reversible-chair seat	M. Hamburger	New York, N. Y	Nov. 5, 1867	70, 556
Reversible lock or latch	A. T. Brooks	New Britain, Conn	May 29, 1866	55, 052
Reversible seat	F. M. Hawkins	Indianapolis, Ind	July 4, 1871	116, 590
Reverting-wheel	O. Paine	Foxborough, Mass	Mar. 1, 1811	....
Revolver	H. Smith and D. B. Wesson	Springfield, Mass	Dec. 18, 1860	30, 990
Revolver	E. F. Starr	New York, N. Y	Dec. 4, 1860	30, 843
Revolver	R. White	Lowell, Mass	Feb. 22, 1870	100, 227
Revolving and rocking chair	P. C. Ingersoll	Green Point, N. Y	May 9, 1871	114, 564
Revolving-battery tower	T. R. Timby	Worcester, Mass	July 8, 1862	35, 846
Revolving-battery tower	T. R. Timby	Worcester, Mass	Sept. 30, 1862	36, 593
Revolving bin	E. J. Smith	Oberlin, Ohio	May 11, 1869	89, 895
Revolving blackboard	C. B. Lyon	Buffalo, N. Y	Nov. 4, 1873	144, 212
Revolving boiler	C. Anderson	Warren, Pa	June 17, 1851	8, 169
Revolving boiler	W. Scott	Rising Sun, Ind	Oct. 7, 1851	8, 411
Revolving chair	F. Barber	Detroit, Mich	Apr. 25, 1871	113, 967
Revolving chair	J. L. Mott	New York, N. Y	Aug. 20, 1845	4, 156
Revolving-chair socket	L. Heywood	Gardner, Mass	Dec. 24, 1867	72, 635
Revolving cutter, ice-shaver, &c	W. H. Hope	Washington, D. C	Jan. 31, 1860	26, 991
Revolving frame for drying fruits, &c	J. C. Dickey	Washington, D. C	June 3, 1851	8, 139
Revolving joints, Packing	J. Hatch	South Windham, Conn	Dec. 11, 1866	60, 369
Revolving light for light-houses	B. F. Willard	Boston, Mass	Feb. 20, 1839	1, 085
Revolving rake	S. E. Ament	Oswego, N. Y	Feb. 9, 1864	41, 469
Revolving rake	A. B. Sharp	Labadieville, La	Mar. 25, 1873	137, 247
Revolving, rocking, and reclining chair	G. Knell	Moorestown, N. J.	Mar. 15, 1870	100, 905
Revolving seat	G. A. Dawson	Washington, D. C	July 15, 1873	140, 895
Revolving table	P. Barrett	Jackson, Pa	Nov. 6, 1866	59, 341
Revolving table	J. H. Beem and A. O. Morgan	Roseville, Ohio	May 28, 1872	127, 299
Revolving table	J. S. Heator	Ovid, Mich	Nov. 10, 1868	83, 960
Revolving table	W. H. Henderson and W. S. Jones.	Thaxton's Switch, Va	Sept. 13, 1870	107, 257
Revolving table	J. Stewart	Bangor, Me	Mar. 12, 1867	62, 903
Revolving tower, Discharging guns by electricity in.	T. R. Timby	Worcester, Mass	July 8, 1862	35, 847
Revolving wheel for raising water, Up-and-down	H. Miller	Allentown, Pa	July 28, 1827	....
Rheostat or resistance-coil	G. Little	Rutherford Park, N. J	Dec. 26, 1871	122, 267
Rheotome or circuit-director	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 334
Rheumatism, Metallic remedy for	M. Bernheim	New York, N. Y	Aug. 17, 1869	93, 797
Rheumatism, Method of curing	L. Fouilloux	Clermont, Ferrand, France	Sept. 11, 1866	58, 034
Rhubarb plant, Alcoholic liquor from	J. H. Deacon	Lumberton, N. J	Jan. 26, 1869	86, 284

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Rhubarb plant, Jelly from the	J. H. Deacon	Lumberton, N. J	Jan. 26, 1869	86, 283
Rhus or sumac, Manufacturing	R. R. Saltonstall		Feb. 28, 1793	
Rhus or sumac, Manufacturing	R. R. Saltonstall		May 1, 1793	
Ribbon and lace case	S. Whitaker	Macon, Ill	Apr. 18, 1871	113, 827
Ribbon and velvet case	R. L. Newton	Warren, Ill	Sept. 12, 1871	118, 968
Ribbon and velvet case	S. Whitaker and A. Ruth	Macon and Decatur, Ill	June 11, 1872	127, 722
Ribbon-block	T. Ehrenberg	New York, N. Y	Nov. 11, 1873	144, 520
Ribbon-block	W. Obrist	New York, N. Y	May 27, 1873	139, 326
Ribbon-blocking machine	G. Vincent	Stockton, Cal	Mar. 14, 1871	112, 656
Ribbon-case	J. K. Landis	York Township, Ohio	July 1, 1873	140, 510
Ribbon-case	G. F. Woolston	Marshalltown, Iowa	Nov. 2, 1869	96, 530
Ribbon for hand-stamp, Composition for preparing	H. Holt	New York, N. Y	Apr. 25, 1865	47, 494
Ribbon-roll clip	M. B. Westhead	Manchester, England	July 28, 1868	80, 375
Ribbon smoothing and glossing machine	C. Cromwell	New York	Jan. 27, 1817	
Ribbon-winding machine	M. Hayes	Owego, N. Y	June 18, 1872	128, 143
Rice and barley huller, cleaner, and polisher	T. F. Strong and M. T. Moody	Northampton, Mass	Aug. 29, 1832	
Rice and barley, Hulling and polishing	T. F. Strong and M. T. Moody	Northampton, Mass	Apr. 26, 1833	
Rice and barley machine	J. L. Norton	Charleston, S. C	May 7, 1830	
Rice and clover huller	S. Burrows	Whitewater, Wis	May 8, 1860	28, 151
Rice and grain hulling machine	W. Herrick	Northampton, Mass	June 26, 1841	2, 148
Rice and grain scouring machine	R. Grant		Oct. 17, 1796	
Rice and maize, Saccharifying	A. J. Brasier	Philadelphia, Pa	Oct. 1, 1830	
Rice and other substances, Pounding	A. Nourse	Saint Lukes, S. C	July 5, 1814	
Rice, barley, &c., Hulling-machine for	E Carver	Bridgewater, Mass	Sept. 22, 1838	940
Rice-brushing machine	O. J. Butts	Georgetown, S. C	Oct. 27, 1857	18, 496
Rice-cleaner	J. L. Arms	New Orleans, La	July 29, 1873	141, 194
Rice-cleaner	R. French	Morrisville, Pa	Oct. 19, 1820	
Rice-cleaner	D. L. Geer	Lake City, Fla	Jan. 30, 1872	123, 165
Rice-cleaner	D. L. Geer	Lake City, Fla	Aug. 26, 1873	142, 158
Rice-cleaner	L. D. Hawkins	San Francisco, Cal	July 14, 1863	39, 255
Rice-cleaner	C. E. Rowan	Brooklyn, N. Y	June 16, 1863	38, 915
Rice-cleaner	C. E. Rowan	Brooklyn, N. Y	July 21, 1863	39, 309
Rice, Cleaning	J. Gardner and A. B. Howe	New York, N. Y	Dec. 9, 1862	37, 093
Rice, Cleaning and polishing	E. Wilder	Jersey City, N. J	Nov. 6, 1827	
Rice cleaning and polishing machine	J. N. White	New Orleans, La	Sept. 12, 1871	118, 889
Rice cleaning, hulling and pearling machine	S. Nowlan	New York, N. Y	May 27, 1862	35, 387
Rice-cleaning machine	W. Ager	Rohrsburgh, Pa	Sept. 15, 1857	18, 177
Rice-cleaning machine	W. Ager	Rohrsburgh, Pa	Oct. 13, 1857	18, 374
Rice-cleaning machine	W. Ager	Rohrsburgh, Pa	Dec. 6, 1859	26, 331
Rice-cleaning machine	S. Dodson	San Francisco, Cal	Sept. 25, 1860	30, 131
Rice-cleaning machine	S. P. Kase	Danville, Pa	Nov. 20, 1860	30, 685
Rice-cleaning machine	R. King	Darien, Ga	Nov. 21, 1809	
Rice-cleaning machine	P. R. Lachicotte and T. B. Bowman.	Charleston, S. C	July 28, 1857	17, 882
Rice-cleaning machine	J. Lucas, jr	Charleston, S. C	July 12, 1808	
Rice-cleaning machine	P. McKinley	Charleston, S. C	Nov. 6, 1866	59, 432
Rice-cleaning machine	J. Ravenel	Charleston, S. C	Jan. 29, 1830	
Rice-cleaning machine	L. Ruggles	New York	Oct. 12, 1821	
Rice-cleaning machine	A. Shinle	Charleston, S. C	Dec. 21, 1825	
Rice-cleaning machine	J. F. Taylor	Charleston, S. C	June 23, 1857	17, 646
Rice-cleaning machine	J. Van Valkinburgh	Binghamton, N. Y	Aug. 21, 1860	29, 735
Rice-cleaning machine	J. N. White	New Orleans, La	Feb. 18, 1873	136, 117
Rice-cleaning machine	A. H. Wright	New York, N. Y	Sept. 10, 1861	33, 276
Rice, Cleaning, polishing, and burnishing	W. Scarbrough	Savannah, Ga	Apr. 14, 1835	
Rice, coffee, and other grains, Machine for scouring, cleaning, and smutting.	L. D. Hawkins	San Francisco, Cal	Aug. 13, 1861	33, 064
Rice, coffee, clover-seed, &c., Machinery for cleaning and hulling.	Z. Bronson	Jasper County, Ga	July 7, 1829	
Rice, coffee, &c., Machine for hulling	E. Osgood	Boston, Mass	Nov. 23, 1869	97, 222
Rice-field cleaner and ditching-machine	S. M. King	Lancaster, Pa	Oct. 11, 1870	108, 269
Rice, gunpowder, &c., Machine for pounding	B. Bolitho		Feb. 7, 1800	
Rice-huller	H. N. Black	Philadelphia, Pa	Apr. 27, 1858	20, 030
Rice-huller	D. Greene	Boston, Mass	Nov. 6, 1860	30, 604
Rice-huller	W. C. Grimes	York, Pa	Oct. 8, 1840	1, 803
Rice-huller	I. M. Hendricks	Philadelphia, Pa	May 29, 1860	28, 485
Rice-huller	C. Jacobs	Brooklyn, N. Y	July 20, 1852	9, 136
Rice-huller	D. Marsh and B. Whitney	Fairfield, Conn	Apr. 26, 1853	9, 692
Rice-huller	P. McKinlay	Charleston, S. C	Apr. 1, 1851	8, 010
Rice-huller	P. McKinlay	Charleston, S. C	Mar. 30, 1852	8, 841
Rice-huller	D. H. Southworth and J. R. Hitchcock.	New York, N. Y	Nov. 6, 1849	6, 851
Rice-huller	M. E. Stacy	Thomsonville, Ga	Mar. 18, 1873	136, 942
Rice-huller	C. Walker	Brooklyn, N. Y	Aug. 14, 1849	6, 644
Rice-huller and trip-hammer, Working	J. Beach	Middletown, Conn	Oct. 1, 1830	
Rice huller, cleaner, and polisher	J. Beach and S. Starr	Middletown, Conn	May 10, 1832	
Rice huller, cleaner, and polisher	J. M. Buskey	New York	Oct. 25, 1832	
Rice huller, cleaner, and polisher	T. F. Strong and M. T. Moody	Northampton, Mass	Nov. 17, 1832	
Rice-huller machinery	D. Tomlinson	Brookfield, Conn	May 12, 1840	1, 602
Rice, &c., Hulling	W. G. Adams	Boston, Mass	Sept. 11, 1866	57, 838
Rice, Hulling	L. Cole	New Gloucester, Me	June 16, 1836	
Rice hulling and cleaning machine	H. N. Black	Philadelphia, Pa	Nov. 13, 1860	30, 653
Rice hulling and cleaning machine	J. Campbell	Winnsborough, S. C	May 31, 1827	
Rice hulling and cleaning machine	D. Henwood and J. Stephens	Brooklyn, N. Y	July 20, 1858	20, 971
Rice hulling and cleaning machine	J. L. Norton	New York	Mar. 10, 1826	
Rice hulling and cleaning machine	J. T. Ricketts	Cameron, Va	Aug. 8, 1808	
Rice, Hulling and dressing	S. Dodson	Bloomsburgh, Pa	June 16, 1863	38, 886
Rice hulling and finishing machine	R. Anderson	Brooklyn, N. Y	Feb. 21, 1860	27, 195
Rice hulling and pearling machine	J. Groat	Troy, N. Y	July 11, 1844	3, 659
Rice, Hulling and polishing	J. W. Walker	Madison, Ga	Dec. 16, 1823	
Rice hulling and polishing machine	C. B. Horton	Elmira, N. Y	Aug. 28, 1860	29, 788
Rice hulling and polishing machine	L. E. Lee	New Orleans, La	Aug. 22, 1871	118, 251
Rice hulling and scouring machine	C. R. Harvey and E. Tracy	Poughkeepsie, N. Y	May 30, 1837	210
Rice hulling and shelling machine	E. Spencer	New Haven, Conn	Dec. 5, 1821	
Rice-hulling machine	W. G. Adams	Franklin, Mass	May 28, 1867	65, 037
Rice-hulling machine	W. Ager	Rohrsburgh, Pa	Sept. 15, 1857	18, 176
Rice-hulling machine	R. and J. E. Anderson	Brooklyn and New York, N. Y.	Oct. 30, 1855	13, 713
Rice-hulling machine	J. S. Bossard	Sumterville, S. C	July 13, 1858	20, 860

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Rice-hulling machine	F. and L. Burdick	South East, N. Y	May 4, 1858	20, 138
Rice-hulling machine	L. F. Currier	Portland, Me	Jan. 27, 1857	16, 469
Rice-hulling machine	S. Dewey	Hartford, Vt	Mar. 2, 1811	....
Rice-hulling machine	P. Dickenhof	Philadelphia, Pa	June 15, 1858	20, 552
Rice-hulling machine	E. T. Ganneron	Paris, France	June 4, 1867	65, 480
Rice-hulling machine	A. M. George	Nashua, N. H	Mar. 9, 1858	19, 557
Rice-hulling machine	J. M. Hendricks	Philadelphia, Pa	Jan. 28, 1868	73, 716
Rice-hulling machine	C. Hoxie	....	Jan. 7, 1803	....
Rice-hulling machine	D. Lombard	Boston, Mass	Oct. 23, 1860	30, 489
Rice-hulling machine	H. B. Stevens	Buffalo, N. Y	Dec. 16, 1873	145, 693
Rice-hulling machine	D. H. Southworth	New York, N. Y	Mar. 26, 1867	63, 320
Rice-hulling machine	J. F. Taylor	Charleston, S. C	July 6, 1858	20, 830
Rice-hulling machine	R. P. Walker	New York, N. Y	July 6, 1858	20, 833
Rice, Machine for beating out	J. Beck and J. Coppinger	Beck's Ferry, S. C	Mar. 19, 1810	....
Rice, &c., Machine for hulling	W. Groat	Troy, N. Y	Aug. 28, 1840	1, 745
Rice, Machine for hulling and pearling	C. Jacobs	Brooklyn, N. Y	Sept. 3, 1846	4, 736
Rice, Machine for hulling, cleaning, and polishing	C. E. Rowan	Brooklyn, N. Y	Mar. 7, 1865	46, 708
Rice, Machinery for pearling, polishing, and finishing.	R. P. Walker	New York, N. Y	Oct. 26, 1858	21, 913
Rice, Machine for pounding	J. Tallow	New Orleans, La	Aug. 10, 1858	21, 156
Rice, Machine for separating scoured	J. Dellet	....	Dec. 23, 1796	....
Rice-mill	J. Ravenel	Charleston, S. C	Apr. 3, 1829	....
Rice-mill, Steam	J. L. Norton	Charleston, S. C	Dec. 16, 1823	....
Rice, Millstone-dress for hulling	C. R. Barnes	Owego, N. Y	Feb. 20, 1855	12, 408
Rice, Mode of cleaning	W. Ager	Rohrsburgh, Pa	Dec. 21, 1858	22, 337
Rice, Mortar for dressing or redressing	J. J. Cordes	United States	Sept. 19, 1838	929
Rice or seed drill tooth	D. E. McSherry	Dayton, Ohio	Oct. 8, 1867	69, 571
Rice-polishing	L. H. Colborn	Baltimore, Md	Apr. 5, 1859	23, 449
Rice-polishing machine	S. Dodson	Bloomsburgh, Pa	Dec. 15, 1863	40, 917
Rice-polishing machine	D. Lombard	Boston, Mass	Sept. 4, 1860	29, 893
Rice-polishing machine	C. E. Rowan	New York, N. Y	Nov. 1, 1859	25, 981
Rice-pounding machine	A. D. Moore	New Hanover, N. C	Jan. 19, 1809	....
Rice-pounding machine	A. H. Sierverd	New Orleans, La	Sept. 24, 1872	131, 572
Rice-pounding machine	J. H. White	Lima, Peru	Aug. 11, 1868	81, 042
Rice-pounding mortar	J. Ravenel	Charleston, S. C	May 17, 1828	....
Rice, Pounding the husk off	J. Reed	Charleston, S. C	June 9, 1809	....
Rice-reaping implement	W. J. McIntosh	Savannah, Ga	Apr. 15, 1856	14, 673
Rice, Scouring or skinning	S. Mulliken	....	Feb. 20, 1797	....
Rice-scouring machine	D. Lombard	Boston, Mass	Sept. 4, 1860	29, 894
Rice-screen	W. C. Chapman	Charleston, S. C	June 14, 1870	104, 112
Rice-separating machine	H. B. Stevens	Buffalo, N. Y	Nov. 18, 1873	144, 803
Rice-sowing machine	J. A. Reynolds	Savannah, Ga	Feb. 19, 1867	62, 226
Rice, wheat, corn, &c., Process and apparatus for treating.	R. B. Fitts	Philadelphia, Pa	July 25, 1871	117, 271
Rice, wheat, &c., Process and apparatus for cleaning, decorticating, and scouring.	A. B. Paige	Washington, D. C	Mar. 19, 1872	124, 848
Rick-cover	P. M. Brown	Carrollton, Ill	Dec. 3, 1872	133, 516
Rick-cover, Portable	J. W. Fitzgerald	Jerseyville, Ill	June 24, 1873	140, 127
Riddle, Molders'	J. C. Ward and J. Hudson	Peekskill, N. Y	Feb. 9, 1869	86, 789
Riddle or sieve	W. Page	Epsom, England	Nov. 21, 1871	121, 192
Riding or warping bit	C. Perley	New York, N. Y	Jan. 31, 1865	46, 135
Riffle-box	R. H. Dunning	North San Juan, Cal	Sept. 18, 1866	58, 079
Riffle-box	F. R. Ford	Ophir, Cal	Mar. 4, 1856	14, 357
Rifle and other fire-arm	J. R. Thomas	Collinsworth, Ga	May 19, 1840	1, 611
Rifle back-sight	E. Allen	Worcester, Mass	Oct. 28, 1862	36, 760
Rifle-ball mold	L. Evans	Morgantown, Va	Sept. 18, 1860	30, 054
Rifle-balls, Casting	P. Naylor	New York, N. Y	Dec. 24, 1861	34, 006
Rifle-barrel	M. S. Colvin	East Randolph, N. Y	June 11, 1872	127, 849
Rifle, Breech-loading	C. W. Alexander	Moorefield, Va	May 25, 1858	20, 315
Rifle, Cane	R. N. Lambert	Upton, Mass	Feb. 27, 1832	....
Rifle for sharpening edged tools	P. Barlow	Dutchess County, N. Y	Mar. 1, 1831	....
Rifle for sharpening edged tools	P. Barlow	Amenia, N. Y	June 13, 1831	....
Rifle for sharpening harvester-cutters	J. R. Cliffton	West Unity, Ohio	Nov. 26, 1872	133, 408
Rifle, Harvester-cutter	J. R. Cliffton	West Unity, Ohio	July 16, 1872	129, 103
Rifle, Harvester-cutter	W. H. Daniels	Bryan, Ohio	Jan. 9, 1872	122, 573
Rifle, musket, &c	J. Miller	Brighton, N. Y	June 11, 1829	....
Rifle-muzzle	J. H. Rector	Syracuse, N. Y	Dec. 18, 1847	5, 402
Rifle, Repeating	I. Jennings	New York	Sept. 22, 1821	....
Rifle, Scythe	W. H. Daniels	Bryan, Ohio	Apr. 15, 1873	137, 763
Rifle, Scythe	E. J. Post	Vienna, N. J	Mar. 4, 1856	14, 367
Rifle, Scythe	B. Swift	Washington, N. Y	June 11, 1829	....
Rifle-sight	W. J. Stillman	Rome, Italy	Dec. 17, 1861	33, 965
Rifle-sight, Convertible	E. B. Beach	West Meriden, Conn	Apr. 9, 1867	63, 690
Rifle, Telescopic sight for	J. B. Wood	Norwich, N. Y	Aug. 30, 1864	44, 057
Rifles, Attachment of loading-muzzle for	D. Smith	Scipio, N. Y	Feb. 20, 1849	6, 124
Rifles, Machine for giving increased twist in cutting.	E. Williams and J. Culbertson	Kenton County, Ky	Mar. 12, 1850	7, 178
Rifles, Manufacturing	J. W. Plummer and J. Clark	Wayne Township, Ohio	May 17, 1832	....
Rifles, Moving loading-muzzle for	A. Clark	Cambridge, Mass	Apr. 24, 1840	1, 565
Rifles, Patching balls for breech-loading	L. H. Gibbs	New York, N. Y	Oct. 26, 1858	21, 924
Rifles, &c., Percussion-lock for	J. Madbery and S. Kellogg	Rochester, N. Y	June 16, 1826	....
Rifles, Side percussion-lock for	E. Strong	Claridon, Ohio	Aug. 2, 1831	....
Rifling-machine	G. W. Bigelow	New Haven, Conn	Mar. 24, 1863	38, 000
Rifling-machine	T. Powers	Philadelphia, Pa	Dec. 2, 1862	37, 054
Rifling-machine	C. Sharps	Philadelphia, Pa	Dec. 2, 1862	37, 057
Rifling machine, Compound	E. K. Root	Hartford, Conn	Jan. 23, 1855	12, 285
Rig for sloops and schooners	J. Atwood, jr	Provincetown, Mass	Sept. 3, 1867	68, 336
Rig of vessels, Fore-and-aft	G. W. Geran	Brooklyn, N. Y	July 29, 1856	15, 420
Rigging and spars of ships and other navigable vessels.	B. Ricketson	New Bedford, Mass	Sept. 16, 1862	36, 482
Rigging, Apparatus for setting up ship's	B. Ricketson	New Bedford, Mass	Apr. 2, 1861	31, 908
Rigging-clamp	J. H. Gillis	Washington, D. C	Nov. 14, 1871	120, 962
Rigging-clasp	G. W. Soule	Freeport, Me	Apr. 30, 1861	32, 210
Rigging coupling, Standing	J. Higgins	Montague, Mich	July 30, 1872	130, 049
Rigging, Device for releasing standing	F. Wittram	San Francisco, Cal	Nov. 23, 1869	97, 261
Rigging, Device for worming and serving	I. W. Bowden and J. D. Leach	Penobscot, Me	June 27, 1871	116, 261
Rigging for gaff top-sails	C. Anthony	Providence, R. I	May 18, 1869	90, 148
Rigging, &c., Machine for making thimbles for	W. Field	Providence, R. I	Nov. 16, 1852	9, 402

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Rigging, Machinery for worming	J. C. Ginn	South Thomaston, Me	Sept. 5, 1854	11, 645
Rigging, Means of attaching sheer-poles to standing.	E. Smith	New York, N. Y	Sept. 19, 1865	50, 046
Rigging, Means of setting up ship's	S. Smith and W. H. Fludder	Newport, R. I	June 16, 1863	38, 919
Rigging of vessels, Machine for worming, parceling, and serving the.	P. McLaughlin	Camden, Me	May 18, 1858	20, 287
Rigging of vessels, Setting up the standing	B. W. Booth	United States Navy, Washington, D. C.	Sept. 28, 1825	....
Rigging, Ratlin-attachment for	J. C. Knowlton	Providence, R. I	Nov. 14, 1871	120, 820
Rigging-setting clamp	J. W. Slaight and J. W. Androvatt.	Prince's Bay, N. Y	May 3, 1870	102, 605
Rigging, Setting up ship's	E. N. Thompson	Bristol, Me	July 17, 1860	29, 204
Rigging, Ship's	J. E. Cole	Brooklyn, N. Y	July 14, 1857	17, 780
Rigging, Ship's standing	F. Howes	Yarmouth Port, Mass	Feb. 13, 1855	12, 390
Rigging, &c., Spring-link for wire	J. E. Liardet	Middlesex County, England	June 4, 1872	127, 491
Rigging-stopper	T. G. Bell	Brooklyn, N. Y	Dec. 23, 1873	145, 833
Rigging-stopper	H. Thompson	Rockland, Me	June 19, 1866	55, 789
Rigging thimble, Ship's	T. G. Bell	Brooklyn, N. Y	May 27, 1873	139, 230
Rigging to mast-heads, Attaching	W. H. Allen	United States Navy	Apr. 25, 1822	....
Rigging to masts, Apparatus for attaching standing.	J. Nute	Boston, Mass	Sept. 6, 1870	107, 093
Rigging, Vessel	R. B. Forbes	Boston, Mass	Apr. 12, 1870	101, 851
Rigging, Vessel	G. Taylor	Harwich, Mass	Mar. 26, 1872	124, 986
Rigging vessels	S. Sayre	Bordentown, N. J	May 9, 1807	....
Rigging vessels	G. F. Trescott	Charleston, S. C	Mar. 24, 1857	16, 890
Rigging vessels	S. Wells	Boston, Mass	July 24, 1822	....
Right or left hand lock	L. R. Livingston, J. J. Roggen, and C. Adams.	Pittsburgh, Pa	May 1, 1849	6, 409
Rim-press and tire-heater	J. H. Britton	Painesville, Ohio	Oct. 5, 1869	95, 420
Ring:				
See Cast ring.				
Clasp-ring.				
Clinch-ring.				
Finger-ring.				
Galvanic ring.				
Halter-ring.				
Hame-ring.				
Harness-ring.				
Hitching-ring.				
Hog-ring.				
Hog's nose-ring.				
Hollow ring.				
Hose-ring.				
India-rubber ring.				
Key-ring.				
Knife-ring.				
Martingale-ring.				
Napkin-ring.				
Open ring.				
Packing-ring.				
Sail-ring.				
Scarf-ring.				
Snout-ring.				
Spermatic-ring.				
Spermatorrhœa-ring.				
Spinning-ring.				
Spinning-machine ring.				
Split ring.				
Stove-pipe ring.				
Suspension-ring.				
Umbrella-ring.				
Whip-socket ring.				
Yoke-ring.				
Ring-bending machine	W. H. Peckham	New York, N. Y	Apr. 28, 1868	77, 312
Ring-bolt	G. W. Devin	Ottumwa, Iowa	May 4, 1858	20, 149
Ring-bolt for ship and boat tackle	H. Bigelow and M. M. Camp	New Haven, Conn	Oct. 7, 1856	15, 837
Rings, buckles, &c., Method of lining	J. P. Hisley	Syracuse, N. Y	Nov. 16, 1869	96, 916
Ring-driver	A. Fisher	Whitinsville, Mass	June 27, 1871	116, 290
Ring, Finger	H. P. Richmond and T. E. Carpenter.	Providence, R. I	May 16, 1871	114, 856
Ring-jars, Process of making	J. S. and T. B. Atterbury	Pittsburgh, Pa	Oct. 30, 1866	59, 159
Ring-lock	W. I. Alston	Williamson County, Tenn	Jan. 18, 1859	22, 613
Ring-making machine	W. Serviss	Sidney, Ohio	Dec. 24, 1867	72, 688
Ring-making machine	J. Siddons	Rochester, N. Y	Dec. 29, 1868	85, 336
Ring stopper-nipper	C. Wardwell	Painesville, Ohio	Nov. 2, 1869	96, 367
Ring to prevent nocturnal emission	L. D. Sibley	Northampton, Mass	Apr. 22, 1856	14, 739
Rings for ring-spinning, Method of making	C. B. Morse	Rhinebeck, N. Y	Apr. 14, 1868	76, 797
Rink, Miniature	C. C. Hall	Saratoga Springs, N. Y	June 15, 1869	91, 437
Rippers and rag-loopers	H. M. Johnson	Marshall, Tex	Feb. 18, 1873	136, 065
Ripping-instrument	W. A. Fitch	Brooklyn, N. Y	Oct. 6, 1863	40, 163
Ripping-tool	J. O. Woods	New York, N. Y	Aug. 1, 1871	117, 588
Rising gate and faucet-gate	J. Brainard	Oneida County, N. Y	Oct. 4, 1817	....
River-boat	N. C. Dawson and A. Rucker	Pedlar's Mills, Va	Apr. 3, 1821	....
River-boat	D. Grieve	....	Feb. 20, 1801	....
River-cleaning apparatus	L. Straus	Louisville, Ky	Jan. 28, 1868	73, 938
River dike and levee	S. B. Driggs	New York, N. Y	Oct. 1, 1867	69, 416
River-navigating machinery	J. Godley	Alexandria, N. J	Feb. 22, 1823	....
Rivers and harbors, Method of removing bars from	S. S. Durfee	Chicago, Ill	Jan. 1, 1867	60, 864
Rivers and rapids navigable, Rendering shallow	J. Stevens	Hoboken, N. J	June 8, 1824	....
Rivers, Apparatus for removing sand-bars from	J. Halliday	New Orleans, La	Aug. 8, 1871	117, 772
Rivers, Device for forming channels in	A. W. Harlan	Croton, Iowa	June 21, 1870	104, 586
Rivers, Device for removing sand-bars in	A. Garnham	Saint Louis, Mo	June 3, 1873	139, 569
Rivers, Findin g the direction of streams for deepening the channels of.	W. Harris	Augusta, Ga	Mar. 27, 1847	5, 043
Rivers, Improving channels of	M. Barney	....	May 4, 1803	....
Rivers, Improving channels of	R. Putnam	New Orleans, La	May 6, 1841	2, 083
Rivers, Machine for clearing the bottoms of	J. Tucker	Baltimore, Md	Dec. 13, 1816	....
Rivers, Machine for delineating the course of	H. Collier	Smitherville, Ark	Oct. 30, 1860	30, 528
Rivers, &c., Machine for moving ground in	W. Schultz	Baltimore, Md	June 16, 1809	....
Rivers, Machine for removing snags and sawyers from the bed of.	H. M. Shreve	Saint Louis, Mo	Sept. 12, 1838	913
Rivers, Method of removing sand-bars from	E. Bell	Saint Paul, Minn	May 8, 1866	54, 489
Rivers, Mode of obstructing	A. B. Cooley	Philadelphia, Pa	Feb. 10, 1863	37, 613
Rivers, Mode of utilizing currents of	E. Valade	Memphis, Tenn	Jan. 7, 1873	134, 618
Rivers, Navigating and ferrying	E. Clark	Philadelphia, Pa	June 25, 1823	....
Rivers, Removing obstructions of	C. T. Baker	Providence, R. I	Apr. 12, 1819	....
Rivers, Raising mud from	J. Newman	Providence, R. I	June 27, 1809	....
Rivet	E. Bourne	Pittsburgh, Pa	Feb. 9, 1869	86, 726
Rivet	A. Boyd	Boston, Mass	July 5, 1870	105, 031
Rivet	W. Butterfield	Boston, Mass	May 30, 1871	115, 432
Rivet	H. E. Copeley	Brooklyn, N. Y	Mar. 29, 1870	101, 352
Rivet	J. N. Dennison	Newark, N. J	Feb. 7, 1865	46, 297
Rivet	J. W. Smith	Boston, Mass	Feb. 21, 1865	46, 504
Rivet	E. S. Wheeler	Westport, Conn	Aug. 4, 1868	80, 791
Rivet	J. E. Wootten	Cressona, Pa	Aug. 6, 1867	67, 624

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Rivet	J. E. Wootten	Reading, Pa	Dec. 10, 1872	133, 737
Rivet and bolt cutter	D. D. Robinson	Niles, Mich	June 5, 1866	55, 366
Rivet and bolt machine	A. Reese	Pittsburgh, Pa	Feb. 21, 1860	27, 238
Rivets and heading screws, &c	I. W. Harvey	Jamestown, N. Y	June 29, 1833	....
Rivet and nail for trunks, &c	L. Houghton	Philadelphia, Pa	Apr. 15, 1843	3, 048
Rivet and screw blank heading machine	V. D. M. Upham	Brooklyn, N. Y	Dec. 27, 1870	110, 515
Rivet and washer	E. Bourne	Pittsburgh, Pa	Dec. 14, 1869	97, 806
Rivet, Cooper's	G. W. Sowle	New Bedford, Mass	May 11, 1839	....
Rivet for leather bands	F. W. Wood	New York, N. Y	Aug. 14, 1847	5, 245
Rivet-heading machine	J. A. Wells	Waterbury, Conn	Oct. 7, 1873	143, 549
Rivet-machine	J. E. Crisp	Charlestown, Mass	Apr. 30, 1867	64, 202
Rivet-machine	W. Van Anden	New York, N. Y	May 2, 1848	5, 542
Rivet-machine block-dies, Cleansing and cooling	D. L. Weatherhead	Philadelphia, Pa	May 17, 1853	9, 735
Rivet-making machine	G. B. Brayton	Providence, R. I	Nov. 15, 1864	45, 116
Rivet-making machine	F. C. Cannon	Boston, Mass	Sept. 25, 1839	1, 335
Rivet-making machine	R. H. Cole	Saint Louis, Mo	Apr. 7, 1857	16, 967
Rivet-making machine	F. W. Hoffman and C. W. G. Fordan.	New York County, N. Y	July 3, 1855	13, 175
Rivet-making machine	J. Jennings	New York	Apr. 25, 1808	....
Rivet-making machine	C. Lyon	New York	Sept. 2, 1840	1, 756
Rivet-making machine	H. G. Reed	Scituate, Mass	Mar. 12, 1845	3, 945
Rivet-making machine	J. H. Swett	Birmingham, Pa	June 30, 1868	79, 516
Rivet-making machinery	O. Edes and A. Holmes	Braintree, Mass	Apr. 24, 1840	1, 564
Rivet-setting machine	M. D. Brooks	Boston, Mass	Sept. 2, 1873	142, 434
Rivet-tool	J. Miller	Swedenborough, N. S	Mar. 16, 1869	87, 863
Rivets, bullets, &c., Machine for making	C. B. Allen	Philadelphia, Pa	Feb. 8, 1859	22, 843
Rivets, Manufacture of hollow	M. Bray	Newton, Mass	July 15, 1873	140, 881
Rivets, Manufacturing cooper's	T. Allen	Plymouth, Mass	Feb. 20, 1833	....
Rivets, Tool for cutting	P. Wixcel	La Fayette, Ill	Nov. 29, 1864	45, 293
Riveting-apparatus	J. Berry	Buffalo, N. Y	Aug. 22, 1871	118, 328
Riveting-device	T. J. Allison	Turnersburgh, N. C	Apr. 23, 1872	125, 924
Riveting-device	S. L. Bower	Auburn, N. Y	Aug. 2, 1870	105, 897
Riveting leather bands	W. H. Jennidon	New York, N. Y	Aug. 14, 1847	5, 246
Riveting-machine	J. Adt	Wolcottville, Conn	May 22, 1866	54, 837
Riveting-machine	J. Adt	Wolcottville, Conn	Sept. 10, 1867	68, 6?0
Riveting-machine	J. Berry	Buffalo, N. Y	Feb. 20, 1872	123, 763
Riveting-machine	J. Berry	Buffalo, N. Y	Nov. 26, 1872	133, 294
Riveting-machine	J. Howell and D. Birdsall	Jersey City, N. J	Apr. 19, 1864	42, 375
Riveting-machine	R. Lyon	West Troy, N. Y	Aug. 7, 1866	57, 045
Riveting-machine	E. Manley	Marion, N. Y	Jan. 22, 1856	14, 137
Riveting-machine	W. Sellers	Philadelphia, Pa	Feb. 7, 1871	111, 575
Riveting-machine	W. Sellers	Philadelphia, Pa	Feb. 18, 1873	136, 100
Riveting-machine	T. Shaw	Philadelphia, Pa	June 1, 1869	90, 693
Riveting-machine	P. B. Tyler, W. Jones, and B. Lathrop.	Springfield, Mass., and Sandusky, Ohio.	June 22, 1858	20, 685
Riveting-pin clamp	E. L. Gaylord	Terryville, Conn	June 13, 1871	115, 840
Riveting-tool	B. F. Cobb	West Troy, N. Y	June 13, 1871	115, 821
Riving equal pieces from a block, Method of	H. White	Oneida Castle, N. Y	July 22, 1856	15, 398
Riving-machine	A. Kendall	Cleveland, Ohio	Sept. 5, 1854	11, 649
Roach and bug trap	T. Williams	Tompkinsville, N. Y	Nov. 15, 1870	109, 282
Roach and bug trap	T. Williams	Tompkinsville, N. Y	Jan. 24, 1871	111, 291
Roach and mouse trap	W. J. Webb	Philadelphia, Pa	Sept. 26, 1871	119, 435
Roach-trap	J. Goodyear, jr., and T. J. Berry	Philadelphia, Pa	Feb. 26, 1856	14, 336
Roach-trap	A. N. Shell	Richmond, Va	Oct. 5, 1858	21, 726
Road and pavement, Asphalt	E. J. De Smedt	New York, N. Y	Dec. 13, 1870	110, 121
Road-bed	N. B. Heafer	Bloomington, Ill	Feb. 21, 1871	112, 034
Road, Constructing	T. Earle	Burlington, N. J	Oct. 14, 1835	....
Road, Construction of	E. Chadwick	Mortlake, England	Aug. 19, 1873	141, 995
Road-dresser	S. D. Reynolds	Rochelle, Ill	Nov. 21, 1871	121, 129
Road-gate	E. Nicholson	Rockport, Ohio	Aug. 11, 1868	80, 992
Road-making	J. S. Williams	Fulton, Ohio	July 1, 1836	....
Road-making device	T. T. Barber	Hampton, Conn	Sept. 5, 1865	49, 693
Road-repairing machine	A. Kimball	Fitchburgh, Mass	Feb. 6, 1855	12, 352
Road-roller	A. Lindelof	Brooklyn, N. Y	Feb. 11, 1873	135, 825
Road-roller, Steam	T. Aveling	Rochester, England	Oct. 15, 1872	132, 232
Road rolling and ramming machine	A. D. Ross	Cincinnati, Ohio	Aug. 22, 1871	118, 395
Road-scraper	J. W. Weston	Windsor, Ill	Nov. 18, 1873	144, 717
Road-steamer steering-apparatus	G. W. Fitts	Oberlin, Ohio	Aug. 8, 1871	117, 759
Road-steamer wheel	J. S. Fisher	Utica, Mo	Mar. 25, 1873	137, 065
Road-trimmer	B. Goodrich	Stratham, N. H	Nov. 11, 1873	144, 532
Roads and carriages therefor, Roller or wheel	J. Gardiner	Washington, D. C	Mar. 16, 1829	....
Roads, Machine for filling ruts and leveling	J. W. Minor and D. P. Ward	New Bedford, Mass	Aug. 27, 1867	68, 224
Roads, Machine for repairing	N. Potter	East Hamburgh, N. Y	June 25, 1850	7, 462
Roads, Rut-shears for repairing and improving	S. Mallory	Alexander, N. Y	July 26, 1843	3, 198
Roads, streets, &c., Composition of matter and constructing.	J. Martineau	Elbridge, N. Y	Aug. 11, 1834	....
Roads with cement, Constructing	J. Robey, jr	Albany, N. Y	Aug. 17, 1835	....
Roadway for rail-cars and ordinary vehicles	J. L. Mott	Mott Haven, N. Y	Sept. 17, 1850	7, 657
Roadways and streets, Machine for removing snow and ice from.	C. G. Waterbury	New York, N. Y	Nov. 11, 1873	144, 488
Roadways, Machine for removing snow and ice from.	C. G. Waterbury	New York, N. Y	Dec. 23, 1873	145, 822
Roadways, Machine for removing snow from	G. Hart	Tarrytown, N. Y	Dec. 16, 1873	145, 566
Roadways, Water-courses across	A. G. Hodgman	Lowell, Mass	Feb. 27, 1872	124, 061
Roaster: *See* Coffee-roaster. Nut-roaster. Pea-nut roaster. Wheat-roaster.				
Roaster	J. Mulligan	New York, N. Y	May 10, 1859	23, 936
Roaster and broiler, Combined	T. Drake	Cincinnati, Ohio	June 7, 1870	103, 998
Roasting and baking, Device for	J. J. Carroll	Washington, D. C	June 21, 1870	104, 422
Roasting and desulphurizing furnace	W. Bushnell	Elizabeth, N. J	Aug. 27, 1872	130, 481
Roasting-jack	E. Whitman, jr	Winthrop, Me	Apr. 28, 1834	....
Robe	J. Klamke	New York, N. Y	July 24, 1866	56, 481
Robe for infants, Creeping	M. M. Cashman	Boston, Mass	Nov. 12, 1867	70, 801
Rock and earth drill with attached tube	L. M. Rumsey and W. P. Smith	Saint Louis, Mo	June 1, 1869	90, 787
Rock and ore crusher	D. Dick	Meadville, Pa	Oct. 4, 1864	44, 518
Rock and ore crusher	C. Forster	Pittsburgh, Pa	Apr. 29, 1873	138, 240
Rock and ore crushing roll	A. Alexander	Pittsburgh, Pa	Apr. 2, 1872	125, 189

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Invention.	Inventor.	Residence.	Date.	No.
Rock and other substances, Machine for drilling or boring.	S. Pettes	Schenectady, N. Y	July 3, 1840	1, 672
Rock and well boring machine, Swivel for	J. H. Luther	Petroleum Centre, Pa	May 28, 1872	127, 177
Rock, Boring	I Overall	Liberty, W. Tenn	Apr. 23, 1830	....
Rock-boring apparatus	T. St. John	Dunbar, Pa	May 3, 1870	102, 610
Rock-boring machine	F. B. Doering	London, England	Dec. 24, 1867	72, 465
Rock-boring machine	I. Overall	Liberty, Tenn	Mar. 14, 1828	....
Rock-boring machine	J. Sanford	Sharon, Conn	Dec. 10, 1812	....
Rock-boring machine	E. Talbot	Windsor, Conn	June 7, 1853	9, 774
Rock-boring tool	R. Leschot	Paris, France	July 14, 1863	39, 235
Rock-breaker	A. Hitchcock	New York, N. Y	May 4, 1869	89, 765
Rock-breaking device	A. W. Hall	New York, N. Y	Oct. 4, 1864	44, 580
Rock-breaking machine	J. B. Wayne	Detroit, Mich	Feb. 9, 1864	41, 585
Rock-chamber drill	H. M. Stow	San Francisco, Cal	Feb. 19, 1867	62, 160
Rock-channeling machine	E. G. Lamson	Windsor, Vt	Apr. 20, 1869	89, 264
Rock, &c., channeling machine	R. W. Love and A. Ball	Windsor, Vt	Dec. 24, 1867	72, 649
Rock-channeling-machine cutter	M. C. Bullock	Rutland, Vt	Oct. 24, 1871	120, 182
Rock-crusher	S. F. Hodge	Detroit, Mich	July 18, 1865	48, 813
Rock crusher and tempering machine	J. Bingham and R. Coward	Pittsburgh, Pa	July 7, 1868	79, 630
Rock-crushing machine	E. J. Wilson	Fair Play, Cal	Dec. 22, 1868	85, 153
Rock-crushing mill	J. H. Day	Walla-Walla, Wash	Aug. 31, 1869	94, 291
Rock cutting and drilling machine	W. Plumer	Boston, Mass	Oct. 6, 1857	18, 352
Rock, Disintegrating	J. Johnson and R. C. Overton	Saco, Me., and New York, N. Y.	June 11, 1867	65, 677
Rock-drill	W. F. Ash	Springfield, Ohio	May 4, 1852	8, 916
Rock-drill	A. Ball	Claremont, N. H	Mar. 21, 1871	112, 885
Rock-drill	W. F. Banks	Brookfield, Conn	Aug. 24, 1869	93, 947
Rock-drill	W. M. Barton	Russellville, Tenn	Aug. 19, 1856	15, 595
Rock, &c., drill	W. Bickel	Pottsville, Pa	July 18, 1865	48, 785
Rock-drill	A. Bigelow	Hamilton, Canada	July 30, 1861	32, 957
Rock-drill	A. Blatchly	Central City, Colo	Mar. 1, 1870	100, 252
Rock-drill	N. P. Bradish	Jerseyville, Ill	June 29, 1869	92, 005
Rock-drill	J. W. Brooks, S. F. Gates, and C. Burleigh.	Milton, Boston, and Fitchburgh, Mass.	Mar. 6, 1866	52, 960
Rock-drill	M. C. Bullock	New York, N. Y	Jan. 9, 1872	122, 514
Rock-drill	T. H. Burridge	Saint Louis, Mo	Mar. 10, 1857	16, 787
Rock-drill	G. F. Case	New York, N. Y	June 29, 1869	92, 014
Rock-drill	J. Chapman	Amsterdam, N. Y	Oct. 17, 1871	120, 036
Rock-drill	J. Cody	New York, N. Y	Apr. 5, 1864	42, 167
Rock-drill	J. Cody	New York, N. Y	June 29, 1869	91, 912
Rock-drill	C. Courtois	Volcano, Cal	Sept. 22, 1863	40, 029
Rock-drill	L. E. Cushman and J. S. French	North Bloomfield, Cal	July 3, 1860	28, 971
Rock-drill	J. D. Dale	Rochester, N. Y	Feb. 27, 1866	52, 827
Rock-drill	C. H. Davis	Troy, N. Y	Apr. 6, 1869	88, 696
Rock-drill	C. H. Davis	San Francisco, Cal	Oct. 5, 1869	95, 569
Rock-drill	J. C. Dickey	Saratoga Springs, N. Y	May 23, 1865	47, 805
Rock-drill	J. C. Dickey	Saratoga Springs, N. Y	July 25, 1865	48, 914
Rock-drill	J. C. Dickey	New York, N. Y	Apr. 3, 1866	53, 586
Rock-drill	J. C. Dickey	New York, N. Y	May 29, 1866	55, 070
Rock-drill	L. Dow	New York, N. Y	Jan. 2, 1866	51, 814
Rock-drill	E. G. Dunham	Portland, Conn	Oct. 10, 1854	11, 779
Rock-drill	D. S. Early	Hummelstown, Pa	May 28, 1867	65, 064
Rock-drill	W. H. Elliot	New York, N. Y	Apr. 26, 1870	102, 383
Rock-drill	D. Evans	Philadelphia, Pa	Nov. 22, 1864	45, 147
Rock-drill	C. D. Foote	Fond du Lac, Wis	Dec. 18, 1866	60, 497
Rock-drill	E. L. Foote	Springfield, Ill	June 5, 1860	28, 569
Rock-drill	J. T. Foster and L. R. Bailey	New York, N. Y	Dec. 5, 1848	5, 951
Rock-drill	G. P. Ganster	New York, N. Y	Apr. 3, 1866	53, 599
Rock-drill	S. F. Gates	Boston, Mass	June 5, 1866	55, 277
Rock-drill	L. M. Gilmore	Janesville, Wis	Apr. 3, 1866	53, 602
Rock-drill	H. B. Gingrich	Bradford, Ohio	Dec. 12, 1871	121, 866
Rock-drill	E. J. Graham	Philadelphia, Pa	Oct. 24, 1865	50, 576
Rock-drill	J. Greives	Brooklyn, N. Y	June 12, 1866	55, 488
Rock-drill	W. Harsen	New York, N. Y	Feb. 12, 1861	31, 430
Rock-drill	W. Z. Hatcher and W. L. Lance	Plymouth, Pa	June 28, 1870	104, 849
Rock-drill	J. D. Hope	Niagara Falls, N. Y	May 12, 1857	17, 304
Rock-drill	S. Ingersoll	Brooklyn, N. Y	Feb. 28, 1871	112, 254
Rock-drill	S. Ingersoll	New York, N. Y	Oct. 24, 1871	120, 279
Rock-drill	L. P. Jenks and G. A. Gardner	New York, N. Y	June 5, 1866	55, 307
Rock-drill	C. W. Johnson	Waterbury, Conn	July 25, 1865	49, 034
Rock-drill	H. Jung	Port Chester, N. Y	Jan. 30, 1866	52, 292
Rock-drill	M. Keefer	Millstone Point, Md	Dec. 15, 1868	84, 883
Rock-drill	D. Kennedy	Brooklyn, N. Y	Sept. 30, 1873	143, 355
Rock-drill	W. R. King	United States Army	Mar. 20, 1866	53, 305
Rock-drill	O. B. Latham	Seneca Falls, N. Y	Aug. 8, 1865	49, 281
Rock-drill	S. Lewis	Williamsburgh, N. Y	June 15, 1869	91, 352
Rock-drill	S. Lewis	Williamsburgh, N. Y	Apr. 12, 1870	101, 746
Rock-drill	W. Lewis	Harrisburgh, Pa	Aug. 10, 1858	21, 140
Rock-drill	J. M. Linscott	New York, N. Y	Dec. 19, 1865	51, 598
Rock-drill	W. H. Loomis and J. Hewitt	Saint Louis, Mo	Aug. 17, 1858	21, 205
Rock-drill	T. J. Lovegrove	Philadelphia, Pa	May 2, 1865	47, 601
Rock-drill	T. J. Lovegrove	Philadelphia, Pa	Mar. 7, 1865	46, 757
Rock-drill	R. C. M. Lovell	Covington, Ky	Feb. 16, 1869	86, 988
Rock-drill	L. G. Marshall	Philadelphia, Pa	Oct. 6, 1863	40, 17[illegible]
Rock-drill	J. M. May	Janesville, Wis	July 18, 1865	48, 8[illegible]
Rock-drill	J. M. May	Janesville, Wis	Sept. 19, 1865	50, 0[illegible]
Rock-drill	T. Mayhew	New York, N. Y	Dec. 5 1865	51, 33[illegible]
Rock-drill	D. Morrison	Portland, Me	May 30, 1871	115, 503
Rock-drill	J. Moulton	Boston, Mass	May 23, 1865	47, 856
Rock-drill	G. Mulhaupt	Buffalo, N. Y	June 20, 1865	48, 301
Rock drill	L. Nelson	Smyrna, Tenn	Nov. 21, 1871	121, 120
Rock-drill	J. E. Nesen	New York, N. Y	Dec. 1, 1857	18, 763
Rock-drill	J. North	New York, N. Y	June 22, 1869	91, 765
Rock-drill	G. E. Nutting and J. C. Githens.	New York, N. Y	July 8, 1873	140, 637
Rock-drill	H. Oterscamp	Eschweiler City, Prussia	Aug. 9, 1870	106, 197
Rock-drill	C. Peck	New Haven, Conn	Dec. 20, 1870	110, 280
Rock-drill	J. Peevy	Orono, Me	Mar. 31, 1868	76, 242

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Rock-drill	G. Phillips	Cadet, Mo	Dec. 1, 1868	84, 576
Rock-drill	G. B. Phillips	Poughkeepsie, N. Y	Mar. 28, 1871	113, 203
Rock-drill	J. Phillips and A. Tschop	Siddonsburgh, Pa	July 12, 1864	43, 523
Rock-drill	D. Ralston	Carlisle, Pa	Aug. 21, 1860	29, 716
Rock-drill	J. M. Raymond	New York, N. Y	Sept. 10, 1872	131, 301
Rock-drill	W. Roberts, jr	Copper Falls, Mich	Dec. 9, 1873	145, 364
Rock-drill	H. C. Sergeant	New York, N. Y	July 8, 1873	140, 596
Rock-drill	J. Shelley	Mahanoy Township, Pa	Feb. 7, 1871	111, 689
Rock-drill	H. and J. Shoemaker	Putneyville, Pa	Jan. 24, 1871	111, 265
Rock-drill	J. Y. Smith	Alexandria, Va	May 23, 1865	47, 870
Rock-drill	J. Y. Smith	Alexandria, Va	Apr. 24, 1866	54, 226
Rock-drill	G. W. Smith and C. F. Henis	Covington, Ky., and Cincinnati, Ohio.	Nov. 28, 1865	51, 230
Rock-drill	M. Stannard and J. R. Reynolds.	Hartford, Conn	May 7, 1872	126, 422
Rock-drill	J. M. Stephenson	Pendleton, Ind	Mar. 28, 1871	113, 107
Rock-drill	J. S. Stockham	Red Dog, Cal	Sept. 24, 1867	69, 159
Rock-drill	J. P. Summers	Tiffin, Ohio	Sept. 14, 1869	94, 923
Rock-drill	P. Sweeney	New York, N. Y	Jan. 2, 1867	51, 902
Rock-drill	J. H. Thomas	Lacon, Ill	Mar. 31, 1868	76, 118
Rock-drill	N. Tucker, L. Williams, and H. H. Coppock.	Pleasant Hill, Ohio	Nov. 8, 1870	109, 158
Rock-drill	J. Von Sparre	Oberhaussen, Prussia	Oct. 8, 1872	132, 123
Rock-drill	O. G. Warren	New York, N. Y	May 22, 1866	54, 982
Rock-drill	J. B. Wayne and W. Evered	Detroit, Mich	Feb. 10, 1863	37, 654
Rock-drill	W. Weaver	Phœnixville, Pa	July 16, 1867	66, 756
Rock-drill	W. Weaver	Phœnixville, Pa	Sept. 16, 1873	142, 824
Rock-drill	C. H. Webb	San Francisco, Cal	May 1, 1866	54, 454
Rock-drill	J. M. Whartnaby	Philadelphia, Pa	Sept. 14, 1869	94, 854
Rock-drill	L. White and J. T. Bumgarner.	Davenport, Iowa	Nov. 9, 1858	22, 046
Rock-drill	L. White	Davenport, Iowa	June 14, 1859	24, 421
Rock-drill	T. R. White	Philadelphia, Pa	Apr. 9, 1867	63, 681
Rock-drill	C. Whitmore	North Vernon, Ind	Aug. 11, 1868	81, 047
Rock-drill	U. Wiggins	Boston, Mass	May 2, 1843	3, 071
Rock-drill	G. L. Williams	Mine La Motte, Mo	Jan. 17, 1871	111, 025
Rock-drill	H. B. Williams and J. C. Wilson.	Appleton, Wis	Dec. 5, 1865	51, 376
Rock-drill	G. H. Wood	Green Bay, Wis	Aug. 12, 1856	15, 540
Rock-drill	G. H. Wood	Green Bay, Wis	Nov. 3, 1857	18, 561
Rock-drill	S. H. Yerden	Stone Mills, N. Y	Aug. 26, 1873	142, 319
Rock-drill apparatus	W. S. Fickett	Rochester, N. Y	Apr. 18, 1865	47, 220
Rock-drill carriage	T. Doane	Boston, Mass	Dec. 10, 1867	71, 999
Rock-drill carriage	A. P. Thomas and W. J. Evans	Copper Falls Mine, Mich	June 24, 1873	140, 173
Rock-drill carriage	G. E. Towne and W. W. Bailey.	Fitchburgh, Mass	May 13, 1873	138, 959
Rock-drill guide and core-barrel, Revolving	G. Frisbee	Pottsville, Pa	July 1, 1873	140, 357
Rock-drill jar-movement	H. Sontag	Osnabrüch, Germany	Aug. 1, 1871	117, 573
Rock-drill platform	P. Sweeney and J. Bradburn	New York, N. Y	June 23, 1868	79, 158
Rock drill point	C. H. Davis	San Francisco, Cal	Aug. 17, 1868	93, 684
Rock-drill, Portable hand	J. B. Millner	Watkins, N. Y	Mar. 19, 1872	124, 845
Rock-drill, Power	F. Walts and D. Mills	Watertown, N. Y	Jan. 2, 1872	122, 342
Rock-drill-rod safety-clamp	M. C. Bullock	New York, N. Y	Mar. 18, 1873	136, 812
Rock-drill spindles, Screw-clamp support for	G. Allen	Waterford, N. Y	June 18, 1872	128, 092
Rock-drills, Core-retainer for tubular	C. J. Stevenson	Hazel Green, Wis	Dec. 12, 1871	121, 821
Rock-drills, &c., Die for forming	D. Minthorn	Gouverneur, N. Y	Dec. 16, 1873	145, 519
Rock-drills, Engine for operating	J. D. Butler	North Adams, Mass	Apr. 25, 1865	47, 390
Rock-drills, Feeding-mechanism for	J. Doty	Buffalo, N. Y	July 15, 1873	140, 767
Rock-drills for shaft-boring apparatus, Expanding	H. Sontag	Saint Louis, Mo	Jan. 14, 1873	134, 943
Rock-drills for wells, &c., Device for operating	C. S., O. D., and H. H. Simmons	Watertown, N. Y	July 16, 1872	129, 605
Rock-drills, Guide for rotary	A. Bell	Claremont, N. H	Jan. 7, 1873	134, 506
Rock-drills, Hydraulic feed for revolving	R. Allison	Port Carbon, Pa	Dec. 23, 1873	145, 775
Rock-drills, Mode of operating	A. Blatchly	San Francisco, Cal	June 4, 1872	127, 548
Rock-drills or oil-wells, Reamer for	A. Perrin and O. P. Callaway	San Diego, Cal	July 9, 1872	128, 747
Rock, Drilling	J. W. and C. Post	Washington, D. C	Feb. 2, 1830	....
Rock, Drilling and blasting	J. W. Post	Washington, D. C	Oct. 4, 1830	....
Rock-drilling apparatus, Submarine	T. Kendall	New York, N. Y	Apr. 17, 1849	6, 313
Rock-drilling engine	G. Phillips	Alleghany, Cal	Aug. 1, 1871	117, 678
Rock-drilling engine, Stand for	F. B. Doering	London, England	Dec. 24, 1867	72, 466
Rock-drilling machine	N. Ball and J. A. Stansbury	East Palestine and Salem, Ohio.	Nov. 28, 1871	121, 315
Rock-drilling machine	C. Bernard	Florida, Mass	Sept. 26, 1871	119, 215
Rock-drilling machine	D. W. Bricher	Clay Lick, Pa	Aug. 13, 1872	130, 471
Rock-drilling machine	C. Burleigh	Fitchburgh, Mass	Mar. 6, 1866	92, 961
Rock-drilling machine	C. Burleigh	Fitchburgh, Mass	Nov. 27, 1866	59, 960
Rock-drilling machine	C. Burleigh	Fitchburgh, Mass	Apr. 18, 1871	113, 850
Rock-drilling machine	T. H. Coate and L. A. John	Pleasant Hill, Ohio	Dec. 5, 1871	121, 590
Rock-drilling machine	J. Cody	New York, N. Y	Aug. 13, 1872	130, 412
Rock-drilling machine	M. P. Coons	Lansingburgh, N. Y	Oct. 24, 1848	5, 881
Rock-drilling machine	T. Crossett	North San Juan, Cal	July 30, 1861	32, 963
Rock-drilling machine	J. F. Dittman	Pittsburgh, Pa	Aug. 20, 1872	130, 703
Rock-drilling machine	F. B. Doering	London, England	May 5, 1868	77, 597
Rock-drilling machine	G. Downing	Schuylerville, N. Y	Nov. 19, 1867	70, 978
Rock-drilling machine	J. S. Foster	Virginia, Nev	Mar. 15, 1864	41, 913
Rock-drilling machine	J. S. French	San Francisco, Cal	Sept. 29, 1863	40, 097
Rock-drilling machine	G. Frisbee	Titusville, Pa	May 23, 1871	115, 167
Rock-drilling machine	S. Gable	Millerstown, Pa	Feb. 23, 1869	87, 162
Rock-drilling machine	R. Gidly	Freedom Plains, N. Y	Dec. 1, 1868	84, 543
Rock-drilling machine	L. M. Gilmore	Janesville, Wis	Sept. 11, 1860	30, 023
Rock-drilling machine	M. and J. P. Gore	Saint Louis, Mo	Dec. 2, 1856	16, 146
Rock-drilling machine	E. W. Gram	Negaunee, Mich	Sept. 15, 1868	82, 109
Rock-drilling machine	J. Hart	Savannah, Mo	Mar. 15, 1870	100, 756
Rock-drilling machine	W. Hide	New York, N. Y	May 22, 1866	55, 109
Rock-drilling machine	R. Hood	Dayton, Ohio	Sept. 19, 1865	50, 001
Rock-drilling machine	L. P. Jenks	Boston, Mass	July 7, 1857	17, 765
Rock-drilling machine	L. P. Jenks and G. A. Gardner	Boston, Mass., and New York, N. Y.	July 7, 1857	17, 766
Rock-drilling machine	F. Johnson	Toledo, Ohio	Apr. 1, 1873	137, 372
Rock-drilling machine	E. Jones and P. White	Brookfield, Mass	Dec. 21, 1809	....

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Rock-drilling machine	P. H. Lawrence	Springfield, Mass	July 24, 1866	56, 577
Rock-drilling machine	C. Lohnes	Springfield, Ohio	Mar. 18, 1873	137, 010
Rock-drilling machine	N. Nilson	Minneapolis, Minn	Oct. 8, 1872	132, 019
Rock-drilling machine	J. North	New York, N. Y	Dec. 24, 1872	134, 305
Rock-drilling machine	R. Nutty	New York, N. Y	Feb. 16, 1869	87, 061
Rock-drilling machine	G. B. Phillips	Poughkeepsie, N. Y	Nov. 9, 1869	96, 612
Rock-drilling machine	G. B. Phillips	Cleveland, Ohio	Sept. 24, 1872	131, 559
Rock-drilling machine	G. B. Phillips	Cleveland, Ohio	Oct. 1, 1872	131, 827
Rock-drilling machine	G. H. Pierce	Richmond, Canada	Nov. 26, 1872	133, 478
Rock-drilling machine	W. Pierce	Onion Valley, Cal	Nov. 19, 1867	71, 056
Rock-drilling machine	J. H. Roberts	Nashville, Tenn	May 11, 1869	89, 944
Rock-drilling machine	N. W. Robinson	Burlington, Vt	June 6, 1871	115, 641
Rock-drilling machine	S. W. Robinson and D. Wood	Ann Arbor, Mich	Nov. 26, 1867	71, 329
Rock-drilling machine	M. T. Rowlands	Pittston, Pa	July 28, 1857	17, 896
Rock-drilling machine	C. Schumann	Freiberg, Saxony	Jan. 7, 1868	73, 053
Rock-drilling machine	F. Schwalm	Joliet, Ill	July 3, 1860	29, 011
Rock-drilling machine	A. J. Severance	San Francisco, Cal	June 11, 1872	127, 712
Rock-drilling machine	J. M. Singer	Lockport, Ill	May 16, 1839	1, 151
Rock-drilling machine	J. C. Smith	Troy, N. Y	July 21, 1868	80, 232
Rock-drilling machine	J. W. Spangler and W. L. Boyd	Jackson Township and York, Pa.	May 9, 1871	114, 617
Rock-drilling machine	E. M. Troth	New York, N. Y	July 2, 1867	66, 422
Rock-drilling machine	G. F. Underhill	New York, N. Y	Sept. 4, 1866	57, 797
Rock-drilling machine	A. W. Vancleve	Stonington, Conn	Dec. 2, 1835	....
Rock-drilling machine	F. Walts	Watertown, N. Y	Jan. 14, 1873	134, 951
Rock-drilling machine	W. Weiler	Washington, N. J	Aug. 4, 1868	80, 579
Rock-drilling machine	A. D. Williams	London, Englaud	Apr. 23, 1872	125, 923
Rock-drilling machine	D. V. Wood	Hoboken, N. J	May 13, 1873	138, 777
Rock-drilling machine, Combined spring	S. Jack, 2d	Richmond, Me	Jan. 30, 1849	6, 073
Rock-drilling machine frame	N. H. Hand	Pittsford, Vt	Nov. 19, 1872	133, 222
Rock-drilling machine, Portable	W. Weiler	Washington, N. J	Mar. 31, 1868	76, 279
Rock-drilling machines, Combined construction and operation of the drill in.	G. N. Doan	Millerstown, Pa	Aug. 28, 1849	6, 675
Rock-drilling machines, Drill-holder for	P. Savage	Adams, Mass	Aug. 6, 1872	130, 246
Rock-drilling machines, Method of turning the drill in.	J. N. Bolles and H. G. Knight	Providence, R. I., and Boston, Mass.	May 1, 1849	6, 417
Rock-drilling machinery	W. Avery	Des Plaines, Ill	Sept. 9, 1845	4, 180
Rock-drilling machinery	J. J. Couch	Bridgewater, Mass	Mar. 27, 1849	6, 237
Rock-drilling machinery	P. T. Wightman and H. Vaughn	East Greenwich, R. I	Nov. 6, 1847	5, 358
Rock-excavator	W. H. Elliot	New York, N. Y	June 18, 1867	65, 891
Rock or earth boring apparatus	T. S. Speakman and R. A. Stratton.	Philadelphia, Pa	Sept. 17, 1845	4, 194
Rock or ore crusher	J. Brodie	San Francisco, Cal	Dec. 27, 1864	45, 582
Rock, quartz, &c., Apparatus for grinding	W. J. Menzies	Saint Helen's, England	Oct. 3, 1871	119, 469
Rock, Splitting	J. Robb	New York, N. Y	Feb. 8, 1870	99, 595
Rock-splitting apparatus	E. Thayer	Union City, Mich	June 7, 1870	103, 940
Rock-tunneling machine	C. Wilson	Springfield, Mass	Mar. 18, 1856	14, 483
Rock-tunneling machine	T. Lindsley	Rock Island, Ill	June 12, 1866	55, 514
Rock, well, &c., drill	R. S. Torrey	Bangor, Me	Dec. 18, 1866	60, 595
Rocks, Machine for removing	I. Lazell	....	May 18, 1798	....
Rocks, Method of removing submarine	A. W. Von Schmidt	San Francisco, Cal	Oct. 10, 1871	119, 902
Rocks under water, Machine for boring holes in	J. B. Aveilhé	....	Aug. 24, 1803	....
Rocker-chair	C. H. Hudson and J. Bowker	New York, N. Y	Nov. 8, 1870	109, 011
Rocker-fastener for chairs	J. S. Lowry	Titusville, Pa	Nov. 26, 1872	133, 464
Rocker for chairs or cradles	C. S. Dunback	Swampscot, Mass	Dec. 17, 1867	72, 178
Rocker, sled, and swing, Combined	G. Knell	Moorestown, N. J	June 15, 1869	91, 453
Rocket	I. Edge	Jersey City, N. J	Feb. 23, 1864	41, 689
Rocket	W. Hale	London, England	Apr. 10, 1866	53, 933
Rocket	E. S. Hunt	Weymouth, Mass	Oct. 9, 1866	58, 646
Rocket	P. Licht	East Williamsburgh, N. Y	Nov. 19, 1872	133, 234
Rocket	C. E. Masten	Boston, Mass	Oct. 3, 1871	119, 630
Rocket, Exhibition	A. Lanergan	Boston, Mass	June 21, 1859	24, 468
Rocket-signal device	J. J. Detwiller	Greenville, N. J	July 14, 1868	79, 963
Rocket, Sky	J. W. Hadfield	Newton, N. Y	Nov. 28, 1865	51, 176
Rocket-staff, Mode of stiffening	J. W. Cochran	New York, N. Y	Apr. 30, 1840	1, 581
Rocket, War	J. B. Hyde	Newark, N. J	Sept. 22, 1863	40, 041
Rocket, War	P. Plant	Washington, D. C	Mar. 17, 1863	37, 940
Rocket, War	T. W. Roys and G. A. Lillien-dahl.	New York, N. Y	July 22, 1862	35, 977
Rocket, War	J. J. B. Walbach	Baltimore, Md	Nov. 6, 1866	59, 487
Rocket, War and signal	T. P. Shaffner	Louisville, Ky	Mar. 2, 1869	87, 371
Rockets, Machine for boring war	A. C. Goell	Washington, D. C	Mar. 18, 1841	2, 009
Rockets, Press for charging	J. B. Hyde	Newark, N. J	Sept. 22, 1863	40, 042
Rockets, Press for filling war	A. C. Goell	Washington, D. C	Feb. 18, 1841	1, 986
Rockets, Stick for exhibition	C. Hadfield	Brooklyn, N. Y	Dec. 13, 1859	26, 428
Rocking and caster chair, Combined	J. D. Brown	New York, N. Y	Oct. 5, 1838	964
Rocking and easy chair	A. W. Stewart	Boston, Mass	Dec. 21, 1869	98, 119
Rocking and reclining chair	D. Cox	Cincinnati, Ohio	Aug. 11, 1868	80, 919
Rocking and reclining chair	J. Edson	Boston, Mass	June 29, 1869	91, 832
Rocking and reclining chair	T. J. Palmer	New York, N. Y	May 3, 1870	102, 701
Rocking-apparatus	J. N. Fowler	New York, N. Y	Nov. 21, 1871	121, 094
Rocking-chair	C. A. Ballard	Boston, Mass	Dec. 5, 1843	3, 371
Rocking-chair	C. L. Bauder	Utica, N. Y	Apr. 6, 1842	2, 543
Rocking-chair	S. H. Bean	Philadelphia, Pa	Mar. 31, 1840	1, 531
Rocking-chair	H. Berg	Springfield, Mass	Mar. 19, 1867	63, 000
Rocking-chair	D. Buzzell	Charlestown, Mass	Jan. 4, 1859	22, 486
Rocking-chair	I. P. Carrier	South Glastenbury, Conn	July 13, 1858	20, 863
Rocking-chair	R. Chauncey	Syracuse, N. Y	Sept. 27, 1864	44, 396
Rocking-chair	C. W. Conant	Gardner, Mass	Mar. 10, 1868	75, 246
Rocking-chair	A. J. Coster	Chicago, Ill	May 8, 1860	28, 159
Rocking-chair	G. Csapp	New York, N. Y	July 4, 1871	116, 689
Rocking-chair	T. W. Currier	Lawrence, Mass	Feb. 16, 1858	19, 352
Rocking-chair	J. W. H. Doubler	Darlington, Wis	Oct. 31, 1871	120, 422
Rocking-chair	M. Eberhard	Philadelphia, Pa	Nov. 4, 1856	16, 006
Rocking-chair	C. Eibee	Brooklyn, N. Y	Sept. 10, 1872	131, 155
Rocking-chair	J. E. Emerson	Trenton, N. J	Oct. 26, 1869	96, 211
Rocking-chair	G. Formica	New York, N. Y	May 11, 1869	89, 924
Rocking-chair	G. Gardner	Glen Gardner, N. J	Nov. 26, 1872	133, 431

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Rocking-chair	C. J. Graf	Chicago, Ill	May 4, 1869	89, 760
Rocking-chair	C. Grawitz	Buffalo, N. Y	Oct. 11, 1870	108, 255
Rocking-chair	E. Hartwell	Hubbardstown, Mass	Dec. 17, 1867	72, 395
Rocking-chair	E. Hartwell	Hubbardstown, Mass	July 7, 1868	79, 656
Rocking-chair	E. Hartwell	Hubbardstown, Mass	July 13, 1869	92, 443
Rocking-chair	R. Hoffman	New York, N. Y	Sept. 10, 1867	68, 027
Rocking-chair	H. Hursh, sr	Mansfield, Ohio	Apr. 27, 1869	89, 317
Rocking-chair	O. Jensen	Christiania, Norway	Feb. 1, 1870	99, 445
Rocking-chair	J. Lamb	Hubbardstown, Mass	Feb. 25, 1868	74, 920
Rocking-chair	G. E. Lord	Utica, N. Y	Jan. 7, 1873	134, 688
Rocking-chair	A. H. McMurray	Utica, N. Y	June 15, 1869	91, 469
Rocking-chair	W. Mohr	New York, N. Y	Feb. 18, 1873	136, 086
Rocking-chair	C. J. Nelson	Rockford, Ill	Dec. 24, 1867	72, 668
Rocking-chair	C. Singer	South Bend, Ind	July 6, 1869	92, 379
Rocking-chair	G. H. Spaulding	Rockford, Ill	Mar. 2, 1869	87, 520
Rocking-chair	C. Streit	Cincinnati, Ohio	Apr. 16, 1872	125, 767
Rocking-chair	T. H. Tatlow, jr	Palmyra, Mo	May 24, 1859	24, 166
Rocking-chair	P. Ten Eyck	New York, N. Y	Mar. 15, 1853	9, 620
Rocking-chair	J. H. Wells	Brooklyn, N. Y	Nov. 29, 1859	26, 312
Rocking-chair	D. Witt	Hubbardstown, Mass	Aug. 20, 1867	68, 021
Rocking-chair and cradle, Combined	A. S. Smith	Lawrence, Mass	May 25, 1858	20, 376
Rocking-chair and cradle, Convertible	R. H. Ewing	Nicollet County, Minn	May 8, 1860	28, 166
Rocking-chair and fan	G. Fleig	Philadelphia, Pa	Feb. 6, 1866	52, 404
Rocking-chair and fan, Combining	C. Horst	New Orleans, La	Aug. 7, 1847	5, 231
Rocking-chair and rotary fan	M. Stiefenhofer	City Island, N. Y	May 11, 1869	89, 897
Rocking-chair and step-ladder	W. H. Cook	Bergen, N. J	Nov. 15, 1870	109, 180
Rocking-chair and trunk	T. Nye	Westbrook, Me	June 18, 1867	65, 937
Rocking-chair, Fan	G. R. G. Jones	Memphis, Tenn	Apr. 12, 1870	101, 740
Rocking-chair, Fan	K. Kiefer	New York, N. Y	Mar. 25, 1856	14, 506
Rocking-chair, Fan	B. M. Lewy	Montgomery, Ala	Mar. 25, 1856	14, 507
Rocking-chair fan	A. Nissle and J. Schöberl	New York, N. Y	Jan. 28, 1873	135, 282
Rocking-chair, Fan	M. A. Woodward	Palmyra, N. Y	Apr. 24, 1849	6, 375
Rocking-chair fan-attachment	O. Brueck	Union Hill, N. J	Oct. 15, 1872	132, 245
Rocking-chair fan-attachment	W. H. Fletcher, jr	New York, N. Y	Feb. 13, 1872	123, 626
Rocking-chair fan-attachment	R. Knaffe and T. M. Schleier	Nashville and Knoxville, Tenn.	Nov. 29, 1870	109, 744
Rocking-chair fanning-attachment	A. R. Hobbs	Elizabeth, N. J	June 16, 1868	78, 965
Rocking-chair, Folding	C. Klink	Chicago, Ill	May 21, 1872	126, 969
Rocking-chair, Folding	A. Russell	Brooklyn, N. Y	Feb. 18, 1873	136, 099
Rocking-chair, Musical	C. Denn	Philadelphia, Pa	Aug. 30, 1870	106, 720
Rocking-chair, Spring	F. Chichester	Milwaukee, Wis	Aug. 26, 1873	142, 145
Rocking-chair, Spring	P. C. Ingersoll	Green Point, N. Y	June 11, 1872	127, 888
Rocking-chair spring	A. H. Ordway	Haverhill, Mass	May 13, 1873	138, 757
Rocking chair, Spring	C. C. Schmitt	New York, N. Y	Dec. 29, 1868	85, 481
Rocking-chair, Spring	E. Smith, jr	Worcester, Mass	Nov. 12, 1867	70, 756
Rocking-chair, Spring	D. E. Teal	Norwich, N. Y	June 1, 1869	90, 701
Rocking-chair swivel	J. W. H. Doubler	Darlington, Wis	July 4, 1871	116, 571
Rocking-chair, Ventilating	D. Kahnweiler	Wilmington, Del	Nov. 24, 1857	18, 696
Rocking-chairs, Mode of applying rollers to	A. Lodeman and M. Desenberg	Kalamazoo, Mich	May 25, 1869	90, 370
Rocking-horse	A. Christian	New York, N. Y	Apr. 2, 1861	31, 869
Rocking-horse	J. A. Crandall	New York, N. Y	Feb. 5, 1861	31, 302
Rocking-horse	B. P. Crandall	New York, N. Y	Jan. 18, 1870	98, 929
Rocking-horse	J. A. Crandall	Brooklyn, N. Y	Mar. 1, 1870	100, 263
Rocking-horse	G. Lautenschlager	Cincinnati, Ohio	Nov. 9, 1869	96, 708
Rocking-horse	E. Kirsch	South Amesbury, Mass	Dec. 19, 1871	121, 945
Rocking-horse	L. C. Percival	Philadelphia, Pa	Sept. 19, 1865	50, 078
Rocking-horse	A. Woodworth, 3d., D. Woodworth, and M. T. Hitchcock.	Boston, Warren, and Springfield, Mass.	Feb. 15, 1859	23, 003
Rocking-horse and swing, Combined	B. P. Crandall, jr., and W. Twiddy.	Williamsburgh, N. Y	Mar. 11, 1873	136, 707
Rocking-horse, Spring	W. E. Vincent and C. B. Northrup.	New York, N. Y	Oct. 22, 1861	33, 552
Rocking or lever boat	B Lies	New York	June 20, 1815	......
Rocking or tilting chair	J. Lamb	Hubbardstown, Mass	Oct. 4, 1870	107, 924
Rocking-spring for cradles, chairs, &c.	A. H. Ordway	Salem, Mass	July 9, 1872	128, 746
Rod:				
See Blind-rod. Measuring-rod.				
Churn-dasher rod. Piston-rod.				
Clock-pendulum rod. Pitman-rod.				
Connecting-rod. Punching-press rod.				
Curling-rod. Ratchet-rod.				
Drawing-rod. Screw-rod.				
Eccentric-rod. Skating-rod.				
Fishing-rod. Skipping-rod.				
Gage-rod. Soldering-rod.				
Gaging-rod. Stair-rod.				
Hoof-rod. Steering-rod.				
Hydrant-stop-cock rod. Sucker-rod.				
Lightning-rod. Upsetting-rod.				
Rod and bolt threading machine	W. Harles	Washington, Mo	May 25, 1869	90, 533
Rod-coupling	D. Daltry	Philadelphia, Pa	July 31, 1866	56, 849
Rod-coupling	F. J. Hanna	Petroleum Centre, Pa	July 12, 1870	105, 199
Rod-coupling	G. Thompson	Shamburgh, Pa	Feb. 23, 1869	87, 223
Rod-cutter	J. E. Gillespie	Boston, Mass	May 14, 1867	64, 660
Rod-turning machine	F. Douglas	Norwich, Conn	Sept. 1, 1868	81, 761
Rods, pitmen, &c., Connecting	R. Carnutt	Georgetown, Me	Dec. 4, 1847	5, 385
Rods, Device for reducing and screw-threading	R. F. Fowler	Canton, Ohio	July 29, 1873	141, 342
Roll	B. Merritt, jr	Newton, Mass	Mar. 8, 1864	41, 851
Roll, Anti-friction	F. A. Sterry	Canton, Mass	May 19, 1868	78, 153
Roll, Drawing	H. T. Robbins	Hyde Park, Mass	Sept. 30, 1873	143, 256
Roll, Elastic	J. B. Forsyth and J. J. Haley	Boston, Mass	Apr. 19, 1870	102, 104
Roll, Elastic	W. H. Towers	Boston, Mass	Mar. 21, 1871	112, 988
Roll for paper, Friction calender	W. H. Soley and G. Stites	Philadelphia, Pa	Apr. 5, 1870	101, 532
Roll for printing, calendering, &c., Renewing	C. E. Wilson	New York, N. Y	Mar. 30, 1869	88, 532
Roll for yard-arms, Friction	F. Thorts	Yarmouth, Me	Mar. 1, 1870	100, 468
Roll, Iron	S. J. Seely	New York, N. Y	Jan. 21, 1868	73, 467
Roll, Roughing	D. Eynon	Richmond, Va	May 3, 1870	102, 670

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Roll, Three high	J. More and J. Fritz	Philadelphia and Bethleham, Pa.	Mar. 5, 1872	124, 370
Roll, Tinners' and sheet-iron workers'	A W., P. A., and F. A. Whitney	Woodstock, Vt.	Mar. 22, 1870	101, 068
Rolls and tubes, Machine for the manufacture of elastic.	J. Moulton	Boston, Mass	Nov. 17, 1868	84, 208
Rolls, Apparatus for reversing the motion of	G. F. McCleane	Pittsburgh, Pa	Nov. 29, 1864	45, 260
Rolls, Application of plain or fluted to common, plain, or fluted plating, eccentric.	W. V. Many	Albany, N. Y	Jan. 30, 1834	....
Rolls, Casting	J. Graves and W. L. Gordon	Bridgewater, Mass	Apr. 25, 1848	5, 528
Rolls, Casting	R. C. Totten	Pittsburgh, Pa	Mar. 16, 1869	87, 805
Rolls, Casting chilled	G. G. Lobdell and W. Stuart	Wilmington, Del	Dec. 20, 1870	110, 378
Rolls, Construction of	J. V. Woodhouse	Mine La Motte, Mo	Nov. 28, 1871	121, 443
Rolls, Covering for drawing	J. M. Smith	Manchester, N. H	July 7, 1857	17, 754
Rolls, Expansive gearing for feeding	J. Richards	Philadelphia, Pa	Dec. 22, 1868	85, 131
Rolls for crushing and pulverizing, Machine	E. S. Blake	Pittsburgh, Pa	Oct. 4, 1870	107, 858
Rolls for making sheet-iron	D. A. Morris	Pittsburgh, Pa	Oct. 5, 1858	21, 692
Rolls for planishing iron	J. Noble	Monongahela Borough, Pa.	Oct. 19, 1858	21, 844
Rolls for rolling iron, steel, &c., Manufacture of metallic.	R. Sleeth	Pittsburgh, Pa	June 6, 1871	115, 649
Rolls, Housing for	J. Rigby	Pittsburgh, Pa	May 16, 1871	114, 858
Rolls, Hydraulic housing for	G. H. Sellers	Wilmington, Del	May 31, 1870	103, 667
Rolls in metal molds, Casting grooved	R. C. Totten	Pittsburgh, Pa	Sept. 26, 1865	50, 187
Rolls, Journal-bearing for calender	W. McAdams	Newton, Mass	June 21, 1870	104, 478
Rolls, Manufacture of dressing	C. McBurney	Roxbury, Mass	Mar. 27, 1866	53, 465
Rolls, Manufacture of elastic	J. B. Forsyth	Boston, Mass	Apr. 19, 1870	101, 994
Rolls, Manufacture of elastic	J. Moulton	Boston, Mass	Mar. 10, 1868	75, 292
Rolls, Manufacture of elastic	J. Moulton	Boston, Mass	May 5, 1868	77, 518
Rolls, Manufacture of elastic	W. A. Torrey	Mont Clair, N. J	Feb. 19, 1867	62, 164
Rolls, Manufacture of India-rubber	W. Cable	Boston, Mass	Apr. 16, 1872	125, 787
Rolls, Manufacture of rubber	J. Greacen, jr., and E. L. Perry	New York, N. Y	Jan. 31, 1871	111, 449
Rolls, Manufacture of vulcanized India-rubber	T. J. Mayall	Boston, Mass	Apr. 9, 1872	125, 595
Rolls, Method of furnishing chilled	G. G. Lobdell and J. Megaw	Wilmington, Del	Nov. 21, 1871	121, 180
Rolls, Mode of covering elastic	J. Moulton	Boston, Mass	Nov. 30, 1869	97, 428
Rolls, Mold for casting grooved	R. C. Totten	Pittsburgh, Pa	Apr. 2, 1867	63, 443
Rolls, Swaging	J. F. Thomas	Ilion, N. Y	Feb. 16, 1869	87, 011
Rolls to metallic shafts, Fastening India-rubber	G. J. Colby	Waterbury, Vt	Apr. 1, 1862	34, 818
Rolls to shafts, Method of uniting rubber	W. H. Grant	Winchendon, Mass	Feb. 21, 1865	46, 464
Rolls to shafts, Mode of securing	C. Manheim	New York, N. Y	Aug. 6, 1867	67, 440

Roller:

See Axle-roller. Axle-box roller. Breaker-roller. Buggy-top roller. Calender-roller. Carding-machine roller. Caster-roller. Chart-roller. Chilled roller. Clothes-wringer roller. Corn-husker roller. Cotton-gin roller. Curtain-roller. Cylinder-roller. Dough-roller. Drawing-roller. Dressing-roller. Elastic roller. Electro-plated roller. Feed-roller. Field-roller. Flood-roller. Fluted roller. Fluting-machine roller. Friction-roller. Garden-roller. Ground-roller. India-rubber roller. Inking-roller. Iron-roller. Land-roller. Leather-roller. Leather-creasing roller. Lumber-feeding roller. Marking-roller. Mill-roller. Old-rail roller. Ore-crushing roller. Pastry-roller. Pavement-roller. Paving-roller. Planing-machine feed-roller. Printers' roller. Puddlers' ball-roller. Road-roller. Rubber roller. Sand-paper roller. Shade or curtain roller. Tobacco-roller. Trunk-roller. Washing-roller. Wheat-roller. Window-shade roller. Wringer-roller. Wringing-roller. Wringing-machine roller. Yielding roller.

Invention.	Inventor.	Residence.	Date.	No.
Roller	E. Wassell	Pittsburgh, Pa	June 27, 1865	48, 496
Roller and corn-planter, Combined	P. Conrad	Dorchester, Ill	Jan. 31, 1865	46, 083
Roller and corn-stalk cutter	R. R. Gaskill	Mendota, Ill	June 26, 1866	55, 848
Roller and cultivator, Combined	J. B. Catey	Williamsburgh, Ind	Nov. 30, 1869	97, 273
Roller and harrow, Combined	J. Davis	Loami, Ill	Oct. 9, 1866	58, 613
Roller and harrow, Combined	J. Ginther	Mier, Ill	Sept. 29, 1868	82, 512
Roller and harrow, Combined	W. R. Mears	Grafton, Ill	Oct. 3, 1865	50, 259
Roller and harrow, Combined	G. H. Woodruff	Jerseyville, Ill	Dec. 18, 1866	60, 655
Roller and irrigator, Combined	D. S. Howard	Drury's Bluff, Va	June 17, 1873	140, 043
Roller and manure-spreader, Combined	J. Syker	Argosville, N. Y	Sept. 25, 1860	30, 179
Roller and planter, Combined	O. Knudson	Effingham, Ill	July 22, 1873	141, 144
Roller and seed-planter, Combined	E. Perin	Connersville, Ind	Sept. 25, 1866	58, 284
Roller and seeder, Combined	H. S. Connelly	Clymer, N. Y	Apr. 9, 1867	63, 704
Roller-box for printers	H. J. Spiller	Cincinnati, Ohio	May 29, 1860	28, 514
Roller bushing, Manufacture of composition	F. B. Torrey	Bath, Me	Mar. 28, 1871	113, 114
Roller-covering clamp for cloth or canvas	H. W. Holly	Norwich, Conn	Nov. 28, 1865	51, 182
Roller crushing-machine	A. Hitchcock	New York, N. Y	Oct. 3, 1865	50, 247
Roller-die	G. W. Wicks	Brooklyn, N. Y	June 27, 1865	48, 472
Roller-dies, Guiding and gaging mechanism for	H. Waters	Boston, Mass	May 9, 1871	114, 735
Roller-frame for elevator-platforms, Adjustable	R. M. Van Sickler	New York, N. Y	Oct. 15, 1867	69, 868
Roller-grinding machine	J. M. Poole	Wilmington, Del	June 21, 1870	104, 492
Roller-guide	H. Waters	Northbridge, Mass	June 27, 1865	48, 466
Roller-lifting power	E. Whitcomb	Waterville, Ohio	Dec. 27, 1870	110, 523
Roller press, Inclined friction	L. Carman	Oxford, Mass	Apr. 7, 1831	....
Roller, stalk-cutter, and marker, Combined	J. W. Dilly	Roseville, Ill	Sept. 3, 1867	68, 419
Roller-stand	H. Waters	Northbridge, Mass	June 21, 1864	43, 246
Rollers and bearings, Device for reducing the friction on.	E. Dummer	Newbury, Mass	Sept. 5, 1871	118, 703

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Invention.	Inventor.	Residence.	Date.	No.
Rollers, Method of adjusting	S. M. Mecutchen	Philadelphia, Pa	June 18, 1867	65, 930
Rollers with shafts, Casting hollow-metal	Z. Washburn	Hopedale, Mass	Aug. 3, 1869	93, 257
Rolling and forging metal, Machine for	S. Vanstone	Providence, R. I	Jan. 6, 1863	37, 368
Rolling and slitting mill	I. Pierson	New York, N. Y	Dec. 24, 1807	....
Rolling-apparatus	E. M. Davis	Pittsburgh, Pa	Jan. 8, 1869	90, 933
Rolling-apparatus	H. Waters	Boston, Mass	Aug. 7, 1866	57, 021
Rolling apparatus, Metal	J. Lippincott	Pittsburgh, Pa	Nov. 9, 1869	96, 600
Rolling apparatus, Metal	R. Marsden	Sheffield, England	Nov. 3, 1868	83, 718
Rolling apparatus, Metal	J. S. Seaman	Pittsburgh, Pa	Mar. 6, 1866	53, 049
Rolling apparatus, Metal	G. H. Sellers	Wilmington, Del	Jan. 11, 1870	98, 807
Rolling apparatus, Metal	C. White, W. Lewis, T. Strickland, and S. Caddick.	Spuyten Duyvil, N. Y	May 16, 1871	114, 892
Rolling apparatus, Metal	J. I. Williams	Millvale, Pa	Jan. 18, 1870	98, 900
Rolling axle and shaft	J. Reese	Sharon, Pa	Jan. 24, 1854	10, 460
Rolling bar-iron edgewise	G. Ellicott	Baltimore, Md	Sept. 20, 1816	....
Rolling bars of metal, Method of	W. Bunton and J. Davis	Pittsburgh and Birmingham, Pa.	Dec. 29, 1868	85, 273
Rolling blanks, Machine for	N. C. Lewis	Boston, Mass	Aug. 7, 1860	29, 500
Rolling-die apparatus	H. Waters	Boston, Mass	Nov. 6, 1866	59, 488
Rolling hoop, bar, and rod iron, Roll for	J. Tranter and J. Kinsey	Cincinnati, Ohio	Apr. 4, 1871	113, 708
Rolling-hoop guide	E. Lindholm	Brooklyn, N. Y	June 22, 1869	91, 755
Rolling irregular figures to a pattern, Machine for	W. Field	Pawtucket, R. I	Aug. 7, 1844	3, 693
Rolling irregular forms, Machine for	J. Dodge	Waterford, N. Y	July 25, 1865	48, 915
Rolling iron, Operating rolls for	W. Stark	Pittsburgh, Pa	Apr. 21, 1863	38, 248
Rolling iron round, Machine for	H. Abbott	....	May 4, 1802	....
Rolling-machine	G. Hastings, jr	Wheeling, W. Va	Jan. 2[illegible], 1868	73, 598
Rolling-machine	J. B. and G. Hastings, jr	Wheeling, W. Va	May 10, 1870	102, 816
Rolling machine, Metal	H. Baines	Manchester, England	Dec. 11, 1866	60, 322
Rolling machine, Metal	W. D. Hillis	Elgin, Ill	Oct. 22, 1872	132, 465
Rolling machine, Metal	I. Hinman	New Haven, Conn	Apr. 22, 1835	....
Rolling machine, Metal	D. I. Jones	Newburgh, Ohio	Sept. 3, 1872	131, 005
Rolling machine, Metal	H. Kellogg	Milford, Conn	Nov. 26, 1872	133, 451
Rolling machine, Metal	H. Kellogg	Milford, Conn	Nov. 26, 1872	133, 452
Rolling machine, Metal	H. Kellogg	Milford, Conn	Nov. 26, 1872	133, 453
Rolling machine, Metal	A. Kloman	Pittsburgh, Pa	Aug. 2, 1870	105, 950
Rolling machine, Metal	A. Lismann	Munich, Germany	Sept. 19, 1871	119, 160
Rolling machine, Metal	H. F. Mann	Pittsburgh, Pa	Feb. 14, 1865	46, 371
Rolling machine, Metal	J. B. Mignault, A. B. Southwick, C. Spofford, and A. Marshall.	Ballard Vale and Lawrence, Mass.	Feb. 3, 1863	37, 601
Rolling machine, Metal	G. Reynolds	Collinsville, Conn	Mar. 2, 1869	87, 512
Rolling machine, Metal	W. H. Singer	Pittsburgh, Pa	Nov. 30, 1869	97, 450
Rolling machine, Metal	A. C. Stone	Steeleville, Pa	July 31, 1866	56, 825
Rolling machine, Metal	L. Thomas	Pittsburgh, Pa	Nov. 14, 1871	120, 838
Rolling machine, Metal	W. H. Ward	Auburn, N. Y	May 24, 1870	103, 397
Rolling machine, Metal	H. Waters	Northbridge, Mass	May 2, 1865	47, 500
Rolling machine, Metal	H. Waters	Northbridge, Mass	Jan. 10, 1865	45, 886
Rolling machine, Metal	H. Waters	Northbridge, Mass	Feb. 13, 1866	52, 630
Rolling machine, Metal	J. White	Philadelphia, Pa	May 15, 1812	....
Rolling machine, Metal-bar	T. Fowler	Seymour, Conn	Apr. 26, 1870	102, 389
Rolling machine, Metallic-tube	C. Eastman	Hillsborough, N. H	Apr. 16, 1818	....
Rolling-machines, Device for pulling metal hoops from the finishing-rolls of.	C. W. Wailey	New Orleans, La	July 23, 1867	67, 003
Rolling machinery, Hanging the fore-plate to iron	J. Reese	Sharon, Pa	Feb. 14, 1854	10, 524
Rolling machinery, Metal	W. George and W. F. Durfee	Philadelphia, Pa	May 20, 1873	139, 000
Rolling metal	G. H. Corliss and E. Harris	Providence, R. I	Feb. 19, 1856	14, 279
Rolling metal	W. Field	Providence, R. I	Apr. 19, 1864	42, 360
Rolling metal, Construction of rolls for	D. Reeves	Phœnixville, Pa	June 9, 1863	38, 869
Rolling metal, "Four high rolls" for	G. F. McCleane	Pittsburgh, Pa	June 14, 1870	104, 177
Rolling metal, Roll for	B. Lauth	Buchanan, Pa	Jan. 19, 1864	41, 307
Rolling metallic plates	R. Rittenhouse	Amwell Township, Pa	Mar. 19, 1833	....
Rolling-mill	J. E. Atwood	Mansfield, Conn	Apr. 22, 1873	138, 114
Rolling-mill	J. H. C. Bachelder	Winsted, Conn	Sept. 8, 1868	81, 973
Rolling-mill	J. A. Bailey	Boston, Mass	Apr. 13, 1858	19, 963
Rolling-mill	R. M. Bassett	Derby, Conn	May 14, 1867	64, 737
Rolling-mill	P. Bright	Philadelphia, Pa	Aug. 6, 1867	67, 404
Rolling-mill	W. H. Brough	Coatesville, Pa	Oct. 10, 1871	119, 693
Rolling-mill	W. Brown	Smithwick, England	Nov. 17, 1868	84, 086
Rolling-mill	W. and D. Brown	Smithwick, England	Sept. 6, 1870	106, 992
Rolling-mill	J. L. Chapman	Philadelphia, Pa	Sept. 1, 1868	81, 600
Rolling-mill	G Fritz	Johnstown, Pa	Dec. 10, 1872	133, 771
Rolling-mill	J. and G. Fritz	Johnstown, Pa	Sept. 27, 1859	25, 565
Rolling-mill	H. R. Hinkley	Milton Junction, Wis	May 27, 1873	139, 246
Rolling-mill	W. W. Howell	Philadelphia, Pa	Apr. 9, 1867	63, 637
Rolling-mill	A. Johnson	Brooklyn, N. Y	Mar. 21, 1871	112, 924
Rolling-mill	D. J. Jones	Newburgh, Ohio	Aug. 2, 1870	106, 063
Rolling-mill	J. H. Jones	Knoxville Tenn	Dec. 20, 1870	110, 369
Rolling-mill	J. Montgomery	Croton Landing, N. Y	Jan. 26, 1869	86, 314
Rolling-mill	J. Montgomery	New York, N. Y	Jan. 25, 1870	99, 221
Rolling-mill	J. Moore, W. George, and A. L. Holley.	Philadelphia, Pa., and Brooklyn, N. Y.	Dec. 2, 1873	145, 225
Rolling-mill	F. Nevergold and D. Brose	Pittsburgh, Pa	Sept. 22, 1868	82, 433
Rolling-mill	C. H. Perkins	Providence, R. I	June 25, 1872	128, 422
Rolling-mill	C. H. Perkins	Providence, R. I	July 9, 1872	128, 748
Rolling-mill	C. H. Perkins	Providence, R. I	Nov. 18, 1873	144, 631
Rolling-mill	P. F. Rumbold	Saint Louis, Mo	Sept. 15, 1863	39, 960
Rolling-mill	W. Sellers and G. H. Sellers	Philadelphia, Pa., and Wilmington, Del.	Dec. 2, 1873	145, 129
Rolling-mill	W. H. Stephens and G. B. F. Cooper.	Evansville and New Albany, Ind.	Aug. 19, 1873	142, 052
Rolling-mill	E. Wassell	Pittsburgh, Pa	Apr. 25, 1865	47, 475
Rolling-mill	E. Wheeler	Feltonville, Mass	May 23, 1865	47, 886
Rolling-mill	A. Wood, jr	Conshohocken, Pa	Aug. 26, 1873	142, 316
Rolling-mill appliances	J. L. Pennock	Coatesville, Pa	Aug. 13, 1872	130, 529
Rolling-mill conductor	J. Gearing	Pittsburgh, Pa	Aug. 17, 1869	93, 699
Rolling-mill for rolling circular saws, &c	E. Carver	Bridgewater, Mass	Sept. 27, 1838	950
Rolling-mill for rolling grooved-metal arches	W. S. Levake	Cleveland, Ohio	Feb. 7, 1870	99, 329
Rolling-mill furnaces, Mode of utilizing the slag of.	C. S. Lynch	Boston, Mass	May 18, 1869	90, 111
Rolling-mill guide	C. H Perkins	Providence, R. I	Nov. 18, 1873	144, 632

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Rolling-mill guide	C. H. Perkins	Providence, R. I	Nov. 18, 1873	144, 633
Rolling mill, Iron	A. C. Kloman	Pittsburgh, Pa	Aug. 2, 1870	105, 952
Rolling mill, Iron and steel	D. Hall	Pittsburgh, Pa	Oct. 31, 1865	50, 704
Rolling mill, Metal	E. Thomas	Newcastle, Pa	Feb. 13, 1872	123, 746
Rolling-mill relief-apparatus	J. Sullivan	Boston, Mass	June 11, 1872	127, 714
Rolling mill, Sheet-metal	E. H. Davies	Pittsburgh, Pa	Aug. 12, 1873	141, 701
Rolling-mill stand, &c	W. F. Burden	Troy, N. Y	Jan. 6, 1863	37, 274
Rolling-mills, Apparatus for handling iron in	E. Sanford	Meriden, Conn	May 12, 1868	77, 923
Rolling-mills, Hot-air bed for	J. Westerman	Sharon, Pa	Dec. 31, 1872	134, 407
Rolling mills, Housing for metal	W. H. Ward	Auburn, N. Y	May 24, 1870	103, 399
Rolling-mills, Machine for grinding the rolls of	H. Disston	Philadelphia, Pa	Feb. 11, 1868	74, 206
Rolling-mills, Plate and sheet guide for	J. Moore	Belleville, N. J	Dec. 3, 1872	133, 591
Rolling mills, Roll for metal	H. Kellogg	Milford, Conn	Nov. 26, 1872	133, 454
Rolling-mills, Saddle-box for relieving pressure from rolls in.	W. H. Brough	Coatesville, Pa	Oct. 10, 1871	119, 692
Rolling-mills, Shove-under for	J. B. Hastings	Ironton, Ohio	June 18, 1872	128, 142
Rolling or polishing machine	B. Q. Budding	Milford, Mass	Apr. 21, 1863	38, 257
Rolling-pin	J. F. Heissenbuttel	Brooklyn, N. Y	Sept. 15, 1863	39, 916
Rolling-pin	C. E. Phillips	Abington, Mass	May 30, 1865	47, 979
Rolling-pin	A. J. Roof	Peoria, Ill	May 19, 1868	78, 135
Rolling-pin	W. Cook	Arsenal, Pa	Nov. 10, 1868	83, 934
Rolling-pin	W. Thomas	Hingham, Mass	Sept. 19, 1871	119, 062
Rolling-pin	G. L. Witsil	Philadelphia, Pa	Oct. 17, 1865	50, 528
Rolling-pin, &c	T. A. Williamson and C. A. Richardson.	Allegheny City, Pa	Nov. 13, 1866	59, 701
Rolling-pin and docker for biscuit	A. Eyton	Trenton, N. J	Aug. 13, 1861	33, 033
Rolling plates of iron and cutting them into nails, Machine for.	S. Rogers and M. Otis	....	Dec. 7, 1803	....
Rolling round tapered bars, Machine for	C. F. Brown	Bristol, R. I	Sept. 2, 1873	142, 372
Rolling sheet-metal, Machine for cold	J. Evans	Portsmouth, Ohio	Jan. 21, 1873	135, 102
Rolling tapering forms, Machine for	H. Kellogg	Milford, Conn	Oct. 3, 1871	119, 521
Rolling-tub mill	S. Bartlett	East Windsor, Conn	July 19, 1808	....
Rolling wheels on inclined shafts	S. Mirick	Madison County, N. Y	Nov. 30, 1808	....
Roof	E. Atkinson	Wrightstown, Pa	Apr. 7, 1868	76, 375
Roof	C. S. Clark	Huntsburgh, Ohio	Aug. 21, 1866	57, 290
Roof	V. Lasserre	Paris, France	Jan. 20, 1863	37, 450
Roof	N. G. Northup	Bloomington, Minn	July 18, 1871	117, 104
Roof	J. M. Price	Nether Providence, Pa	July 25, 1871	117, 327
Roof	J. Rodefer	Cincinnati, Ohio	Oct. 25, 1864	44, 821
Roof	H. A. Seymour	Bristol, Conn	Feb. 26, 1867	62, 372
Roof	M. Simmons	Howardsville, Ill	Feb. 13, 1866	52, 613
Roof	C. P. Weaver	Philadelphia, Pa	Nov. 26, 1872	133, 508
Roof and clapboarding bracket	H. W. Holden, T. J. Mooers, D. H. Stratton, and G. Reynolds.	Blossburgh, Pa	July 2, 1867	66, 341
Roof and roof-pavement, Illuminating	T. Hyatt	New York, N. Y	Aug. 27, 1867	68, 332
Roof, Battening	G. W. Robinson	Bennington Centre, Vt	Nov. 5, 1872	132, 737
Roof-bracket	S. Clough	Monmouth, Me	Oct. 12, 1869	95, 654
Roof-bracket	D. Fisher	Mansfield, Mass	Aug. 15, 1871	118, 001
Roof-bracket	A. Jones	Lebanon, N. H	Oct. 9, 1860	30, 325
Roof bracket, Shingle	P. B. Turner	Quincy, Mass	June 30, 1868	79, 415
Roof, Building	J. Shidler	Knox Township, Ohio	Oct. 6, 1863	40, 191
Roof, Cement	A. Straub	Milton, Pa	Mar. 31, 1863	38, 065
Roof, Composition	E. Westermayr	Chicago, Ill	Dec. 26, 1871	122, 296
Roof-covering	R. U. Piper	Girard, Mich	Jan. 7, 1873	134, 702
Roof-covering, Portable	H. Tucker	Cambridgeport, Mass	Jan. 17, 1860	26, 868
Roof, Curb	D. Newton	Newport, R. I	Aug. 22, 1871	118, 261
Roof, Fire and water proof	J. Long	Mechanicsburgh, Pa	Oct. 14, 1873	143, 581
Roof, Fire-proof	J. B. Cornell	New York, N. Y	June 17, 1873	139, 945
Roof, Fire-proof	I. Hodgson and W. H. Brown	Indianapolis, Ind	May 30, 1871	115, 471
Roof, Fire-proof	I. Hodgson and W. H. Brown	Indianapolis, Ind	July 23, 1872	129, 826
Roof, Fire-proof	G. H. Johnson and W. J. Fryer, jr.	New York, N. Y	Sept. 30, 1873	143, 352
Roof, Fire-proof	N. Poulson	New York, N. Y	June 3, 1873	139, 607
Roof, Fire-proof	S. Smith	Mattoon, Ill	Mar. 19, 1872	124, 767
Roof, Fire-proof	E. S. Tobey	Boston, Mass	Mar. 18, 1873	137, 038
Roof, Fire-proof and water-tight	J. Hensen	Lexington, Va	Feb. 28, 1834	....
Roof, Fire-proof Mansard	W. J. Fryer, jr., and G. H. Johnson.	New York, N. Y	July 29, 1873	141, 215
Roof, Fire-proof Mansard	J. W. Kennedy	Saint Louis, Mo	Sept. 16, 1873	142, 793
Roof for buildings	W. W. Beach	New York, N. Y	June 26, 1866	55, 805
Roof for buildings, Metal	J. S. Haywood	Rochester, Minn	Dec. 27, 1870	110, 567
Roof for buildings, Plank	S. Taylor	Petersham, Mass	June 12, 1855	13, 052
Roof for churches	S. S. Woodcock and G. F. Meacham.	Somerville and Watertown, Mass.	Oct. 25, 1864	44, 831
Roof for houses and balconies, Flat	H. Johnson	....	May 10, 1802	....
Roof-guard	S. R. Hathorn	Worcester, Mass	Aug. 23, 1870	106, 580
Roof-gutter	J. F. Lockwood	Taylorville, Ill	June 20, 1871	116, 072
Roof, Metallic	W. M. Barry	Nashville, Tenn	Sept. 27, 1870	107, 649
Roof, Metallic	J. S. Mettler	Jersey City, N. J	Sept. 9, 1873	142, 641
Roof, Metallic	J. Siddons	Rochester, N. Y	Sept. 28, 1869	95, 390
Roof, Metallic	W. E. Worthen	New York, N. Y	Mar. 3, 1857	16, 767
Roof, Metallic and wooden	E. U. Benedict	Chicago, Ill	Dec. 23, 1862	37, 211
Roof protector, Metal	G. D. Volkmar	Baltimore, Md	Apr. 26, 1870	102, 451
Roof-purlin, Iron	G. Halstead	Buffalo, N. Y	June 22, 1869	91, 740
Roof snow-guard	A. Rogers	Worcester, Mass	Nov. 30, 1869	97, 316
Roof-staging	C. M. Pease	Monson, Mass	Apr. 7, 1868	76, 516
Roof-staging	W. B. Ross	Keene, N. H	Oct. 5, 1869	95, 519
Roof, Thatch	L. Foster	Burlington, Iowa	Feb. 1, 1870	99, 304
Roof-thatching	J. Weed	Muscatine, Iowa	June 7, 1864	43, 055
Roof, Tin, copper, and zinc	J. Bonis	Baltimore, Md	June 26, 1835	....
Roof-truss	P. L. Weimer	Lebanon, Pa	Dec. 30, 1873	146, 114
Roof truss, Iron	A. Gottlieb	Chicago, Ill	July 15, 1873	140, 772
Roof-truss, Wrought-iron	G. H. Sellers	Phœnixville, Pa	Apr. 28, 1868	77, 409
Roofs and other structures, Compound for covering	G. B. Hutchins	Ann Arbor, Mich	June 30, 1868	79, 472
Roofs, Attaching slates to	D. Ryan	Boston, Mass	Dec. 16, 1873	145, 529
Roofs, bridges, &c., Truss for	S. J. Reeves and M. C. Meigs	Philadelphia, Pa., and Washington, D. C.	June 7, 1859	24, 323

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Roofs, Cementing	I. L. G. Ward	Adrian, Mich	Feb. 22, 1859	23, 051
Roofs, Composition dressing for	H. O. Brown	Castleton, Vt	June 17, 1873	139, 864
Roofs, Compound resinous cement for	D. A. Balcom	Northampton, Pa	Aug. 1, 1834	....
Roofs, &c., Connecting-board for	W. T. De Golyer	Schenectady, N. Y	June 28, 1859	24, 546
Roofs, Construction of	M. D. Cutts	Richmond, Va	Dec. 10, 1867	71, 855
Roofs, Construction of	F. Wilbar	Roxbury, Mass	Aug. 12, 1851	8, 295
Roofs, Construction of	S. B. Woolfolk	Scottville, Ill	Oct. 15, 1872	132, 345
Roofs, decks of vessels, &c., Mode of applying covering to.	J. Hall	Dorchester, Mass	June 6, 1865	48, 060
Roofs, &c., Fastening sheet-metal on	A. Johnson	Cairo, N. Y	May 19, 1857	17, 331
Roofs fire and water proof, Composition for making	D. Greer	Pittsburgh, Pa	Apr. 25, 1828	....
Roofs, Fire-proof soap-clay covering for	H. Steel	Hudson, N. Y	June 29, 1833	....
Roofs, floors, walls, tanks, &c., Fibrous-composition slab and panel for.	R. W. Russell	New York, N. Y	Mar. 30, 1869	88, 516
Roofs for houses, Making metal	J. Woolley	Springfield, Mass	Mar. 26, 1844	3, 507
Roofs, Form and shape of brick for	J. Parker	Gardiner, Me	Aug. 15, 1835	....
Roofs, Forming	W. G. Stirling	Bridgeport, Conn	Apr. 25, 1854	10, 833
Roofs, Foundation for	R. O. Lowrey	Saratoga Springs, N. Y	May 7, 1867	64, 433
Roofs, Joint for sheet-metal on	S. Scotton	Richmond, Ind	Feb. 9, 1858	19, 314
Roofs, Laying slate	I. Mott	Glen's Falls, N. Y	Apr. 10, 1860	27, 822
Roofs, Machine for seaming metal	J. D. James, jr	Washington, D. C	Mar. 1, 1870	100, 414
Roofs, Machine for seaming sheet-metal	L. Fay	Cincinnati, Ohio	July 28, 1857	17, 874
Roofs, Manufacture of composition	C. F. Hinman	Chicago, Ill	June 25, 1870	99, 088
Roofs, Metallic tile for	C. G. Van Pappelendam	Charleston, Iowa	June 13, 1871	115, 912
Roofs, Mode of protecting and repairing shingle	I. Straub	Cincinnati, Ohio	Oct. 11, 1864	44, 675
Roofs, Mode of securing sheet-metal covering for	W. H. Trissler and J. Stewart	Fairview, Pa	Oct. 28, 1856	15, 988
Roofs of buildings, Preserving	I. W. Dean	Franklin, Conn	Aug. 18, 1868	81, 147
Roofs of buildings with tin-plate, &c., Covering	I. B. Duval	Charleston, S. C	Sept. 19, 1838	933
Roofs of houses, Covering	P. U. Ware	Albemarle, Va	Nov. 11, 1830	....
Roofs of houses, &c., Manner of securing tin-plates, &c., on.	P. Naylor	New York, N. Y	Apr. 25, 1844	3, 560
Roofs, Paint or coating for	D. D. Pennoyer	Colebrook, N. Y	Jan. 25, 1870	99, 229
Roofs, pavements, &c., Composition for	S. G. Morrison	Williamsport, Pa	July 18, 1871	117, 196
Roofs, pavements, walks, &c., Composition for	J. See	Philadelphia, Pa	June 2, 1868	78, 544
Roofs, Preserving composition	F. O. Rogers	Niles, Mich	July 7, 1868	79, 601
Roofs, Securing sheet-metal	E. Pollard	Albany, N. Y	Feb. 15, 1859	23, 000
Roofs, Shingling	B. Flowers	Jerusalem, Ohio	Dec. 22, 1868	85, 082
Roofs, Shingling	T. Young	Philadelphia, Pa	May 11, 1807	....
Roofs, Shingling hipped	A. R. Holcomb	Naples, N. Y	Sept. 22, 1863	40, 036
Roofs, ships' bottoms, &c., Composition felting for covering.	T. R. Abbott	Lowell, Mass	May 31, 1870	103, 536
Roofs, Supporting metal	P. Naylor	New York, N. Y	June 12, 1840	1, 631
Roofs, walls, &c., Composition for water-proof	L. Garfield	Troy, N. Y	Feb. 20, 1835	....
Roofs water-tight around the chimneys and dormer-windows, Method of rendering metallic.	J. U. Boesch	Charleston, S. C	Nov. 12, 1842	2, 850
Roofs with metal, Covering	P. Naylor	New York, N. Y	Sept. 11, 1839	1, 321
Roofs with sheet-iron and tin, Covering	C. Bonnycastle	Charlottesville, Va	June 29, 1833	....
Roofs with tin and other metals, Covering	P. Burgess	Brooklyn, N. Y	Oct. 17, 1835	....
Roofs with tin, iron, &c., Covering	C. Bonnycastle	Leesburgh, Va	Aug. 17, 1835	....
Roofing	D. M. Ayer	Lewiston, Me	May 26, 1863	38, 646
Roofing	E. Becker	Cincinnati, Ohio	Jan. 1, 1867	60, 848
Roofing	E. Becker	Cincinnati, Ohio	June 25, 1867	66, 117
Roofing	A. Brisbane	New York, N. Y	Aug. 14, 1866	57, 080
Roofing	G. Cook	Paris, Ill	Nov. 12, 1867	70, 805
Roofing	D. W. Denton	Ithaca, N. Y	Apr. 2, 1867	63, 371
Roofing	J. Duke	Milesburgh, Pa	Jan. 21, 1862	34, 200
Roofing	M. J. Earl	Mannsville, N. Y	Jan. 2, 1872	122, 372
Roofing	O. Eaton	Troy, N. Y	Feb. 13, 1866	52, 549
Roofing	M. Ehret, jr	Philadelphia, Pa	Aug. 18, 1868	81, 078
Roofing	W. Gilbert	Detroit, Mich	Sept. 25, 1866	58, 246
Roofing	R. P. Henry	Akron, Ohio	Nov. 26, 1867	71, 386
Roofing	J. F. Hodgson	Washington, D. C	July 31, 1866	56, 751
Roofing	J. H. Hood	Dansville, N. Y	Mar. 4, 1873	136, 516
Roofing	S. Hughes	Hudson City, N. J	Aug. 30, 1870	106, 825
Roofing	S. R. Jones	York, Pa	July 16, 1861	32, 835
Roofing	J. W. Kingman	North Bridgewater, Mass	Jan. 3, 1865	45, 723
Roofing	T. A. Makibbin	Annapolis, Md	Apr. 5, 1870	101, 635
Roofing	O. Manly	Garrettsville, Ohio	Dec. 10, 1867	72, 060
Roofing	J. McVay	Columbia, Ohio	Mar. 13, 1866	53, 162
Roofing	H. G. Noble	Selma, Ala	Dec. 14, 1869	97, 796
Roofing	R. Norwood	Baltimore, Md	June 26, 1866	55, 891
Roofing	J. Park	Joliet, Ill	Nov. 19, 1872	133, 247
Roofing	O. J. Pierce	Worcester, Mass	Nov. 21, 1871	121, 063
Roofing	S. Pratt	Fayetteville, N. Y	May 7, 1867	64, 566
Roofing	G. W. Robinson	Bennington, Vt	Feb. 6, 1872	123, 511
Roofing	F. O. Rogers	Niles, Mich	Apr. 2, 1867	63, 429
Roofing	R. Sanderson	Cleveland, Ohio	Nov. 14, 1871	120, 900
Roofing	G. Shove	Yarmouth Port, Mass	Oct. 4, 1870	107, 967
Roofing	C. T. Smith	Nyack, N. Y	July 6, 1869	92, 216
Roofing	M. Stewart	Philadelphia, Pa	May 1, 1847	5, 091
Roofing	J. C. Wands	Nashville, Tenn	Feb. 5, 1867	61, 899
Roofing	W. H. White	Dubuque, Iowa	Feb. 25, 1862	34, 543
Roofing	J. R. Woodworth	Nunda, N. Y	Feb. 5, 1867	61, 787
Roofing, Alloy for metallic	L. S. Enos	Almond, N. Y	May 12, 1868	77, 874
Roofing and cement, Composition for	A. Asboth	New York, N. Y	July 3, 1860	28, 953
Roofing and clapboarding	S. J. Seely	New York, N. Y	Nov. 20, 1866	59, 928
Roofing and flooring	P. N. Mackay	Virginia City, Nev	Feb. 22, 1870	100, 167
Roofing and paint, Composition for	C. B. Hutchins	Ann Arbor, Mich	Aug. 3, 1869	93, 304
Roofing and painting, Compound for	N. Irish	Rochester, Minn	Nov. 24, 1868	84, 421
Roofing and paving composition	G. Bartolomer	Chicago, Ill	Sept. 21, 1869	95, 071
Roofing and paving material	J. L. Fulton and J. Brace	Covington, Ky	May 17, 1870	103, 169
Roofing and other purposes, Cement for	J. Mosteller	Lockhaven, Pa	June 3, 1862	35, 464
Roofing and other purposes, Compound for	H. W. Johns	New York, N. Y	Apr. 14, 1868	76, 773
Roofing and other purposes, Fabric for	H. W. Johns	New York, N. Y	Sept. 1, 1868	81, 641
Roofing and other purposes, Fibrous compound for	R. O. Lowrey	Salem, N. Y	May 19, 1868	77, 992
Roofing and other purposes, Fire-proof felt for	M. A. Johnson	Lowell, Mass	Dec. 11, 1866	60, 381
Roofing and other purposes, Plastic compound for	R. O. Lowrey	Salem, N. Y	May 19, 1868	77, 991
Roofing and siding for houses	C. J. Fay	Hammonton, N. J	Jan. 1, 1867	60, 708

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Invention.	Inventor.	Residence.	Date.	No.
Roofing, Apparatus for making artificial	D. G. Conger	Chicago, Ill	Mar. 19, 1872	124, 794
Roofing, artificial stone, &c., Cement for	A. Pelletier	Washington, D. C	May 5, 1868	77, 705
Roofing, Attaching iron	T. W. H. Moseley	Cincinnati, Ohio	Apr. 12, 1859	23, 600
Roofing, belting, &c., Fabric for	J. B. Wands	Memphis, Tenn	July 31, 1860	29, 423
Roofing, Board	F. Walcott	Milford, Mass	Apr. 10, 1860	27, 872
Roofing boiler and furnace, Portable	P. Fenlason	Cincinnati, Ohio	May 21, 1867	64, 853
Roofing-bracket	J. W. Caldwell	Saint Louis, Mo	Mar. 21, 1871	112, 898
Roofing-bracket	A. J. Connelly	Philadelphia, Pa	June 18, 1872	127, 960
Roofing-bracket	W. Hancock	Gosport, Ind	Aug. 1, 1871	117, 624
Roofing-bracket	C. A. Kirkpatrick	Somerville, Mass	July 18, 1865	48, 818
Roofing-bracket	J. H. Look, jr	Rochester, N. Y	July 11, 1871	116, 845
Roofing-bracket	L. W. Merriam	Fitchburgh, Mass	Nov. 1, 1870	108, 924
Roofing buildings, Mode of	C. De Hass	Washington, D. C	Apr. 28, 1868	77, 177
Roofing, Cast-iron	W. Beach	Philadelphia, Pa	Apr. 23, 1842	2, 585
Roofing-cement	H. Billings	Beardstown, Ill	July 8, 1856	15, 275
Roofing-cement	F. M. Buell	Truxton, N. Y	July 17, 1866	56, 363
Roofing-cement	W. H. H. Burnham	East Homer, N. Y	Nov. 13, 1866	59, 551
Roofing-cement	E. Curtis and A. Crozier	Ithaca, N. Y	Mar. 6, 1866	52, 973
Roofing-cement	G. W. Cushing	Chicago, Ill	Sept. 21, 1858	21, 553
Roofing-cement	J. Darby	Cortlandville, N. Y	Aug. 28, 1866	57, 626
Roofing-cement	J. Darby	Cortlandville, N. Y	Apr. 2, 1867	63, 367
Roofing-cement	W. T. De Golyer	Schenectady, N. Y	Mar. 16, 1858	19, 627
Roofing-cement	M. D. Dubois	Newburgh, N. Y	Sept. 6, 1859	25, 324
Roofing-cement	N. A. Dyar	Medford, Mass	May 3, 1859	23, 882
Roofing-cement	R. H. Fitts	Lawrence, Kans	Dec. 3, 1867	71, 731
Roofing-cement	W. Green	Cleveland, Ohio	Mar. 13, 1866	53, 140
Roofing-cement	W. Green	Cleveland, Ohio	May 29, 1866	55, 087
Roofing-cement	W. Green	Cleveland, Ohio	July 3, 1866	56, 040
Roofing-cement	J. F. Hammond	Lynn, Mass	Dec. 11, 1860	30, 919
Roofing-cement	P. Harder	Danville, Pa	Sept. 3, 1861	33, 194
Roofing-cement	J. L. Kidwell	Washington, D. C	Sept. 22, 1868	82, 419
Roofing-cement	R. O. Lowrey	Saratoga Springs, N. Y	Apr. 16, 1867	63, 803
Roofing-cement	J. A. Moore	Providence, R. I	July 21, 1868	80, 084
Roofing-cement	S. B. Moore	Lockport, N. Y	Nov. 27, 1866	60, 037
Roofing-cement	J. D. Numan, J. T. Wilkinson, and E. W. Cook.	Lockport, N. Y	Aug. 27, 1867	68, 106
Roofing-cement	O. S. Oaks	South Rutland, N. Y	Mar. 1, 1859	23, 108
Roofing-cement	O. Porter	Waterford, Me	Nov. 15, 1870	109, 246
Roofing-cement	W. L. Potter	Clifton Park, N. Y	July 17, 1866	56, 444
Roofing-cement	L. Rodney	New York, N. Y	Feb. 11, 1868	74, 430
Roofing-cement	R. Simons	Rockford, Ill	May 4, 1858	20, 173
Roofing-cement	R. H. Smith	Cincinnati, Ohio	Jan. 20, 1857	16, 457
Roofing, &c., cement	H. S. Snow and E. J. Hunkins.	Macon, Mo	July 28, 1868	80, 368
Roofing-cement	G Stead	Brooklyn, N. Y	Oct. 2, 1866	58, 499
Roofing-cement	J. Stow and J. White	Geneva and Cleveland, Ohio.	Sept. 18, 1866	58, 148
Roofing-cement	W. M. Stuart and A. J. Chapman	Saint Clair, Mich	Jan. 12, 1869	85, 871
Roofing-cement	J. Thompson	North Wrentham, Mass	Aug. 10, 1858	21, 158
Roofing-cement	N. Trowbridge and E. Richardson.	Tully, N. Y	Apr. 28, 1868	77, 418
Roofing-cement	C. G. Von Tagen	Philadelphia, Pa	Apr. 20, 1869	89, 186
Roofing cement	W. B. Wheeler	Waterloo, N. Y	Apr. 3, 1866	53, 716
Roofing-cement	J. S. Wilkinson	Lockport, N. Y	Oct. 25, 1870	108, 666
Roofing-cement	J. C. Worth	Little Britain Township, Lancaster County, Pa.	May 17, 1859	24, 072
Roofing cement and tile	Z. Street	Salem, Ohio	Mar. 11, 1862	34, 653
Roofing-cement composition	R. Glemon	New Orleans, La	Mar. 23, 1858	19, 695
Roofing, Cement composition for	B. L. Prime	Hamilton, Ohio	Mar. 23, 1858	19, 712
Roofing-cement, Elastic	A. Doudes	Canton, Ohio	Mar. 6, 1866	52, 978
Roofing cement, Fire-proof	J B. Slichter	Chicago, Ill	Aug. 26, 1873	142, 130
Roofing, Cement for	S. Bowerman	Battle Creek, Mich	May 31, 1864	42, 925
Roofing, Cement for slate	C. Wanzer	New York, N. Y	June 24, 1862	35, 720
Roofing, Cement for slate	H. Wheeler	Burlington, Vt	Dec. 16, 1873	145, 705
Roofing-cement intended as a substitute for slate, tile, &c.	C. Morneweck	Baltimore, Md	Mar. 13, 1809	......
Roofing-cement, Machinery for making	P. Pomeroy and I. G. Allen	Middletown, Ohio	Aug. 2, 1859	24, 954
Roofing-cement. Preparing	R. T. Havens	Casstown, Ohio	Sept. 29, 1857	18, 278
Roofing-cement to prevent fire	D. Stodder	......	Nov. 16, 1804	......
Roofing, Cemented slate	A. G. Henmon	Buffalo, N. Y	Aug. 5, 1873	141, 437
Roofing-cloth, Apparatus for making	D. S. Anderson	Trenton, N. J	Apr. 23, 1861	32, 111
Roofing, Composite	S. C. Hoque	Oskaloosa, Iowa	Mar. 11, 1873	136, 722
Roofing, Composite	R. Lehndorff	Detroit, Mich	Mar. 18, 1873	136, 840
Roofing-composition	T. R. Abbott	Lowell, Mass	Feb. 1, 1870	99, 277
Roofing-composition	C. B. Allen	Saint Louis, Mo	Oct. 15, 1867	69, 889
Roofing-composition	D. W. Bailey	Hingham, Mass	Mar. 5, 1872	124, 192
Roofing-composition	F. Bearse and G. E. Hopkins	Barnstable, Mass	Oct. 23, 1866	58, 975
Roofing-composition	A. T. Boon	Galesburgh, Ill	Mar. 12, 1867	62, 810
Roofing-composition	C. A. Bremner	Goshen, Ohio	Dec. 21, 1858	22, 343
Roofing-composition	B. Capron	Lee Centre, N. Y	Dec. 15, 1868	84, 856
Roofing-composition	A. Coda, J. Bartlett, and H. M. Jones.	Ukiah City, Cal	Jan. 7, 1868	72, 977
Roofing-composition	D. G. Conger	Chicago, Ill	Feb. 27, 1872	124, 117
Roofing-composition	D. G. Conger	Chicago, Ill	Apr. 23, 1872	126, 026
Roofing-composition	M. Converse and A. C. Torry	Jordan, N. Y	May 7, 1867	64, 493
Roofing-composition	C. K. and S. F. Daniel	Covington, Ky	Sept. 11, 1866	57, 874
Roofing-composition	A. Davis	Chicago, Ill	Aug. 24, 1858	21, 246
Roofing-composition	H. L. Davis	Worcester, Mass	July 19, 1870	105, 434
Roofing-composition	J. M. Day and E. H. A. Oakley	Aiken, S. C	May 24, 1859	24, 105
Roofing-composition	G. L. and C. H. Eagen	San Francisco, Cal	Mar. 5, 1867	62, 619
Roofing-composition	J. P. Gay	Cincinnati, Ohio	Oct. 2, 1860	30, 217
Roofing-composition	J. P. Godfrey	Manchester, N. H	Nov. 8, 1870	109, 002
Roofing-composition	M. Gould	Chicago, Ill	Dec. 8, 1868	84, 820
Roofing-composition	R. C. Graves	Barnesville, Ohio	Feb. 11, 1868	74, 343
Roofing-composition	D. Green	Brookfield Township, Ohio	Feb. 26, 1867	62, 409
Roofing-composition	N. Groh	Helenville, Wis	Apr. 25, 1865	47, 416
Roofing-composition	L. Groneweg, J. H. Pulte, and C. T. Jones.	Cincinnati, Ohio	Dec. 5, 1865	51, 309

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Roofing-composition	W. H. Haight and T. S. Gladding.	Leavenworth, Kans	July 1, 1873	140, 366
Roofing-composition	D. Harger	Des Moines, Iowa	Feb. 4, 1868	74, 083
Roofing-composition	C. Hill	Dover, Me	Jan. 22, 1867	61, 427
Roofing-composition	B. Hinkley	Troy, N. Y	Aug. 21, 1866	57, 324
Roofing-composition	C. F. Hinman	Chicago, Ill	Nov. 17, 1868	84, 119
Roofing-composition	D. Hitchcock	Syracuse, N. Y	Nov. 17, 1868	84, 120
Roofing-composition	J. G. Holliday	Wheeling, W. Va	Sept. 18, 1866	58, 169
Roofing-composition	J. H. Hood	Danville, N. Y	Mar. 17, 1868	75, 634
Roofing-composition	C. B. Hutchins	Ann Arbor, Mich	Jan. 5, 1869	85, 666
Roofing-composition	A. P. Jackson	Warsaw, Ind	Oct. 15, 1867	69, 917
Roofing-composition	R. S. Jennings	Philadelphia, Pa	Oct. 14, 1873	143, 697
Roofing-composition	W. H. Jones	Newport, Ky	Sept. 13, 1870	107, 382
Roofing-composition	L. B. Joy	Buffalo, N. Y	Feb. 16, 1869	87, 050
Roofing-composition	W. Kinsey	Cincinnati, Ohio	Aug. 15, 1871	118, 025
Roofing-composition	H. Lester	Cincinnati, Ohio	Jan. 11, 1859	22, 563
Roofing-composition	S. M. Logan	Richmond, Ind	Dec. 23, 1859	26, 600
Roofing-composition	J. B. Melvin	Lowell, Mass	Jan. 3, 1871	110, 665
Roofing-composition	C. Mueller	Warren, Mass	July 15, 1873	140, 955
Roofing-composition	F. Neidhardt	East Saginaw, Mich	Aug. 3, 1869	93, 333
Roofing-composition	E. P. Newton	Clintonville, Pa	May 2, 1871	114, 325
Roofing-composition	W. L. Potter	Clifton Park, N. Y	Feb. 21, 1865	46, 405
Roofing-composition	S. I. Russell and J. H. Cole	Chicago, Ill	Aug. 10, 1869	93, 482
Roofing-composition	A. Ruttkay	New York, N. Y	Nov. 15, 1870	109, 254
Roofing-composition	B. D. Sanders	Wellsburgh, Va	Mar. 29, 1870	101, 314
Roofing-composition	H. K. Schanck	Benville, Ind	Nov. 6, 1866	59, 462
Roofing-composition	J. H. Smyser	Pittsburgh, Pa	Apr. 4, 1871	113, 588
Roofing-composition	C. Spear	Hopewell, N. Y	Aug. 21, 1866	57, 400
Roofing-composition	B. Stephens	Wheeling, W. Va	Sept. 1, 1868	81, 838
Roofing-composition	L. S. Stimson	Lowell, Mass	Aug. 3, 1869	93, 245
Roofing-composition	J. P. Thompson	Kirkville, Iowa	Sept. 11, 1866	57, 999
Roofing-composition	J. P. Thompson	Kirkville, Iowa	Nov. 13, 1866	59, 682
Roofing-composition	R. Tyler and P. Campbell, jr.	Diana, N. Y	Dec. 3, 1867	71, 667
Roofing-composition	W. Van Dyke and W. W. Eastwick.	Keokuk, Iowa	Aug. 27, 1867	68, 264
Roofing-composition	J. R. Van Horn and J. B. Roberts.	Newtown, Pa	July 30, 1867	67, 233
Roofing-composition	J. B. Wands	Chicago, Ill	July 21, 1857	17, 851
Roofing-composition	J. West	Syracuse, N. Y	Oct. 30, 1855	13, 733
Roofing-composition	W. W. Wilcox	Buffalo, N. Y	May 14, 1872	126, 662
Roofing-composition, Elastic	T. E. Wood	Knoxville, Pa	Sept. 29, 1868	82, 507
Roofing, Composition for	C. B. Allen	Chicago, Ill	Jan. 8, 1867	61, 036
Roofing, Composition for	J. F. Boynton	Syracuse, N. Y	Nov. 6, 1866	59, 348
Roofing, Composition for	J. P. Cowing	Seneca Falls, N. Y	Feb. 19, 1867	62, 115
Roofing, Composition for	J. Hobrecker	Quincy, Ill	Mar. 15, 1859	23, 248
Roofing, Composition for	J. Johnson	New York, N. Y	Oct. 26, 1858	21, 927
Roofing, Composition for	H. K. Schanck	Chicago, Ill	Feb. 18, 1868	74, 606
Roofing, Composition for	R. B. Smith	Mount Pleasant, Ohio	July 31, 1866	56, 818
Roofing, Composition for cement	J. Ditto and H. Van Bergen	New York, N. Y	Aug. 23, 1859	25, 182
Roofing, &c., Composition for coating	O. A. Day and G. W. Bishop	Saratoga Springs, N. Y	May 28, 1867	65, 179
Roofing-composition for houses, boats, barns, &c	J. J. Wiggin	Syracuse, N. Y	Oct. 27, 1868	83, 576
Roofing-composition for railway-cars, &c	H. Grant	Chicago, Ill	Jan. 28, 1862	34, 251
Roofing-composition, Mastic	S. K. Lighter and J. A. Morrell	Hamilton, Ohio	July 28, 1857	17, 883
Roofing, Composition paste or cement for	R. B. Stevenson	York Township, Ohio	Jan. 1, 1867	60, 957
Roofing-compositions, &c., Machine for mixing	A. Eagle	Trenton, N. J	Apr. 16, 1867	63, 873
Roofing-compositions to felt, Apparatus for applying	R. O. Benton	Buffalo, N. Y	Oct. 19, 1869	95, 974
Roofing-compositions to felt, paper, and other fabrics, Machine for compounding and applying.	B. S. Brown	Buffalo, N. Y	Apr. 20, 1869	89, 122
Roofing-compound	O. N. Bartholomew	Elmira, N. Y	Oct. 8, 1867	69, 612
Roofing-compound	D. W. Denton	Ithaca, N. Y	May 26, 1868	78, 269
Roofing-compound	J. V. Douglas	Philadelphia, Pa	Sept. 13, 1870	107, 232
Roofing-compound	G. Duncan	San Francisco, Cal	Mar. 20, 1866	53, 281
Roofing-compound	L. D. Ferguson	Dansville, N. Y	July 7, 1868	79, 645
Roofing-compound	S. Fields	Bridgeport, Conn	Dec. 3, 1867	71, 597
Roofing-compound	C. L. Fowler	Baltimore, Md	Sept. 12, 1871	118, 850
Roofing-compound	C. B. Hutchins	Ann Arbor, Mich	Dec. 21, 1869	98, 065
Roofing-compound	J. A. Jones	Baltimore, Md	Jan. 21, 1868	73, 531
Roofing-compound	J. A. Jones	Baltimore, Md	Sept. 29, 1868	82, 529
Roofing-compound	H. Morrie	Rockford, Ill	July 11, 1871	116, 983
Roofing-compound	A. H. Mott, D. Winer, and L. Brink.	Lockport, N. Y	Aug. 20, 1867	67, 998
Roofing-compound	M. Pinner	Buffalo, N. Y	Oct. 27, 1868	83, 539
Roofing-compound	G. O. and J. H. Smith	Chicago, Ill	Nov. 5, 1867	7[illegible], 478
Roofing-compound	H. G. Soules	Syracuse, N. Y	June 22, 1869	91, 576
Roofing-compound	W. M. Stuart	Saint Clair, Mich	Apr. 19, 1870	102, 061
Roofing-compound	H. M. Teasdale	Dansville, N. Y	July 14, 1868	80, 029
Roofing-compound	F. C. Tegetthoff	Cleveland, Ohio	Mar. 8, 1870	100, 688
Roofing-compound	W. P. Valentine	Buffalo, N. Y	Mar. 31, 1868	76, 276
Roofing-compound	E. B. Wells	New York, N. Y	Mar. 24, 1868	76, 012
Roofing-compound	L. A. Wilder	Chicago, Ill	May 24, 1870	103, 403
Roofing-compound	T. E. Wood	Waseca, Minn	Mar. 22, 1870	101, 071
Roofing-compound, Mastic	C. R. Milks	Detroit, Mich	Mar. 3, 1857	16, 739
Roofing-compound, Plastic	R. O. Benton	Buffalo, N. Y	Jan. 18, 1870	98, 911
Roofing compound, Water and fire proof	F. A. Curtis	East Saginaw, Mich	July 7, 1868	79, 732
Roofing, Concrete	S. B. and P. Pierce	Homer, N. Y	Jan. 21, 1868	73, 645
Roofing, Construction of	J. Scanlon	Chicago, Ill	Oct. 22, 1867	70, 098
Roofing, Construction of mastic	C. C. Hoff	Albany, N. Y	Feb. 12, 1856	14, 267
Roofing, covering wood, &c., Composition for	J. Caflisch	Union Mills, Pa	Mar. 19, 1867	62, 936
Roofing, Device for rolling	E. Richardson and J. H. Cole	Adrian, Mich	May 19, 1868	78, 014
Roofing, Edging metal plates for	D. A. Piper	Cincinnati, Ohio	Aug. 15, 1831	....
Roofing-fabric	D. P. Bartlett and A. Adams	Chagrin Falls, Ohio	Oct. 12, 1869	95, 634
Roofing-fabric	D. W. Denton	Ithaca, N. Y	Oct. 18, 1870	108, 334
Roofing-fabric	B. F. Field	Beloit, Wis	Apr. 27, 1869	89, 395
Roofing, &c., fabric	B. F. Field and R. D. O. Smith	Beloit, Wis., and Washington, D. C.	Oct. 5, 1869	95, 576
Roofing-fabric	J. G. Fuller	Brooklyn, N. Y	July 7, 1863	39, 139
Roofing-fabric	J. H. Green	Christiansburgh, Iowa	May 24, 1864	42, 910
Roofing-fabric	H. W. Johns	New York, N. Y	Apr. 9, 1872	125, 574

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Roofing-fabric	A. Robinson	New York, N. Y	Sept. 16, 1862	36, 484
Roofing-fabric	A. Robinson	New York, N. Y	Sept. 13, 1864	44, 220
Roofing-fabric	J. Scanlan	Chicago, Ill	Oct. 22, 1867	70, 029
Roofing-fabric, Apparatus for making	D. W. McConnell and W. W. Pierce.	Buffalo, N. Y	Apr. 25, 1871	114, 174
Roofing-fabric, &c., Apparatus for spreading plastic compound in the manufacture of.	W. B. Davies	New York, N. Y	June 25, 1872	128, 367
Roofing-fabric, Process and apparatus for the manufacture of.	A. Robinson	New York, N. Y	Mar. 3, 1868	75, 197
Roofing-fabrics, floor-coverings, &c., Compound for coating.	W. B. Davies	Brooklyn, N. Y	July 2, 1872	128, 599
Roofing-fabrics, Preparation of	J. J. Wiggin	Syracuse, N. Y	Oct. 27, 1868	83, 575
Roofing-felt	C. Churchill	Saint Thomas, Canada	Oct. 28, 1873	144, 016
Roofing-felt	W. B. Coates	Philadelphia, Pa	Aug. 16, 1870	106, 327
Roofing-felt	F. Curtis	Newton, Mass	Mar. 3, 1868	75, 128
Roofing-felt	J. Scanlan	Chicago, Ill	Feb. 5, 1867	61, 878
Roofing-felt	J. Scanlan	Chicago, Ill	Oct. 22, 1867	70, 030
Roofing, Felt and cement	H. Kirk and J. Winsmore, jr.	Philadelphia, Pa	Aug. 13, 1872	130, 376
Roofing-felt, Apparatus for preparing	G. W. Pond	Brooklyn, N. Y	Dec. 17, 1872	134, 002
Roofing-felt, Machine for coating	J. H. Barker	Washington, D. C	Apr. 9, 1872	125, 517
Roofing-felt, Machinery for making	J. B. Melvin	Lowell, Mass	June 27, 1871	116, 470
Roofing-felt, Manufacture of	J. Anderson	New York, N. Y	May 17, 1870	103, 199
Roofing-felting, Machine for making	E. Van Orden	New York, N. Y	June 14, 1870	104, 380
Roofing, Fire and water proof	C. W. Chaffee	Des Moines, Iowa	Aug. 1, 1871	117, 601
Roofing, Fire and water proof	E. R. Percy	Lawrence, Kans	Apr. 8, 1873	137, 566
Roofing, Fire-proof	J. B. Cornell	New York, N. Y	July 25, 1871	117, 384
Roofing, Fire-proof	C. Parker	Wenona, Ill	May 13, 1873	138, 813
Roofing, flooring, pipes, &c., Process and apparatus for the manufacture of.	J. K. Griffin	Waterdown, Canada	Nov. 21, 1871	121, 166
Roofing for buildings	N. Adams	Marlborough, N. Y	July 29, 1829	....
Roofing for buildings	L. S. Mills and C. H. Smith	New York, N. Y., and Baltimore, Md.	Nov. 3, 1863	40, 542
Roofing for houses, Manner of constructing metal	J. G. Woodin	Cincinnati, Ohio	July 8, 1843	3, 157
Roofing for subterranean vaults, Metallic	J. B. Cornell	New York, N. Y	Nov. 24, 1857	18, 677
Roofing houses	W. Docker	New Orleans, La	Dec. 10, 1840	1, 887
Roofing houses, Composition for	J. A. Hawley	Jackson, Mich	June 5, 1860	28, 577
Roofing houses, Machinery for bending metal plates for.	J. Iggett	Albany, N. Y	July 15, 1843	3, 177
Roofing, Illuminating	T. Hyatt	New York, N. Y	Sept. 2, 1873	142, 472
Roofing, Illuminating	T. Hyatt	New York, N. Y	Sept. 2, 1873	142, 473
Roofing-machine	J. H. Cole	Adrian, Mich	Apr. 28, 1868	77, 257
Roofing-machine	J. B. Driscole	Knoxville, Tenn	June 9, 1857	17, 497
Roofing-machine	C. L. Fowler	Baltimore, Md	Oct. 24, 1871	120, 153
Roofing-machine	C. B. Koons	Philadelphia, Pa	June 11, 1872	127, 896
Roofing-machine	E. Wise	Hannibal, Mo	Sept. 28, 1858	21, 643
Roofing, Machine for making composition	I. S. G. Rice	Cambridge, Mass	June 28, 1870	104, 887
Roofing, Machine for manufacturing	H. G. Soules	Syracuse, N. Y	June 22, 1869	91, 577
Roofing, Machine for the manufacture of	D. Hitchcock and W. Gibbs	Syracuse, N. Y	Apr. 25, 1871	114, 139
Roofing, Machine for the manufacture of composition.	J. J. Wiggin	New York, N. Y	Apr. 4, 1871	113, 604
Roofing, Machine for the manufacture of felted fabric for.	J. Anderson	New York, N. Y	Apr. 5, 1870	101, 473
Roofing, Machine for seaming metal	C. H. and W. G. Dowd	Scranton, Pa	Sept. 30, 1862	36, 561
Roofing, Machine for tarring paper for	J. Howard	West Manchester, Pa	Oct. 12, 1869	95, 689
Roofing, &c., Machine for tarring paper for	J. Roberts	Waltham, Mass	Feb. 8, 1870	99, 710
Roofing machine, Tin	O. W. Borritt	Weedsport, N. Y	Nov. 14, 1871	120, 851
Roofing, Manufacture of ready-prepared	J. M. Cobb	Beloit, Wis	Aug. 17, 1869	93, 859
Roofing, Manufacturing paper	F. A. Taft	Dedham, Mass	May 11, 1832	....
Roofing, Mastic	W. H. Carver and J. Beckley	Covington, Ky., and Cincinnati, Ohio.	Sept. 15, 1857	18, 186
Roofing, Mastic	J. Cipperly	Galesville, N. Y	Apr. 4, 1871	113, 628
Roofing, Mastic composition for	C. C. Hoff	New York, N. Y	May 14, 1861	32, 290
Roofing-material, Mastic	N. A. Dyar	Lynn, Mass	Mar. 3, 1857	16, 770
Roofing-material	S. M. Allen	Woburn, Mass	June 21, 1864	43, 171
Roofing-material	M. G. Balfour	Manston, Wis	Apr. 19, 1870	101, 970
Roofing-material	J. F. Boynton	Syracuse, N. Y	Jan. 1, 1867	60, 830
Roofing-material	J. H. Cole	Chicago, Ill	Dec. 20, 1870	110, 343
Roofing-material	B. Hinkley	Troy, N. Y	Sept. 7, 1869	94, 493
Roofing-material	A. Jameson	Trenton, N. J	Jan. 28, 1868	73, 899
Roofing-material	J. Munn	Camden, N. J	Jan. 5, 1869	85, 687
Roofing-material	W. Myler	Bridgeport, Ohio	May 28, 1867	65, 258
Roofing-material	W. L. Potter	Clifton Park, N. Y	Oct. 23, 1866	59, 065
Roofing-material	J. Rouse	Port Gibson, N. Y	Oct. 2, 1866	58, 484
Roofing-material	P. Werni	Chicago, Ill	Jan. 25, 1870	99, 267
Roofing-materials, Mode of preparing	A. Robinson	New York, N. Y	June 20, 1865	48, 311
Roofing-materials, Portable apparatus for heating and melting.	J. Munn	Columbus, N. J	July 31, 1866	56, 783
Roofing, Metallic	W. S. Belt	Cincinnati, Ohio	Aug. 8, 1871	117, 855
Roofing, Metallic	G. W. Bliss	Springfield, Mass	Jan. 31, 1871	111, 307
Roofing, Metallic	T. Carter	Niles, Ohio	June 21, 1870	104, 553
Roofing, Metallic	H. D. Cook	Normal, Ill	Aug. 1, 1871	117, 605
Roofing, Metallic	J. B. Crowley	Middletown, Conn	Oct. 19, 1869	95, 900
Roofing, Metallic	J. B. Davis	Cleveland, Ohio	June 28, 1870	104, 713
Roofing, Metallic	L. S. Enos	Chicago, Ill	Jan. 12, 1869	85, 806
Roofing, Metallic	J. C. Gaston	Oxford, Ohio	June 22, 1858	20, 636
Roofing, Metallic	W. S. Hawley	New York, N. Y	Apr. 9, 1872	125, 456
Roofing, Metallic	J. J. Hayden	Indianapolis, Ind	Jan. 28, 1862	34, 254
Roofing, Metallic	S. Hughes	Hudson City, N. J	June 7, 1870	103, 887
Roofing, Metallic	T. N. Hickcox	Brooklyn, N. Y	Feb. 22, 1870	100, 148
Roofing, Metallic	J. W. Kingman	North Bridgewater, Mass.	June 1, 1869	90, 667
Roofing, Metallic	C. Lewando	Cambridge, Mass	Mar. 26, 1872	124, 963
Roofing, Metallic	C. Lewando	Cambridge, Mass	July 15, 1873	140, 928
Roofing, Metallic	W. G. Reed	Chelsea, Mass	Mar. 26, 1861	31, 824
Roofing, Metallic	B. Ross and J. C. Campbell	Syracuse, N. Y	Feb. 10, 1857	16, 614
Roofing, Metallic	F. Roys	East Berlin, Conn	Oct. 12, 1869	95, 732
Roofing, Metallic	D. Saunderson	Saint Louis, Mo	May 25, 1869	90, 589
Roofing, Metallic	C. C. Scaife	Pittsburgh, Pa	June 22, 1868	91, 672
Roofing, Metallic	J. Siddons	Rochester, N. Y	Apr. 26, 1870	102, 441

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Invention.	Inventor.	Residence.	Date.	No.
Roofing, Metallic	J. Siddons	Rochester, N. Y	Nov. 14, 1871	120, 829
Roofing, Metallic	J. Siddons	Rochester, N. Y	Jan. 9, 1872	122, 670
Roofing, Metallic	J. Siddons	Rochester, N. Y	Jan. 9, 1872	122, 671
Roofing, Metallic	J. B. Stryker	Philadelphia, Pa	Oct. 8, 1867	69, 723
Roofing, Metallic	E. P. Vaux	Washington, D. C	June 30, 1868	79, 522
Roofing, Metallic	P. Wall	Allegheny, Pa	June 17, 1873	140, 100
Roofing, Metallic	J. C. Wands	Nashville, Tenn	May 9, 1871	114, 733
Roofing, Metallic	J. C. Wands	Nashville, Tenn	Nov. 28, 1871	121, 438
Roofing, Metallic	W. Ward	Cleveland, Ohio	Oct. 6, 1868	82, 802
Roofing, Metallic plates for	T. N. Hickcox	Brooklyn, N. Y	Apr. 2, 1872	125, 294
Roofing, Method of preparing mastic	R. Skinner, G. Duncan, and C. Merighi.	San Francisco, Cal	Sept. 26, 1865	50, 177
Roofing, Method of spreading mastic	W. R. Coe	West Meriden, Conn	Aug. 14, 1866	57, 091
Roofing, Mode of constructing metallic	H. Outcalt	Wilmington, Ohio	July 11, 1854	11, 292
Roofing, Non-corrosive metallic	O. T. May	Canastota, N. Y	Jan. 25, 1870	99, 216
Roofing, Paper for	J. Howard	West Manchester, Pa	June 8, 1869	91, 133
Roofing, pavement, &c., Cement for	L. De L'Homme and A. Lazzaro	New York, N. Y	Nov. 13, 1866	59, 713
Roofing, pavement, &c., Composition for	E. W. Ranney	New York, N. Y	Sept. 28, 1869	95, 378
Roofing, pavement, &c., Composition for	J. See	Baltimore, Md	June 18, 1867	65, 956
Roofing, pavement, floor, &c., Composition for	H. A. Weber	Columbus, Ohio	Apr. 27, 1869	89, 527
Roofing, pavement, &c., Method of laying and spreading composition.	J. and G. Rivett	Covington, Ky	Dec. 29, 1868	85, 453
Roofing, paving, &c., Composition for	E. J. De Smedt	New York, N. Y	Mar. 1, 1870	100, 269
Roofing, paving, &c., Composition for	E. J. De Smedt	New York, N. Y	Apr. 5, 1870	101, 594
Roofing, paving, &c., Composition for	W. M. Stuart	Port Huron, Mich	Aug. 22, 1871	118, 296
Roofing-plates, Machine for rolling metallic	G. A. Reynolds	Rochester, N. Y	June 21, 1870	104, 647
Roofing-plates, Seaming the ends of metallic	G. A. Reynolds	Rochester, N. Y	Sept. 13, 1870	107, 290
Roofing-plates, Ventilating illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 186
Roofing, Sheet-metal	J. Diehl	Clayton, Pa	Feb. 8, 1870	99, 656
Roofing, Sheet-metal	L. S. Enos	Almond, N. Y	Sept. 14, 1869	94, 877
Roofing, Sheet-metal	E. C. Hegeler and F. W. Matthiessen.	La Salle, Ill	Aug. 19, 1873	141, 929
Roofing, Sheet-metal	G. F. Leonard	Newport, Vt	July 8, 1873	140, 582
Roofing, Sheet-metal	E. Mills	Baltimore, Md	Nov. 17, 1868	84, 205
Roofing, Sheet-metal	J. H. Shimmons	Lawrence, Kans	Mar. 16, 1869	87, 881
Roofing, Sheet-metal	R. A. Smith	Fond du Lac, Wis	Oct. 7, 1873	143, 471
Roofing-shoes	J. M. Wood	Lowville, N. Y	Feb. 11, 1868	74, 473
Roofing, Slate	E. P. Farnum	Ijamsville, Md	Apr. 7, 1863	38, 103
Roofing, Slate	R. K. Kille	Mount Holly, N. J	Sept. 7, 1869	94, 689
Roofing, Slate and metal	S. R. Hathorn	Worcester, Mass	Aug. 3, 1869	93, 391
Roofing-slates, Mode of attaching	S. Farquhar	Boston, Mass	May 20, 1873	138, 999
Roofing, Terra-cotta	S. M. Logan and P. E. Baker	New Carlisle, Ohio	May 6, 1862	35, 164
Roofing, Tile	G. Graessle	Hamilton, Ohio	Dec. 11, 1855	13, 906
Roofing-tile	C. Howard	Warren, Ohio	Feb. 21, 1871	111, 938
Roofing-tile	J. B. Hughes	Terre Haute, Ind	Dec. 5, 1871	121, 624
Roofing, Tile	I. Marsh, jr., and G. Marsh	Milton and Lewisburgh, Pa.	Aug. 19, 1862	36, 225
Roofing, Tile	D. Swain	Dover, N. H	Aug. 19, 1873	142, 056
Roofing-tile	W. Utley	Troy, N. Y	Oct. 4, 1870	108, 068
Roofing-tile press	J. Koehler	Warren, Ohio	Jan. 10, 1871	110, 859
Roofing, Tin	B. Coddington	La Fayette, Ind	Sept. 27, 1870	107, 664
Roofing to buildings, Attaching	T. S. Card	Cortland, N. Y	Sept. 11, 1866	57, 860
Roofing to buildings, Attaching	L. D. Ford	Canaan, N. Y	Jan. 15, 1867	61, 184
Roofing-tongs	G. E. Taylor	Philadelphia, Pa	Jan. 11, 1870	98, 815
Roofing, tubing, tanks, wainscoting, boats, and other structures, Material for.	J. K. Mayo	Portland, Me	Dec. 26, 1865	51, 735
Roofing, Water-proof plastic cement for	G. Howland	Brunswick, N. Y	Apr. 22, 1873	138, 159
Roofing with slate	J. S. Sammons	New York, N. Y	Feb. 26, 1861	31, 561
Roofing with slate	J. S. Sammons	New York, N. Y	May 21, 1861	32, 383
Roofing with tin	A. Gandois and J. Sevales	Petersburgh, Va	Jan. 5, 1833	....
Room	A. P. Garretson and J. M. Hoffman.	Ripley, Ohio, and Miami, Ind.	Aug. 7, 1866	56, 925
Room ventilator and heater	J. H. Loomis	Attica, N. Y	Jan. 1, 1867	60, 760
Rooms, &c., Warming	W. Baker	Springfield, N. Y	Sept. 9, 1825	....
Root-cutter	J. and W. L. Heberling	Mount Pleasant, Ohio	Apr. 21, 1868	76, 912
Root-cutter	G. S. Perfater	Camp Point, Ill	Nov. 24, 1868	84, 374
Root-cutter	J. F. Smith and H. Underwood	Westmoreland, N. Y	June 14, 1870	104, 218
Root-cutter and shovel-plow, Combined	G. Trump	Second Fork, Pa	Nov. 14, 1871	120, 839
Root-cutting machine	W. C. Berry	Woodbridge, N. J	Jan. 1, 1861	31, 005
Root-cutting machine	H. C. Fletcher	Eden, Vt	July 22, 1862	35, 928
Root-cutting machine	J. Widmer	New Haven, Conn	Dec. 10, 1861	33, 922
Root-cutting machine, Succulent	E. J. Roosevelt	Pelham, N. Y	May 29, 1866	55, 164
Root-digger	B. Wright	Cardiff, N. Y	May 4, 1869	89, 615
Root-extractor	B. Goodrich	Brentwood, N. H	Jan. 1, 1867	60, 715
Roots from peat, Machine for separating	S. Brackett	Jamaica Plain, Mass	Dec. 17, 1867	72, 161
Roots, House for preserving	T. V. Bush	Gallatin, Tex	June 5, 1860	28, 558
Roots, &c., Mill for powdering	H. D. Garrison	Chicago, Ill	Nov. 15, 1870	109, 196
Rope and cordage	W. Fanning	New York, N. Y	Feb. 3, 1836	....
Rope and cordage, Coating and preserving	W. A. Torrey	Mont Clair, N. J	Feb. 11, 1873	135, 865
Rope and cordage machine	S. Pearson, jr., and W. H. Gardner.	Roxbury, Mass	July 10, 1855	13, 229
Rope and cordage, Machinery for making	W. R. Dutcher	Troy, N. Y	May 20, 1856	14, 938
Rope and cordage, Machinery for making	J. Harris, J. B. Stott, and G. Richmond.	Lansingburgh and Troy, N. Y.	Oct. 31, 1854	11, 863
Rope and cordage, Machinery for making	A. Woodworth, 3d, and G. Chamberlin.	Boston, Mass., and Olean, N. Y.	Nov. 28, 1854	12, 016
Rope and cordage, Preserving	A. Salisbury	Troy, N. Y	Nov. 1, 1830	....
Rope and twine, Machine for making	J. Heavin	Montgomery Court-House, Va.	Aug. 3, 1813	....
Rope and wire clamp	J. H. Edward	Mendota, Ill	Oct. 8, 1867	69, 646
Rope-band coupling	H. Badcock	Pittsburgh, Pa	May 21, 1872	126, 918
Rope-clamp	T. J. and G. M. Clark	Higganum, Conn	Apr. 16, 1872	125, 789
Rope-clamp	W. H. Downing	Shamburgh, Pa	Aug. 12, 1873	141, 706
Rope-clamp	P. P. Jenney	New Bedford, Mass	Apr. 9, 1872	125, 396
Rope-clamp	T. Pimer	New London, Conn	July 23, 1872	129, 860
Rope-clamp	J. G. Winger	Oil City, Pa	Oct. 1, 1872	131, 803
Rope-clamp, Metallic	A. Méhu	Paris, France	Aug. 5, 1873	141, 579
Rope-cord, &c	L. G. Yon	Paris, France	June 29, 1869	91, 995

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Invention.	Inventor.	Residence.	Date.	No.
Rope, cord, and covering for wire, cord, &c., Fibrous material for the manufacture of.	H. H. Martin	Roxbury, Mass	Jan. 7, 1868	73, 109
Rope, cord, or yarn, Winding	P. B. Tyler	Springfield, Mass	July 18, 1854	11, 342
Rope, cordage, and twine, Manufacturing	S. F. Dexter and S. Graves	Auburn, N. Y	Aug. 24, 1830	....
Rope-driving machine	S. B. Whiting	Pottsville, Pa	Nov. 13, 1866	59, 697
Rope-guard	O. B. Latham	Seneca Falls, N. Y	June 12, 1866	55, 506
Rope-holder	C. W. Huson	French Corral, Cal	Nov. 22, 1870	109, 412
Rope-hook and fastening	C. B. Bristol	New Haven, Conn	Nov. 20, 1866	59, 890
Rope-layer, Combined jacks and breastwork	D. Myerlo	Philadelphia	Mar. 3, 1827	....
Rope laying and twisting machine	S. and J. A. Bazin	Canton, Mass	Nov. 12, 1867	70, 685
Rope-laying machine	J. Goulding	Roston, Mass	Oct. 10, 1835	....
Rope-laying machinery	S. and J. A. Bazin	Canton, Mass	Apr. 25, 1854	10, 823
Rope-laying machinery	M. Guild	Easton, Mass	May 8, 1849	6, 441
Rope-laying machinery	G. W. Pittman	Bushwick, N. Y	Jan. 24, 1860	26, 894
Rope-laying machinery	G. W. Pittman and W. C. Boone.	Bushwick, N. Y	Apr. 5, 1859	23, 491
Rope-machine	J. Blackie	New York, N. Y	Jan. 9, 1866	51, 915
Rope-machine	T. G. Boone	Brooklyn, N. Y	July 15, 1856	15, 326
Rope-machine	W. Coutie	Troy, N. Y	Jan. 19, 1858	19, 133
Rope-machine	W. R. Dutcher	Lansingburgh, N. Y	June 9, 1857	17, 496
Rope-machine	E. Guile	Saint Louis, Mo	July 14, 1857	17, 787
Rope-machine, &c., indicator	C. Couse	Belleville, N. J	Feb. 26, 1867	62, 398
Rope-machines, Tension-device for flier of	H. Perkins	Mansfield, Mass	May 7, 1872	126, 483
Rope-machinery	W. Joslin	Waterford, N. Y	Mar. 10, 1849	6, 166
Rope-machinery	B. Morison	Harrisburgh, Pa	Mar. 13, 1849	6, 176
Rope-machinery	J. W. Peer	Troy, N. Y	Apr. 5, 1859	23, 486
Rope, Making	D. Treadwell	Boston, Mass	Feb. 5, 1834	....
Rope, &c., making	J. Whiteman	Philadelphia, Pa	Jan. 15, 1836	....
Rope, Making	M. Wigglesworth	....	June 26, 1799	....
Rope, Metallic	R. S. Newall	Gateshead-upon-Tyne, England.	Aug. 26, 1846	4, 714
Rope-molding machine	N. W. House	Adrian, Mich	July 6, 1869	92, 312
Rope-moldings, Machine for making	C. Eden	Indianapolis, Ind	Oct. 26, 1869	96, 091
Rope-nipper	W. H. Allen and A. J. Bentley.	New York, N. Y	Oct. 11, 1859	25, 709
Rope-opening machine	R. Mansley	Philadelphia, Pa	June 11, 1861	32, 524
Rope or cable, Machine for making covered	H. Greenway	East Newark, N. J	July 23, 1872	129, 816
Rope or line holder	A. J. Chase	Boston, Mass	Oct. 15, 1867	69, 767
Rope or wire, Clamp	J. H. Elward	Mendota, Ill	July 9, 1867	66, 575
Rope-parceling machine	O. Kempton	New Bedford, Mass	Sept. 25, 1837	408
Rope protector, Tiller	J. Sample	Meadville, Miss	Oct. 26, 1858	21, 906
Rope-reeding machine	A. Boring and W. W. Jones	Thornville, Ohio	May 5, 1828	....
Rope, Serving	A. Montgomery	New York, N. Y	Mar. 18, 1836	....
Rope, Serving	C. Parke	New York, N. Y	Apr. 13, 1836	....
Rope, Skipping	S. P. Coon	Milwaukee, Wis	Jan. 18, 1870	98, 928
Rope, Skipping	J. R. Cross	Chicago, Ill	Jan. 5, 1869	85, 514
Rope to fiber, Machinery for reducing	T. H. Dunham	Boston, Mass	Aug. 5, 1862	36, 080
Rope-walk	H. Maxson	Hopkinton, R. I	June 4, 1861	32, 483
Rope-walks, Strand-twisting machine for	J. Rinek	Easton, Pa	Jan. 9, 1872	122, 653
Rope-walker, Automaton	H. A. House	Bridgeport, Conn	Nov. 29, 1870	109, 618
Rope-way, Endless	A. S. Hallidie	San Francisco, Cal	Dec. 12, 1871	121, 776
Rope-way, Endless	D. R. Smith	San Francisco, Cal	Mar. 5, 1872	124, 391
Rope-ways, Griping-attachment for	A. S. Hallidie	San Francisco, Cal	July 16, 1872	129, 130
Rope-yarns, Machine for tarring	J. Stewart	Brooklyn, N. Y	Nov. 23, 1858	22, 150
Rope-yarns, Machine for tarring	D. Treadwell	Boston, Mass	Aug. 18, 1834	....
Rope-yarns, Putting up	J. H. Echols	Lynchburgh, Va	Oct. 20, 1836	....
Rope-yarns, Putting up	J. H. Echols	Lynchburgh, Va	Oct. 20, 1836	60
Rope-yarns, Spinning and winding	C. Bergh and P. Shermerhorn, jr.	New York	July 2, 1811	....
Rope-yarns, Tarring	W. Montgomery	Roxbury, Mass	May 8, 1849	6, 445
Ropes and winding into coils, Machinery for laying	S. and J. A. Bazin	Canton, Mass	Feb. 28, 1844	3, 451
Ropes, Chock for holding	D. D. Brown	Oswego, N. Y	Oct. 11, 1870	108, 101
Ropes, cordage, and other fabrics, Strengthening and preserving.	L. S. Robbins	New York, N. Y	Aug. 13, 1867	67, 678
Ropes, Forming and laying	G. Bradley	Fishkill, N. Y	Dec. 16, 1833	....
Ropes, &c., Gage-plate for making readies for	R. Graves	Boston, Mass	Dec. 31, 1819	....
Ropes, Machine for laying hemp around wire in making.	J. Rinek	Easton, Pa	Apr. 26, 1859	23, 785
Ropes, Machine for making	C. R. Bellows	Seneca Falls, N. Y	Jan. 17, 1860	26, 872
Ropes, Machine for making	C. Clark	Dayton, Ky	Sept. 1, 1868	81, 753
Ropes, Machine for making	E. Crain	Springfield	Jan. 10, 1820	....
Ropes, Machine for making	H. Evans	New Bedford, Mass	Sept. 24, 1850	7, 664
Ropes, Machine for making	H. W. Fowler	Hoosick Falls, N. Y	Apr. 21, 1857	17, 084
Ropes, Machine for making	H. Greenway	East Newark, N. J	Dec. 17, 1872	134, 050
Ropes, Machine for making	B. S. and J. B. Hale	Lowell, Mass	Jan. 4, 1870	98, 491
Ropes Machine for making	S. Hills, jr	Glastonburgh, Conn	June 11, 1829	....
Ropes, Machine for making	H. Perkins	Mansfield, Mass	Nov. 5, 1867	70, 466
Ropes, Machine for making	W. G. Pike	Philadelphia, Pa	Oct. 18, 1870	108, 387
Ropes, Machine for making and twisting strands of.	M. Day	Roxbury, Mass	Feb. 7, 1838	596
Ropes, Machine for making straw	C. E. Donnellan	Indianapolis, Ind	May 9, 1871	114, 535
Ropes, Machine for serving	J. Fales	New Bedford, Mass	Aug. 20, 1835	....
Ropes, &c., Machine for tightening	E. Paget	Loughborough, England	July 12, 1870	105, 240
Ropes, Machine for twisting and untwisting	J. Paradis and W. H. Drew	Brooklyn, N. Y	June 7, 1870	104, 058
Ropes, Machine for untwisting and carding	J. Blick	Camden Town, England	May 21, 1872	126, 868
Ropes, Machine for untwisting and picking hair	G. Sanford	Bergen Point, N. J	Dec. 26, 1871	122, 285
Ropes, Machinery for making	N. Adams	Lansingburgh, N. Y	Aug. 24, 1858	21, 238
Ropes, Machinery for making	J. Harris	North Hoosick, N. Y	July 24, 1855	13, 309
Ropes, Machinery for making	O. S. Hazard and I. Peck	Coventry, R. I	Feb. 5, 1856	14, 194
Ropes, Machinery for making	H. Maxson and J. Johnson	Hopkinton, R. I., and Brooklyn, N. Y.	Apr. 2, 1867	63, 408
Ropes, Machinery for making	F. J. Miller	Buford, Ga	Mar. 5, 1861	31, 615
Ropes, Machinery for making	W. Robinson, jr	Warsaw, N. Y	May 2, 1854	10, 866
Ropes, Machinery for making	E. S. Townsend	Palmyra, N. Y	Feb. 28, 1845	3, 934
Ropes, Machinery for making	M. Wallwork	Hoosick Falls, N. Y	Apr. 7, 1857	17, 005
Ropes, Machinery for opening old	A. Ford	Newport, Ky	June 7, 1859	24, 292
Ropes, Machinery for the manufacture of wire	E. S. Towsend	Trenton, N. J	Oct. 30, 1847	5, 346
Ropes, Manufacturing	M. H. Johnson	Saint Louis, Mo	Mar. 17, 1857	16, 842
Ropes, Manufacturing	W. Stone, jr	Williamson County, Tenn	Sept. 8, 1831	....
Ropes, Manufacturing	E. S. Townsend and P. Durfee	Palmyra, N. Y	Jan 6, 1831	....

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Invention.	Inventor.	Residence.	Date.	No.
Ropes, Method of and machinery for manufacturing wire.	J. A. Roebling	Saxenburgh, Pa	July 16, 1842	2,720
Ropes of any size, and lines, &c., Making	J. Sellers and A. Bartle	Alexandria, Va	May 5, 1807	....
Ropes or cordage, Machine for unmaking	J. Wood	Brooklyn, N. Y	Mar. 17, 1857	16,858
Ropes, Sheave for wire	R. Long	Scott Township, Pa	May 21, 1872	126,971
Ropes, Speeder for making cotton	G. Brewster	Poughkeepsie, N. Y	Apr. 18, 1829	....
Ropes, Top for wire	J. A. Roebling	Sexenburgh, Pa	Feb. 6, 1849	6,082
Ropes with caoutchouc, Covering	P. Mackie	New York	Dec. 3, 1834	....
Ropes with caoutchouc, Covering	P. Mackie	New York	Oct. 16, 1834	....
Roping and skinning machine	G. Cornell	Rensselaer County, N. Y	July 22, 1812	....
Roping, Machine for making cotton	C. Danforth	Paterson, N. J	Feb. 18, 1841	1,983
Roping, Manufacturing	A. Whitman and J. Baker	Walpole, Mass	July 20, 1831	....
Rose-engine	A. Schwitter	New York, N. Y	May 10, 1864	42,691
Rose-engine for ornamenting glass, &c	A. Schwitter	New York, N. Y	Sept. 27, 1864	44,461
Rose-engine for ornamenting glass	A. Schwitter	New York, N. Y	Aug. 22, 1865	49,555
Rose-head sprinkler	W. Westlake	Chicago, Ill	Oct. 3, 1871	119,550
Rose-pink, Preparing liquid	J. W. Perry	Boston, Mass	June 16, 1857	17,610
Rosette	J. W. Dayton	Waterbury, Conn	June 7, 1870	103,849
Rosette	F. L. Hilbright and F. Reynold	Newark, N. J	June 11, 1867	65,672
Rosette	J. V. Waldron	New York, N. Y	Feb. 26, 1867	62,454
Rosette-engine	C. H. Field	Providence, R. I	July 16, 1867	66,819
Rosette-holder	I. C. Kelley	Monticello, Ind	June 22, 1869	91,545
Rossing saw-logs, Machine for	E. H. Stearns	Cincinnati, Ohio	Feb. 7, 1860	27,081
Rossing-machine	C. Gilpin and L. T. Dickinson.	Cumberland, Md	Sept. 22, 1868	82,399
Rossing-machine	C. Gilpin and L. T. Dickinson.	Cumberland, Md	Sept. 22, 1868	82,400
Rossing-machine	J. H. Lufbery	Rahway, N. J	Apr. 26, 1870	102,288
Rossing-machine, Feed-roll for	C. Gilpin	Cumberland, Md	Nov. 15, 1870	109,199
Rotary and stationary spindle	C. Jackson, S. S. Potter, and J. Miller.	Providence, R. I	Apr. 2, 1835	....
Rotary boiler	N. T. Edson	New Orleans, La	July 18, 1871	117,159
Rotary boilers, Mode of heating	C. S. Buchanan	Ballston, N. Y	June 15, 1858	20,546
Rotary chair	J. L. Mott and W. Tabele	Mott Haven and New York, N. Y.	Nov. 24, 1857	18,722
Rotary cutter	C. H. Mellor and M. L. Orum	Philadelphia, Pa	July 15, 1873	140,938
Rotary cutter, and mode of operating it for moldings.	F. Shutle	Philadelphia, Pa	May 10, 1859	23,991
Rotary cutter for tonguing and grooving	J. A. Woodbury	Winchester, Mass	Mar. 30, 1858	19,806
Rotary cutter, Reversible	E. V. O'Neill	Philadelphia, Pa	May 27, 1873	139,417
Rotary cutters, Device for grinding	J. J. Grant	Greenfield, Mass	July 16, 1872	129,548
Rotary cutter, Machine for forming	A. Jennings	Fall River, Mass	Mar. 26, 1850	7,219
Rotary cutters, Sharpening-device for	E. Conroy	Boston, Mass	Apr. 20, 1858	19,982
Rotary cutters while being ground, Device for holding.	H. Disston	Philadelphia, Pa	June 23, 1868	79,213
Rotary cutting-shears	C. W. Brown	Boston, Mass	May 22, 1860	28,345
Rotary digger	E. Gordon	Taunton, Mass	Mar. 25, 1862	34,751
Rotary digger	W. F. Quinby and G. G. Lobdell	Wilmington, Del	Sept. 25, 1866	58,289
Rotary digger	H. Stanley	Troy, N. Y	May 30, 1865	47,996
Rotary engine	E. B. Adams, R. P. Trimble, and H. N. Adams.	Salem, Ohio	Feb. 7, 1865	46,201
Rotary engine	W. B. Allyn	Washington, Ohio	May 19, 1863	38,542
Rotary engine	M. L. Andrew	Cincinnati, Ohio	Oct. 1, 1867	69,383
Rotary engine	A. Andrews	Bernville, Pa	Mar. 1, 1859	23,066
Rotary engine	W. Atwood	Cape Elizabeth, Me	Sept. 3, 1867	68,337
Rotary engine	W. Avens and F. Fradley	Brooklyn, N. Y	Feb. 21, 1865	46,436
Rotary engine	C. Avery	Tunkhannock, Pa	June 2, 1863	38,721
Rotary engine	S. Baker and S. C. McIntire	Springfield, Ohio	Nov. 25, 1873	144,882
Rotary engine	M. W. Baldwin	Philadelphia, Pa	Jan. 21, 1862	34,190
Rotary engine	J. W. Barriger	Omaha, Nebr	Oct. 24, 1871	120,231
Rotary engine	E. Barrows	New York, N. Y	Feb. 7, 1854	10,489
Rotary engine	H. I. Behrens	New York, N. Y	Apr. 10, 1866	53,915
Rotary engine	E. S. Bennett	Brooklyn, N. Y	July 16, 1872	129,452
Rotary engine	E. S. Bennett	Brooklyn, N. Y	Dec. 24, 1872	134,123
Rotary engine	J. B. Bennett	Brooklyn, N. Y	Feb. 25, 1868	74,744
Rotary engine	J. B. Bennett	Brooklyn, N. Y	Jan. 30, 1872	123,144
Rotary engine	J. B. Bennett	Brooklyn, N. Y	Jan. 30, 1872	123,145
Rotary engine	J. B. Bennett	Brooklyn, N. Y	Apr. 9, 1872	125,524
Rotary engine	H. L. Bennison	Greenwich, England	Apr. 18, 1871	113,839
Rotary engine	W. C. Bibb	Madison, Ga	Dec. 24, 1872	134,245
Rotary engine	D. Bickford	Boston, Mass	Aug. 1, 1865	49,070
Rotary engine	C. T. Boardman	Bergen Point, N. J	June 9, 1863	38,805
Rotary engine	R. C. Bristol	China, Mich	Aug. 22, 1854	11,546
Rotary engine	A. and D. Buffum	Brooklyn and New York, N. Y.	Oct. 30, 1847	5,343
Rotary engine	W. Case	Troy, Ill	June 20, 1871	116,022
Rotary engine	W. Case	Troy, Ill	Oct. 24, 1871	120,183
Rotary engine	E. Chapman	Rochester, Minn	Nov. 12, 1867	70,802
Rotary engine	F. Chatelain	Lille, France	Apr. 17, 1866	54,079
Rotary engine	C. Christensen	Brooklyn, N. Y	Sept. 3, 1861	33,184
Rotary engine	J. J. and B. Clark	Elgin, Ill	Apr. 9, 1872	125,578
Rotary engine	J. Clayton and A. Campbell	Brooklyn, N. Y	Feb. 11, 1862	34,393
Rotary engine	J. M. Conkle	Beaver Falls, Pa	July 18, 1871	117,153
Rotary engine	J. M. Conkle	Beaver Falls, Pa	Dec. 31, 1872	134,464
Rotary engine	J. Constantine	Mansfield, La	Nov. 15, 1870	109,179
Rotary engine	J. Cox	Belle Plaine, Iowa	May 23, 1871	115,171
Rotary engine	K. and I. Cox	New York, N. Y	Oct. 16, 1860	30,389
Rotary engine	J. E. Crisp	Charlestown, Mass	Sept. 9, 1873	142,559
Rotary engine	J. C. Culver	Cleveland, Ohio	Jan. 28, 1873	135,207
Rotary engine	G. W. Cummings	Conneaut, Ohio	July 29, 1873	141,261
Rotary engine	J. Cuthbert	Glenham, N. Y	Oct. 19, 1869	95,992
Rotary engine	S. M. Davis	Rushville, Mo	Aug. 29, 1865	49,610
Rotary engine	W. A. Davis	Salem, Ohio	Dec. 6, 1870	109,878
Rotary engine	W. H. Devalin	Sacramento, Cal	Feb. 18, 1862	34,414
Rotary engine	C. Donovan	East Abington, Mass	Aug. 7, 1860	29,473
Rotary engine	R. Dudgeon	New York, N. Y	Dec. 13, 1870	110,022
Rotary engine	H. Durre	New York, N. Y	Aug. 15, 1865	49,391
Rotary engine	W. P. Eayrs	Boston, Mass	Mar. 18, 1873	136,981
Rotary engine	W. P. Eayrs	Boston, Mass	July 22, 1873	141,128

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Invention.	Inventor.	Residence.	Date.	No.
Rotary engine	J. R. Ellis	Company F, Twenty-second Regiment, Wisconsin Volunteers.	Feb. 21, 1865	46, 457
Rotary engine	M. Elsaesser	Brooklyn, N. Y	May 13, 1873	138, 744
Rotary engine	H. C. Emery	Lincoln, Ohio	Aug. 7, 1860	29, 475
Rotary engine	J. B. Faucett	Pope's Station, Miss	Jan. 16, 1872	122, 713
Rotary engine	C. G. Foote	Indianapolis, Ind	Oct. 6, 1868	82, 820
Rotary engine	R. N. and R. Francis	Girard, Pa	July 4, 1871	116, 582
Rotary engine	L. K. Fuller	Brattleborough, Vt	Aug. 13, 1872	130, 493
Rotary engine	W. M. Fuller	New York, N. Y	July 26, 1870	105, 796
Rotary engine	S. Gibson	Lancaster, Pa	Oct. 4, 1870	108, 016
Rotary engine	S. Gibson	Lancaster, Pa	Jan. 10, 1871	110, 912
Rotary engine	S. D. Gilson	Syracuse, N. Y	June 7, 1870	103, 869
Rotary engine	B. A. Goodell	Millbury, Mass	Aug. 14, 1860	29, 584
Rotary engine	W. A. Graham	Carlisle, Pa	June 27, 1871	116, 436
Rotary engine	M. Gregg	Philadelphia, Pa	June 26, 1847	5, 178
Rotary engine	W. Hall	Turney Station, Mo	Feb. 13, 1872	123, 695
Rotary engine	W. Hall	Freeport, Ill	Mar. 12, 1872	124, 572
Rotary engine	M. Hanford	Boston, Mass	Aug. 20, 1867	67, 978
Rotary engine	J. E. Hanger	Richmond, Va	May 14, 1872	126, 806
Rotary engine	D. D. Hardy	Cincinnati, Ohio	June 14, 1859	24, 388
Rotary engine	D. D. Hardy	Cincinnati, Ohio	Apr. 28, 1868	77, 373
Rotary engine	D. D. Hardy and A. C. West	Delavan, Ill	Apr. 30, 1872	126, 263
Rotary engine	J. H. Hathaway	Millbury, Mass	Nov. 13, 1855	13, 786
Rotary engine	J. H. Hathaway	Millbury, Mass	Nov. 15, 1859	26, 148
Rotary engine	B. I. Henderson	Salem, Mass	June 13, 1871	115, 854
Rotary engine	W. S. Hinds	Little Falls, N. Y	Aug. 2, 1864	43, 690
Rotary engine	F. J. Hollenweger	New Rochelle, N. Y	Sept. 9, 1873	142, 629
Rotary engine	P. B. Holmes	Cincinnati, Ohio	Aug. 28, 1860	29, 787
Rotary engine	J. C. Howard	Williamsburgh, N. Y	Apr. 3, 1849	6, 251
Rotary engine	D. Hughes	Rochester, N. Y	Apr. 5, 1859	23, 466
Rotary engine	R. Hughes	Dangerfield, Tex	June 5, 1866	55, 301
Rotary engine	R. Hughes	Dangerfield, Tex	May 9, 1871	114, 685
Rotary engine	W. Humphreys	Cold Spring, N. Y	Oct. 2, 1860	30, 224
Rotary engine	S. Huse	Chicago, Ill	Feb. 15, 1859	22, 935
Rotary engine	H. Jamison	Williamsburgh, N. Y	Oct. 11, 1870	108, 148
Rotary engine	D. L. Jaques	Hudson, Mich	July 26, 1864	43, 642
Rotary engine	F. Jessop	York, Pa	Nov. 26, 1872	133, 318
Rotary engine	E. P. Jones	Leflore County, Miss	July 23, 1872	129, 830
Rotary engine	F. Kettler	Milwaukee, Wis	Oct. 23, 1860	30, 481
Rotary engine	W. P. Kidder	Norridgewock, Me	Dec. 10, 1872	133, 861
Rotary engine	C. C. Klein	Philadelphia, Pa	Dec. 16, 1873	145, 505
Rotary engine	T. S. La France	Elmira, N. Y	Dec. 19, 1871	122, 033
Rotary engine	T. S. La France	Elmira, N. Y	Nov. 19, 1872	133, 159
Rotary engine	R. Leach	Bangor, Me	Dec. 19, 1871	121, 947
Rotary engine	S. D. Lount	Summerville, Mich	May 10, 1859	23, 929
Rotary engine	W. R. Manley	New York, N. Y	Dec. 30, 1873	146, 010
Rotary engine	G. B. Massey	New York, N. Y	Feb. 13, 1872	123, 574
Rotary engine	G. B. Massey	New York, N. Y	Feb. 13, 1872	123, 575
Rotary engine	G. B. Massey	New York, N. Y	Apr. 16, 1872	125, 748
Rotary engine	A. Masson	Philadelphia, Pa	Apr. 17, 1855	12, 726
Rotary engine	E. Matteson	South Brooklyn, N. Y	Dec. 5, 1865	51, 335
Rotary engine	W. P. Maxson	Independence, Iowa	Dec. 16, 1873	145, 671
Rotary engine	J. McGowan	Mifflin Township, Pa	Aug. 1, 1871	117, 656
Rotary engine	J. McGowan	Mifflin Township, Pa	Dec. 17, 1872	134, 082
Rotary engine	E. D. Mead	Shortsville, N. Y	July 26, 1870	105, 708
Rotary engine	S. S. Mecay	Kilbourne, Ohio	Mar. 3, 1863	37, 841
Rotary engine	T. Merriam and J. Cushing	Waterloo Village, Wis	July 4, 1865	48, 577
Rotary engine	C. Miller	Belleville, Ill	May 3, 1859	23, 852
Rotary engine	J. Miller	Philadelphia, Pa	Sept. 26, 1846	4, 776
Rotary engine	A. Millochau	New York, N. Y	Nov. 10, 1863	40, 571
Rotary engine	D. S. Money	Valdosta, Ga	Sept. 6, 1870	107, 081
Rotary engine	C. Monson	New Haven, Conn	Aug. 12, 1862	36, 164
Rotary engine	E. Myers	New York, N. Y	Nov. 11, 1873	144, 559
Rotary engine	W. J. Norton	Cincinnati, Ohio	Apr. 17, 1866	54, 006
Rotary engine	S. P. Ochiltree	Orange, Ind	June 10, 1873	139, 807
Rotary engine	A. O'Leary	Iowa City, Iowa	Jan. 9, 1872	122, 641
Rotary engine	F. Ortlieb	Williamsburgh, N. Y	Nov. 19, 1867	71, 208
Rotary engine	F. Ortlieb	Green Point, N. Y	Jan. 4, 1870	98, 619
Rotary engine	J. Platt	Utica, N. Y	Apr. 15, 1862	34, 981
Rotary engine	J. Platt	New York, N. Y	Sept. 8, 1863	39, 829
Rotary engine	T. T. Prosser	Fond du Lac, Wis	Mar. 22, 1859	23, 311
Rotary engine	A. Ramsdell	Moscow, Mich	Oct. 13, 1863	40, 278
Rotary engine	A. F. Reeder	Bloomington, Ill	May 15, 1860	28, 305
Rotary engine	J. D. Richardson	Houston, Tex	Feb. 6, 1872	123, 362
Rotary engine	A. K. Rider	Hydeville, Vt	Dec. 27, 1864	45, 636
Rotary engine	A. K. Rider	Hydeville, Vt	Dec. 27, 1864	45, 637
Rotary engine	J. Rix and J. S. Shaw	Springfield, Mo	June 26, 1860	28, 905
Rotary engine	J. B. Root	Battle Creek, Mich	Apr. 30, 1861	32, 208
Rotary engine	J. B. Root	Battle Creek, Mich	Feb. 11, 1862	34, 375
Rotary engine	J. B. Root	Battle Creek, Mich	Feb. 11, 1862	34, 376
Rotary engine	J. B. Root	New York, N. Y	Aug. 2, 1864	43, 744
Rotary engine	C. Rumley	Rochester, N. Y	Nov. 7, 1854	11, 909
Rotary engine	S. T. Russell	Ottawa, Ill	July 31, 1860	29, 408
Rotary engine	A. P. Samuel	New York, N. Y	Aug. 16, 1859	25, 220
Rotary engine	W. and T. Schnebly	Hagerstown, Md	Aug. 24, 1848	5, 732
Rotary engine	S. Sherman	Weston, Mo	Oct. 16, 1866	58, 900
Rotary engine	G. Sickels	Brooklyn, N. Y	Mar. 14, 1854	10, 642
Rotary engine	J. J. Slocum	New York, N. Y	Dec. 18, 1860	30, 936
Rotary engine	S. M. Snyder	Brady, Pa	Jan. 11, 1870	98, 811
Rotary engine	J. C. Spencer	Phelps, N. Y	Oct. 21, 1873	143, 936
Rotary engine	S. Stevens	Boston, Mass	June 19, 1855	13, 107
Rotary engine	J. Stott	Burlington, Iowa	Oct. 10, 1871	119, 797
Rotary engine	J. J. Thomas	Manayunk, Pa	Apr. 17, 1855	12, 746
Rotary engine	G. M. Venable	Memphis, Tenn	Oct. 31, 1871	120, 470
Rotary engine	W. W. Verdin	Baltimore, Md	June 17, 1862	35, 640
Rotary engine	G. Vining	Boston, Mass	Nov. 1, 1864	44, 901
Rotary engine	J. T. Warren	Stafford, N. Y	Aug. 24, 1865	49, 594

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Invention.	Inventor.	Residence.	Date.	No.
Rotary engine	J. T. Warren	Stafford, N. Y	Oct. 24, 1865	50, 666
Rotary engine	C. and S. Weed	El Dorado, Iowa	Aug. 2, 1864	43, 729
Rotary engine	W. I. Weed	Binghamton, N. Y	July 16, 1872	129, 635
Rotary engine	W. P. Wentworth	Seneca Falls, N. Y	Sept. 12, 1871	118, 993
Rotary engine	J. C. Wilson	London, England	June 11, 1872	127, 943
Rotary engine	J. R. Winkler	Williamsport, Pa	June 4, 1872	127, 667
Rotary engine	T. H. Witherby	Worcester, Mass	June 5, 1860	28, 624
Rotary engine	S. A. Wood and A. F. Dumke	Manitowoc, Wis	Sept. 13, 1864	44, 247
Rotary engine	L. H. Woods	Syracuse, N. Y	Nov. 25, 1873	144, 941
Rotary engine	P. Worrall	Sugartown, Pa	Nov. 18, 1873	144, 722
Rotary engine	W. Wright	Rochester, N. Y	Sept. 9, 1845	4, 182
Rotary engine	R. D. Wright	Saint Louis, Mo	Apr. 3, 1866	53, 755
Rotary engine	O. Zellen and C. Taftezon	New York, N. Y	June 7, 1864	43, 064
Rotary engine and pump	J. Harris	Montreal, Canada	Nov. 5, 1872	132, 829
Rotary engine, Double-acting	J. P. Herron	Atlanta, Ga	Feb. 7, 1871	111, 538
Rotary-engine lever	C. Tomkins	Montgomery, Ala	Nov. 14, 1834	....
Rotary engine or pump	L. Chapman	Collinsville, Conn	Mar. 25, 1873	137, 056
Rotary engine, Propelling	J. G. Hotchkiss	Cincinnati, Ohio	Oct. 1, 1830	....
Rotary engine, Reciprocating	G. Ambrose	New York, N. Y	June 22, 1858	20, 613
Rotary engine, Reversible	W. H. Ward	Auburn, N. Y	Apr. 30, 1872	126, 355
Rotary engine, Steam and water jet	J. McGowan	Lebanon Church, Pa	Aug. 1, 1871	117, 655
Rotary engine, Steam-lever	J. Catlin and C. Fletcher	Cincinnati, Ohio	June 13, 1831	....
Rotary engine, Water or steam	P. H. Green and H. H. Evarts	Mount Morris, N. Y	Mar. 9, 1842	2, 485
Rotary engines, Abutment-motion for reversible	C. A. Mills	Cold Water, Mich	Aug. 24, 1852	9, 219
Rotary engines, Method of reversing reacting	C. M. Miles	Brockwayville, Pa	Sept. 4, 1849	6, 698
Rotary engines, Mode of packing	J. D. Akin	Columbus, Pa	Mar. 19, 1840	1, 519
Rotary evaporator, Construction of	A. H. Miller	La Porte, Ind	Apr. 24, 1860	28, 002
Rotary meter	I. Cook	Saint Louis, Mo	July 29, 1873	141, 325
Rotary meter or motor	C. Moore and A. P. Emery	New York, N. Y	Oct. 29, 1867	70, 242
Rotary motor	W. Reading	Georgetown, D. C	Apr. 23, 1872	126, 086
Rotary motor and meter	W. and W. Hamilton, jr	Toronto, Canada	Mar. 9, 1869	87, 665
Rotary or pump steam-engine	O. Allen	Norwich, Conn	Nov. 8, 1831	....
Rotary press	J. A. Wilkinson	Brooklyn, N. Y	Aug. 9, 1859	25, 069
Rotary press for woolen and cotton goods	M. Bayley	Salisbury, Mass	July 5, 1837	251
Rotary shears	A. Hardy	Dorchester, Mass	Jan. 6, 1867	16, 334
Rotary shears	A. Hardy and G. A. Rollins	Boston, Mass., and Nashua, N. H.	Oct. 27, 1857	18, 506
Rotary shears	L. and L. J. Lamb	Berlin, Conn	Nov. 10, 1846	4, 846
Rotary shears	H. F. and G. F. Shaw	West Roxbury, Mass	July 9, 1872	128, 759
Rotary shears for metal	M. Stephens	Brooklyn, N. Y	Oct. 28, 1873	144, 155
Rotary steam and water engine and condenser	H. Pratt	Great Britain	Mar. 28, 1842	2, 517
Rotary steam-engine	R. T. P. Allen	Farmdale, Ky	July 23, 1872	129, 703
Rotary steam-engine	C. R. Alsop	Middletown, Conn	Jan. 21, 1833	....
Rotary steam-engine	G. M. Alsop	Philadelphia, Pa	Feb. 20, 1835	....
Rotary steam-engine	A. Arnold	New York, N. Y	Mar. 9, 1858	19, 537
Rotary steam-engine	G. V. Atwood	Mount Hope, Ala	Oct. 31, 1871	120, 411
Rotary steam-engine	J. R. Averill and F. Hoard	Rochester, N. Y	Nov. 12, 1825	....
Rotary steam-engine	A. Bailey	Oswego, N. Y	June 1, 1869	90, 721
Rotary steam-engine	J. W. Bailey	Aurora, Ind	May 24, 1870	103, 279
Rotary steam-engine	W. H. Baker and S. H. Baldwin	Cohoes, N. Y	Aug. 21, 1839	1, 295
Rotary steam-engine	A. C. Baldwin	Boston, Mass	Sept. 25, 1866	58, 206
Rotary steam-engine	T. Banta	Hoboken, N. J	May 28, 1867	65, 154
Rotary steam-engine	J. S. Barden	Providence, R. I	July 14, 1868	79, 803
Rotary steam-engine	O. Barnes	Van Buren, N. Y	June 26, 1835	....
Rotary steam-engine	J. Barnett	Fredericktown, Ohio	June 27, 1871	116, 395
Rotary steam-engine	W. Barry	Carthage, N. Y	Mar. 28, 1871	113, 005
Rotary steam-engine	A. Batby	New York	May 26, 1819	....
Rotary steam-engine	J. T. and B. Beale	East Greenwich, England	June 11, 1842	2, 669
Rotary steam-engine	J. V. Beckman	Brooklyn, N. Y	Sept. 23, 1873	142, 982
Rotary steam-engine	J. B. Bennett	South Brooklyn, N. Y	Oct. 30, 1866	59, 166
Rotary steam-engine	J. B. Bennett	Brooklyn, N. Y	Jan. 28, 1873	135, 311
Rotary steam-engine	J. P. Birch	Philadelphia, Pa	Apr. 9, 1867	63, 694
Rotary steam-engine	J. Black	Philadelphia, Pa	May 30, 1846	4, 555
Rotary steam-engine	J. Black	Philadelphia, Pa	June 5, 1847	5, 142
Rotary steam-engine	S. Blake	Providence, R. I	Oct. 11, 1828	....
Rotary steam-engine	J. S. Boicourt and T. H. Barnes	Boonesborough, Iowa	Mar. 3, 1868	75, 117
Rotary steam-engine	J. M. Boorman	Scarborough, N. Y	Feb. 16, 1869	87, 023
Rotary steam-engine	G. W. Briggs and M. H. Densmore	Shickshinny, Pa	Sept. 12, 1871	118, 840
Rotary steam-engine	H. T Briggs	South Bend, Ind	June 27, 1865	48, 362
Rotary steam-engine	R. C. Bristol	Chicago, Ill	July 26, 1853	9, 874
Rotary steam-engine	R. F. Brower	New York, N. Y	Feb. 14, 1860	27, 100
Rotary steam-engine	S. H. Brown	New York, N. Y	Apr. 23, 1867	64, 068
Rotary steam-engine	A. W. Browne	Brooklyn, N. Y	Sept. 22, 1868	82, 285
Rotary steam-engine	H. T. Buff	Franklin, Ind	Feb. 18, 1868	74, 662
Rotary steam-engine	A. Buffum	Philadelphia, Pa	Oct. 10, 1835	....
Rotary steam-engine	W. B. Campbell	Abingdon, Iowa	May 12, 1868	77, 869
Rotary steam-engine	W. B. Campbell	Abingdon, Iowa	June 2, 1868	78, 425
Rotary steam-engine	L. Carman	Oxford, Me	July 16, 1832	....
Rotary steam-engine	P. D. M. Carmichael	Le Roy, N. Y	Sept. 5, 1856	15, 641
Rotary steam-engine	F. Carpenter	Cazenovia, N. Y	July 2, 1836	....
Rotary steam-engine	L. Carpenter	Oswego, N. Y	Sept. 10, 1867	68, 602
Rotary steam-engine	E. Child	Philadelphia, Pa	Oct. 1, 1830	....
Rotary steam-engine	A. Clark	Bangor, Me	Feb. 17, 1836	....
Rotary steam-engine	J. Collicott	Boston, Mass	Apr. 3, 1866	53, 731
Rotary steam-engine	M. H. Collins	Chelsea, Mass	Oct. 9, 1856	58, 602
Rotary steam-engine	J. M. Colman and T. Turton	Milwaukee, Wis	July 8, 1856	15, 281
Rotary steam-engine	A. Cooley	Le Roy, N. Y	July 29, 1824	....
Rotary steam-engine	J. J. Cordes and E. Locke	United States and Newport, England.	Mar. 29, 1841	2, 019
Rotary steam-engine	W. Cram	New York, N. Y	May 13, 1873	138, 864
Rotary steam-engine	P. Cramer	Providence, R. I	Feb. 14, 1871	111, 818
Rotary steam-engine	L. Currie	Saint Charles, Mo	Nov. 3, 1868	83, 766
Rotary steam-engine	P. C. Curtis	Utica, N. Y	July 10, 1847	5, 190
Rotary steam-engine	W. Darker	Philadelphia, Pa	Apr. 9, 1872	125, 442
Rotary steam-engine	J. Darling	Cincinnati, Ohio	July 9, 1867	66, 570
Rotary steam-engine	J. F. De Navarro	New York, N. Y	July 6, 1869	92, 286
Rotary steam-engine	F. O. Deschamps	Philadelphia, Pa	Sept. 12, 1871	118, 915

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Rotary steam-engine	J. Drummond	Elizabethtown, N. J	Aug. 3, 1839	1, 273
Rotary steam-engine	A. Duvall	Baltimore, Md	Nov. 10, 1868	83, 941
Rotary steam-engine	J. F. Early	Buckersville, Va	Feb. 11, 1873	135, 789
Rotary steam-engine	S. M. Eby and D. M. Phelps	Wayne and Richland Counties, Ohio.	Aug. 26, 1842	2, 764
Rotary steam-engine	S. Fairlamb and D. Bruce, jr	New York	May 25, 1826	....
Rotary steam-engine	D. L. Farnam	Albany, N. Y	Feb. 10, 1823	....
Rotary steam-engine	N. B. Fassett	Adrian, Mich	Sept. 1, 1868	81, 763
Rotary steam-engine	E. Ferren	Haverhill, N. H	Nov. 15, 1843	3, 338
Rotary steam-engine	F. Fischer	Garibaldi, Iowa	Feb. 19, 1867	62, 190
Rotary steam-engine	M. Fletcher	London, England	Nov. 18, 1844	3, 833
Rotary steam-engine	M. Fletcher	Louisville, Ky	Nov. 28, 1865	51, 165
Rotary steam-engine	M. Fletcher	Louisville, Ky	Sept. 18, 1866	58, 086
Rotary steam-engine	G. S. Follensbee	Philadelphia, Pa	Dec. 20, 1870	110, 350
Rotary steam-engine	S. B. Frank	Knobnoster, Mo	Oct. 7, 1873	143, 504
Rotary steam-engine	S. B. Freeman	Ashland, Ohio	June 27, 1871	116, 293
Rotary steam-engine	M. Gabriel	Newark, N. J	Aug. 6, 1867	67, 527
Rotary steam-engine	A. C. Gallahue	M.rrisania, N. Y	May 4, 1869	89, 650
Rotary steam-engine	C. Galvani	New York, N. Y	Mar. 27, 1847	5, 039
Rotary steam-engine	S. Gibson	York, Pa	Apr. 2, 1872	125, 373
Rotary steam-engine	S. Gibson	York, Pa	Aug. 12, 1873	141, 710
Rotary steam-engine	J. Gilbert	Le Roy, N. Y	Nov. 17, 1824	....
Rotary steam-engine	J. E. Gillespie	Boston, Mass	June 4, 1867	65, 483
Rotary steam-engine	L. F. Goben	Spring Hill, Mo	Feb. 2, 1858	19, 247
Rotary steam-engine	L. F. Goben	Spring Hill, Mo	Oct. 27, 1868	83, 483
Rotary steam-engine	W. Goodwin	Boston, Mass	Jan. 9, 1866	51, 996
Rotary steam-engine	G. W. Goodwyn	Petersburgh, Va	Oct. 27, 1868	83, 484
Rotary steam-engine	D. Grannis and D. E. Brand	Collins, N. Y	July 29, 1837	316
Rotary steam-engine	R. C. Grant	Pomeroy, Ohio	Dec. 4, 1843	3, 360
Rotary steam-engine	A. Greenleaf	Paris, N. Y	Apr. 18, 1831	....
Rotary steam-engine	J. B. Groomes	Carmichaels, Pa	Mar. 23, 1858	19, 697
Rotary steam-engine	C. Grotz	Ottumwa, Iowa	July 15, 1873	140, 914
Rotary steam-engine	C. Grotz and D. B. Dennison	Ottumwa, Iowa	Nov. 26, 1872	133, 441
Rotary steam-engine	E. Hale	Pomfret, N. Y	May 20, 1825	....
Rotary steam-engine	E. R. Hale	Hyde Park, N. Y	June 13, 1831	....
Rotary steam-engine	S. G. Hall	Norwich, Conn	Aug. 27, 1867	68, 186
Rotary steam-engine	S. G. Hall and G. W. Bugbee	Norwich, Conn	May 29, 1866	55, 092
Rotary steam-engine	S. H. Hamilton	Bushnell, Ill	Mar. 16, 1869	87, 928
Rotary steam-engine	D. D. Hardy	Delevan, Ill	Aug. 5, 1873	141, 436
Rotary steam-engine	A. S. Harlan	Bloomington, Ill	Nov. 26, 1867	71, 384
Rotary steam-engine	A. S. Harlan	Bloomington, Ill	Mar. 14, 1871	112, 591
Rotary steam-engine	S. Harris	Rochester, Mich	May 9, 1865	47, 636
Rotary steam-engine	C. Harrison	Milwaukee, Wis	July 14, 1868	79, 828
Rotary steam-engine	J. and E. Harthan	Timbersbrook, England	Sept. 14, 1858	21, 494
Rotary steam-engine	C. A. Hege	Forsyth County, N. C	Aug. 22, 1871	118, 366
Rotary steam-engine	W. H. Holland	Chelsea, Mass	June 25, 1867	66, 085
Rotary steam-engine	C. Inman	Hope, Mich	Feb. 25, 1873	136, 164
Rotary steam-engine	E. W. Jackson	Brooklyn, N. Y	July 28, 1868	80, 487
Rotary steam-engine	N. and A. W. Jackson	Napoleon, Ohio	Aug. 4, 1868	80, 630
Rotary steam-engine	S. S. Jamison, jr	Saltsburgh, Pa	Apr. 14, 1868	76, 770
Rotary steam-engine	E. W. and S. Jenkins	Camden, N. J., and Landsdale, Pa.	July 29, 1873	141, 226
Rotary steam-engine	I. Jennings	New York	Jan. 17, 1817	....
Rotary steam-engine	L. Johnson	Grand Lodge, Mich	Nov. 22, 1859	26, 190
Rotary steam-engine	W. Jones	Bradford, Vt	Nov. 10, 1832	....
Rotary steam-engine	W. Jones and R. Farnum	Bradford, Vt	Dec. 31, 1842	2, 896
Rotary steam-engine	H. Jungling	Hannover, Prussia	Aug. 6, 1872	130, 306
Rotary steam-engine	C. Kaiser	New York, N. Y	June 25, 1867	66, 092
Rotary steam-engine	C. Kaiser	New York, N. Y	Nov. 24, 1868	84, 286
Rotary steam-engine	A. Kipp, jr	Sing Sing, N. Y	Sept. 8, 1868	82, 007
Rotary steam-engine	T. S. La France	Elmira, N. Y	Apr. 4, 1871	113, 309
Rotary steam-engine	G. A. Lamb	Washington, D. C	Dec. 5, 1865	51, 389
Rotary steam-engine	J. A. Lannert and C. A. Tower	Cleveland, Ohio	Oct. 1, 1872	131, 883
Rotary steam-engine	W. B. Leachman	Leeds, England	Dec. 22, 1868	85, 106
Rotary steam-engine	J. Leaver and J. Wock	Canal Fulton, Ohio	July 1, 1873	140, 378
Rotary steam-engine	D. B. Lee and S. Stewart	Philadelphia, Pa	June 11, 1829	....
Rotary steam-engine	J. Lucas	Hastings, Minn	Apr. 29, 1873	138, 334
Rotary steam-engine	W. I. Lyman	Springfield, Mass	Oct. 20, 1868	83, 186
Rotary steam-engine	T. G. Massie	Port Henry, N. Y	Sept. 20, 1864	44, 330
Rotary steam-engine	E. Matteson	Brooklyn, N. Y	Jan. 26, 1869	86, 311
Rotary steam-engine	E. Matteson and W. M. and H. Parris.	Dayton, N. Y., and Dorset and Pawlet, Vt.	Nov. 6, 1855	13, 763
Rotary steam-engine	L. Matthews	Antrim, Ohio	Apr. 13, 1858	19, 967
Rotary steam-engine	P. McEwen	Chicago, Ill	June 15, 1869	91, 468
Rotary steam-engine	J. McKay	Philadelphia, Pa	Mar. 1, 1853	9, 600
Rotary steam-engine	A. Miller	Lockport, N. Y	Aug. 8, 1873	342
Rotary steam-engine	L. H. Mitchell and L. Stone	Mount Vernon, Ohio	Sept. 14, 1869	94, 906
Rotary steam-engine	G. I. Montjoy and J. B. Sawyer.	Houston, Tex	Aug. 16, 1859	25, 133
Rotary steam-engine	W. F. Moody	Chicago, Ill	Dec. 9, 1873	145, 304
Rotary steam-engine	J. Moore	Elizabethtown, N. J	June 10, 1840	1, 628
Rotary steam-engine	J. C. Massholder	Lebanon, Oreg	Feb. 21, 1871	112, 066
Rotary steam-engine	C. F. Murdock	Caseville, Mich	July 30, 1872	130, 063
Rotary steam-engine	T. A. Nizer	Hamilton, Ohio	Sept. 15, 1868	82, 149
Rotary steam-engine	C. E. Offhaus	Newark, N. J	Sept. 11, 1855	13, 550
Rotary steam-engine	F. Ogden	Meadville, Pa	Nov. 24, 1868	84, 371
Rotary steam-engine	H. Olney	Malone, N. Y	Dec. 7, 1869	97, 546
Rotary steam-engine	E. Osborn	Economy, Ind	Oct. 6, 1868	82, 742
Rotary steam-engine	J. I. Parker	Plymouth, Ohio	Mar. 18, 1842	2, 495
Rotary steam-engine	J. Parsons	Carthage, Ohio	Feb. 14, 1860	27, 148
Rotary steam-engine	C. W. Patten	Elk Point, Dak	June 18, 1872	128, 062
Rotary steam-engine	A. Pease	Lyons, N. Y	Feb. 12, 1844	3, 429
Rotary steam-engine	L. Peter	Gnadenhutten, Ohio	Jan. 12, 1858	19, 100
Rotary steam-engine	R. D. Pettit	Baldwinsville, N. Y	Dec. 24, 1867	72, 537
Rotary steam-engine	A. Philp	New York, N. Y	Oct. 15, 1872	132, 317
Rotary steam-engine	G. H. Pond	San Francisco, Cal	Jan. 4, 1870	98, 626
Rotary steam-engine	A. Pott and B. F. Pomroy	Pottsville, Pa	Mar. 11, 1833	....
Rotary steam-engine	T. Powell	Baltimore, Md	Oct. 1, 1830	....
Rotary steam-engine	W. Race	Lockport, N. Y	June 27, 1871	116, 352
Rotary steam-engine	E. H. Read	Lancaster, Ky	Nov. 10, 1826	....

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Rotary steam-engine	N. Read	Boston, Mass	Feb. 21, 1817	....
Rotary steam-engine	F. Rhind	Brooklyn, N. Y	Nov. 9, 1869	96, 729
Rotary steam-engine	A. K. and W. S. Rider	New York	Apr. 10, 1843	3, 039
Rotary steam-engine	R. W. Riess	Philadelphia, Pa	Oct. 8, 1867	69, 705
Rotary steam-engine	M. Rikert	Oneida, Ill	Apr. 7, 1868	76, 525
Rotary steam-engine	J. C. Robie	Binghamton, N. Y	Nov. 26, 1840	1, 862
Rotary steam-engine	J. Robingson	New Brighton, Pa	Sept. 2, 1856	15, 667
Rotary steam-engine	J. B. Root	Brooklyn, N. Y	Apr. 29, 1856	14, 778
Rotary steam-engine	J. B. Root	Buffalo, N. Y	Feb. 10, 1857	16, 613
Rotary steam-engine	J. B. Root	Youngstown, N. Y	Dec. 29, 1857	18, 989
Rotary steam-engine	C. F. Roth	Osceola, Iowa	June 27, 1871	116, 357
Rotary steam-engine	J. C. Salomon, jr	Washington, D. C	Oct. 4, 1853	10, 075
Rotary steam-engine	L. M. Shaw and A. S. Baker	Evansville, Wis	Oct. 14, 1873	143, 793
Rotary steam-engine	P. Shellenback and J. Augspurger.	Middletown, Ohio	Apr. 28, 1868	77, 221
Rotary steam-engine	R. M. Sherman	Fairfield, Conn	Apr. 25, 1837	177
Rotary steam-engine	R. M. Sherman	Fairfield, Conn	Mar. 12, 1839	1, 100
Rotary steam-engine	J. W. Simonton and O. T. Struble.	Taylorville, Ind	May 16, 1865	47, 751
Rotary steam-engine	H. Smith	Sunbury, Ohio	June 11, 1841	2, 128
Rotary steam-engine	M. Smith	Pittsburgh, Pa	May 10, 1859	23, 956
Rotary steam-engine	R. F. Stevens	Saint Louis, Mo	May 30, 1846	4, 545
Rotary steam-engine	J. A. Stewart	Cross Plains, Tenn	Oct. 11, 1841	2, 302
Rotary steam-engine	W. C. Stiles	Nevada City, Cal	Mar. 25, 1873	137, 109
Rotary steam-engine	W. C. Stiles	Nevada City, Cal	Apr. 29, 1873	138, 352
Rotary steam-engine	J. L. Sullivan	Boston, Mass	Dec. 10, 1810	....
Rotary steam-engine	L. Sumner and J. Youmans	Davenport, Iowa	Feb. 16, 1869	87, 076
Rotary steam-engine	W. Sutton	Geneva, N. Y	Sept. 18, 1834	....
Rotary steam-engine	H. Taylor	Baltimore, Md	Mar. 25, 1873	137, 261
Rotary steam-engine	H. B. Thomas	Portage City, Wis	Feb. 1, 1859	22, 832
Rotary steam-engine	H. G. Thompson	New York, N. Y	Aug. 22, 1848	5, 724
Rotary steam-engine	J. Thomson	Pittsburgh, Pa	July 16, 1823	....
Rotary steam-engine	A. I. Thunell and J. M. Hedstrom.	Buffalo, N. Y	May 12, 1868	77, 780
Rotary steam-engine	J. Torrance	Irwin Station, Pa	Nov. 21, 1865	51, 122
Rotary steam-engine	C. B. Turner	Grand Rapids, Mich	Feb. 4, 1868	74, 172
Rotary steam-engine	D. C. Turner	Aztalan, Wis	Sept. 22, 1857	18, 255
Rotary steam-engine	J. Tuttle	Boston, Mass	Mar. 26, 1841	2, 015
Rotary steam-engine	D. Ulam	Greenburgh, Pa	Mar. 23, 1836	....
Rotary steam-engine	J. B. Van Deusen	New York, N. Y	May 7, 1867	64, 600
Rotary steam-engine	T. B. Van Pelt	Spring Hill, Kans	Jan. 16, 1872	122, 789
Rotary steam-engine	J. H. Van Sandt and J. J. Hurt	Princeton, Ind	May 28, 1867	65, 312
Rotary steam-engine	F. J. Van Vorhis and T. C. Workman.	Stockwell, Ind	Apr. 14, 1868	76, 676
Rotary steam-engine	W. P. Vickery	East Auburn, Me	Oct. 18, 1870	108, 412
Rotary steam-engine	W. H. Ward	Auburn, N. Y	Oct. 3, 1871	119, 483
Rotary steam-engine	W. H. Ward	Auburn, N. Y	Oct. 3, 1871	119, 484
Rotary steam-engine	J. Q. Welch	Oswego, Oreg	Sept. 17, 1867	68, 929
Rotary steam-engine	G. Westinghouse, jr	Schenectady, N. Y	Oct. 31, 1865	50, 759
Rotary steam-engine	J. D. Whelpley	Boston, Mass	Oct. 27, 1868	83, 427
Rotary steam-engine	G. H. Whitcher	South Brooklyn, N. Y	July 2, 1874	128, 572
Rotary steam-engine	S. Whitman	New Albany, Ind	June 25, 1836	....
Rotary steam-engine	I. N. Whittlesey	Vincennes, Ind	Apr. 2, 1841	2, 037
Rotary steam-engine	J. R. Willett and L. Brien	Nashville, Tenn	Jan. 29, 1867	61, 695
Rotary steam-engine	G. R. Winkler	Williamsport, Pa	Jan. 30, 1872	123, 320
Rotary steam-engine	J. Woody	Mount Vernon, Ind	Aug. 18, 1868	81, 219
Rotary steam-engine	B. H. Wright	Rome, N. Y	Oct. 24, 1854	11, 846
Rotary steam-engine	O. Wright and A. A. Wilder	Warsaw, N. Y	Apr. 2, 1838	667
Rotary steam-engine and boiler	E. Baldwin	Washington, D. C	Jan. 13, 1835	....
Rotary steam-engine and boiler	C. Tompkins	Montgomery, Ala	Nov. 30, 1830	....
Rotary steam-engine and boiler, Compound	S. Fairman	Lansingburgh, N. Y	May 24, 1834	....
Rotary steam-engine and method of applying it to carriage-wheels, Curved tube.	E. Bryan	New York	Apr. 8, 1829	....
Rotary steam-engine applicable to pumps	N. H. J. F. Comte de Crony	England	June 14, 1843	3, 134
Rotary steam-engine, Double-chamber	J. Eastman	Bath, N. H	Feb. 18, 1831	....
Rotary steam-engine, Inject-reacting	J. Pilbrow	Tottingham Green, England.	June 14, 1843	3, 131
Rotary steam-engine, Rarefied-air	G. Cameron	Washington, D. C	Aug. 17, 1835	....
Rotary steam-engine, Reacting	C. Hill	Zanesville, Ohio	June 26, 1835	....
Rotary steam-engine, Reacting	J. G. Hotchkiss	New Haven, Conn	Nov. 7, 1835	....
Rotary steam-engine, Reacting	J. Ingham	Apulia, N. Y	Nov. 28, 1836	94
Rotary steam-engine, Reacting	R. N. Powers	Cincinnati, Ohio	Apr. 29, 1824	....
Rotary steam-engine, Spiral-spring float-propelling	M. Young	Buffalo, N. Y	July 21, 1835	....
Rotary steam-engines, Mode of exhausting the case of.	E. Lock	Newport, England	Sept. 11, 1844	3, 736
Rotary table-waiter	A. N. Kellogg	Chicago, Ill	Dec. 28, 1869	98, 269
Rotary washer	C. Post	Springport, N. Y	July 15, 1828	....
Rotary wrench	A. Pitcher	Freedom, Minn	Oct. 1, 1872	131, 828
Rotating fountain and seat for barbers' shop, Combined.	J. Mayer	Philadelphia, Pa	Aug. 22, 1865	49, 539
Rotating tumbler-lock	D. H. Richards and J. F. Flanders.	Newburyport, Mass	Dec. 16, 1851	8, 593
Rouge-pad	H. M. Fish	New York, N. Y	July 30, 1867	67, 182
Roulette	A. H. Crozier and M. Taylor	Oswego, N. Y., and Hartford, Conn.	Oct. 4, 1870	107, 882
Round boxes, Machine for labeling	E. Tyrrell	Brooklyn, N. Y	June 6, 1871	115, 789
Round comb	E. Brown	Wappinger's Falls, N. Y	Jan. 18, 1870	98, 844
Round comb	O. B. Gallup	Summit, R. I	Apr. 20, 1869	89, 212
Round comb	O. B. Gallup	Summit, R. I	July 20, 1869	92, 815
Round comb	G. T. Lincoln	Providence, R. I	Aug. 2, 1870	105, [illegible]57
Round comb, Child's	C. H. Noyes	Brooklyn, N. Y	Sept. 21, 1869	95, 130
Rounding and dressing irregular and regular forms, Machine for.	H. A. Gore	Goshen, Ind	June 21, 1870	104, 578
Rounding-machine	E. M. Stevens	Boston, Mass	Aug. 23, 1864	43, 958
Roulette apparatus	G. Hauschild	Saint Louis, Mo	Mar. 2, 1869	87, 410
Roulette, Parlor	A. Marais	Saint Louis, Mo	July 19, 1870	105, 468
Roving and spinning wool and cotton, Machine for.	O. Barrett, jr	Schaghticoke, N. Y	Dec. 3, 1811	....
Roving-can	E. Haskell	Dover, N. H	July 11, 1871	116, 835

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Roving, Can-bottom for	G. Bradley	Paterson, N. J	Nov. 29, 1859	26, 320
Roving, Device for steaming	S. Barber	South Coventry, Conn	Oct. 5, 1869	95, 413
Roving-frame	J. Higgins and T. S. Whitworth	Salford, Great Britain	Mar. 25, 1862	34, 753
Roving-frame	T. Mayor	Pawtucket, R. I	Feb. 21, 1865	46, 530
Roving-frame	E. P. Morgan and J. H. McMullan.	Saco and Biddeford, Me	May 25, 1869	90, 378
Roving-frame	E. P. Morgan and J. H. McMullan.	Saco and Biddeford, Me	Oct. 24, 1871	120, 209
Roving-frame	W. H. Thompson	Biddeford, Me	Jan. 14, 1868	73, 267
Roving-frames, Flier for	T. Mayor	Pawtucket, R. I	Mar. 21, 1865	46, 921
Roving-frames, Flier for	T. Mayor	Pawtucket, R. I	Sept. 11, 1866	57, 938
Roving from speeders, Twisting	W. Fowler and R. M. Germond	Union Vale, N. Y	Nov. 24, 1834	....
Roving-machine-belt shifter	J. Edwards	Lowell, Mass	Nov. 26, 1867	71, 369
Roving machine, Flax, hemp, &c	S. Conillard, jr	Boston, Mass	Oct. 19, 1836	57
Roving, Machine for making	N. F. Clark	Lawrence, Mass	July 14, 1868	79, 899
Roving, Machine for making	N. E. Hale	Nashua, N. H	Jan. 27, 1863	37, 504
Roving or yarn, Regulator for	D. Dermond	Philadelphia, Pa	Mar. 23, 1858	19, 690
Roving, Regulating the size of	S. Pearson, jr., and W. H. Gardner.	Roxbury, Mass	Jan. 2, 1855	12, 138
Roving, slubbing, and other machines, Driving-mechanism for.	A. Wilcock, R. Robinson, and F. Wilcock.	Rochdale, Great Britain	Feb. 21, 1871	112, 103
Roving-tube	M. Sargent, jr	Meredith, N. H	Oct. 17, 1854	11, 812
Roving, Twisting tubes in the formation of	H. Silver	Lowell, Mass	Nov. 9, 1852	9, 391
Row-boat seat	W. Brown	Boston, Mass	Sept. 20, 1870	107, 439
Row-boats, Outrigger for	A. J. Luffbarry, jr	Philadelphia, Pa	Sept. 13, 1870	107, 392
Row-lock	M. L. Babb	Cape Elizabeth, Me	Oct. 24, 1865	50, 547
Row-lock	A. E. Brockett	New Haven, Conn	Jan. 9, 1872	122, 556
Row-lock	G. W. Browne	New York, N. Y	Apr. 30, 1867	64, 280
Row-lock	G. W. Browne	Brooklyn, N. Y	Feb. 11, 1868	74, 296
Row-lock	W. D. Bush	Fall River, Mass	Dec. 3, 1861	33, 823
Row-lock	C. L. Dayton	North Buffalo, N. Y	June 30, 1868	79, 459
Row-lock	T. Fearson	Yonkers, N. Y	Apr. 29, 1873	138, 38[illegible]
Row-lock	I. C. and F. W. Flagg	Middletown, Conn	Aug. 15, 1865	49, 395
Row-lock	I. C. and F. W. Flagg	Middletown, Conn	Nov. 21, 1865	51, 032
Row-lock	W. Fuzzard	Chelsea, Mass	July 30, 1867	67, 285
Row-lock	J. H. Hills	Burlington, Vt	Apr. 6, 1858	19, 851
Row-lock	J. B. Kelly	Kendallville, Ind	June 5, 1866	55, 309
Row-lock	P. H. Mills	Green's Landing, Me	Sept. 22, 1868	82, 338
Row-lock	P. W. Neefus	New York, N. Y	Oct. 3, 1865	50, 264
Row-lock	J. W. Norcross	Boston, Mass	Sept. 27, 1864	44, 446
Row-lock	J. W. Norcross	Middletown, Conn	Jan. 31, 1865	46, 132
Row-lock	J. W. Norcross	Middletown, Conn	Mar. 14, 1865	46, 816
Row-lock	J. W. Norcross	Middletown, Conn	July 25, 1865	48, 975
Row-lock	J. W. Norcross	Middletown, Conn	July 3, 1866	56, 086
Row-lock	J. W. Norcross	Boston, Mass	Jan. 26, 1869	86, 244
Row-lock	W. Sage	Berlin, Conn	Feb. 28, 1865	46, 589
Row-lock	J. M. K. Southwick	Newport, R. I	Jan. 14, 1873	134, 821
Row-lock	G. C. Wilen	Philadelphia, Pa	May 13, 1873	138, 972
Row-lock	W. H. Willard	Cleveland, Ohio	July 7, 1863	39, 188
Row or scull lock	J. W. Norcross	Boston, Mass	Sept. 20, 1864	44, 373
Rowing-machine	E Bryant	New London, Conn	Jan. 13, 1806	....
Rowing-machine	W. B. Curtis	Chicago, Ill	June 27, 1871	116, 417
Rubber and brush	A. Charles	Pittsburgh, Pa	Aug. 29, 1871	4, 529
Rubber and brush	A. Charles	Pittsburgh, Pa	Apr. 4, 1871	113, 258
Rubber and fiber for belts, &c., Compound structure of.	W. G. Adams	Franklin, Mass	May 7, 1867	64, 397
Rubber and fibrous material, Compound of hard	R. O. Lowrey	Salem, N. Y	Sept. 14, 1869	94, 832
Rubber and gutta-percha, Composition for treating	F. Baschnagel	New York, N. Y	Aug. 14, 1855	13, 420
Rubber and other articles, Mode of polishing hard	W. F. Semple and R. W. Stephens.	Mount Vernon, Ohio	Mar. 23, 1869	88, 086
Rubber and other elastic springs, Construction of	D. E. Somes	Washington, D. C	Dec. 1, 1868	84, 654
Rubber and other flexible materials, Hollow articles of.	L. Picot	Hoboken, N. J	May 7, 1867	64, 564
Rubber and other vulcanizable gums, Treating	P. Finley	New York, N. Y	July 11, 1871	116, 825
Rubber and plumbago compound for bearings, &c	T. J. Mayall	Boston, Mass	June 24, 1873	140, 908
Rubber and steel springs, Manufacture of	S. Moulton	Bradford, England	Oct. 29, 1861	33, 597
Rubber, Apparatus for molding and vulcanizing articles of.	J. R. Moffitt	Chelsea, Mass	Apr. 2, 1867	63, 550
Rubber articles, Manufacture of	D. D. Parmelee	Salem, Mass	Dec. 20, 1859	26, 519
Rubber articles, Manufacture of hard	G. S. Rice	New York, N. Y	Apr. 25, 1865	47, 437
Rubber articles, Method of protecting	J. R. Moffitt and F. D. Hayward	Chelsea and Malden, Mass	Oct. 16, 1866	58, 870
Rubber articles, Mode of inlaying and ornamenting	C. D. Burchardt	Brooklyn, N. Y	Aug. 2, 1864	43, 666
Rubber, Artificial	W. F. Bond	Philadelphia, Pa	Aug. 28, 1866	57, 468
Rubber balls, Inflating	H. A. Alden	Fishkill, N. Y	Dec. 10, 1867	71, 942
Rubber balls, Manufacture of	J. H. Tuttle	East Hampton, Mass	July 20, 1869	92, 763
Rubber balls, Manufacture of vulcanized India	H. A. Alden	Matteawan, N. Y	July 7, 1868	79, 535
Rubber cement	W. Mosbier	Norwalk, Ohio	May 13, 1873	138, 917
Rubber cloth, Forming tight seams in	G. M. Allerton	New York, N. Y	May 12, 1868	77, 859
Rubber cloth, Manufacture of figured	L. Burt	United States	July 29, 1862	35, 992
Rubber cloth, Manufacture of porous	C. Goodyear	New Haven, Conn	Aug. 16, 1859	25, 110
Rubber cloth, Process for making elastic	R. McMullin	New Brunswick, N. J	Mar. 18, 1856	14, 464
Rubber-coated articles, Vulcanizing	A. Albright	Newark, N. J	Apr. 15, 1873	137, 872
Rubber, Composition for imitation	J. B. Newbrough and E. Fagan	New York, N. Y	Oct. 1, 1867	69, 470
Rubber-compound	J. Johnson	Brooklyn, N. Y	Apr. 6, 1869	88, 639
Rubber-compound	M. A. Sutherland	New York, N. Y	Sept. 21, 1869	95, 162
Rubber-compound for manufacture of packings, &c	C. L. Frink	Rockville, Conn	Sept. 16, 1873	142, 908
Rubber compound, Hard	O. Falke	New York, N. Y	June 17, 1862	35, 599
Rubber compound, Reworking hard	C. Morey	Paris, France	Jan. 9, 1855	12, 212
Rubber compound, Vulcanized	W. A. Torrey	Mont Clair, N. J	Apr. 1, 1873	137, 509
Rubber, Devulcanizing waste	A. C. Richard	New York, N. Y	Aug. 21, 1860	29, 717
Rubber fabric	J. Haskins	Roxbury, Mass	July 30, 1867	67, 298
Rubber fabric, Porous napped	C. Goodyear	New Haven, Conn	Aug. 23, 1859	25, 192
Rubber fabrics, Manufacture of indurated	N. Goodyear	Newtown, Conn	Apr. 22, 1845	4, 005
Rubber for making brush-backs, &c., Manufacture and vulcanization of	E. A. Hill	East Cambridge, Mass	Sept. 16, 1873	142, 911
Rubber goods, Finishing felt	J. T. Trotter	New York, N. Y	Jan. 3, 1860	26, 720
Rubber goods, Inflated	G. M. Allerton	New York, N. Y	July 14, 1868	79, 933
Rubber goods, Machine for applying flock to felt	I. F. Williams	New York N. Y	Nov. 26, 1861	33, 808

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Rubber goods, Manufacture of hard	G. Cuppers	College Point, N. Y	July 20, 1858	20, 938
Rubber goods, Manufacture of hollow	J. C. Lyons	New York, N. Y	Oct. 19, 1869	96, 020
Rubber goods, Manufacture of hollow molded	D. D. Parmelee	Salem, Mass	Nov. 29, 1859	26, 286
Rubber goods, Mode of coloring and tinting	J. Beck	Trenton, N. J	May 25, 1869	90, 335
Rubber, gutta-percha, &c., Bleaching	J. Helm, jr	New Brunswick, N. J	May 23, 1871	115, 202
Rubber, gutta-percha, &c., Manufacture of articles of.	J. B. Newbrough and E. Fagan	New York, N. Y	Jan. 28, 1868	73, 916
Rubber, Hand	W. H. Blye	Syracuse, N. Y	Dec. 30, 1873	145, 927
Rubber, &c., Implement for cutting	E. Hubner	New York, N. Y	Apr. 25, 1865	47, 421
Rubber in the mold, Method of giving smooth surface to hard.	F. Simon	New York, N. Y	July 23, 1861	32, 901
Rubber into sheets and in applying the same to fabrics, Rolling.	D. C. Hull	Chelsea, Mass	Sept. 3, 1867	68, 365
Rubber into threads, Machine for cutting	D. W. Rust and G. Buzzee	East Hampton, Mass	Sept. 11, 1866	58, 028
Rubber, Manufacture of	J. Greacen, jr	New York, N. Y	May 2, 1871	114, 287
Rubber, Manufacture of articles of soft	G. W. Martin	Boston, Mass	July 28, 1868	80, 299
Rubber, Manufacture of hard	T. J. Mayall	Roxbury, Mass	Nov. 30, 1858	22, 218
Rubber, Manufacture of hard	C. McBurney	Roxbury, Mass	Apr. 3, 1866	53, 643
Rubber, Manufacture of hard	W. Mullee	Chesterville, Pa	Mar. 31, 1868	76, 293
Rubber, Manufacture of hard	J. B. Newbrough	New York, N. Y	Mar. 1, 1870	100, 435
Rubber, Manufacture of hard	D. D. Parmelee	New York, N. Y	July 25, 1865	48, 993
Rubber, Manufacture of hard	E. L. Simpson	Bridgeport, Conn	Feb. 28, 1865	46, 609
Rubber, Manufacture of white	F. Marquard	Rahway, N. J	Dec. 5, 1865	51, 331
Rubber, Manufacture of white	F. Marquard	Rahway, N. J	Dec. 5, 1865	51, 332
Rubber mat	F. M. Shepard	New York, N. Y	Sept. 29, 1868	82, 647
Rubber-mat for pictures, &c	C. A. Price	Jersey City, N. J	Dec. 23, 1873	145, 815
Rubber, Method of making a hard compound of	G. Dieffenbach	New York, N. Y	Nov. 1, 1859	25, 957
Rubber-molding apparatus	J. R. Moffit	Chelsea, Mass	Nov. 28, 1865	51, 207
Rubber or gutta-percha, Compound of	J. B. Newbrough	New York, N. Y	Nov. 24, 1868	84, 369
Rubber or gutta-percha for articles of dress, &c., Method of treating hard.	W. H. Halsey and M. Fitzgibbons.	Hoboken, N. J., and New York, N. Y.	Apr. 10, 1866	53, 922
Rubber or vulcanite, Manufacture of hard	D. D. Parmelee	New York, N. Y	July 25, 1865	48, 992
Rubber pad and block for steps, side-walks, &c	J. Moffet	New York, N. Y	June 4, 1872	127, 502
Rubber, Reducing	W. N. MacCartney	Glasgow, Scotland	May 9, 1871	114, 576
Rubber, Restoring waste	F. Baschnagel	Wenham, Mass	Apr. 26, 1859	23, 805
Rubber, Restoring waste	T. J. Mayall	Roxbury, Mass	Feb. 4, 1862	34, 309
Rubber, Restoring waste	T. J. Mayall	Roxbury, Mass	Nov. 3, 1863	40, 491
Rubber, Restoring waste vulcanized	F. Baschnagel	Beverly, Mass	June 22, 1858	20, 678
Rubber, Restoring waste vulcanized	H. L. Hall	Beverly, Mass	Jan. 19, 1858	19, 172
Rubber, Restoring waste vulcanized	H. L. Hall	Beverly, Mass	Nov. 30, 1858	22, 217
Rubber, Restoring waste vulcanized	C. F. E. Simon	Washington Town, N. J	Apr. 10, 1860	27, 837
Rubber roller for wringers, &c	D. H. Chamberlain	West Roxbury, Mass	June 28, 1870	104, 826
Rubber-rolling machine	C. V. Mead	Hamilton, N. J	Nov. 20, 1866	59, 854
Rubber sheets into strips, Machine for cutting	T. J. Mayall	Boston, Mass	July 15, 1873	140, 933
Rubber sheets to cut into threads, Machine for laying.	D. H. Buzzee	East Hampton, Mass	July 30, 1867	67, 262
Rubber spring	S. J. Seely	Brooklyn, N. Y	Apr. 21, 1863	38, 245
Rubber spring	G. Weaver and H. N. Allen	Boston, Mass	July 6, 1869	92, 236
Rubber spring for use in ships, cars, &c	J. A. Joyner	New York, N. Y	Dec. 14, 1869	97, 928
Rubber, &c., to be used in articles of dress, Article of manufacture from hard.	W. H. Halsey and M. Fitzgibbons.	Hoboken, N. J., and New York, N. Y.	Apr. 10, 1866	53, 921
Rubber, Treating waste	C. H. and D. E. Hayward	Stoneham and Melrose, Mass.	Oct. 27, 1863	40, 407
Rubber tube and machinery therefor, Manufacture of.	J. Robertson	Brooklyn, N. Y	Mar. 17, 1868	75, 649
Rubber, Utilizing waste vulcanized	H. L. Hall	Beverly, Mass	May 11, 1858	20, 242
Rubber, Utilizing waste vulcanized	C. McBurney	Roxbury, Mass	Aug. 20, 1861	33, 094
Rubber with jet, &c., to produce useful and ornamental articles, Combining hard.	W. Byron	New York, N. Y	May 18, 1869	90, 154
Ruche-holder	J. V. Rockwell	New York, N. Y	May 27, 1873	139, 423
Ruches, Machine for manufacturing	D. Penman and E. Fitzgerald	New York, N. Y	Nov. 29, 1859	26, 328
Ruches, Setting and sewing	M. and S. Roggenburger	Philadelphia, Pa	Feb. 4, 1873	135, 445
Rudder	J. M. G. Croft	London, Great Britain	May 1, 1866	54, 474
Rudder	T. G. Crosby	Buffalo, N. Y	Jan. 17, 1865	45, 959
Rudder	A. B. Crossman	Huntington, N. Y	Jan. 6, 1857	16, 352
Rudder	W. H. Degges	Washington, D. C	Apr. 28, 1863	38, 293
Rudder	P. Dinzey	Island of St. Bartholomew, West Indies.	May 22, 1866	55, 028
Rudder	R. S. Harris	Galena, Ill	June 16, 1857	17, 572
Rudder	J. Higbee	Northport, N. Y	Mar. 7, 1865	46, 753
Rudder	J. Higbee	Northport, N. Y	July 25, 1865	48, 940
Rudder	D. W. Howard	Detroit, Mich	Oct. 29, 1867	70, 215
Rudder	S. Kepner	Harrisburgh, Pa	Mar. 4, 1836	....
Rudder	F. W. Kuhnert	Rochester, N. Y	May 28, 1867	65, 093
Rudder	N. D. Le Pelley	Cleveland, Ohio	Mar. 14, 1865	46, 807
Rudder	J. Lewis	Elizabeth, N. J	Apr. 26, 186[illegible]	42, 494
Rudder	H. Lumley	Chancery Lane, England	Apr. 14, 1863	38, 172
Rudder	T. W. Murray	New York, N. Y	July 23, 1867	67, 066
Rudder	T. W. Murray	New York, N. Y	Mar. 17, 1868	75, 696
Rudder	J. C. Palmer	New York, N. Y	Aug. 6, 1867	67, 574
Rudder	J. C. Raymond	Brooklyn, N. Y	Aug. 5, 1862	36, 109
Rudder	M. W. Ruthven	Middlesex, England	Apr. 10, 1866	53, 936
Rudder	R. H. Thomas	Kid's Grove, near Stoke-upon-Trent, England.	Nov. 12, 1872	132, 991
Rudder	M. Wappich	Sacramento, Cal	Oct. 30, 1866	59, 226
Rudder and drag, Distress	H. Rablen	New York, N. Y	June 18, 1872	128, 066
Rudder, Apparatus for relieving the helmsman from the shock of the.	C. Hoskyns	New Orleans, La	May 13, 1851	8, 087
Rudder-attachment	B. F. Delano	Boston, Mass	Jan. 31, 1860	26, 971
Rudder-attachment	J. H. Moore and J. B. Clark	Deep River and Chester, Conn.	Oct. 10, 1871	119, 874
Rudder, Balanced	C. F. Brown	Warren, R. I	June 10, 1851	8, 142
Rudder-bearing	J. N. Bitting, sr	Camden, N. J	Jan. 15, 1867	61, 147
Rudder, Boat's	W. C. Law	New York, N. Y	May 3, 1870	102, 550
Rudder, Boom and raft	L. W. Pond	Eau Claire, Wis	May 13, 1873	138, 760
Rudder-brace	B. F. Delano	Chelsea, Mass	Aug. 16, 1853	9, 936

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Rudder-case for navigable vessels	S. L. Foster	Bristol, Me	Sept. 17, 1861	33, 319
Rudder for steering vessels	W. J. Millar	McKeesport, Pa	Apr. 17, 1866	54, 002
Rudder for vessels	S. G. Coleman	Providence, R. I	Feb. 8, 1870	99, 639
Rudder for vessels	A. De Man	Ghent, Belgium	Oct. 3, 1871	119, 584
Rudder for vessels	A. H. Murphy	New York, N. Y	Nov. 26, 1872	133, 382
Rudder for vessels	O. P. Tharp	Cincinnati, Ohio	Jan. 28, 1873	135, 385
Rudder for vessels	S. Yerkes, jr.	Philadelphia, Pa	Nov. 2, 1858	22, 002
Rudder for vessels, Construction of	A. Watkins	Salem, Mass	May 21, 1824	....
Rudder-gear	C. T. Rideout	Booth Bay Harbor, Me	Apr. 21, 1868	77, 095
Rudder-head bearing	R. C. Sturges	Boston, Mass	Jan. 11, 1870	98, 719
Rudder-post, Yoke of ship's	W. Beers	Milan, Ohio	Mar. 8, 1859	23, 149
Rudder, Ship's	T. F. and E. C. Goodwin and C. E. Goin.	New York, N. Y	Apr. 6, 1869	88, 628
Rudder, Ship's	J. S. Robbins	San Francisco, Cal	Sept. 25, 1855	13, 601
Rudder, Ship's	T. Robin and C. E. Burk	Cheboygan, Mich	Jan. 4, 1870	98, 636
Rudder, Ship's	L. P. Thurston	Rockport, Mass	June 13, 1871	115, 991
Rudder, Steamboat side	J. L. Sullivan	Boston, Mass	Dec. 11, 1818	....
Rudder, Temporary	H. L. Stibbs	Savannah, Ga	May 21, 1867	64, 920
Rudder, Vessel's	J. W. Van Sant	Le Claire, Iowa	May 13, 1873	138, 962
Rudder with corrugated surface	S. J. Seely	New York, N. Y	Jan. 31, 1865	46, 147
Rudders, Anti-friction support for the back of	A. H. Manchester	Providence, R. I	May 17, 1859	24, 037
Rudders, Apparatus for operating	C. F. E. Blaich	Elyria, Ohio	Oct. 25, 1859	25, 878
Rudders, Apparatus for shipping spare	M. Wappich	Sacramento, Cal	Mar. 25, 1862	34, 797
Rudders, Hanging	J. P. Manton and H. A. Billings.	Providence, R. I	Feb. 14, 1860	27, 139
Rudders, Hanging	H. H. Pember	New York, N. Y	Mar. 24, 1868	75, 964
Rudders, Hanging	J. Shaw	Philadelphia, Pa	Apr. 10, 1818	....
Rudders, Hanging and securing	R. M. Taylor	New York	Feb. 14, 1833	....
Rudders, Hanging ship's	C. N. Nixon	Barnsgate, England	Sept. 9, 1856	15, 704
Rudders, Means for hanging	W. N. Clark	Chester, Conn	Sept. 3, 1867	68, 413
Rudders, Method of operating	T. H. Mortimer and J. M. Gardiner.	Charleston, S. C	Nov. 25, 1851	8, 546
Rudders of steam-vessels, Operating and controlling.	F. E. Sickels	New York, N. Y	May 10, 1853	9, 713
Rudders to spindle-shaped hull, Application of	W. L. and T. Winans	London, England, and Baltimore, Md.	Oct. 9, 1866	58, 743
Ruffle	C. O. Crosby	New Haven, Conn	Jan. 19, 1864	41, 280
Ruffle	S. F. Dickinson	New York, N. Y	Apr. 7, 1863	38, 097
Ruffle	A. Kelley	Brooklyn, N. Y	Sept. 28, 1869	95, 233
Ruffle	A. H. Price	New York, N. Y	June 30, 1863	30, 103
Ruffle	E. C. Wooster	New York, N. Y	Dec. 8, 1863	40, 877
Ruffle, Band	C. O. Crosby	New Haven, Conn	Dec. 1, 1863	40, 738
Ruffle, Band	C. O. Crosby	New Haven, Conn	Dec. 1, 1863	40, 739
Ruffle, Band	T. Robjohn	New York, N. Y	Sept. 1, 1863	39, 779
Ruffle, Band	T. Robjohn	Mott Haven, N. Y	Apr. 19, 1864	42, 403
Ruffle, Band	G. H. Wooster	New York, N. Y	Nov. 1, 1864	44, 923
Ruffle, Fluted	T. Robjohn	New York, N. Y	Apr. 26, 1864	42, 510
Ruffle-iron	N. Waterman	Boston, Mass	Sept. 1, 1863	39, 765
Ruffle, Machine-made	A. H. Price	New York, N. Y	Aug. 25, 1863	39, 701
Ruffle, Machine-shirred	C. O. Crosby	New Haven, Conn	May 5, 1863	38, 375
Ruffles, Apparatus for making fluted	T. Robjohn	New York, N. Y	Apr. 19, 1864	42, 404
Ruffles, Machine for making	J. A. Pipo	New York, N. Y	Jan. 27, 1863	37, 500
Ruffles, Manufacture of	G. B. Arnold	New York, N. Y	May 8, 1860	28, 244
Ruffles, Manufacture of	G. B. Arnold	New York, N. Y	Sept. 25, 1860	30, 111
Ruffles, Plating	S. W. Talbot	Dedham, Norfolk	May 4, 1816	....
Ruffling, Apparatus for making	T. Robjohn	New York, N. Y	July 21, 1863	39, 328
Ruffling-machine	S. E. Barney and E. Hubbell	New Haven, Conn	May 7, 1872	126, 436
Rug, Alarm	R. B. Carsley	New York, N. Y	Dec. 22, 1868	85, 068
Rugs, Preparation of pile for	J. Taylor	Loch Winnoch, Scotland	May 28, 1850	7, 403
Rule, Adjustable measuring	I. Williams	Westfield, Ind	Sept. 1, 1868	81, 720
Rule and calculator	N. Ackerlund	New York, N. Y	Apr. 19, 1870	102, 034
Rule and dividers, Combined	R. Nicol	Rockford, Ill	June 25, 1872	128, 417
Rule and pattern for tailors, Graduated	W. E. Smith	Chicago, Ill	Mar. 29, 1870	101, 390
Rule and pocket-knife, Combined	O. B. Steele	Franklin, Pa	Apr. 21, 1868	77, 121
Rule and protractor, Combined	R. A. Briggs	New York, N. Y	Jan. 19, 1869	85, 991
Rule and socket-joint	C. Chinnock	New York, N. Y	Feb. 12, 1850	7, 080
Rule and square, Combined	W. O. Jones	Portland, Me	Jan. 21, 1868	73, 532
Rule and square, Combined	W. H. Walker	Charleston, S. C	Dec. 24, 1872	134, 333
Rule and square, Folding	F. B. Scott	Lancaster, N. Y	Mar. 5, 1872	124, 222
Rule, Apparatus for cutting and mitering printer's	W. W. Ustick	La Crosse, Wis	July 21, 1868	80, 245
Rule, Apparatus for mitering printer's	G. H. Babcock	New York, N. Y	Feb. 5, 1861	31, 292
Rule, Arithmetical proof	S. S. Young	Eaton, Ohio	Oct. 26, 1858	21, 921
Rule, bevel, square, and dividers, Combined	G. G. Burgess	Grafton, Ohio	Dec. 6, 1870	109, 868
Rule, Board and log	C. B. Hutchinson	Waterloo, N. Y	June 4, 1850	7, 416
Rule, Board and log	B. M. Van Der Veer	Clyde, N. Y	Apr. 30, 1850	7, 331
Rule, Caliper	A. W. Goddard	Clinton, Mass	June 18, 1867	65, 900
Rule, Carpenter's	W. O. C. Fritschler	Brooklyn, N. Y	July 20, 1858	20, 943
Rule, Carpenter's	B. G. Martin	Philadelphia, Pa	July 25, 1865	49, 037
Rule, Carpenter's	S. C. Stephens	Pine Meadow, Conn	Jan. 12, 1858	19, 105
Rule, Carpenter's	O. Whitmore and D. M. Smith	Springfield, Vt	Sept. 13, 1859	25, 460
Rule-clamp	D. H. Stephens	Riverton, Conn	Mar. 23, 1869	88, 004
Rule, Combination pocket	J. Manchester	New York, N. Y	Nov. 23, 1869	97, 099
Rule, Extension	E. D. Waterbury	Macon City, Iowa	Oct. 28, 1873	144, 003
Rule for calculating interest	S. S. Young	Eaton, Ohio	Sept. 2, 1851	8, 329
Rule for calculating time and measures	D. W. Wright	New York, N. Y	July 23, 1867	67, 151
Rule for describing polygonal forms	M. J. Thompson	Saint Joseph, Mo	Oct. 12, 1858	21, 784
Rule, Gear-cutting	C. B. Long	Worcester, Mass	Apr. 25, 1865	47, 430
Rule-graduating machine	N. Millington	Shaftsbury, Vt	Feb. 11, 1868	74, 235
Rule-joint	D. H. Stephens	Riverton, Conn	May 16, 1871	114, 987
Rule joint, Carpenter's	L. Hedge	Brattleborough, Vt	Apr. 22, 1835	....
Rule joint, Double-centered	S. Hedge	Hartford, Conn	Apr. 29, 1837	185
Rule-joints, Machine for making	D. H. Stephens	Riverton, Conn	Nov. 20, 1866	59, 871
Rule, Jointed	E. Paeckert	Stratford, Canada	Sept. 17, 1872	131, 407
Rule, level, clinometer, &c., Combined	E. A. Goodes	Philadelphia, Pa	June 21, 1870	104, 577
Rule or measure for boards, leather, &c	C. Ross	Piqua, Ohio	May 17, 1844	3, 590
Rule, Printer's	C. N. Morris	Cincinnati, Ohio	Aug. 3, 1869	93, 331
Rule, Printer's	C. Reuter	Cincinnati, Ohio	Jan. 11, 1870	98, 799
Rule, Printer's column	A. J. H. Duganne	New York, N. Y	Aug. 29, 1871	118, 439

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Rule, Printer's perforating	C. W. Ames	New York, N. Y	Dec. 9, 1873	145, 380
Rule, Printer's perforating	W. W. Harding	Philadelphia, Pa	May 1, 1860	28, 078
Rule, Sawyer's	T. Carter	Louisville, Ky	Dec. 10, 1867	71, 979
Rule, Scale	W. Hay	Dumbarton, Scotland	June 11, 1867	65, 744
Rule, Sliding	J. P. Smith	New York	Jan. 10, 1843	2, 907
Rule, square, and bevel combined	C. M. Heffron	Rochester, N. Y	Apr. 22, 1873	138, 152
Rule, Tailor's	P. W. Dolan	Jersey City, N. J	June 9, 1868	78, 726
Rule, Tinner's	T. Bigelow	Elkhart, Ind	June 25, 1867	66, 120
Rules, Joint of folding	J. A. Traut	New Britain, Conn	June 20, 1865	48, 327
Rules, Machine for cutting and beveling pointed	S. Magoun	Newton, Mass	Aug. 23, 1853	9, 964
Rules, Machine for cutting and mitering printer's	R. Walker	Milford, Mass	Dec. 3, 1867	71, 668
Rules, Machine for making printer's	R. Dobie and M. A. Starr	Richmond, Ind	Jan. 18, 1859	22, 634
Rules, Machine for mitering printer's	W. McDonald	New York, N. Y	July 3, 1855	13, 197
Rules, Machine for mitering printer's	T. H. Mead	Boston, Mass	Apr. 27, 1869	89, 421
Rules, Machine for ornamenting printer's	J. M. Conner	Brooklyn, N. Y	June 13, 1871	115, 834
Rules, Perforating-edged column	J. C. White	Quincy, Ill	Mar. 26, 1872	124, 925
Rules, scales, and tables, Slide for	F. J. Coffin	Newburyport, Mass	July 30, 1867	67, 269
Rules, Tool for mitering printer's	O. F. Grover and H. S. Pelouze	Middletown and New York, N. Y.	May 29, 1860	28, 472
Ruler	H. S. Ball	Spartanburgh, S. C	Mar. 7, 1871	112, 406
Ruler	J. M. Batchelder	Cambridge, Mass	June 18, 1872	127, 949
Ruler	B. Brown	New York, N. Y	Apr. 30, 1872	126, 261
Ruler	F. A. Combes	Cleveland, Ohio	Dec. 16, 1873	145, 555
Ruler	R. N. Eagle	Washington, D. C	Apr. 17, 1866	53, 961
Ruler	J. G. Ernst	Baltimore, Md	June 24, 1873	140, 125
Ruler	L. Feusier, jr	Virginia City, Nev	Aug. 22, 1871	118, 225
Ruler	L. Feusier, jr	Virginia City, Nev	Aug. 22, 1871	118, 226
Ruler	T. Fisler	Camden, N. J	Apr. 27, 1858	20, 055
Ruler	J. D. Hall	Trenton, N. J	Oct. 19, 1869	95, 898
Ruler	G. Lane	New York, N. Y	June 18, 1861	32, 571
Ruler	G. W. Schramm	New York, N. Y	Feb. 6, 1866	52, 453
Ruler	S. L. Simpson	New York, N. Y	June 27, 1865	48, 454
Ruler, Adjustable	E. Bostock	Philadelphia, Pa	May 23, 1871	115, 019
Ruler, Adjustable parallel	E. Bostock	Albany, N. Y	Aug. 6, 1867	67, 487
Ruler and blotter, Combined	R. M. Austin	Philadelphia, Pa	July 22, 1873	140, 989
Ruler and blotter, Combined	J. E. Eaton	Utica, N. Y	Dec. 10, 1872	133, 839
Ruler and blotter, Combined	T. Merrill	Portland, Me	Dec. 2, 1873	145, 068
Ruler and paper-cutter	J. Woodward	New York, N. Y	July 11, 1865	48, 756
Ruler and pencil-sharpener, Combined	W. H. Flanigan	Philadelphia, Pa	Feb. 25, 1873	136, 230
Ruler, blotter, and paper-cutter, Combined	L. Katen	Brooklyn, N. Y	Apr. 10, 1866	53, 833
Ruler, Book	A. A. Moser	New York, N. Y	Mar. 13, 1860	27, 464
Ruler, Book-keeper's	A. O. Latham	Wheeling, W. Va	Mar. 19, 1867	63, 060
Ruler, Counting-house	D. W. Clegg	San Francisco, Cal	Sept. 10, 1867	68, 605
Ruler, Envelope	A. De Witzleben	Washington, D. C	Oct. 23, 1860	30, 469
Ruler, Extension	J. S. Rue	Newark, N. J	Oct. 8, 1872	131, 973
Ruler for ruling paper, Cylindric	J. Fairbanks	....	Nov. 30, 1803	....
Ruler, Metallic	R. F. Macoy and H. L. Herwig	New York, N. Y	Nov. 1, 1864	44, 874
Ruler, Metallic	D. Munson	Indianapolis, Ind	Dec. 19, 1865	51, 609
Ruler, Parallel	T. Bergner	Philadelphia, Pa	Apr. 2, 1872	125, 115
Ruler, Parallel	G. Blunck	New York, N. Y	July 22, 1873	141, 029
Ruler, Parallel	J. Carrington	Wallingford, Conn	Apr. 14, 1832	....
Ruler, Parallel	J. C. Dow and J. Myrick	Henderson and Le Sueur, Minn.	July 8, 1862	35, 812
Ruler, Parallel	R. Eickemeyer	Yonkers, N. Y	Mar. 11, 1856	14, 396
Ruler, Parallel	E. C. Gillette	Richfield, British Columbia	Feb. 14, 1865	46, 348
Ruler, Parallel	W. B. Mason	Boston, Mass	Jan. 14, 1873	134, 814
Ruler, Parallel	D. J. Pratt	Albany, N. Y	July 28, 1868	80, 500
Ruler, Parallel	U. Smith	Battle Creek, Mich	Feb. 13, 1866	52, 616
Ruler, Parallel	F. A. Traut	New Britain, Conn	Jan. 5, 1869	85, 708
Ruler, Parallel	W. L. Woods	Washington, D. C	Nov. 14, 1865	50, 980
Ruler, Revolving	L. Hedge	Windsor, Vt	Mar. 3, 1817	....
Ruler, Spring-pen	T. M. Pomeroy and L. Hedge	Windsor, Vt	June 21, 1815	....
Ruling and copying machine	G. McHenry	Louisa, Ky	Sept. 27, 1870	107, 795
Ruling and paging paper, Machine for	J. A. Elder and J. Richardson	Westbrook and Portland, Me.	July 31, 1855	13, 349
Ruling and printing machine	H. J. Hewitt	Brooklyn, N. Y	Oct. 17, 1865	50, 475
Ruling books and paper, Method of	M. I. Brunel	....	Nov. 16, 1796	....
Ruling-device	E. H. Robinson	Janesville, Wis	Jan. 11, 1870	98, 710
Ruling-gage, Draftsman's	A. F. Nagle	Providence, R. I	June 3, 1873	139, 601
Ruling implement, Slate	F. Soehner	Hamilton, Ohio	Apr. 16, 1872	125, 763
Ruling-machine	D. Brewer	....	Apr. 22, 1803	....
Ruling-machine	J. H. Bruce	Nashville, Tenn	Aug. 10, 1869	93, 409
Ruling-machine	G. W. Casilear	Washington, D. C	Feb. 15, 1870	99, 758
Ruling-machine	J. Callman	Silver Creek, Ill	Jan. 3, 1854	10, 361
Ruling-machine	L. R. Dreysel	Saint Louis, Mo	Jan. 3, 1860	26, 732
Ruling-machine	L. Edwards	Norwich, Conn	Oct. 9, 1845	4, 223
Ruling-machine	W. O. Hickok	Harrisburgh, Pa	May 31, 1870	103, 743
Ruling-machine	D. W. Landvoigt	Washington, D. C	Dec. 26, 1871	122, 262
Ruling-machine	J. McAdams	Brooklyn, N. Y	June 7, 1870	104, 047
Ruling-machine	A. Spencer	New London, Conn	Feb. 7, 1812	....
Ruling-machine	J. Stewart	Washington, D. C	Nov. 15, 1870	109, 267
Ruling-machine	J. F. Tapley	Springfield, Mass	Jan. 21, 1868	73, 669
Ruling-machine	C. Walton	Washington, D. C	Sept. 13, 1864	44, 243
Ruling-machine, Cylindric	J. Fairbanks	Boston, Mass	Apr. 21, 1808	....
Ruling machine, Double	T. Newhall, jr	Lynn, Mass	Dec. 26, 1816	....
Ruling-machine heater, Paper	L. Siebert and J. W. Lilley	Columbus, Ohio	Jan. 31, 1871	111, 390
Ruling machine, Leather	J. Turner, jr	Charlestown, Mass	June 12, 1855	13, 071
Ruling machine, Paper	J. Ames and G. L. Wright	Springfield, Mass	Dec. 23, 1851	8, 619
Ruling machine, Paper	E. D. Averell	New York, N. Y	Feb. 11, 1873	135, 751
Ruling machine, Paper	T. J. Baldwin	Bridgeport, Conn	Apr. 17, 1855	12, 736
Ruling machine, Paper	G. A. Ball	San Francisco, Cal	Jan. 22, 1867	61, 382
Ruling machine, Paper	C. S. Boynton	New York, N. Y	Aug. 2, 1853	9, 898
Ruling machine, Paper	H. T. Cliff and J. E. Martin	Detroit, Mich	Oct. 28, 1873	144, 064
Ruling machine, Paper	G. Crosby	Augusta, Me	Jan. 21, 1825	....
Ruling machine, Paper	J. Dobbs	Albany, N. Y	Sept. 17, 1861	33, 298
Ruling machine, Paper	J. C. Forman	Cleveland, Ohio	Sept. 7, 1858	21, 411
Ruling machine, Paper	A. Hathaway	Charlestown, Mass	Oct. 1, 1861	33, 389
Ruling machine, Paper	A. Hathaway	Freetown, Mass	Jan. 14, 1873	134, 883

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Ruling machine, Paper	L. Henry	Bellows Falls, Mass	Aug. 24, 1816	....
Ruling machine, Paper	W. O. Hickok	Harrisburgh, Pa	Nov. 12, 1867	70, 715
Ruling machine, Paper	W. O. Hickok	Harrisburgh, Pa	Oct. 6, 1868	82, 834
Ruling machine, Paper	W. O. Hickok	Harrisburgh, Pa	June 14, 1870	104, 152
Ruling machine, Paper	J. and W. McAdams	Boston, Mass	Feb. 7, 1854	10, 492
Ruling machine, Paper	W. B. Pollock	Holyoke, Mass	Sept. 3, 1867	68, 571
Ruling machine, Paper	C. L. Pond	Buffalo, N. Y	Apr. 8, 1857	16, 994
Ruling machine, Paper	R. Robotham	....	Oct. 10, 1801	....
Ruling machine, Paper	W. C. Smith	Brooklyn, N. Y	Nov. 24, 1868	84, 390
Ruling machine, Paper	J. C. Teasdale	Dansville, N. Y	June 15, 1835	....
Ruling machine, Paper	E. Town and J. L. Chichester	Buffalo, N. Y	Apr. 19, 1864	42, 418
Ruling machine, Paper	J. Tregurtha	Charlestown, Mass	May 16, 1871	114, 886
Ruling machine, Paper	J. Tregurtha	Charlestown, Mass	Jan. 30, 1872	123, 309
Ruling machine, Paper	J. J. Walser	Chicago, Ill	Jan. 5, 1869	85, 550
Ruling machine, Paper	C. Walton	Washington, D. C	Nov. 22, 1864	45, 195
Ruling machine, Paper	E. A. Warren	Brooklyn, N. Y	Nov. 12, 1867	70, 925
Ruling machine, Paper	C. F. West	Boston, Mass	July 14, 1868	79, 927
Ruling machine, Paper	W. S. Wilder	Boston, Mass	Aug. 14, 1849	6, 645
Ruling machine, Paper	W. S. Wilder	New York, N. Y	June 30, 1868	79, 424
Ruling machine, Paper	G. L. Wright	Springfield, Mass	May 28, 1842	2, 648
Ruling-machine pen	W. O. Hickok	Harrisburgh, Pa	Sept. 6, 1870	107, 046
Ruling-machine-pen holder	I. W. Henderson	Leavenworth, Kans	Mar. 17, 1868	75, 546
Ruling machine, Slate	F. Ames	North Bridgewater, Mass	Aug. 23, 1870	106, 534
Ruling-machines, Adjustable atmospheric fountain feeder for.	A. Smith	Perrysburgh, Ohio	Nov. 8, 1864	44, 980
Ruling-machines, Attachment to	I. B. Blair	Philadelphia, Pa	Mar. 8, 1859	23, 152
Ruling machines, Counting-register for paper	J. J. Groshans	Buffalo, N. Y	Apr. 20, 1869	89, 215
Ruling machines, Drying-attachment to paper	J. J. Groshans	Buffalo, N. Y	Nov. 12, 1867	70, 833
Ruling-machines, Electro-magnetic attachment to	E. D. Averell	New York, N. Y	June 12, 1866	55, 594
Ruling machines, Mode of supplying ink to the pens of paper.	L. Edwards	Norwich, Conn	Aug. 31, 1839	1, 309
Ruling-machines, Regulator for the pen-beam in	W. O. Hickok	Harrisburgh, Pa	June 17, 1851	8, 168
Ruling machinery, Paper	R. Willcox	New York	Sept. 4, 1823	....
Ruling paper	A. Hathaway	Troy, Mass	Dec. 31, 1832	....
Ruling paper	C. Lanuza	New York	Aug. 13, 1828	....
Ruling paper by electro-magnetism	E. D. Averell	New York, N. Y	Jan. 1, 1867	60, 663
Runner for wheeled vehicles	B. Thompson	Chicago, Ill	Mar. 24, 1868	75, 812
Rustic seat	A. G. Hawkes	Baltimore, Md	Sept. 12, 1871	118, 802
Rye and other grain, potatoes, &c., Saccharifying	A. J. Brazier	Philadelphia, Pa	Oct. 1, 1830	....
S.				
Saber to belt, Method of attaching	J. E. B. Stuart	Wytheville, Va	Oct. 4, 1859	25, 684
Sabot	F. W. Schroeder	Philadelphia, Pa	June 19, 1866	55, 786
Sabot	M. Warne	Philadelphia, Pa	Oct. 20, 1868	83, 229
Saccharine and other fermentation, Managing	J. J. C. Sheridan	London, England	June 30, 1837	245
Saccharine and other fluids, Process of deodorizing and refining.	W. Clough	Cincinnati, Ohio	Mar. 10, 1868	75, 245
Saccharine and other liquid evaporating apparatus	D. Harris	New York, N. Y	May 5, 1863	38, 386
Saccharine and other liquid evaporator	J. E. Morse	Boston, Mass	Feb. 7, 1865	46, 260
Saccharine and other liquid evaporator	P. D. Wesson	Providence, R. I	Nov. 11, 1862	36, 926
Saccharine and other liquids, Refining and decolorizing.	W. Clough	Cincinnati, Ohio	Mar. 16, 1869	87, 759
Saccharine-evaporator	J. Bour	Forbach, France	Sept. 8, 1857	18, 172
Saccharine-evaporator	R. Orford	Dowagiac, Mich	Oct. 26, 1869	96, 141
Saccharine-fluid evaporator	C. Cory	Lima, Ind	Sept. 10, 1861	33, 238
Saccharine fluids, Defecating	W. Clough	Cincinnati, Ohio	Mar. 16, 1869	87, 758
Saccharine juice, Clarifying	E. T. and E. O. De Gemini	Paris, France	Feb. 10, 1863	37, 614
Saccharine-juice clarifying and evaporating apparatus.	L. P. Harris	Mansfield, Ohio	May 29, 1860	28, 477
Saccharine-juice-clarifying apparatus	L. P. Harris	Crestline, Ohio	Jan. 7, 1868	73, 001
Saccharine-juice-clarifying process	R. Root	Galesburgh, Ill	Oct. 8, 1861	33, 450
Saccharine juice, Defecating and clarifying	J. Spangenberg	New York, N. Y	Feb. 15, 1859	22, 968
Saccharine juice, Defecating and decolorizing	J. C. Tucker	New York, N. Y	Feb. 28, 1860	27, 321
Saccharine juice, Evaporating	A. Stillman	New York	Aug 17, 1843	3, 223
Saccharine-juice-evaporating apparatus	W. H. Gilbert and H. O. Ames	Bayou Goula and New Orleans, La.	June 5, 1860	28, 570
Saccharine-juice-evaporating apparatus	M. H. Mansfield	Ashland, Ohio	Feb. 12, 1861	31, 395
Saccharine-juice-evaporating apparatus	J. Souther	Boston, Mass	Jan. 10, 1860	26, 794
Saccharine-juice-evaporating vessel	B. Coe and M. Goon	Dalton, Ohio	Mar. 5, 1861	31, 590
Saccharine-juice evaporator	A. Bare	Mexico, Ohio	Mar. 25, 1862	34, 728
Saccharine-juice evaporator	W. Chesterman	Peosta, Iowa	Jan. 22, 1861	31, 151
Saccharine-juice evaporator	O. Clark and I. Utter	Rockford, Ill	Apr. 29, 1862	35, 081
Saccharine-juice evaporator	A. C. Clemens	Crain Township, Ohio	May 22, 1860	28, 349
Saccharine-juice evaporator	D. I. Durfey	Croton, Ohio	May 17, 1859	24, 016
Saccharine-juice evaporator	E. H. Funk	Newark, Ohio	Apr. 29, 1862	35, 092
Saccharine-juice evaporator	S. H. Gilman	New Orleans, La	Feb. 21, 1860	27, 219
Saccharine-juice evaporator	L. P. Harris	Mansfield, Ohio	Jan. 18, 1859	22, 648
Saccharine-juice evaporator	A. Ingals	Independence, Iowa	May 13, 1862	35, 238
Saccharine-juice evaporator	T. W. McFarland	Ottawa, Ill	July 29, 1862	36, 012
Saccharine-juice evaporator	D. B. Neal and H. C. Emery	Mount Gilead, Ohio	Feb. 21, 1860	27, 258
Saccharine-juice evaporator	J. Newman	London, England	Oct. 28, 1862	36, 851
Saccharine-juice evaporator	A. A. Sawin	West Irving, Iowa	Aug. 2, 1864	43, 711
Saccharine-juice evaporator	G. L. Squier	Buffalo, N. Y	Apr. 16, 1867	63, 957
Saccharine-juice evaporator	C. D. Stevens	Mendota, Ill	Apr. 15, 1862	34, 991
Saccharine-juice evaporator	W. Thomson	Detroit, Mich	Apr. 22, 1862	35, 047
Saccharine-juice evaporator	L. J. Whitcomb and W. E. Prall	Maineville, Ohio	June 3, 1862	35, 481
Saccharine-juice evaporator	S. F. Woodworth	Iowa Falls, Iowa	Sept. 13, 1864	44, 248
Saccharine-juice evaporator, Portable	A. J. Low	German Township, Pa	July 15, 1862	35, 880
Saccharine-juice evaporator, Portable	J. R. Webb	Jackson, Mich	July 8, 1862	35, 862
Saccharine juice from cane, Process of extracting	H. S. Lewis	Chicago, Ill	Mar. 16, 1869	87, 858
Saccharine juice, Purifying	T. E. O. Allaire	Paris, France	June 4, 1872	127, 447
Saccharine liquid and sugar, Apparatus for purifying, curing, and drying.	W. B. Espent	Spanish Town, Jamaica	Aug. 31, 1869	94, 298
Saccharine liquid, Apparatus for treating	C. W. Durant	New York, N. Y	Feb. 11, 1873	135, 788
Saccharine-liquid boiler and evaporator	D. M. Cook	Mansfield, Ohio	July 4, 1865	48, 522
Saccharine liquid, Defecating	J. Duval	New Orleans, La	Feb. 5, 1861	31, 304
Saccharine liquid, Evaporating	M. Harter	Independence, Iowa	June 24, 1862	35, 679

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Saccharine-liquid evaporating and clarifying apparatus.	F. G. Butler	Bellows Falls, Vt	Oct. 10, 1871	119, 694
Saccharine-liquid-evaporating apparatus	G. E. Evans	Boston, Mass	Oct. 11, 1864	44, 619
Saccharine-liquid evaporator	B. Brown	Byberry, Pa	Jan. 31, 1865	46, 069
Saccharine-liquid evaporator	J. Bucknell	Decorah, Iowa	June 23, 1863	38, 945
Saccharine-liquid evaporator	F. G. Butler	Bellows Falls, Vt	Mar. 14, 1871	112, 539
Saccharine-liquid evaporator	J. C. Chesney	Abingdon, Ill	Dec. 15, 1863	40, 908
Saccharine-liquid evaporator	F. D. Drake	Four Corners, Ohio	Jan. 6, 1863	37, 339
Saccharine-liquid evaporator	P. W. Gates	Chicago, Ill	Nov. 18, 1862	36, 949
Saccharine-liquid evaporator	J. H. Hartwell	Jefferson County, Ind	Mar. 17, 1863	37, 911
Saccharine-liquid evaporator	J. C. McKee	Urbana, Ill	Oct. 28, 1862	36, 849
Saccharine-liquid evaporator	J. A. Morrell and P. Bargion	Richmond, Ind	Aug. 11, 1863	39, 490
Saccharine-liquid evaporator	M. H. Smith	Four Corners, Ohio	Nov. 11, 1862	36, 924
Saccharine liquid, Filtering, evaporating, and granulating.	J. R. Hopkins	Dayton, Ohio	Jan. 15, 1867	61, 200
Saccharine liquid, Process and apparatus for the fermentation of.	A. H. Tait and J. W. Avis	New York, N. Y	Mar. 19, 1867	63, 116
Saccharine liquid, Process for concentrating and granulating.	J. Pickles	Wigan, England	Sept. 7, 1869	94, 509
Saccharine liquid, Process of purifying	A. P. Dubrunfaunt	Paris, France	June 7, 1864	43, 065
Saccharine liquid, Treating	G. L. Rundle	Greenville, N. Y	June 20, 1871	116, 102
Saccharine liquid, Treating	A. Schreiber	New York, N. Y	June 27, 1871	116, 504
Saccharine liquid, Treating	C. Von Witzleben	Berlin, Prussia	June 25, 1872	128, 440
Saccharine matter, Defecating and bleaching	H. B. Bond	Terre Bonne Parish, La	Aug. 29, 1871	118, 427
Saccharine matter from cane, &c., Apparatus for extracting.	M. S. Bringier	Ascension Parish, La	July 29, 1873	141, 316
Saccharine matter from malt, Extracting	W. Anheuser	Saint Louis, Mo	Mar. 17, 1868	75, 509
Saccharine matter from malt, Extracting	W. Anheuser	Saint Louis, Mo	Nov. 3, 1868	83, 589
Saccharine matter from sugar-cane, Process and apparatus for extracting.	M. S. Bringier	Ascension Parish, La	July 1, 1873	140, 461
Saccharine matter, Mode of treating	E. Beanes	London, England	Feb. 12, 1867	61, 917
Saccharine matter, Preparation of fermentable	W. Garton	Southampton, England	Aug. 29, 1871	118, 523
Saccharine-solution evaporator	A. Tolles	Weathersfield, Vt	Jan. 11, 1870	98, 816
Saccharine solution, Process for delaying the fermentation of.	J. A. Morrell	New York, N. Y	July 22, 1873	141, 068
Sack-fastener	T. Hopkins	Newport, Ky	Aug. 21, 1860	29, 695
Sack-fastener	W. P. and J. E. B. Maxson	Albion, Wis	Sept. 1, 1857	18, 099
Sack-fastener	T. Purse and H. C. Draper	Ashley, Mo	Nov. 5, 1867	70, 611
Sack-holder	D. Stollum	Union City, Ind	July 27, 1869	93, 134
Sack-holder, Self-adjusting	A. Stoner	Mount Joy, Pa	Apr. 28, 1857	17, 176
Sack-shoulderer	L. Rice	Clarksborough, N. J	Aug. 3, 1827	....
Sacks, Apparatus for raising, emptying, and filling	S. Wilkerson, jr	Bassingbourn, England	Dec. 30, 1873	146, 117
Sacks, &c., String fastening for	I. A. Watrous	Green Spring, Ohio	Oct. 13, 1857	18, 419
Sacket and sand shovels, Machine for making	J. Righter	Downington, Pa	July 23, 1811	....
Sacking bottom	L. L. Wells	Middletown, Conn	Apr. 13, 1836	....
Sad and crimping iron	C. Anderson	Montana, Iowa	Feb. 28, 1871	112, 105
Sad and crimping iron	C. Hyatt	Buffalo, N. Y	Aug. 9, 1870	106, 164
Sad and embossing iron, Combined	F. Myers	New York, N. Y	Mar. 11, 1873	136, 613
Sad and fluting iron	J. K. Gulihur	Montana, Iowa	Sept. 12, 1871	118, 854
Sad and fluting iron	J. Hewitt	New York, N. Y	Jan. 21, 1873	135, 116
Sad and fluting iron	J. Hewitt	Pittsburgh, Pa	Apr. 1, 1873	137, 445
Sad and fluting iron	L. Mooney	Allegheny, Pa	Dec. 16, 1873	145, 676
Sad and fluting iron	F. Myers	New York, N. Y	Mar. 7, 1871	112, 482
Sad and fluting iron	F. Myers	New York, N. Y	Feb. 27, 1872	124, 005
Sad and fluting iron	W. D. Robertson	Knoxville, Tenn	Feb. 28, 1871	112, 282
Sad and fluting iron	J. E. Swift	New York, N. Y	June 20, 1871	116, 115
Sad and fluting iron	D. W. Young, J. Hewitt, and L. Mooney.	Pittsburgh, Pa	Feb. 18, 1873	136, 121
Sad and fluting iron, Combined	A. S. Mann	Pittsburgh, Pa	Oct. 8, 1872	132, 093
Sad and fluting iron, Combined	F. Myers	New York, N. Y	Oct. 3, 1871	119, 471
Sad and polishing iron	F. Myers	New York, N. Y	Jan. 30, 1872	123, 119
Sad and polishing iron	F. Myers	New York, N. Y	Nov. 19, 1872	133, 245
Sad, fluting, and band iron	A. S. Mann	Pittsburgh, Pa	June 3, 1873	139, 590
Sad-iron	C. Barry and O. W. Preston	Corning, N. Y	Feb. 13, 1866	52, 513
Sad-iron	J. S. Butterfield and J. A. Read	Philadelphia, Pa	Dec. 10, 1867	71, 974
Sad-iron	F. A. Cannon	New York, N. Y	June 2, 1863	38, 728
Sad-iron	L. S. Chichester	New York, N. Y	Sept. 4, 1860	29, 863
Sad-iron	E. Clapp	Dedham, Mass	Feb. 25, 1851	7, 952
Sad-iron	E. T. Colburn	Boston, Mass	Sept. 18, 1866	58, 070
Sad-iron	J. Conner	Richmond, Ind	July 26, 1870	105, 649
Sad-iron	J. Dittrich	Hoboken, N. J	May 4, 1869	89, 638
Sad-iron	W. P. Dodson	Philadelphia, Pa	July 1, 1873	140, 483
Sad-iron	D. Donalds	New York, N. Y	May 25, 1869	90, 511
Sad-iron	R. Drake	Newark, N. J	June 6, 1865	48, 129
Sad-iron	J. Egger and S. S. B. Alexander	Montgomery, Ala	Oct. 22, 1872	132, 458
Sad-iron	T. G. Eiswald	Providence, R. I	Nov. 9, 1869	96, 683
Sad-iron	T. G. Eiswald	Providence, R. I	Nov. 15, 1870	109, 306
Sad-iron	J. T. Fewkes	Philadelphia, Pa	Feb. 11, 1873	135, 791
Sad-iron	S. S. Fitch	New York, N. Y	Mar. 18, 1873	136, 829
Sad-iron	W. A. Freeman, jr	Newark, N. J	Jan. 28, 1873	135, 328
Sad-iron	R. J. P. Goodwin	Manchester, N. H	Mar. 3, 1868	75, 150
Sad-iron	J. Gray	Newark, N. J	Aug. 27, 1867	68, 183
Sad-iron	J. Gray	Newark, N. J	June 23, 1868	79, 067
Sad-iron	J. W. Hall	Worcester, Mass	Apr. 14, 1868	76, 754
Sad-iron	C. C. Hare	Louisville, Ky	Aug. 20, 1867	67, 979
Sad-iron	J. Hewitt	Pittsburgh, Pa	Mar. 25, 1873	137, 201
Sad-iron	P. B. Hood	Milford, N. H	Jan. 15, 1867	61, 198
Sad-iron	A. Y. Hubbell	Elmira, N. Y	Oct. 1, 1867	69, 344
Sad-iron	W. L. Hubbell	Brooklyn, N. Y	Mar. 25, 1873	137, 205
Sad-iron	W. L. Hubbell	Brooklyn, N. Y	July 22, 1873	141, 054
Sad-iron	H. R. Ives	New Haven, Conn	Jan. 10, 1871	110, 919
Sad-iron	B. Jones	State Line City, Ind	Oct. 7, 1873	143, 451
Sad-iron	C. F. Knauer and W. Warwick	Pittsburgh, Pa	July 31, 1866	56, 764
Sad-iron	G. G. Knifiin	Long Island City, N. Y	Apr. 24, 1866	54, 174
Sad-iron	W. M. Knight	Buffalo, N. Y	Aug. 28, 1860	29, 706
Sad-iron	E. Lewis	Lockport, N. Y	Apr. 23, 1867	64, 116
Sad-iron	G. W. C. Lovell	Clarksville, Tenn	Mar. 4, 1873	136, 528
Sad-iron	C. J. Mallon	Schoharie, N. Y	May 8, 1866	54, 570

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Sad-iron	J. C. Maxcy and T. Lewis	Springfield, Ill	Aug. 29, 1871	118, 623
Sad-iron	W. McClure	Peebles, Pa	May 14, 1861	32, 304
Sad-iron	R. McGrath	Philadelphia, Pa	May 9, 1871	114, 698
Sad-iron	M. W. Montgomery and E. H. Votaw.	Springfield, Mass	Nov. 30, 1869	97, 427
Sad-iron	O. F. Morrill	Chelsea, Mass	Dec. 1, 1863	40, 768
Sad-iron	F. Myers	New York, N. Y	Mar. 11, 1873	136, 612
Sad-iron	M. F. Potts	Ottumwa, Iowa	May 24, 1870	103, 501
Sad-iron	M. F. Potts	Ottumwa, Iowa	Apr. 4, 1871	113, 448
Sad-iron	E. L. Pratt	Boston, Mass	Dec. 13, 1864	45, 434
Sad-iron	O. W. Preston, jr., and C. Barry	Corning, N. Y	July 7, 1863	39, 171
Sad-iron	D. H. Priest	Watertown, Mass	July 23, 1867	67, 072
Sad-iron	J. Shalkenback	Chicago, Ill	June 23, 1868	79, 262
Sad-iron	W. Siefert	New York, N. Y	June 18, 1867	65, 837
Sad-iron	E. H. Taylor	Batavia, N. Y	July 9, 1867	66, 535
Sad-iron	J. H. Vail	New Brunswick, N. J	Mar. 26, 1872	125, 100
Sad-iron	P. D. Van Hoesen	New York, N. Y	Jan. 8, 1861	31, 095
Sad-iron	J. J. Vaughn and C. J. Blaney	Boston, Mass	Apr. 15, 1873	137, 982
Sad-iron	J. T. Warren	Stafford, N. Y	Apr. 2, 1867	63, 588
Sad-iron	N. Waterman	Boston, Mass	July 14, 1863	39, 250
Sad-iron	J. Webster	Brooklyn, N. Y	Dec. 9, 1862	37, 118
Sad-iron	W. Webster	Washington, D. C	Aug. 16, 1870	106, 524
Sad-iron	P. W. Weida	Philadelphia, Pa	Aug. 22, 1871	118, 311
Sad-iron and crimping-shoe	J. Hewitt	New York, N. Y	Jan. 14, 1873	134, 887
Sad iron and ruffler	W. Banzett	Williamsburgh, N. Y	Aug. 8, 1871	117, 725
Sad-iron and stand combined	F. Myers	New York, N. Y	Jan. 30, 1872	123, 120
Sad-iron cleaner	A. R. Fuller	Burlington, Vt	Apr. 20, 1869	89, 262
Sad-iron crimper	J. Hewitt	New York, N. Y	Feb. 4, 1873	135, 550
Sad-iron fixture	D. L. Shaw	Lansing, Iowa	Aug. 15, 1865	49, 446
Sad-iron, fluting-iron, and nut-cracker, Combined	A. and L. Leeds	New London, Conn	Feb. 27, 1872	124, 069
Sad-iron handle	A. Barrows	Philadelphia, Pa	Oct. 6, 1868	82, 677
Sad-iron handle	S. R. Bartlett	Burlington, Iowa	Jan. 16, 1872	122, 696
Sad-iron handle	H. Clarkson	Peekskill, N. Y	Sept. 18, 1866	58, 066
Sad-iron handle	S. H. Cummings	Norway, Me	June 30, 1868	79, 320
Sad-iron handle	J. Gleason	Whitestone, N. Y	July 12, 1870	105, 192
Sad-iron handle	T. S. Minniss	Meadville, Pa	Mar. 24, 1868	75, 949
Sad-iron handle	H. Mitchell	Dayton, Ohio	Feb. 5, 1867	61, 752
Sad-iron handle	F. Rehorn	New York, N. Y	Sept. 25, 1866	58, 291
Sad-iron handle	F. J. Schellman	Syracuse, N. Y	June 25, 1867	66, 175
Sad-iron handle	A. Tait	Sonora, Cal	Oct. 17, 18[illegible]1	120, 011
Sad-iron handle, Non-heating	W. H. Towers	Boston, Mass	Mar. 7, 1871	112, 514
Sad-iron handle, Removable	C. Graham	Kingston, Pa	June 4, 1872	127, 596
Sad-iron handle, Removable	T. R. Timby	Meridian, N. Y	Mar. 18, 1851	7, 992
Sad-iron heater	W. J. Andrews	Columbia, Tenn	June 5, 1860	28, 546
Sad-iron heater	B. F. Bebbitt	New York, N. Y	Oct. 31, 1871	120, 480
Sad-iron heater	G. Benns	Rockford, Ill	Feb. 28, 1871	112, 208
Sad-iron heater	H. W. Blyer	Buffalo, N. Y	Oct. 18, 1864	44, 701
Sad-iron heater	J. S. Brooks	Rochester, N. Y	Jan. 28, 1862	34, 237
Sad-iron heater	J. S. Brooks	Rochester, N. Y	Nov. 25, 1862	36, 990
Sad-iron heater	J. Burgess	Zanesville, Ohio	May 24, 1870	103, 294
Sad-iron heater	G. Chilson	Boston, Mass	May 6, 1862	35, 139
Sad-iron heater	J. S. Dennis	Chicago, Ill	Dec. 4, 1866	60, 150
Sad-iron heater	A. Doll	Cleveland, Ohio	Apr. 20, 1869	89, 033
Sad-iron heater	H. W. Dopp	Buffalo, N. Y	June 27, 1865	48, 380
Sad-iron heater	R. Drake	Newark, N. J	Feb. 8, 1870	99, 542
Sad-iron heater	H. C. Drexel	Baltimore, Md	Mar. 30, 1869	88, 462
Sad-iron heater	J. Fewkes	Philadelphia, Pa	Sept. 24, 1872	131, 672
Sad-iron heater	P. Flinn	Lowell, Mass	Aug. 7, 1866	57, 055
Sad-iron heater	S. C. Frink	Indianapolis, Ind	Dec. 17, 1867	72, 280
Sad-iron heater	C. H. Frost	Peekskill, N. Y	Oct. 9, 1866	58, 629
Sad-iron heater	W. A. Greene	Albany, N. Y	Aug. 19, 1862	36, 213
Sad-iron heater	T. Hagerty	Richmond, Va	Dec. 10, 1872	133, 852
Sad-iron heater	G. O. Hanks	Addison, Vt	Mar. 8, 1870	100, 525
Sad-iron heater	C. Herrick	Albion, Mich	July 13, 1869	92, 445
Sad-iron heater	G. Hurdman	Wolverhampton, England	Nov. 5, 1867	70, 572
Sad-iron heater	E. N. Jenkins	Chicago, Ill	Oct. 2, 1866	58, 424
Sad-iron heater	J. Jenkinson	Williamsburgh, N. Y	Dec. 7, 1869	97, 515
Sad-iron heater	S. M. Johnson	Lockport, N. Y	Aug. 25, 1868	81, 377
Sad-iron heater	J. J. Johnston	Allegheny City, Pa	Oct. 1, 1867	69, 347
Sad-iron heater	A. J. Kennedy	Saint Louis, Mo	June 15, 1869	91, 450
Sad-iron heater	E. Lewis	Lockport, N. Y	Jan. 25, 1870	99, 213
Sad-iron heater	M. Little	East Saginaw, Mich	Aug. 22, 1871	118, 375
Sad-iron heater	D. H. Lowe	Boston, Mass	Nov. 24, 1868	84, 429
Sad-iron heater	A. C. Mumler	Charlestown, Mass	Nov. 19, 1872	133, 112
Sad-iron heater	F. Myers	New York, N. Y	Sept. 17, 1872	131, 406
Sad-iron heater	E. Phillips	Blackstone, Mass	July 12, 1870	105, 245
Sad-iron heater	J. G. Redline	Lanark, Ill	Jan. 4, 1870	98, 629
Sad-iron heater	W. Scarlett	Aurora, Ill	Apr. 5, 1870	101, 519
Sad-iron heater	H. W. Seaman	Millport, N. Y	Feb. 13, 1872	123, 581
Sad-iron heater	W. F. Smith	Green Point, N. Y	Sept. 20, 1864	44, 350
Sad-iron heater	F. Stadler	Philadelphia, Pa	Feb. 8, 1870	99, 609
Sad-iron heater	W. S. Teel	Washington, D. C	Jan. 23, 1872	123, 061
Sad-iron heater	P. W. Thomas	Waterbury, Vt	June 8, 1869	91, 053
Sad-iron heater	J. W. Thorp	Hillsborough Bridge, N. H	Nov. 22, 1870	109, 471
Sad-iron heater	J. N. Titsworth	Aurora, Ill	Sept. 27, 1864	44, 473
Sad-iron heater	D. Utley, 2d	Moscow, N. Y	July 30, 1867	67, 381
Sad-iron heater	W. P. Wage	Barre Centre, N. Y	Sept. 25, 1866	58, 324
Sad-iron heater	J. D. Westgate	San Francisco, Cal	Feb. 19, 1867	62, 179
Sad-iron heater	B. F. Wheelock	Mayville, Wis	July 29, 1856	15, 450
Sad-iron heater	J. D. Wheelock	Mayville, Wis	Dec. 25, 1855	14, 004
Sad-iron heater	L. Wilkinson	New York, N. Y	Jan. 3, 1871	110, 708
Sad-iron heater	F. G. Wynkoop	Corning, N. Y	Feb. 5, 1867	61, 911
Sad-iron-heater cover	W. Heath	Lincoln, Me	Aug. 31, 1858	21, 337
Sad-iron heater, nurse-lamp, and foot-warmer	E. Small	Dennisport, Mass	May 24, 1868	75, 802
Sad-iron-heater oven	W. McLucas	Wood Grove, Ohio	Aug. 31, 1869	94, 427
Sad-iron-heating furnace	J. T. Davy	Troy, N. Y	Mar. 12, 1850	7, 159
Sad-iron-heating furnace	S. Maxam	Westfield, Mass	Dec. 19, 1848	5, 971
Sad-iron holder	L. T. Conde	Beloit, Wis	May 19, 1868	78, 063

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Sad-iron holder	L. Hover	Chicago, Ill	Apr. 24, 1866	54, 164
Sad-iron holder	L. Hover	Chicago, Ill	Feb. 19, 1867	62, 201
Sad-iron holder	J. Humphrey	Washington, D. C	Apr. 28, 1868	77, 380
Sad-iron holder	E. Inger	New York, N. Y	Dec. 7, 1869	97, 641
Sad-iron holder	L. Londinsky	New York, N. Y	June 2, 1857	17, 470
Sad-iron holder	G. H. Roth	Boston, Mass	July 28, 1868	80, 311
Sad-iron holder	E. H. G. Von Doehren and F. P. L. Reimers.	Davenport, Iowa	July 19, 1870	105, 523
Sad-iron holder	J. D. Westgate	San Francisco, Cal	Mar. 17, 1868	5, 611
Sad-iron holder and clothes-drier	H. L. Franklin and E. Clark	Nashua, N. H	Oct. 19, 1869	95, 996
Sad-iron holder and lid-lifter	C. B. Pettengill	Hebron, Me	June 10, 1873	139, 733
Sad-iron holder, Composition	W. B. Coates	Philadelphia, Pa	Aug. 1, 1871	117, 515
Sad-iron manufacture	A. Y. Hubbell	Elmira, N. Y	Apr. 28, 1868	77, 379
Sad-iron, Metal-coated	W. H. Howell	Geneva, Ill	Apr. 2, 1872	125, 297
Sad-iron polisher and glosser	J. D. Davies	East New York, N. Y	Aug. 10, 1869	93, 421
Sad-iron, Reversible	S. M. Johnson	Lockport, N. Y	Dec. 10, 1867	72, 047
Sad-iron, Self-heating	J. Melder	München, Bavaria	Oct. 31, 1871	120, 450
Sad-iron shield	J. Gleason	Brooklyn, N. Y	Sept. 2, 1873	142, 334
Sad-iron stand	G. O. Ballou	Fall River, Mass	July 9, 1872	128, 778
Sad-iron support for stove	A. Dickey	Albany, N. Y	Aug. 11, 1868	80, 814
Sad-iron, Case for heating	G. W. C. Lovell	Clarksville, Tenn	Feb. 18, 1873	136, 077
Sad-irons, Gas-heater attachment for	J. D. Spang	Dayton, Ohio	Aug. 27, 1867	68, 318
Sad-irons, Hand-protector for	J. K. Batey	New York, N. Y	May 22, 1866	54, 841
Sad-irons, Heating	A. F. Dusantoy	Neuilly, (Seine,) France	July 12, 1864	43, 554
Sad-irons, &c., Method of coating	W. H. Towers	Boston, Mass	Jan. 10, 1871	110, 878
Sad-irons, &c., Mode of and apparatus for varnishing.	W. J. Reagan	Royer's Ford, Pa	Sept. 9, 1873	142, 728
Saddle	J. H. Boyd	Baltimore, Md	Sept. 25, 1860	30, 118
Saddle	J. Bryan	Lexington, Ky	Oct. 24, 1815	....
Saddle	R. Caldwell	Nashville, Tenn	Oct. 24, 1848	5, 872
Saddle	O. W. S. Callihan	Staunton, Va	July 1, 1836	....
Saddle	W. H. Collins	Cincinnati, Ohio	May 27, 1826	....
Saddle	J. Commins	Charleston, S. C	Oct. 2, 1860	30, 207
Saddle	J. Curry	Stanford, Ky	Apr. 16, 1867	63, 864
Saddle	W. F. Dean	Baltimore, Md	Mar. 13, 1860	27, 621
Saddle	I. Dunham	Plattsburgh, Mo	Nov. 11, 1862	36, 900
Saddle	R. N. Eagle	United States Army	Dec. 24, 1861	34, 044
Saddle	G. H. Hayden	New Market, Ala	Nov. 17, 1868	84, 186
Saddle	G. Horter	New Orleans, La	Mar. 15, 1870	100, 894
Saddle	D. Irwin	Madison, Wis	Apr. 11, 1842	2, 544
Saddle	W. S. Kennedy	Philadelphia, Pa	June 15, 1852	9, 029
Saddle	B. Kraft	Reading, Pa	June 20, 1836	....
Saddle	J. F. Lehr	Huntsville, Ala	July 5, 1845	4, 100
Saddle	L. T. A. Lewis	Liege, Belgium	May 3, 1864	42, 583
Saddle	T. Mardock	Cincinnati, Ohio	Nov. 9, 1852	9, 386
Saddle	A. Marshall	Chester County, Pa	Apr. 30, 1828	....
Saddle	O. McCluer	Fredonia, N. Y	Mar. 25, 1840	1, 521
Saddle	T. H. McGrath	San Antonio, Tex	Nov. 25, 1873	145, 001
Saddle	J. Meyer	Williamsburgh, N. Y	Sept. 18, 1866	58, 121
Saddle	B. T. Nichols	Newark, N. J	May 5, 1863	38, 404
Saddle	B. T. Nichols	Newark, N. J	Mar. 22, 1864	42, 015
Saddle	T. G. Prettyman	Alexandria, D. C	Sept. 30, 1825	....
Saddle	S. Ringgold	Fort McHenry, Md	Oct. 7, 1844	3, 779
Saddle	J. C. Salomon, jr	Cincinnati, Ohio	Oct. 21, 1851	8, 454
Saddle	T. Stickney	....	Nov. 16, 1797	....
Saddle	H. Stockton and W. S. Smoot	Newport, R. I., and Washington, D. C.	Aug. 14, 1866	57, 214
Saddle	B. Suits	Chittenango, N. Y	Aug. 9, 1845	4, 142
Saddle	S. E. Tompkins	Newark, N. J	Mar. 29, 1859	23, 411
Saddle	E. Walker	Aurora, N. Y	Nov. 16, 1820	....
Saddle	F. D. Ward	Bellbrook, Ohio	Apr. 23, 1842	2, 584
Saddle	L. White	New York	Sept. 30, 1825	....
Saddle	J. D. Woodruff	Brooklyn, N. Y	Nov. 12, 1861	33, 728
Saddle and collar	E. Hall	New York, N. Y	Jan. 20, 1836	....
Saddle and harness	A. Angelini	Genoa, Italy	Apr. 10, 1866	53, 932
Saddle and harness	R. M. La Rue	Andersonville, Ind	Mar. 24, 1868	75, 930
Saddle and winch, Combination of adjustable	A. G. Polhamous	Nyack, N. Y	Mar. 27, 1849	6, 224
Saddle-bag	G. W. Elliott	Rocheport, Mo	Jan. 18, 1870	98, 857
Saddle-bag	J. H. Satourandais	Flint Hill, Va	June 7, 1834	....
Saddle-bag and medicine-case	H. H. Peacock	Philadelphia, Pa	Jan. 12, 1864	41, 233
Saddle-bag, mail-bag, &c., fastening	A. North	North Britain, Conn	Dec. 29, 1837	545
Saddle-bag, Physician's	A. M. Leslie	Saint Louis, Mo	Mar. 21, 1871	112, 819
Saddle, Cart	J. Bea	Newark, N. J	Oct. 15, 1867	69, 749
Saddle, Cart	C. C. Cushman	Gallipolis, Ohio	Feb. 6, 1872	123, 459
Saddle, Cart	W. H. Gordon	Norfolk, Va	Feb. 27, 1872	124, 055
Saddle, Cart	C. K. Marshall	New Orleans, La	May 31, 1870	103, 636
Saddle, Cart	W. B. McClure	Alexandria, Va	Dec. 14, 1869	97, 789
Saddle, Cart	W. B. McClure	Alexandria, Va	Oct. 25, 1870	108, 614
Saddle, Cart	W. B. McClure	Alexandria, Va	Sept. 26, 1871	119, 382
Saddle, Cart	H. A. Raine	Nashville, Tenn	Aug. 19, 1856	15, 575
Saddle, Cart	H. A. Raine and A. P. Adams	Nashville, Tenn., and Newark, N. J.	Oct. 16, 1866	58, 884
Saddle-cloth, Manufacture of	R. Allison	New York, N. Y	Feb. 9, 1869	86, 798
Saddle, Double side	H. M. Rose	Lexington, Ky	June 19, 1824	....
Saddle, Dray	J. O'Mahony	Savannah, Ga	Apr. 28, 1868	77, 310
Saddle, Elastic	L. Bishop	Talladega, Ala	Jan. 4, 1859	22, 460
Saddle, Elastic	W. McCormick	Bath County, Ky	June 20, 1836	....
Saddle, Elastic-seat	W. Harper	Nashville, Tenn	Apr. 2, 1819	....
Saddle, Elastic-seat	P. H. Martin	Nashville, Tenn	Feb. 23, 1820	....
Saddle, Elastic-seat	B. Smith	Romney, Va	Aug. 24, 1833	....
Saddle for moving the sick &c	H. L. Thistle	New Orleans, La	Jan. 21, 1837	112
Saddle-frame	L. Hall	Adrain, Mich	Oct. 3, 1848	5, 830
Saddle, Gig	J. W. Crouch	Rushville, Ohio	Oct. 31, 1871	120, 499
Saddle, Gig	G. D. Gillett	Meridian, N. Y	June 6, 1871	115, 599
Saddle, Gig	J. Hughes	Newark, N. J	Oct. 13, 1868	82, 954
Saddle-girth	S. W. Baker	Providence, R. I	Nov. 28, 1871	121, 263
Saddle, Gum-elastic-webbing riding	A. L. Vanhorn	Philadelphia, Pa	June 26, 1835	....
Saddle, Harness	R. Spencer	Brooklyn, N. Y	Sept. 2, 1862	36, 376

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Invention.	Inventor.	Residence.	Date.	No.
Saddle, Harness	T. J. Weeks	New London, Conn	Nov. 13, 1860	30, 650
Saddle hook, Gig	W. Sassaman	Hightstown, N. J	Apr. 2, 1872	125, 222
Saddle, Lady's	M. Jenkins	Attica, N. Y	July 1, 1836	....
Saddle, Lady's riding	H. Adams	New York, N. Y	Sept. 9, 1856	15, 681
Saddle, Lady's riding	R. Spencer	New York, N. Y	Feb. 3, 1857	16, 556
Saddle, Leather-tree	M. Halderman	Trapp, Pa	Oct. 12, 1829	....
Saddle, Military	D. Campbell	Washington, D. C	Dec. 4, 1855	13, 864
Saddle, Military	W. H. Jenifer	Baltimore, Md	June 26, 1860	28, 867
Saddle, Military and other riding	R. Spencer	Brooklyn, N. Y	Feb. 4, 1862	34, 320
Saddle or sweat cloth	R. Spencer	Newark, N. J	Sept. 29, 1863	40, 128
Saddle or sweat cloth	R. Spencer	Newark, N. J	Mar. 15, 1864	41, 944
Saddle or sweat cloth, Absorbing and ventilating	R. Spencer	Newark, N. J	Sept. 29, 1863	40, 129
Saddle, Pack	W. T. Campbell	Philadelphia, Pa	Aug. 18, 1863	39, 547
Saddle, Pack	J. Dunton	Philadelphia, Pa	Feb. 24, 1863	37, 742
Saddle, Pack	J. Dunton	Philadelphia, Pa	Mar. 3, 1863	37, 844
Saddle, Pack	J. Gosker and A. Degenhart	Cincinnati, Ohio	July 21, 1863	39, 285
Saddle, Pack	F. P. Woodcock	New York, N. Y	Nov. 3, 1863	40, 533
Saddle, Pad	R. McClary	Crestline, Ohio	Nov. 9, 1869	96, 716
Saddle-pads, Sweat-shield for	R. C. Sturges	Boston, Mass	Mar. 2, 1869	87, 379
Saddle, Riding	J. Chenoweth	Fort Wayne, Ind	Oct. 6, 1863	40, 158
Saddle, Riding	A. R. Dinsmoor	Goffstown, N. H	Oct. 25, 1834	....
Saddle, Riding	P. Dixon	Philadelphia, Pa	Apr. 25, 1821	....
Saddle, Riding	J. M. Flautt	Reedsburgh, Wis	Nov. 29, 1864	45, 235
Saddle, Riding	L. Friese	Stuttgart, Germany	Sept. 9, 1862	36, 400
Saddle, Riding	R. C. Hamil	Harrisville, Tex	June 10, 1873	139, 668
Saddle, Riding	G. Horter	New Orleans, La	July 5, 1870	105, 080
Saddle, Riding	J. E. Kelly	New York, N. Y	Apr. 3, 1860	27, 719
Saddle, Riding	G. H. Meeker	Bridgeport, Conn	May 16, 1865	47, 771
Saddle, Riding	M. Nelson	New York, N. Y	Apr. 10, 1860	27, 824
Saddle, Riding	P. Plant	Chicago, Ill	Sept. 16, 1856	15, 744
Saddle, Riding	J. Rudisill	Natchez, Miss	Dec. 1, 1857	18, 771
Saddle, Riding	J. C. Salomon, jr., and G. E. Cooper.	Baltimore, Md	July 22, 1856	15, 302
Saddle, Riding	G. F. Schmidt	Kiel, Prussia	June 6, 1871	115, 772
Saddle, Riding	F. M. Simpson	Pittsville, Mo	Dec. 12, 1871	121, 818
Saddle, Riding	E. Spedden	Astoria, Oreg	Mar. 8, 1870	100, 565
Saddle, Riding	S. S. Spurgin	Jacksonville, Ill	Mar. 26, 1867	63, 322
Saddle, Riding	S. Ward	Princeton, Ind	Jan. 6, 1857	16, 345
Saddle, Riding	P. Weber and L. Muller	Stuttgart, Würtemberg	Jan. 5, 1864	41, 130
Saddle-seat spring	Bayliss and Brannon	Fredericksburgh, Va	May 16, 1835	....
Saddle, Self-adjusting cart	M. Clinton	New York, N. Y	Dec. 28, 1869	98, 229
Saddle, Side	C. A. Bartelett	Ferndale, Cal	Dec. 6, 1864	45, 308
Saddle, Side	C. A. Bartlett	Oakland, Cal	Aug. 7, 1866	56, 875
Saddle, Side	E. Bridewell	Bardstown, Ky	Nov. 20, 1836	....
Saddle, Side	E. Bridewell	Bardstown, Ky	Nov. 26, 1836	89
Saddle, Side	O. Briggs	Schoharie, N. Y	Dec. 3, 1834	....
Saddle, Side	J. T. Gathright and J. C. Freeman.	Louisville, Ky	Sept. 14, 1869	94, 737
Saddle, Side	W. Hill	New York, N. Y	June 21, 1870	104, 456
Saddle, Side	J. C. Miller	Danville, Ky	Aug. 10, 1869	93, 634
Saddle, Side	F. Smith	Austin, Tex	July 26, 1870	105, 734
Saddle, Spring	M. Baldwin	Cincinnati, Ohio	Apr. 29, 1837	186
Saddle, Spring	C. Bates	Staunton, Va	Nov. 26, 1835	....
Saddle, Spring	R. Caldwell	Montevallo, Ala	May 24, 1845	4, 061
Saddle, Spring	P. Crim	Waynestown, Pa	Apr. 28, 1836	....
Saddle, Spring	W. Duchman	Morgantown, Pa	Aug. 31, 1836	20
Saddle, Spring	G. Fisher	Raleigh, N. C	July 16, 1850	7, 507
Saddle, Spring	H. C. Fisher	Warwick, R. I	Nov. 25, 1837	482
Saddle, Spring	A. Freed	Marietta, Pa	June 11, 1842	2, 667
Saddle, Spring	T. Harvey	Middletown, Del	Jan. 24, 1828	....
Saddle, Spring	A. Hickman	Abingdon, Va	Nov. 23, 1835	....
Saddle, Spring	C. Klasson	Baltimore, Md	May 22, 1816	....
Saddle, Spring	J. G. Manlove	Bainbridge, Ohio	Mar. 25, 1837	151
Saddle, Spring	T. Mardock	Liberty, Ind	Aug. 28, 1841	2, 229
Saddle, Spring	J. C. Miller	Louisville, Ky	Apr. 10, 1866	53, 854
Saddle, Spring	J. D. Payne	Warm Springs, Va	Nov. 25, 1837	483
Saddle, Spring	J. Rhoades and W. Pouley	Shippensburgh, Pa	May 22, 1849	6, 472
Saddle, Spring	J. C. Salomon, jr	Cincinnati, Ohio	Nov. 8, 1851	8, 536
Saddle, Spring	J. C. Smith	Stoughstown, Pa	Apr. 29, 1851	8, 064
Saddle, Spring	R. Spencer	New York, N. Y	Nov. 24, 1843	3, 353
Saddle-spring	J. Woodward	Marshallton, Pa	Oct. 6, 1835	....
Saddle, Spring and riding	R. Wilson	Milton, Pa	Mar. 11, 1837	139
Saddle, Spring riding	R. Harrison	New York, N. Y	Feb. 11, 1834	....
Saddle, Spring-seat	H. Sheets	Staunton, Va	Mar. 30, 1837	157
Saddle, Spring-seat	R. Smith	Leesburgh, Pa	Aug. 28, 1849	6, 682
Saddle, Spring-seat	R. J. Steele, jr	Rockingham, N. C	May 12, 1868	77, 849
Saddle, Spring-seat riding	Palmer and Beards	Greenville, Va	June 12, 1835	....
Saddle, Spring-tree	D. C. Mosely	Boston, Mass	Apr. 25, 1810	....
Saddle sweat-cloth	R. Allison	New York, N. Y	May 24, 1870	103, 276
Saddle-tree	H. Adams	New York, N. Y	Sept. 13, 1859	25, 375
Saddle-tree	G. B. Ambler	Trumbull, Conn	Feb. 14, 1854	10, 530
Saddle-tree	P. Becker	Philadelphia, Pa	Feb. 11, 1873	135, 755
Saddle-tree	D. Campbell	Washington, D. C	July 10, 1855	13, 213
Saddle-tree	J. Contner	Milroy, Pa	Jan. 18, 1853	9, 543
Saddle-tree	D. A. Dixon	Saint Louis, Mo	Nov. 5, 1867	70, 425
Saddle-tree	E. H. Dunn	Portland, Me	Nov. 28, 1871	121, 282
Saddle-tree	O. V. Flora	Madison, Ind	Dec. 16, 1873	145, 639
Saddle-tree	E. E. Hardy	New York, N. Y	Dec. 20, 1864	45, 492
Saddle-tree	W. E. Jones	United States Army	June 13, 1854	11, 068
Saddle-tree	A. Koehler	Holyoke, Mass	May 30, 1865	47, 960
Saddle-tree	C. Kurtz	Lancaster, Pa	May 28, 1823	....
Saddle-tree	I. Landis	Saint Joseph, Mo	Feb. 1, 1870	99, 447
Saddle-tree	A. R. McBride	Williamson County, Tenn	Feb. 5, 1836	....
Saddle-tree	J. Nece	Philadelphia, Pa	Nov. 23, 1858	22, 130
Saddle-tree	A. Null	Philadelphia, Pa	Aug. 29, 1822	....
Saddle-tree	J. T. Smelser	Williamsburgh, Ind	Aug. 11, 1868	81, 022
Saddle-tree	C. Stiles, jr	Philadelphia, Pa	June 28, 1814	....
Saddle-tree	A. Teas	Cincinnati, Ohio	Oct. 28, 1873	144, 164

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Saddle-tree	S. E. Tompkins	Newark, N. J	Sept. 25, 1860	30, 168
Saddle-tree	S. E. Tompkins	Newark, N. J	Jan. 30, 1866	52, 342
Saddle-tree	G. Woods	St. Catharine's, Canada	July 4, 1871	116, 785
Saddle-tree and composition for the same, Molded.	E. B. Newman	Saint Louis, Mo	Mar. 28, 1871	113, 196
Saddle tree, Cart	T. Glasco	Wilmington, Del	Sept. 19, 1848	5, 795
Saddle-tree crupper-loop	J. C. Young	Newark, N. J	Feb. 27, 1866	52, 924
Saddle tree, Dragoon	T. Grimsley	Saint Louis, Mo	Dec. 11, 1847	5, 396
Saddle tree, Gig	J. Bauer	Newark, N. J	Feb. 25, 1873	136, 205
Saddle tree, Gig	S. E. Tompkins	Sing Sing, N. Y	Jan. 30, 1872	123, 209
Saddle tree, Gig	P. H. Wiedersum	New York, N. Y	Mar. 5, 1872	124, 302
Saddle tree, Gig	P. H. Wiedersum	New York, N. Y	Mar. 5, 1872	124, 303
Saddle tree, Gig	P. H. Wiedersum	New York, N. Y	July 2, 1872	128, 689
Saddle tree, Harness	M. A. Pond	Elyria, Ohio	Sept. 30, 1873	143, 381
Saddle-tree, Lady's	J. M. Bonton	Newark, N. J	Aug. 17, 1835	....
Saddle-tree, Lady's	W. Rhodes and G. Hazlewood.	Bloomfield, Iowa	Sept. 25, 1866	58, 293
Saddle-tree mold	J. Strans	Saint Louis, Mo	May 2, 1871	114, 488
Saddle tree, Side	J. B. Gathright	Louisville, Ky	Feb. 25, 1868	74, 909
Saddle tree, Side	W. Hill	New York, N. Y	Nov. 24, 1863	40, 691
Saddle tree, Side	W. Hill	New York, N. Y	June 21, 1870	104, 455
Saddle tree, Side	A. Lawrence	Louisville, Ky	Dec. 13, 1870	110, 147
Saddle tree, Side	J. C. Miller	Danville, Ky	Sept. 22, 1868	82, 337
Saddle tree, Side	D. M. Oliver	Charleston, Ill	July 16, 1872	129, 292
Saddle tree, Side	T. Pogue	Madison, Ind	Dec. 15, 1863	40, 943
Saddle tree, Side	J. H. Preston	Jefferson City, Mo	Dec. 14, 1869	97, 961
Saddle tree, Side	J. Shelly	Saint Louis, Mo	Nov. 23, 1869	97, 236
Saddle tree, Side	J. Straus	Saint Louis, Mo	Aug. 17, 1869	93, 843
Saddle tree, Side	J. Straus	Saint Louis, Mo	May 17, 1870	103, 101
Saddle tree, Side	L. Triplett	Columbia, Ky	Sept. 21, 1869	95, 055
Saddle tree, Side	C. Wellman	New York, N. Y	Nov. 3, 1863	40, 524
Saddle tree, Spring	J. H. Boyd	Baltimore, Md	Sept. 20, 1859	25, 485
Saddle tree, Spring	J. R. Bragg	Williamsburgh, Mo	June 8, 1869	90, 990
Saddle tree, Spring	J. and W. Dinwiddie	Concord Post-Office, Va	Aug. 8, 1823	....
Saddle-tree stuff, Carriage for sawing	J. H. Preston	Jefferson City, Mo	Mar. 2, 1869	87, 430
Saddle-tree, Wooden	G. B. Ambler	Trumbull, Conn	May 22, 1855	12, 891
Saddle-trees, Fastening skirt to	J. C. Dickey	Sandy Hill, N. Y	Aug. 29, 1854	11, 598
Saddle-trees, Machine and tool for making	R. and E. Fairchild	Fairfield County, Conn	Mar. 6, 1822	....
Saddle-trees, Machine for covering	J. Maclure	Newark, N. J	Oct. 18, 1859	25, 867
Saddle-trees, Machine for making	R. and E. Fairchild	Fairfield, Conn	June 1, 1810	....
Saddle-trees, Making	G. Wilkes	Fredonia, Ind	Nov. 22, 1826	....
Saddle-trees, Manufacturing	W. Kelly	New Columbus, Pa	May 30, 1837	209
Saddle-trees, Mode of attaching pads to	J. Ives	Mount Carmel, Conn	June 10, 1856	15, 077
Saddles, Applying bow and worm spring to	J. Keedy	Russellville, Ky	Aug. 18, 1867	361
Saddles, Back-chain for cart	W. B. McClure	Alexandria, Va	Jan. 28, 1873	135, 235
Saddles, Luggage-supporter for	W. Cline	Boston, Mass	July 14, 1868	79, 953
Saddles, Making	J. J. Morris	New York	Aug. 28, 1821	....
Saddles, Manufacture of cart	B. F. Nichols	Newark, N. J	May 19, 1868	78, 119
Saddles, Manufacturing	L. Sherman	Bridgeport, Conn	Jan. 18, 1831	....
Saddles, Mode of constructing the elastic spring-seat of.	C. E. King	Mount Pleasant, Ohio	Feb. 21, 1840	1, 494
Saddles without saddle-trees, Making	P. Dixon	Philadelphia, Pa	July 16, 1819	....
Saddlers' and shoe-makers' tool	G. V. Farr and E. Hall	Brandon, Vt	Dec. 3, 1867	71, 726
Saddler's clamp	W. K. Rairigh	Rural Valley, Pa	Oct. 13, 1868	82, 986
Saddlery goods, Composition	J. Straus	Saint Louis, Mo	Nov. 21, 1871	121, 215
Safe	M. C. Boyer	Norristown, Pa	Mar. 19, 1872	124, 784
Safe	M. Briggs	Rochester, N. Y	Mar. 7, 1865	46, 634
Safe	M. Briggs	Rochester, N. Y	Nov. 23, 1869	97, 159
Safe	W. Corliss	Providence, R. I	Apr. 30, 1872	126, 131
Safe	W. Corliss	Providence, R. I	Apr. 30, 1872	126, 132
Safe	W. Corliss	Providence, R. I	Apr. 30, 1872	126, 133
Safe	W. Corliss	Providence, R. I	Apr. 30, 1872	126, 134
Safe	J. B. Cornell	New York, N. Y	Mar. 20, 1860	27, 527
Safe	J. B. Cornell	New York, N. Y	Oct. 30, 1866	59, 189
Safe	T. Dolan	Albany, N. Y	June 28, 1864	43, 296
Safe	J. Farrel	New York, N. Y	May 19, 1863	38, 573
Safe	J. Farrel	New York, N. Y	Dec. 12, 1871	121, 710
Safe	J. Farrel and J. Weimar	New York, N. Y	Mar. 29, 1870	101, 245
Safe	D. Fitzgerald	New York, N. Y	Apr. 27, 1869	89, 474
Safe	D. Fitzgerald	New York, N. Y	Dec. 5, 1871	121, 503
Safe	T. T. Furlong and D. C. Freeman.	Saint Louis, Mo	Oct. 30, 1866	59, 207
Safe	J. L. Hall	Cincinnati, Ohio	July 23, 1867	67, 045
Safe	J. L. Hall	Cincinnati, Ohio	Oct. 29, 1867	70, 262
Safe	G. Hopson	Bridgeport, Conn	Feb. 16, 1864	41, 621
Safe	E. B. Horn	Boston, Mass	Dec. 4, 1866	60, 191
Safe	J. P. Howard	Brooklyn, N. Y	Dec. 27, 1864	45, 607
Safe	G. H. Ireland	Somerville, Mass	May 30, 1871	115, 479
Safe	S. S. B. Lewis and W. H. Sterling.	Troy, N. Y	May 23, 1871	115, 221
Safe	E. Macy	Brooklyn, N. Y	Oct. 26, 1869	96, 246
Safe	O. Marland	Boston, Mass	Apr. 12, 1870	101, 894
Safe	W. K. Marvin	New York, N. Y	Jan. 4, 1870	98, 608
Safe	W. McFarland	Williamsburgh, N. Y	Nov. 30, 1869	97, 423
Safe	L. H. Miller	Baltimore, Md	Dec. 11, 1866	60, 405
Safe	D. O. Paige	Detroit, Mich	Feb. 22, 1870	100, 184
Safe	I. Rogers	Washington, D. C	Dec. 15, 1863	40, 947
Safe	R. S. Sanborn	Ripon, Wis	July 17, 1866	56, 452
Safe	B. Sherwood	New York, N. Y	Oct. 24, 1854	11, 842
Safe	B. Sherwood and J. Fitzgerald.	New York, N. Y	Mar. 19, 1867	62, 974
Safe	T. J. Sullivan	Albany, N. Y	Dec. 14, 1869	97, 829
Safe	W. R. Terwilliger and D. Fitzgerald.	New York, N. Y	Dec. 20, 1864	45, 536
Safe	J. P. White	Savannah, Ga	Sept. 21, 1869	95, 059
Safe	L. F. Whiting and F. Smith	Boston, Mass	Feb. 22, 1870	100, 093
Safe	L. Yale, jr	Shelburne Falls, Mass	Feb. 6, 1866	52, 484
Safe-alarm	W. Spear	Cape Elizabeth, Me	June 7, 1870	104, 073
Safe and alarm-bell, Ticket	E. Richmond and J. G. Moody.	New York, N. Y	Apr. 30, 1867	64, 366
Safe and chest filling, Fire-proof	W. Alford	Philadelphia, Pa	Jan. 19, 1869	85, 893
Safe and detector, Coin	J. J. Hatcher	Spring Garden, Pa	Apr. 12, 1853	9, 661

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Invention.	Inventor.	Residence.	Date.	No.
Safe and detector, Coin	H. G. Robinson	Schuylkill Haven, Pa	July 12, 1853	9,844
Safe and sifter, Flour	F. A. Hoyt	Hanover, Wis	Feb. 4, 1868	74,091
Safe and table, Provision	J. S. Robinson	Baltimore, Md	Apr. 10, 1866	53,877
Safe and vault	J. Crump	Philadelphia, Pa	Dec. 30, 1873	146,047
Safe and vault	J. Crump	Philadelphia, Pa	Dec. 30, 1873	146,048
Safe and vault	T. J. Sullivan	Albany, N. Y	May 31, 1870	103,683
Safe, Ash and garbage	W. Gee	New York, N. Y	Nov. 30, 1858	22,176
Safe, Automatic fire-escape for	I. Parke	Mineral Point, Mo	Aug. 26, 1873	142,174
Safe, bank-vault, &c., lock	W. Hall	Chelsea, Mass	Aug. 17, 1843	3,221
Safe, Binding-post	D. Fitzgerald	New York, N. Y	Dec. 5, 1871	121,454
Safe-bolt	G. L. Damon	Portland, Me	May 10, 1870	102,780
Safe-bolt	J. Farrell	New York, N. Y	May 10, 1870	102,793
Safe-bolt	S. Perry	Newport, N. Y	Sept. 8, 1859	18,157
Safe-bolt	W. Sharts	Athens, N. Y	Mar. 22, 1870	101,051
Safe-bolt	J. Weimar	New York, N. Y	May 16, 1871	115,001
Safe-bolt, Interlocked conical	J. Farrel	New York, N. Y	Nov. 7, 1871	120,577
Safe-bolt work and door	J. C. Hintz	Cincinnati, Ohio	Jan. 4, 1870	98,494
Safe-bolting device	S. J. Burton	Charlestown, Mass	June 7, 1870	103,841
Safe, Book	J. P. Gage	New York, N. Y	Nov. 14, 1848	5,924
Safe, Buoy	F. C. Buleson	Nantiat, France	Sept. 3, 1867	68,349
Safe, &c., Burglar-alarm	B. G. Fitzhugh	Baltimore, Md	Jan. 8, 1867	61,061
Safe, Burglar and fire proof	L. H. Miller	Baltimore, Md	July 23, 1867	66,984
Safe, Burglar-proof	J. W. Campbell, sr	New York, N. Y	Apr. 25, 1871	114,107
Safe, Burglar-proof	W. Corliss	Providence, R. I	Mar. 25, 1873	137,061
Safe, Burglar-proof	J. B. Cornell	New York, N. Y	Jan. 11, 1859	22,547
Safe, Burglar-proof	L. Eidlitz	New York, N. Y	Dec. 29, 1857	18,962
Safe, Burglar-proof	J. M. Ewing	Hastings, Mich	Mar. 15, 1870	100,741
Safe, Burglar-proof	J. Farrel	New York, N. Y	Sept. 6, 1870	107,021
Safe, Burglar-proof	J. Farrel	New York, N. Y	June 27, 1871	116,287
Safe, Burglar-proof	J. Farrel	New York, N. Y	Dec. 3, 1872	133,637
Safe, Burglar-proof	D. Fitzgerald	New York, N. Y	Jan. 23, 1872	122,883
Safe, Burglar-proof	E. K. Hall	Louisville, Ky	Apr. 18, 1871	113,877
Safe, Burglar-proof	E. K. Hall	Louisville, Ky	June 6, 1871	115,728
Safe, Burglar-proof	E. K. Hall	Louisville, Ky	July 11, 1871	116,954
Safe, Burglar-proof	E. M. Hendrickson	Brooklyn, N. Y	Jan. 25, 1870	99,085
Safe, Burglar-proof	E. M. Hendrickson	Brooklyn, N. Y	Oct. 15, 1872	132,156
Safe, Burglar-proof	R. G. Holmes and W. H. Butler	New York, N. Y	Nov. 18, 1856	16,087
Safe, Burglar-proof	G. H. Ireland	Somerville, Mass	June 15, 1869	91,342
Safe, Burglar-proof	L. Lillie	Newark, N. J	Aug. 8, 1871	117,899
Safe, Burglar-proof	W. McFarland	Brooklyn, N. Y	Sept. 14, 1869	94,761
Safe, Burglar-proof	W. McFarland	Williamsburgh, N. Y	Mar. 15, 1870	100,781
Safe, Burglar-proof	G. W. Putnam	Boston, Mass	Dec. 14, 1869	97,810
Safe, Burglar-proof	L. Yale, jr	Shelburne Falls, Mass	Nov. 19, 1867	71,110
Safe-case for books	S. H. Harris	Chicago, Ill	Sept. 6, 1870	107,042
Safe-case for papers, Frame of	S. H. Harris	Chicago, Ill	Sept. 6, 1870	107,043
Safe, Confectionery	R. Shaler	Madison, Conn	July 12, 1859	24,764
Safe-deposit box	W. H. Butler	New York, N. Y	June 14, 1870	104,263
Safe-door	D. S. Covert	Chicago, Ill	July 4, 1871	116,686
Safe-door	D. S. Covert	Chicago, Ill	July 4, 1871	116,688
Safe-door bolt	J. Farrel and J. Weimar	New York, N. Y	Dec. 12, 1871	121,711
Safe-door bolt	W. Hall	Brookline, Mass	Aug. 19, 1873	141,874
Safe-door bolt	L. H. Miller	Baltimore, Md	Sept. 24, 1872	131,699
Safe-door bolt	J. R. Pierson	Newark, N. J	Nov. 26, 1867	71,410
Safe-door bolt	J. Sargent	Rochester, N. Y	Dec. 22, 1868	85,246
Safe-door bolt	H. B. Tripp	Boston, Mass	June 21, 1870	104,666
Safe-door, Burglar-proof	J. Farrel	New York, N. Y	July 13, 1869	92,595
Safe-door, Iron	L. H. Miller	Baltimore, Md	Oct. 25, 1859	25,906
Safe-door lock	J. G. Kriechbaum	Youngstown, Ohio	May 19, 1868	78,101
Safe-door lock	D. O. Paige	Detroit, Mich	Apr. 6, 1869	88,581
Safe-door lock, Applying	R. S. Foster	Sing Sing, N. Y	June 23, 1863	39,001
Safe-door, &c., Bolt-work for	M. Briggs	Rochester, N. Y	Feb. 15, 1870	99,828
Safe-doors, Bolt-worker for	H. B. Tripp	South Boston, Mass	Aug. 26, 1873	142,300
Safe-doors, Device for operating	G. L. Damon and H. B. Tripp	Cambridge and Boston, Mass.	June 6, 1871	115,714
Safe-doors, Device for operating	W. Terwilliger	New York, N. Y	July 11, 1871	117,016
Safe-doors, Device for operating	H. B. Tripp	Boston, Mass	Nov. 25, 1873	145,032
Safe-doors, Machine for opening and closing	J. Farrel	New York, N. Y	Sept. 6, 1870	107,023
Safe-doors, Safety-guard for	J. B. Cornell	New York, N. Y	Aug. 10, 1858	21,119
Safe-doors, Securing lock-spindles in	J. Sargent	Rochester, N. Y	Feb. 26, 1867	62,445
Safe-doors, Securing lock-spindles in	R. Young	San Francisco, Cal	Feb. 25, 1873	136,353
Safe, Express-messenger's	T. Dolan	Albany, N. Y	Jan. 5, 1869	85,647
Safe-filling	H. H. Bryant	Boston, Mass	Aug. 13, 1867	67,629
Safe-filling	R. A. Chesebrough	New York, N. Y	July 24, 1866	56,529
Safe-filling, Fire-proof	J. Farrel	New York, N. Y	Sept. 6, 1870	107,022
Safe, Fire and burglar proof	D. Fitzgerald	New York, N. Y	Aug. 11, 1868	80,936
Safe, Fire and burglar proof	F. C. Goffin	New York, N. Y	Feb. 14, 1854	10,517
Safe, Fire and burglar proof	B. Howard	Saint Clair, Pa	June 10, 1873	139,792
Safe, Fire and burglar proof	T. Sharts	Albany, N. Y	June 29, 1858	20,736
Safe, Fire-proof	E. H. Ashcroft	Lynn, Mass	June 25, 1867	66,062
Safe, Fire-proof	E. H. Ashcroft	Lynn, Mass	Nov. 5, 1867	70,390
Safe, Fire-proof	R. A. Ballou	Boston, Mass	Mar. 10, 1868	75,346
Safe, Fire-proof	H. H. Bryant	Boston, Mass	July 16, 1867	66,790
Safe, Fire-proof	H. H. Bryant	Boston, Mass	July 14, 1868	79,808
Safe, Fire-proof	W. H. Butler	New York, N. Y	May 28, 1867	65,055
Safe, Fire-proof	N. Constable	Carrollton, Ill	May 27, 1873	139,296
Safe, Fire-proof	T. Cook	London, England	Nov. 5, 1867	70,415
Safe, Fire-proof	W. B. Dodds	Cincinnati, Ohio	Mar. 10, 1868	75,369
Safe, Fire-proof	E. D. Draper and E. W. Glover	Hopedale and Medford, Mass.	Dec. 17, 1867	72,176
Safe, Fire-proof	E. D. Draper and E. W. Glover	Hopedale and Medford, Mass.	Jan. 14, 1868	73,309
Safe, Fire-proof	E. A. Eaton and W. C. Ireland	Boston, Mass	Nov. 26, 1867	71,288
Safe, Fire-proof	J. Farrel	New York, N. Y	Feb. 7, 1865	46,228
Safe, Fire-proof	J. Farrel	New York, N. Y	Apr. 21, 1868	76,898
Safe, Fire-proof	J. Fitzgerald	New York	May 16, 1848	5,582
Safe, Fire-proof	J. P. Greely	Boston, Mass	Nov. 23, 1869	97,079
Safe, Fire-proof	E. and J. L. Hall	Cincinnati, Ohio	Aug. 21, 1849	6,655
Safe, Fire-proof	J. L. Hall	Cincinnati, Ohio	Aug. 4, 1848	80,728

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Invention.	Inventor.	Residence.	Date.	No.
Safe, Fire-proof	D. Harrington	Philadelphia, Pa	Mar. 2, 1836	....
Safe, Fire-proof	D. Harrington	Philadelphia, Pa	Mar. 2, 1836	....
Safe, Fire-proof	A. W. Herr	Chicago, Ill	May 12, 1868	77, 816
Safe, Fire-proof	R. G. Holmes and W. H. Butler	New York, N. Y	Mar. 27, 1855	12, 594
Safe, Fire-proof	E. N. Horsford	Cambridge, Mass	Sept. 15, 1863	39, 919
Safe, Fire-proof	T. Hyatt	New York, N. Y	Sept. 2, 1873	142, 476
Safe, Fire-proof	L. Lillie	Troy, N. Y	July 15, 1851	8, 223
Safe, Fire-proof	H. Ludecke	Southington, Conn	July 16, 1872	129, 286
Safe, &c., Fire-proof	W. K. Marvin	New York, N. Y	Feb. 9, 1864	41, 521
Safe, Fire-proof	W. McFarland and W. H. Butler.	Williamsburgh, N. Y	Sept. 8, 1868	82, 016
Safe, Fire-proof	G. Menzel	Milwaukee, Wis	Apr. 24, 1860	27, 997
Safe, Fire-proof	J. E. Mulford	New York, N. Y	May 27, 1873	139, 414
Safe, Fire-proof	D. O. Paige	Detroit, Mich	July 29, 1873	141, 376
Safe, Fire-proof	R. S. Sanborn	Ripon, Wis	Mar. 26, 1867	63, 311
Safe, Fire-proof	W. H. Short	Montreal, Canada	June 20, 1871	116, 227
Safe, Fire-proof	F. A. R. Sontag and W. H. Lotz	Chicago, Ill	Dec. 23, 1873	145, 761
Safe, Fire-proof	J. W. Warner	Oneida, N. Y	Jan. 7, 1873	134, 574
Safe for books, &c., Fire-proof	B. Sherwood	New York, N. Y	May 8, 1837	190
Safe for butchers and others, Meat	J. J. Doepken	Lima, Ohio	Aug. 17, 1869	93, 864
Safe for preservation of papers	H. Fitzgerald	New York, N. Y	Aug. 15, 1837	353
Safe for ships and other vessels	W. M. Storm	New York, N. Y	June 10, 1856	15, 090
Safe for travelers, Money	J. A. Engelhard	Saint Louis, Mo	Feb. 24, 1863	37, 785
Safe, Fruit	H. T. Field	Worcester, Mass	Sept. 10, 1867	68, 722
Safe, Iron	W. Alford and J. D. Spear	Southwark, Pa	May 18, 1852	8, 952
Safe, Iron	W. Gardner	New York, N. Y	Dec. 17, 1867	72, 283
Safe, Iron	L. Lillie	Troy, N. Y	Sept. 7, 1858	21, 427
Safe, Iron	L. Lillie	Clinton, N. J	Oct. 18, 1870	108, 494
Safe, Iron	O. Marland	Boston, Mass	Mar. 21, 1854	10, 661
Safe, Kitchen	A. S. Brown	Delphi, Ind	Oct. 29, 1872	132, 624
Safe, Kitchen	T. Coltrane	Cedar Township, Iowa	June 27, 1871	116, 415
Safe, Kitchen	J. M. Klingenmeier	Buffalo, N. Y	Feb. 23, 1869	87, 266
Safe, Kitchen	W. McElwee	Shelbyville, Ind	Aug. 9, 1859	25, 024
Safe, Liquid	G. D. Anderson	Montrose, N. Y	Sept. 1, 1868	81, 723
Safe-lock	O. Bayley, jr	Dearborn County, Ind	Nov. 16, 1858	22, 057
Safe-lock	L. Diss	Utica, N. Y	Nov. 16, 1858	22, 068
Safe-lock	W. B. Dodds	Cincinnati, Ohio	Aug. 7, 1866	57, 040
Safe-lock	J. Farrel	New York, N. Y	July 25 1865	48, 919
Safe-lock	A. Freutel	New York, N. Y	July 19, 1859	24, 802
Safe-lock	F. C. Goffin	New York, N. Y	Dec. 2, 1851	8, 559
Safe-lock	F. C. Goffin	New York, N. Y	Mar. 21, 1854	10, 660
Safe-lock	H. Isham	Montpelier, Vt	Nov. 12, 1845	4, 270
Safe-lock	C. Le Due	Boston, Mass	Nov. 5, 1861	33, 652
Safe-lock	R. Lewis	New York, N. Y	Oct. 29, 1867	70, 232
Safe-lock	A. A. Oat	Philadelphia, Pa	July 31, 1866	56, 790
Safe-lock	J. R. Richards	Mount Joy, Pa	Mar. 26, 1867	63, 305
Safe-lock, Electro-magnetic	C. O. Yale	New York, N. Y	Oct. 4, 1870	107, 993
Safe-lock spindle	A. G. Burton	Rochester, N. Y	Feb. 1, 1870	99, 400
Safe-lock spindle	R. Haile	Cincinnati, Ohio	June 7, 1870	104, 020
Safe-lock spindle	J. Sargent	Rochester, N. Y	Feb. 26, 1867	62, 446
Safe-lock spindle	M. G. Tousley	Mendota, Ill	Sept. 12, 1871	118, 830
Safe-lock spindle	C. O. Yale	New York, N. Y	Sept. 26, 1871	119, 258
Safe, Marine	G. F. Abraham	Baltimore, Md	May 13, 1873	138, 832
Safe, Marine	J. Foster	Sandwich, Mass	Jan. 12, 1858	19, 084
Safe, Marine	E. B. Tyler	Baltimore, Md	Aug. 31, 1869	94, 454
Safe, Match	J. B. Creemer	New York, N. Y	Jan. 12, 1858	19, 111
Safe, Match	J. E. Folk	Brooklyn, N. Y	Mar. 2, 1869	87, 405
Safe, Match	A. Kline	Philadelphia, Pa	Feb. 18, 1862	34, 431
Safe, Match	H. Richmond	West Meriden, Conn	Sept. 14, 1869	94, 775
Safe, Meat	W. Brighton	Arcanum, Ohio	Aug. 13, 1867	67, 712
Safe, Meat	E. Duncan	West Milton, Ohio	Dec. 19, 1865	51, 573
Safe, Meat	F. S. Groyer	New York, N. Y	Jan. 29, 1867	61, 619
Safe, Meat	A. Knoche	Saint Louis, Mo	May 23, 1871	115, 067
Safe, Meat	G. L. Michael	Farmersville, Ohio	Mar. 22, 1870	101, 146
Safe, Meat	E. L. Pratt	Philadelphia, Pa	Aug. 16, 1859	25, 165
Safe, Meat-preserving	D. B. Dickinson	Baltimore, Md	July 16, 1842	2, 719
Safe, Milk	J. H. Bush	Bengal, Mich	Aug. 9, 1870	106, 117
Safe, Milk	J. W. Case	Ypsilanti, Mich	Nov. 21, 1871	121, 155
Safe, Milk	J. W. Case	Ypsilanti, Mich	Feb. 6, 1872	123, 453
Safe, Milk	J. P. Dale	Battle Creek, Mich	May 20, 1873	139, 120
Safe, Milk	H. Haskin	Ypsilanti, Mich	July 2, 1872	128, 483
Safe, Milk	J. M. Perkins	Cleveland, Ohio	Jan. 30, 1872	123, 123
Safe, Milk	E. F. Sevy	Saint John's, Mich	Oct. 17, 1871	120, 111
Safe, Milk	W. H. Tambling	Berlin, Wis	Oct. 11, 1859	25, 773
Safe, Milk	J. Waldron	North Creek, N. Y	July 13, 1869	92, 675
Safe, Milk and provision	W. Hinman	Elkhart, Ind	Oct. 5, 1869	95, 477
Safe, Money	B. Cole	Brooklyn, N. Y	Mar. 14, 1865	46, 779
Safe, Money	P. Schreyer	New York, N. Y	Apr. 12, 1870	101, 770
Safe or chest, Fire-proof	E. N. Horsford	Cambridge, Mass	Sept. 15, 1863	39, 920
Safe, Protecting	S. M. Lillie	Elizabeth, N. J	July 25, 1871	117, 435
Safe-protector, Electrical	C. C. Rowell and W. Duncan	Lebanon, N. H	Apr. 16, 1872	125, 693
Safe-protector, Electro-magnetic	W. Duncan	Lebanon, N. H	Aug. 1, 1871	117, 713
Safe-protector, Portable	J. W. Brook	Lynchburgh, Va	Oct. 1, 1872	131, 842
Safe, Provision	W. Mead and G. E. Starbuck	Chestertown, N. Y	Sept. 13, 1870	107, 395
Safe, Provision	O. E. Sanford, W. H. Dunnington, and C. Weed.	La Porte, Ind	Jan. 30, 1872	123, 295
Safe, Provision and milk	B. H. Martin	Ann Arbor, Mich	Sept. 19, 1871	119, 165
Safe, Reversible railway-ticket	J. G. Chase	Springfield, Mass	Oct. 8, 1867	69, 626
Safe, Rotary provision	A. Sly and S. S. Ford	Lebanon, N. H	Feb. 8, 1870	99, 606
Safe, Secretary	T. J. Sullivan	Albany, N. Y	July 19, 1870	105, 512
Safe-vault	J. Crump	Philadelphia, Pa	July 23, 1872	129, 795
Safe-vault	M. McCall and R. O. Wood	Buffalo, N. Y	June 17, 1873	139, 907
Safe, Water and fire proof	J. T. Garlick	New York, N. Y	Apr. 13, 1858	19, 923
Safe, Water-proof	J. P. Ellis	Flushing, N. Y	Jan. 7, 1868	73, 085
Safes against fire, Protecting	S. Martin	Chillicothe, Ill	July 16, 1872	129, 484
Safes and bank-vaults, Powder-channel to doors of.	F. C. Goffin	New York, N. Y	June 27, 1854	11, 190
Safes and other structures, Combination asbestos filling for fire-proof.	T. Hyatt	New York, N. Y	Mar. 29, 1870	101, 268

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Safes and other structures fire-proof and protecting the same against corrosion, Rendering.	T. Hyatt	Atchison, Kans	Feb. 2, 1869	86, 547
Safes and powder-magazines, Compound for use in.	E. H. Ashcroft	Lynn, Mass	Mar. 31, 1868	76, 133
Safes and vaults from burglars, Protecting	C. T. Chester	Englewood, N. J	Aug. 16, 1870	106, 324
Safes, banks, vaults, &c., Heat-resisting material for.	T. Hyatt	New York, N. Y	Mar. 8, 1870	100, 632
Safes, Composition for filling fire-proof	E. N. Horsford	Cambridge, Mass	Sept. 15, 1863	39, 921
Safes, Composition for filling fire-proof	W. H. Marvin	New York, N. Y	Dec. 1, 1863	40, 800
Safes, Composition for filling fire-proof	D. Weiser	Milwaukee, Wis	May 15, 1855	12, 882
Safes, Composition for lining	J. Jenkins	Philadelphia, Pa	June 19, 1860	28, 756
Safes, &c., Composition of matter for filling	S. T. Fowler	Brooklyn, N. Y	Oct. 1, 1867	69, 331
Safes, Connecting door and casing of	J. L. Hall	Cincinnati, Ohio	July 23, 1867	67, 046
Safes, Construction of	J. Farrell	New York, N. Y	July 6, 1869	92, 178
Safes, Construction of	E. M. Hendrickson	Brooklyn, N. Y	Mar. 19, 1867	63, 046
Safes, Construction of	O. Marland	Boston, Mass	Apr. 28, 1868	77, 432
Safes, Construction of	B. Sherwood and D. Fitzgerald	New York, N. Y	Mar. 30, 1869	88, 521
Safes, Construction of	T. J. Sullivan	Albany, N. Y	Jan. 26, 1869	86, 189
Safes, Construction of	F. H. Williams	Syracuse, N. Y	June 9, 1868	78, 851
Safes, Construction of	F. H. Williams	Syracuse, N. Y	Jan. 19, 1869	85, 978
Safes, Construction of burglar-proof	R. A. Ballou	Boston, Mass	Feb. 2, 1869	86, 493
Safes, Construction of burglar-proof	F. Selleck and W. H. Butler	Greenwich, Conn	Oct. 8, 1861	33, 455
Safes, Construction of burglar-proof	J. Weimer	New York, N. Y	Apr. 13, 1869	88, 928
Safes, Construction of fire-proof	H. H. Bryant	Boston, Mass	July 23, 1867	67, 154
Safes, Construction of fire-proof	H. H. Bryant	Boston, Mass	Feb. 2, 1869	86, 356
Safes, Construction of meter	A. W. Adams	New York, N. Y	May 5, 1868	77, 563
Safes, Electric lining for	E. Holmes and H. C. Roome	Brooklyn, N. Y., and Jersey City, N. J.	Nov. 14, 1871	120, 874
Safes, Eectrical-alarm apparatus for bank	W.H.Butler and D.D.Parmelee	New York, N. Y	Apr. 30, 1872	126, 263
Safes, Electro-magnetic apparatus for protecting	W. Duncan and C. C. Rowell	Lebanon, N. H	Nov. 15, 1870	109, 193
Safes, Fire-escape for	C. Morgan	Philadelphia, Pa	Nov. 11, 1873	144, 470
Safes fire-proof, Rendering	A. K. Eaton	Brooklyn, N. Y	May 29, 1860	28, 459
Safes, &c., from burglars, Method of protecting	C. C. Rowell and W. Duncan	Lebanon, N. H	Jan. 23, 1872	122, 913
Safes from corrosion, Protecting the walls of fire-proof.	W. K. Marvin	New York, N. Y	Dec. 1, 1863	40, 799
Safes, Lining for fire-proof	J. Farrell	Philadelphia, Pa	July 19, 1853	9, 861
Safes, &c., Lining for iron	W. P. Blake	New York, N. Y	Dec. 14, 1852	9, 461
Safes, Lining or filling fire-proof	W. H. Butler	New York, N. Y	June 25, 1872	128, 359
Safes, lockers, &c., Water-tight door for marine	M. Ludlum	Fair Haven, Vt	Apr. 5, 1859	23, 477
Safes, Making burglar-proof	J. R. Floyd	New York, N. Y	Oct. 16, 1860	30, 398
Safes, Manufacture of fire-proof	S. T. Fowler	Brooklyn, N. Y	Jan. 9, 1866	51, 937
Safes, &c., Material for filling	H. C. Hahn	Wyandotte, Mich	Apr. 23, 1872	126, 049
Safes, Material for filling fire-proof	J. M. Burt	Philadelphia, Pa	Feb. 23, 1869	87, 140
Safes, Plate for burglar-proof	I. L. Cady	New York, N. Y	July 27, 1858	20, 989
Safes, &c., Plate for constructing burglar-proof	W. K. Marvin	New York, N. Y	Feb. 16, 1864	41, 629
Safes, Self-locking screw-bolt for	C. O. Yale	New York, N. Y	May 16, 1871	115, 007
Safes to floors, Locking portable	H. Hochstrasser	Philadelphia, Pa	Feb. 19, 1850	7, 101
Safes, &c., to protect them from insects	R. Sanderson	Athens, Ohio	Jan. 10, 1843	2, 902
Safes, vaults, and buildings, Telegraphic protection for.	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111, 408
Safes, vaults, and chests fire-proof, Rendering	T. Hyatt	New York, N. Y	Dec. 28, 1869	98, 381
Safes, vaults, &c., Attaching locks to	T. Dolan	Albany, N. Y	Nov. 27, 1866	59, 981
Safes, vaults, &c., Composition for filling fire-proof.	C. Berger	East Saginaw, Mich	Apr. 23, 1872	126, 011
Safes, vaults, &c., Electrical lining for	W. B. Guernsey	Jersey City, N. J	Apr. 30, 1872	126, 289
Safes, vaults, &c., Electro-magnetic envelope for	E. Holmes and H. C. Roome	New York, N. Y., and Jersey City, N. J.	Dec. 20, 1870	110, 362
Safes, vaults, &c., fire-proof, Composition for rendering.	J. F. Wood	Everett, Mass	Apr. 23, 1872	126, 121
Safes, vaults, &c., fire-proof, Method of rendering	B. Sherwood	Brooklyn, N. Y	Jan. 19, 1869	86, 106
Safes, vaults, &c., Mold for casting metal	L. Lillie	Troy, N. Y	Nov. 21, 1865	51, 125
Safes, vaults, or doors, Construction of	J. Sargent	Rochester, N. Y	Jan. 11, 1870	98, 714
Safes, vaults, &c., Steam protection for	J. A. Robertson	Boston, Mass	Mar. 22, 1870	101, 044
Safes, Water-vessel for fire-proof	R. S. Sanborn	Ripon, Wis	Apr. 21, 1868	76, 948
Safes, Water-vessel for steam fire-proof	G. W. Putnam	Billerica, Mass	June 14, 1870	104, 352
Safety-box for bank-porters	W. Wiler	Philadelphia, Pa	Feb. 8, 1870	99, 736
Safety-brake for horse-powers	J. C. Bird	Rising Sun, Md	Jan. 17, 1865	45, 958
Safety-can	M. H. Barnes	Peoria, Ill	Nov. 2, 1869	96, 380
Safety-can for burning-fluid	S. E. Winslow	Philadelphia, Pa	June 24, 1856	15, 206
Safety-can for combustible materials, Self-extinguishing.	W. H. Lawrence	Williamsburgh, N. Y	May 2, 1871	114, 450
Safety-clamp, Child's	J. Goodliff	Brooklyn, N. Y	July 2, 1872	128, 614
Safety-coupling	F. W. Robinson	Richmond, Ind	July 25, 1871	117, 333
Safety-coupling, Universal	G. H. Zscheck	Indianapolis, Ind	Oct. 17, 1871	120, 145
Safety-hook	C. S. Abeel	Chicago, Ill	Jan. 5, 1864	41, 131
Safety-hook	E. F. Brundage	Virginia City, Nev	Feb. 4, 1868	74, 043
Safety-hook	L. H. Pfleegor	Milton, Pa	June 16, 1868	78, 996
Safety-hook for tow-line, Self-locking	D. De Garmo	Rochester, N. Y	Feb. 17, 1863	37, 681
Safety-indicator for steam-boilers	L. J. Knowles	Warren, Mass	Feb. 10, 1857	16, 596
Safety-lock	H. Bachmann	Lancaster, Pa	Aug. 21, 1833	....
Safety-lock	L. Yale, jr	Newport, N. Y	Dec. 21, 1852	9, 497
Safety-lock, Permutation	R. Newell	New York, N. Y	June 10, 1851	8, 145
Safety-lock, Secret	W. Hobbs	Springfield, Mass	Dec. 20, 1837	529
Safety-pin	W. H. Brock	Bridgeport, Conn	Dec. 5, 1871	121, 485
Safety-pin	R. W. Huston	Washington, D. C	May 14, 1872	126, 811
Safety-pin for securing clothing	F. Catlin	New York, N. Y	Oct. 5, 1869	95, 424
Safety-spring coupling	E. F. Shoenberger	Marietta, Pa	Feb. 12, 1856	14, 256
Safety-stud	L. De Masure	New York, N. Y	Feb. 14, 1860	27, 114
Safety-switch	J. Saxby and J. S. Farmer	Kilburn, England	Oct. 1, 1872	131, 788
Safety-washer for securing wheels to axles	W. Thornley	Philadelphia, Pa	Sept. 19, 1854	11, 705
Sail	H. Brown	Cape Elizabeth, Me	June 5, 1866	55, 236
Sail and marine drag, Combined	T. M. Fleetwood	Savannah, Ga	Mar. 25, 1873	137, 190
Sail and rigging, Ship's	H. C. Johnson	Philadelphia, Pa	May 10, 1864	42, 665
Sail-attachment	J. W. Norcross	Boston, Mass	Sept. 27, 1864	44, 445
Sail-bender	H. W. Ketchum	New York, N. Y	Feb. 9, 1869	86, 760
Sail-cloth, canvas, and other fibrous and textile materials, Application of carbolic acid for preventing decay and mildew in.	W. A. Torry	Mont Clair, N. J	July 5, 1871	105, 142
Sail-cloth, Manufacturing	J. Richards	Paterson, N. J	Aug. 10, 1821	....
Sail-cringle	C. Lucas	Brooklyn, N. Y	Mar. 16, 1869	87, 859

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Sail cringle and clew	F. Chandler	Charlestown, Mass	Jan. 26, 1864	41, 364
Sail-cringle attachment	A. M. Southworth	Dorchester, Mass	Feb. 21, 1860	27, 243
Sail-duck, awning-canvas, &c., mildew-proof, Process of rendering.	R. G. Sturgis	Boston, Mass	June 18, 1872	128, 079
Sail-duck, Manufacturing	J. Chapman	Frankford, Pa	July 9, 1821	....
Sail-duck, Weaving and beating	J. Davenport		Feb. 14, 1794	....
Sail, Fan-shaped	W. H. Mallory	New York, N. Y	Aug. 5, 1862	36, 099
Sail for fore-and-aft-rigged vessel	A. W. Stewart	Cambridge, Md	May 24, 1859	24, 157
Sail for fore-and-aft vessel, Square	A. A. Holling	Pultneyville, N. Y	Oct. 25, 1870	108, 706
Sail for ships, &c	J. Maull	Philadelphia, Pa	Dec. 11, 1845	4, 305
Sail for ships and other navigable vessels	B. Ricketson	New Bedford, Mass	Sept. 16, 1862	36, 483
Sail for vessel	C. H. Crandall	Stonington, Conn	Aug. 31, 1869	94, 400
Sail furling and reefing	E. W. Brown	Cambridge, Ill	Aug. 31, 1869	94, 277
Sail furling and reefing	W. Wyatt	New Bedford, Mass	June 18, 1867	65, 852
Sail-furling apparatus	E. G. Gaillic	Eastport, Me	Aug. 24, 1869	94, 099
Sail, Furling gaff-top	G. A. Ford	Oswego, N. Y	June 29, 1869	91, 927
Sail-furling traveler	G. Hart	New Bedford, Mass	Mar. 3, 1868	75, 012
Sail, Gaff	G. T. May	Tompkinsville, N. Y	July 22, 1862	35, 944
Sail-grommet	W. W. Wilcox	Middletown, Conn	Jan. 31, 1860	27, 016
Sail-grommet, Metallic	E. H. Penfield	Middletown, Conn	Mar. 14, 1854	10, 639
Sail-hank	S. Barker	New York, N. Y	June 29, 1852	9, 065
Sail-hank	H. M. Bonney	New Bedford, Mass	Dec. 9, 1856	16, 169
Sail-hank	D. Crowell, jr	Yarmouth Port, Mass	June 6, 1871	115, 712
Sail-hank	C. Ellis	Gloucester, Mass	May 5, 1863	38, 445
Sail-hank	G. Kirtland	Westbrook, Conn	June 21, 1870	104, 601
Sail-hank	D. G. Low	Chelsea, Mass	Apr. 16, 1872	125, 744
Sail-hank	W. McKay	Newburyport, Mass	Aug. 24, 1869	94, 018
Sail-hank	W. McKay and C. E. Bayley	Newburyport, Mass	May 18, 1869	90, 113
Sail-hank	W. E. Meyer	New York, N. Y	May 2, 1871	114, 459
Sail-hank	G. C. Williams	Boston, Mass	Nov. 14, 1871	121, 033
Sail-hank	J. G. Young, jr	Boston, Mass	Jan. 21, 1873	135, 055
Sail-hoisting tackle	G. A. Ford	Oswego, N. Y	Feb. 14, 1871	111, 833
Sail-lace leader	D. W. Sawyer	Booth Bay, Me	Oct. 26, 1869	96, 270
Sail-latchet	J. Mair	Philadelphia, Pa	Sept. 28, 1869	95, 243
Sail-lizard	C. H. Gallagher	Gloucester, Mass	Mar. 18, 1873	136, 988
Sail-making, Method of	E. F. Southward	Wellfleet, Mass	Sept. 9, 1851	8, 343
Sail of fore-and-aft vessel, Main	G. W. Geran	Brooklyn, N. Y	May 22, 1860	28, 360
Sail of vessel	D. Fitzgerald	New York, N. Y	Feb. 3, 1863	37, 571
Sail-reefing	H. R. Atwood	Chelsea, Mass	Jan. 19, 1869	86, 651
Sail-reefing	R. B. Benson	New York, N. Y	Apr. 5, 1859	23, 440
Sail-reefing	H. Bessling	New York, N. Y	July 26, 1859	24, 854
Sail-reefing	J. F. Boyd	Charlestown, Mass	Jan. 12, 1858	19, 067
Sail-reefing	J. F. Brouard	Havre de Grace, France	June 14, 1859	24, 370
Sail-reefing	H. D. P. Cunningham	Bury Hauts, England	Jan. 15, 1856	14, 094
Sail-reefing	W. F. Davis	Winthrop, Mass	Apr. 7, 1857	16, 969
Sail-reefing	L. Higgins and A. Brown	Jersey City, N. J., and New York, N. Y.	Apr. 6, 1858	19, 850
Sail-reefing	F. C. La Croix and C. Barnes	New York, N. Y	Apr. 21, 1857	17, 101
Sail-reefing	E. E. Mulliner	New York, N. Y	Apr. 26, 1859	23, 776
Sail-reefing	A. L. Simpson	Durham, N. H	Feb. 28, 1860	27, 316
Sail-reefing	J. E. Worthman	Mobile, Ala	Nov. 7, 1871	120, 806
Sail reefing and furling	C. E. Bishop	Brooklyn, N. Y	Feb. 15, 1859	22, 929
Sail reefing and furling	F. B. Dunton	Lincolnville, Me	Nov. 10, 1868	83, 940
Sail reefing and furling	G. H. Felt	New York, N. Y	Oct. 11, 1864	44, 620
Sail reefing and furling apparatus	J. Medhurst	London, England	Aug. 14, 1866	57, 267
Sail reefing and furling device	W. Spear	Cape Elizabeth, Me	Feb. 7, 1871	111, 694
Sail reefing and furling from the deck of vessels, Arrangement for top.	W. H. Foster	Portsmouth, N. H	Sept. 5, 1854	11, 644
Sail reefing and furling means	G. W. La Baw	Jersey City, N. J	Sept. 15, 1857	18, 219
Sail-reefing apparatus, Fore-and-aft	G. A. Bigelow	New Braintree, Mass	Feb. 13, 1866	52, 517
Sail-reefing apparatus	G. B. Cornish	New York, N. Y	Sept. 20, 1859	25, 491
Sail-reefing apparatus	O. G. Crossman	Huntington, N. Y	Apr. 25, 1871	113, 983
Sail-reefing apparatus	J. Davidson	Edinburgh, North Britain	Jan. 1, 1867	60, 838
Sail-reefing apparatus	N. Ingersoll	Salem, Mass	Feb. 16, 1869	86, 984
Sail-reefing apparatus	N. W. Rich	Swampscott, Mass	Apr. 19, 1870	102, 158
Sail reefing apparatus and courses of ships, Top	E. A. Sawyer and J. B. Nichols	Portland, Me	Nov. 25, 1862	37, 011
Sail-reefing arrangement	H. I. Crandall	East Boston, Mass	Dec. 5, 1854	12, 020
Sail-reefing device	L. B. Wakeman	Baltimore, Md	Jan. 18, 1859	22, 683
Sail reefing device, Fore-and-aft	J. Hart	Sunderland, England	Dec. 12, 1865	51, 529
Sail reefing, Fore-and-aft	R. Chambers	Detroit, Mich	Apr. 6, 1869	88, 543
Sail reefing, Fore-and-aft	R. C. Denham	Richmond, Me	May 26, 1868	78, 267
Sail reefing, Fore-and-aft	S. G. Martin	South Amboy, N. J	Jan. 24, 1860	26, 915
Sail reefing, Fore-and-aft	W. Morton	Friendship, Me	Jan. 17, 1860	26, 857
Sail reefing, Fore-and-aft	L. Norden	Philadelphia, Pa	Aug. 12, 1873	141, 811
Sail reefing, Fore-and aft	W. C. Rogers	Newark, N. J	Nov. 17, 1868	84, 134
Sail reefing, Fore-and-aft	S. Samuels	Brooklyn, N. Y	Oct. 25, 1859	25, 917
Sail reefing, Fore-and-aft	W. R. Satterly	Setauket, N. Y	Nov. 1, 1859	25, 982
Sail reefing, Fore-and-aft	J. L. Townsend	Newburyport, Mass	May 24, 1859	24, 167
Sail reefing, Means for top	J. E. Cole	New York, N. Y	May 26, 1857	17, 365
Sail reefing, Means for top	F. Höök	San Francisco, Cal	Aug. 6, 1867	67, 546
Sail-reefing, Means of	D. West and L. Smith	Yonkers, N. Y	Nov. 12, 1872	133, 072
Sail-reefing, Mode of	J. J. Mason	Girdletree, Md	June 13, 1871	115, 972
Sail reefing, Rig for fore-and-aft	I. W. Gill	Exeter, N. H	Jan. 10, 1860	26, 758
Sail reefing rig, Top	W. G. Smith and D. Hooper	New York, N. Y	June 26, 1866	55, 922
Sail reefing, Ship's	J. Emerson	Worcester, Mass	Apr. 14, 1857	17, 031
Sail reefing, Top	I. Boss	Brooklyn, N. Y	Sept. 23, 1856	15, 574
Sail reefing, Top	D. McLean	Boston, Mass	Jan. 26, 1858	19, 225
Sail reefing, Top	J. W. Norcross	Boston, Mass	Aug. 11, 1857	17, 977
Sail reefing, Top	W. Shibles	Thomaston, Me	May 29, 1855	12, 968
Sail reefing upon extra yards, Ship's	J. S. Foster	Buffalo, N. Y	Sept. 16, 1856	15, 732
Sail-releasing apparatus	F. G. Oehme	Plymouth, Mass	Dec. 17, 1867	72, 320
Sail ring, Jib	R. Balans	Paris, France	Oct. 4, 1864	44, 582
Sail-rig for ships, Balance	J. Lewis	Elizabeth, N. J	Sept. 28, 1858	21, 609
Sail rig, Top	P. Rouse	Macedon, N. Y	Apr. 8, 1862	34, 924
Sail rigging, Jib	F. Fillingham	Ithaca, N. Y	May 12, 1868	77, 875
Sail, Rotary	J. E. Garcia	New York, N. Y	Feb. 11, 1873	135, 641
Sail, Ship's	W. A. Sands	Brooklyn, N. Y	Nov. 20, 1860	30, 694
Sail-supporter	C. S. Brown	Pittston, Me	Aug. 11, 1868	80, 803

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Sail, Wind	J. C. Raymond	Green Point, N. Y	Oct. 30, 1866	59, 264
Sail yards, Hanging lower top	E. J. Pinkham	Portland, Me	Nov. 16, 1869	96, 956
Sail yards, Method of hanging top	J. B. Woodbury	Portland, Me	Sept. 14, 1869	94, 806
Sail yards, Suspending extra top	G. Hubbard	Stonington, Conn	Apr. 22, 1856	14, 723
Sails and rigging of vessels	G. T. May	Tompkinsville, N. Y	Apr. 28, 1857	17, 165
Sails, Attaching bonnets to	J. Smith	Dorchester, Mass	Jan. 24, 1860	26, 935
Sails, Bending fore-and-aft	W. Woodbury	Chelsea, Mass	May 29, 1866	55, 213
Sails, Canvas for	J. Maull	Philadelphia, Pa	Aug. 29, 1848	5, 744
Sails, Device for working jib	J. W. Sharret	Portsmouth, Va	Dec. 27, 1864	45, 645
Sails, Extra yard to top	F. Howes	Yarmouth, Mass	June 20, 1854	11, 125
Sails for ships, Making and furling	J. Wade	Boston, Mass	Dec. 6, 1836	101
Sails in course, Working ship's lower	S. Very, jr	Salem, Mass	May 11, 1858	20, 233
Sails, Lazy-jack for	S. B. Butler	Middletown, Conn	Mar. 29, 1864	42, 072
Sails, Lazy-jack for vessels'	D. R. Arnold	Haddam, Conn	Apr. 11, 1865	47, 178
Sails, Means for reducing top	F. Batty	Brooklyn, N. Y	June 23, 1857	17, 616
Sails, Means of setting, reefing, and furling	C. Peterson	San Francisco, Cal	Oct. 29, 1867	70, 256
Sails of ships, &c., Applying and regulating	J. S. Sampson	....	July 5, 1793	....
Sails of ships, &c., Method of strengthening the	A. Trail	Great Britain	Sept. 24, 1844	3, 756
Sails of square-rigged vessels, Mode of forming and rigging.	W. C. Choate	Washington, D. C	Apr. 17, 1844	3, 547
Sails of vessels, Fore-and-aft	A. C. Tibbitts	Rockland, Me	Sept. 11, 1860	30, 011
Sails of vessels, Manufacturing thimbles for	I. Jennings	New York	Nov. 20, 1807	....
Sails of vessels, Safety-cleat for releasing the	J. W. Sharret	Portsmouth, Va	Mar. 8, 1864	41, 866
Sails, Pendants for sheets of fore-and-aft	N. Woodbury	Chelsea, Mass	July 28, 1868	80, 325
Sails, Securing reef-points of	J. W. Logan	Philadelphia, Pa	June 5, 1860	28, 589
Sails, Spectacle-clew for vessel's	G. H. Creed	New York, N. Y	June 13, 1871	115, 826
Sails, Stay for ship's	C. Freeman	Brewster, Mass	Oct. 14, 1873	143, 568
Sails, Stop for fore-and-aft	J. Edson	Boston, Mass	July 28, 1868	80, 278
Sails, Tackle for fore-and-aft	W. Woodbury	Gloucester, Mass	June 14, 1864	43, 150
Sails to mast-hoops, Device for attaching	D. Mouat	Brooklyn, N. Y	May 17, 1864	42, 783
Sails to ship's yards, Attaching	J. Lewis	Elizabeth, N. J	Nov. 6, 1860	30, 582
Sails to vessels, Attaching extra top	E. H. Linnell	Orleans, Mass	Feb. 17, 1857	16, 650
Sails, Working	W. A. Ross	Port Richmond, N. Y	Oct. 30, 1849	6, 836
Sails, Working ship's	A. L. Simpson	Durham, N. H	Aug. 28, 1860	29, 829
Sailing-boat	J. Tuers	Jersey City, N. J	Dec. 4, 1847	5, 388
Saleratus, Making	E. Chamberlain	Boston, Mass	Sept. 7, 1844	3, 733
Saline, &c., evaporator	J. Howarth	Salem, Mass	July 4, 1871	116, 711
Saline-liquor evaporator	C. Pope	Syracuse, N. Y	Feb. 14, 1860	27, 153
Saline-meter pot	G. Sewell	Poughkeepsie, N. Y	Apr. 17, 1866	54, 073
Salines, Process of treating the mother water of	E. Stieren	Allegheny County, Pa	Dec. 12, 1854	12, 077
Salinometer	B. F. Bee	Harwich, Mass	Jan. 9, 1866	51, 912
Salinometer	R. H. Long	Philadelphia, Pa	July 12, 1859	24, 746
Salinometer	P. B. O'Neill	Saint Mary's Villa, Great Britain.	Oct. 10, 1865	50, 380
Salinometer and water-gage for steam-boilers	J. Montgomery	Baltimore, Md	Apr. 24, 1860	28, 003
Salinometer-case	E. H. Ashcroft	Lynn, Mass	Mar. 22, 1864	41, 970
Salinometer-pot	H. Wanklin	United States revenue-steamer Wilderness.	Feb. 25, 1868	74, 958
Saloon-table shelf	J. R. McRae	Vicksburgh, Miss	Nov. 26, 1872	133, 471
Salt	J. R. Buchanan	Louisville, Ky	Apr. 4, 1871	113, 250
Salt	E. Hall	Princess Anne, Va	Nov. 14, 1817	....
Salt and pepper dredge, Combined	T. B. Atterbury	Pittsburgh, Pa	Oct. 28, 1873	143, 951
Salt and sugar evaporator	J. M. Thompson	Rome, N. Y	May 19, 1868	78, 028
Salt, Apparatus and process for the manufacture of.	J. A. Davis	Watertown, N. Y	July 27, 1869	93, 066
Salt, Apparatus and process for the manufacture of.	A. C. Twining	New Haven, Conn	Sept. 26, 1871	119, 252
Salt, Apparatus for boiling and manufacturing	J. J. Cabell	Lynchburgh, Va	May 28, 1813	....
Salt, Apparatus for making	J. P. Hale	Kanawha Court-House, Va	Dec. 25, 1855	13, 987
Salt, Apparatus for the manufacture of	H. Beschkee	Albany, N. Y	Nov. 19, 1867	70, 943
Salt, Apparatus for the manufacture of	N. Chapin	East Saginaw, Mich	Mar. 18, 1862	34, 669
Salt, Apparatus for the manufacture of	C. S. Farrar	Romeo, Mich	June 16, 1863	38, 893
Salt, Apparatus for the manufacture of	C. O. Garrison	East Saginaw, Mich	Aug. 19, 1862	36, 211
Salt, Apparatus for the manufacture of	R. G. Lockie	Acton Vale, Canada	July 11, 1871	116, 970
Salt-block, Apparatus for the manufacture of	N. Barnard and J. G. Spiller	Saginaw City, Mich	Dec. 4, 1866	60, 120
Salt-block, Flue-wall for	T. R. Porter and G. H. Cook	Syracuse, N. Y., and New Brunswick, N. J.	Apr. 28, 1863	38, 332
Salt-boiler	R. Griffin and L. Y. Avery	Salina, N. Y	Mar. 21, 1843	3, 007
Salt-boiler	I. W. Averill	Salina, N. Y	Nov. 5, 1814	....
Salt, Boiling	O. Parsons	Pittsburgh, Pa	Apr. 4, 1820	....
Salt boiling and making apparatus	A. Black	Barnstable, Mass	Apr. 4, 1816	....
Salt-boiling furnace	W. J. Dodge	Syracuse, N. Y	July 26, 1870	105, 786
Salt, boring wells, and pumping water, Apparatus for manufacturing.	R. Deering	....	May 28, 1814	....
Salt-brine, Apparatus for evaporating, concentrating, and superheating.	J. Howarth	Salem, Mass	July 25, 1871	117, 290
Salt-brine, Apparatus for purifying	L. R. Cornell	Syracuse, N. Y	July 16, 1872	129, 397
Salt-brine, Evaporating	G. E. Sellers	Bowlesville, Ill	Apr. 16, 1872	125, 697
Salt-brine, Evaporating	C. A. Shepard	Pomeroy, Ohio	Nov. 22, 1870	109, 555
Salt-brine, Purification of	S. P. Duffield	Detroit, Mich	Apr. 12, 1864	42, 280
Salt by evaporation, Making	B. Wilbor	Washington County, N. Y	Feb. 4, 1811	....
Salt by solar evaporation, Manufacturing	E. C. Cooper	New York	May 16, 1835	....
Salt by steam, Manufacturing	B. Barlow	Geddes, N. Y	June 25, 1825	....
Salt by steam, Manufacturing	S. T. Conn	Georgetown, D. C	July 12, 1826	....
Salt-cellar	J. T. Walker	Brooklyn, N. Y	Jan. 24, 1871	111, 281
Salt, Crystallizing	B. Douglas	Albany, N. Y	Sept. 23, 1843	3, 272
Salt-drier	G. C. Briggs	Boston, Mass	June 6, 1871	115, 564
Salt-drier	G. C. Robinson	Boston, Mass	Mar. 26, 1861	31, 827
Salt-evaporator	W. T. Clough	Newark, N. J	Aug. 26, 1856	15, 598
Salt-evaporator	B. L. Hoord and E. P. Monroe	Albany, N. Y., and Charlestown, Mass.	May 6, 1856	14, 813
Salt-evaporator	J. R. Hopkins	Auburn, N. Y	Oct. 28, 1856	15, 975
Salt-evaporator	J. L. Humphreys	Syracuse, N. Y	Oct. 14, 1856	15, 884
Salt-evaporator	A. Van Horn	Brooklyn, N. Y	Mar. 16, 1869	87, 890
Salt-evaporator, Solar	J. F. Boynton	Syracuse, N. Y	July 29, 1856	15, 411
Salt-evaporators, Construction of	H. G. Bulkley	Kalamazoo, Mich	July 4, 1854	11, 907
Salt for culinary use, Apparatus for preparing	F. Baker	Boston, Mass	Dec. 26, 1871	122, 101
Salt from brine, Manufacture of	S. D. Gilson	Syracuse, N. Y	Mar. 28, 1871	113, 045

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Invention.	Inventor.	Residence.	Date.	No.
Salt from salt water, Manufacturing coarse	A. Barnes	Deerfield, N. Y	Sept. 25, 1831	....
Salt from salt water, Use of the scape-heat from furnaces and discharged steam from steam-engines to the manufacturing of.	A. Browne	Salina, N. Y	June 11, 1829	....
Salt from sea-water and saline springs, Making	W. Barker	Smithfield, R. I	July 20, 1825	....
Salt from sea-water, Extracting	S. Smith	Suffolk, Mass	June 12, 1806	....
Salt from sea-water, Extracting	S. Smith	Suffolk, Mass	June 13, 1806	....
Salt from sea-water, Extracting	S. Smith	Suffolk, Mass	June 13, 1806	....
Salt, Furnace and boiler for manufacturing	S. Anthony	Lynchburgh, Va	May 29, 1813	....
Salt-holder	G. B. Fowle	East Cambridge, Mass	Mar. 5, 1872	124, 261
Salt in cruets, Device for agitating	F. B. Richardson	Boston, Mass	Mar. 4, 1873	136, 386
Salt-kiln	J. P. Conger	Newark, N. J	Feb. 28, 1854	10, 564
Salt, Machine for manufacturing	B. Ellicott	....	May 12, 1802	....
Salt, Machine for manufacturing	J. Sears	....	Jan. 24, 1799	....
Salt, Machine for packing	J. McGrew	West Columbia, W. Va	July 19, 1870	105, 586
Salt-making	J. S. O. Brooks	Kanawha, Va	Feb. 12, 1845	3, 902
Salt, Making	C. D. Colden	New York	Dec. 14, 1822	....
Salt, Making	R. K. Cralle	Lynchburgh, Va	Mar. 18, 1836	....
Salt, Making	C. Guiteau	Geddes, N. Y	Sept. 9, 1825	....
Salt, Making	G. James	....	Nov. 16, 1796	....
Salt, Making	I. Noyes	Kanawha Salines, Va	Aug. 26, 1843	3, 230
Salt, Making	I. Noyes	Kanawha Salines, Va	Apr. 25, 1844	3, 563
Salt, Making	V. Peers	....	Dec. 18, 1802	....
Salt, Making	J. G. Taylor	....	Nov. 13, 1805	....
Salt, Making	B. Wheeler	Boston, Mass	Apr. 17, 1809	....
Salt-making apparatus	W. and J. D. Hawkins	Raleigh, N. C	May 26, 1814	....
Salt-making apparatus	C. G. Reynolds	Kanawha, Va	Mar. 3, 1838	619
Salt, Making fine and coarse	J. P. Rossiter	Salina, N. Y	Mar. 2, 1824	....
Salt-making machine or apparatus	E. Weld	....	May 16, 1804	....
Salt, Manufacture and purifying of common	S. P. Duffield	Detroit, Mich	Mar. 22, 1864	41, 980
Salt, Manufacture of	J. R. Buchanan	Louisville, Ky	Oct. 4, 1870	107, 866
Salt, Manufacture of	N. W. Clark	Clarkston, Mich	Feb. 12, 1861	31, 372
Salt, Manufacture of	D. Gerrard	Clay County, Ky	Jan. 28, 1825	....
Salt, Manufacture of	C. F. Johnson	East Saginaw, Mich	Nov. 26, 1867	71, 494
Salt, Manufacture of	D. Reynolds and J. W. Paige	Albany and Rochester, N. Y	Nov. 22, 1870	109, 546
Salt, &c., Manufacture of	H. Smith	Salina, N. Y	July 12, 1843	3, 173
Salt, Manufacture of	N. P. Stanton	Syracuse, N. Y	Aug. 20, 1845	4, 157
Salt, Manufacture of	J. A. Teissier	Boston, Mass	Jan. 13, 1829	....
Salt, Manufacture of	J. A. Teissier	Boston, Mass	Apr. 11, 1829	....
Salt, Manufacture of common	T. Alden, jr	....	May 25, 1803	....
Salt, Manufacture of common	S. P. Duffield	Detroit, Mich	Mar. 22, 1864	41, 979
Salt, Manufacture of common	J. P. Haskin	Syracuse, N. Y	Sept. 7, 1852	9, 248
Salt, Manufacture of common	H. Pemberton	East Tarentum, Pa	Aug. 2, 1859	24, 951
Salt, Manufacture of common	T. Spencer	Syracuse, N. Y	May 29, 1860	28, 513
Salt, Manufacture of common	T. Spencer	Syracuse, N. Y	Sept. 25, 1860	30, 165
Salt, Manufacturing	J. I. Cabell	Lynchburgh, Va	June 10, 1814	....
Salt, Manufacturing	P. Cooper	New York, N. Y	Dec. 24, 1824	....
Salt, Manufacturing	A. Dudley	King William County, Va	Mar. 31, 1812	....
Salt, Manufacturing	C. Guiteau	Geddes, N. Y	Oct. 25, 1832	....
Salt, Manufacturing	T. Hord	Caroline County, Va	Apr. 8, 1814	....
Salt, Manufacturing	W. J. Lewis	Dedham, Mass	Feb. 1, 1814	....
Salt, Manufacturing	W. J. Lewis	....	Feb. 1, 1816	....
Salt, Manufacturing	P. Sarchet, sr	Cincinnati, Ohio	Sept. 27, 1814	....
Salt, Manufacturing	H. J. Tudor	Boston, Mass	Apr. 29, 1829	....
Salt, Manufacturing	B. Wheeler	Boston, Mass	Mar. 28, 1810	....
Salt, Manufacturing	S. W. Williams	Elizabethtown, N. J	Mar. 29, 1830	....
Salt-manufacturing apparatus	N. W. Clark	Clarkston, Mich	Feb. 11, 1862	34, 348
Salt, Manufacturing common	G. Munger	New Haven, Conn	June 23, 1810	....
Salt, Manufacturing fine from coarse	C. W. Sellers	Alexandria, D. C	Oct. 11, 1811	....
Salt, Mode of making	B. Byington	Salina, N. Y	Feb. 21, 1827	....
Salt, Mode of making	J. Fennel	....	Sept. 24, 1794	....
Salt, Mode of making	T. Green	New York	Apr. 1, 1807	....
Salt-packing machine	J. G. Fulton	Middleport, Ohio	Aug. 8, 1854	11, 480
Salt, Pan for boiling salt water for making	W. Blocksom and J. T. Fracker	Zanesville, Ohio	Mar. 23, 1829	....
Salt-pans, Construction of	W. S. Worthington	Newtown, N. Y	Dec. 8, 1857	18, 830
Salt, pot and pearl ash, Making	A. Vansants	Jefferson County, Mo	Sept. 29, 1823	....
Salt, Preparing	F. Baker	Boston, Mass	Dec. 26, 1871	122, 100
Salt, Process and apparatus for the manufacture of.	D. Reynolds	Albany, N. Y	Feb. 15, 1870	99, 949
Salt, Process for the manufacture of	S. B. Howd	Syracuse, N. Y	Oct. 10, 1854	11, 802
Salt, Process of manufacturing sea	G. Hunter	....	Mar. 24, 1803	....
Salt, Process of purifying brine for manufacture of.	J. M. Luther	Salina, N. Y	Nov. 12, 1861	33, 725
Salt, Purification of common	J. W. Barker and J. P. Haskin.	Syracuse, N. Y	Oct. 8, 1861	33, 424
Salt, Purifying brine for manufacture of	L. R. Cornell	Syracuse, N. Y	Dec. 19, 1871	121, 994
Salt, Purifying brine for the manufacture of	F. M. Smith	Syracuse, N. Y	Oct. 11, 1870	108, 198
Salt, Purifying common	J. W. Barker and J. P. Haskin.	Syracuse, N. Y	Jan. 14, 1862	34, 179
Salt, Purifying salt water preparatory to the manufacture of.	N. S. Von Schoultz	Salina, N. Y	July 29, 1837	298
Salt, &c., Steam superheater for evaporating	L. R. Cornell	Brooklyn, N. Y	Sept. 2, 1873	142, 440
Salt-stone for salting cattle and other animals	V. A. Tagant and P. Schüler	Mulhouse, France, and Bienne, Switzerland.	Aug. 17, 1869	93, 923
Salt, sugar, &c., Evaporating solution of	O. McDaniel	New York, N. Y	May 15, 1866	54, 746
Salt, Supplying	P. Cooper	New York, N. Y	Feb. 20, 1836	....
Salt to cattle, Apparatus for supplying	F. Stamberger	Clarion, Ill	Apr. 1, 1873	137, 390
Salt-trough for stock	G. T. Marshall	Unadilla, Mich	Nov. 3, 1868	83, 780
Salt-vats from the weather, Covering	H. Killey, 2d	....	Feb. 12, 1800	....
Salt water and metals, Finding	V. Cook	....	Nov. 1, 1803	....
Salt-water boiler	Z. Phinney	Cairo, N. Y	June 19, 1812	....
Salt water, Evaporating	W. J. Dodge	Syracuse, N. Y	Oct. 12, 1869	95, 668
Salt water, Evaporating	J. L. Murphy	Syracuse, N. Y	Sept. 19, 1871	119, 031
Salt-water evaporator	W. M. Hawkins	King and Queen County, Va	Apr. 23, 1814	....
Salt-water evaporator	F. A. Morely	Syracuse, N. Y	Sept. 20, 1870	107, 523
Salt water, Purifying	S. Hunt	Syracuse, N. Y	Jan. 23, 1830	....
Salt water, Vat for evaporating	J. F. Boynton	Syracuse, N. Y	Nov. 6, 1866	59, 349
Salt-works	C. Guiteau	Geddes, N. Y	July 23, 1842	2, 735
Salt-works, Plan of erecting	D. Thacher	Tuckerton, N. J	Oct. 24, 1816	....
Salts and borax, Manufacture of Rochelle	V. G. Bloede	Brooklyn, N. Y	Mar. 7, 1871	112, 316
Salts, Decomposing alkaline and other	R. A. Tilghman	Philadelphia, Pa	Dec. 4, 1847	5, 383
Salts from alkaline, Extracting neutral	B. Gorton	....	Nov. 29, 1802	....

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Salts, Manufacture of metallic	E. Clarke	New York	Dec. 4, 1828	....
Salts, Metallic	E. Clark	New York	July 3, 1832	....
Saltpeter, Manufacture of	C. Delafield	Staten Island, N. Y	Jan. 23, 1866	52, 145
Saltpeter, Manufacture of	V. E. Keegan	Roxbury, Mass	Nov. 13, 1866	59, 611
Salve	G. Backett	New York, N. Y	July 24, 1866	56, 513
Salve	D. W. Craft	New York, N. Y	Jan. 2, 1866	51, 805
Salve	T. Enszlin	Newburgh, N. Y	Mar. 24, 1868	75, 742
Salve	J. Fell	Uniontown, Pa	Aug. 27, 1872	130, 908
Salve	G. Hall	Joliet, Ill	June 17, 1873	139, 954
Salve	M. Huddleston	Jackson, Tenn	Mar. 21, 1871	112, 920
Salve	T. Jarvis	New York, N. Y	Nov. 2, 1869	96, 437
Salve	T. Kuhn	Greenville, N. J	Jan. 30, 1872	123, 180
Salve	N. Lauer	Dansville, N. Y	Mar. 19, 1872	124, 751
Salve	L. Masters	Jackson, Miss	Jan. 9, 1872	122, 621
Salve	D. J. McEvoy	Charlestown, Mass	Nov. 11, 1873	144, 405
Salve	W. W. Oglesbey	Benton County, Oreg	Dec. 28, 1869	98, 400
Salve	W. Slape	Salem, N. J	Aug. 1, 1865	49, 198
Salve	C. Swarthout	Joliet, Ill	June 30, 1868	79, 411
Salve	E. Wilson	Buchanan, Mich	Aug. 6, 1872	130, 263
Salve, Composition for	M. C. Ross	New York, N. Y	Nov. 17, 1863	40, 643
Salve, Compound for	F. Lumsden and F. Lessmann	Oakland, Cal	June 22, 1869	91, 647
Salve, Corn	J. McKee	New Orleans, La	Oct. 3, 1871	119, 468
Salve, Corn	A. Seabold	Florence, Ohio	Apr. 4, 1871	113, 456
Salve for burns and scalds	A. Schmitt	California, Mo	Dec. 8, 1868	84, 770
Salve for cornet-players and others, Lip	G. Burt	Painesville, Ohio	Oct. 8, 1872	131, 935
Salve for cure of foot-rot in sheep	J. McDowell	Buffalo Township, Pa	Apr. 13, 1869	88, 973
Salve for rheumatism	J. Mickel	East Birmingham, Pa	Oct. 31, 1871	120, 451
Salve for ring-bone, spavin, &c	C. Shute	Philadelphia, Pa	Apr. 23, 1872	126, 124
Salve for the eyes	J. Loeuenherz	Hoboken, N. J	Sept. 27, 1864	44, 436
Salve, Healing	R. Robbins	Binghamton, N. Y	Nov. 29, 1870	109, 599
Salve, Medical vegetable	T. L. Upton	Farmington, W. Va	Apr. 16, 1867	63, 966
Salve, Mercurial	W. Wheelock	Boston, Mass	May 2, 1871	114, 375
Salve or plaster for cancer	H. J. Bendall	Jarratt's Depot, Va	Jan. 30, 1872	123, 220
Salver	A. H. Baggs	Bridgeport, Ohio	Dec. 2, 1873	145, 145
Salvers, Construction of	S. C. Babbitt	Meriden, Conn	Nov. 12, 1867	70, 682
Salvers, Construction of metal	G. Brabrook	Taunton, Mass	Dec. 10, 1867	71, 845
Sample-box	G. P. Oakley	Poughkeepsie, N. Y	Nov. 25, 1818	....
Sample-case, Grocer's	N. B. McCreary	Phelp's City, Mo	Jan. 14, 1873	134, 912
Sample-case, Revolving	J. F. Randolph	Edwardsburgh, Mich	Nov. 25, 1873	144, 924
Sample-fastener	C. Mason	New York, N. Y	Mar. 11, 1873	136, 662
Sample-frame, Merchant's	J. S. Monroe	Mitchell, Ind	Aug. 22, 1871	118, 380
Sample-holder	G. L. Bailey	Portland, Me	May 11, 1869	89, 966
Sample-holder for displaying boots, &c	J. Closs	Decatur, Ind	May 20, 1873	139, 044
Samples, Box-cover for the exhibition of	C. O. Crosby	New Haven, Conn	July 18, 1865	48, 794
Sand and clay together, Machine for grinding	A. Cushman	Sumner, Me	Mar. 3, 1829	....
Sand and emery paper, Manufacture of printed	W. Adamson	Philadelphia, Pa	July 2, 1872	128, 574
Sand and gravel drier	A. H. Bauman	Mapleton, Pa	Dec. 12, 1871	121, 746
Sand and gravel heater and drier	H. R. Johnson	Detroit, Mich	June 13, 1871	115, 865
Sand and gravel separating machine	N. J. Killer	East Birmingham, Pa	May 21, 1872	126, 968
Sand and other mineral substances, Machine for washing.	W. M. Lanehart and J. C. King	Cookstown, Pa	Oct. 30, 1866	59, 039
Sand, Apparatus for separating ocher from	J. and A. Hursh	Philadelphia, Pa	Aug. 8, 1865	49, 273
Sand-cleaning machine	E. Bennett	Baltimore, Md	July 13, 1869	92, 568
Sand-collecting machine	R. Elliott	Georgetown, D. C	Feb. 14, 1818	....
Sand crushing and washing machine	J. R. Smith	Connellsville, Pa	Aug. 27, 1867	68, 248
Sand-drying furnace	I. D. Johnson and A. V. Hartwell.	Chicago, Ill	Mar. 8, 1870	100, 636
Sand, emery, &c., paper	W. Adamson	Philadelphia, Pa	Mar. 5, 1867	62, 518
Sand from the beds of rivers, Gathering and treating auriferous.	J. Johnson	Saco, Me	Jan. 1, 1867	60, 899
Sand from water in wells, Method of separating	T. Rose	Cortlandville, N. Y	Sept. 11, 1866	57, 974
Sand, glass, or emery paper, Machine for making	E. Morris	Philadelphia, Pa	Sept. 14, 1844	3, 738
Sand, gravel, &c., Process and apparatus for heating.	A. D. Foote	Washington, D. C	July 16, 1872	129, 329
Sand molds, Applying wash to	D. Robinson	Cold Spring, N. Y	Aug. 18, 1863	39, 589
Sand or emery paper	G. C. Taft	Worcester, Mass	Feb. 7, 1871	111, 700
Sand-paper	I. Fisher, jr	Springfield, Vt	June 14, 1834	....
Sand-paper	I. Fisher, jr	Springfield, Vt	June 14, 1834	....
Sand-paper	J. G. Isham	New York, N. Y	Apr. 25, 1848	5, 535
Sand-paper-cutting machine	W. Adamson	Philadelphia, Pa	July 3, 1855	13, 153
Sand-paper holder	J. Barker	Chicago, Ill	May 3, 1870	102, 474
Sand-paper holder	A. H. Copeland	West Bridgewater, Mass	Jan. 27, 1852	8, 681
Sand-paper holder	N. H. Fay	Worcester, Mass	Mar. 5, 1872	124, 259
Sand-paper holder	T. B. Fitch	Norwalk, Conn	Mar. 13, 1866	53, 133
Sand-paper holder	J. D. Gernez	New York, N. Y	Feb. 20, 1872	123, 888
Sand-paper holder	J. and N. W. Redding	Maplewood and Charlestown, Mass.	Mar. 7, 1865	46, 702
Sand-paper, Machinery for cutting	W. Adamson	Philadelphia County, Pa	Feb. 12, 1856	14, 218
Sand-paper-making machine	G. D. Jones	Jersey City, N. J	Dec. 11, 1855	13, 913
Sand-paper, Manufacture of	J. Palmer	Cleveland, Ohio	Jan. 2, 1866	51, 857
Sand-paper, Manufacturing	I. Fisher, jr	Springfield, Vt	June 14, 1834	....
Sand-paper roller	H. W. Brett	Boston, Mass	Dec. 9, 1873	145, 392
Sand-paper, Softening	I. Fisher, jr	Springfield, Vt	June 14, 1834	....
Sand-papering machine	D. A. and S. T. Armstrong	Sandwich and Sycamore, Ill.	Aug. 5, 1873	141, 413
Sand-papering machine	J. Barker	Chicago, Ill	May 30, 1871	115, 414
Sand-papering machine	O. I. Foster	Salem, N. H	Aug. 13, 1872	130, 420
Sand-papering machine	H. L. Hapgood	Athol, Mass	Sept. 9, 1873	142, 626
Sand-papering machine	P. Hufeland	New York, N. Y	May 17, 1870	103, 191
Sand-papering machine	S. F. Smith	Indianapolis, Ind	Dec. 13, 1870	110, 165
Sand-papering machinery	J. P. Gage	New York, N. Y	Feb. 15, 1848	5, 443
Sand-papering wood-work, Machine for	J. H. Wonderly	Williamsport, Pa	June 12, 1866	55, 570
Sand-screen	G. W. Fair	Dayton, Ohio	Mar. 21, 1871	112, 911
Sand-screen	S. Holdsworth	Maspeth, N. Y	Mar. 21, 1871	112, 809
Sand-screen	C. Lockwood	Haverstraw, N. Y	June 15, 1868	91, 353
Sand-screen	R. McMurray	Brooklyn, N. Y	May 5, 1868	77, 509
Sand-screen	W. Osmond	New York, N. Y	Aug. 5, 1862	36, 104
Sand-throwing machine	W. H. Cox	Portland, Me	June 2, 1868	78, 432

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Sand-trap for water-pipes	J. D. West	New York, N. Y	Mar. 26, 1867	63, 189
Sand-washer, Riddle for	D. L. Furnier	Rostraver, Pa	Apr. 23, 1867	64, 091
Sand, Washing and transporting	D. D. Mallory	Mystic Bridge, Conn	Nov. 8, 1870	109, 030
Sand-washing machine	G. Finley	Collins Township, Pa	July 3, 1855	13, 164
Sand-washing machine	J. French	Belle Vernon, Pa	June 4, 1867	65, 369
Sand-washing machine	L. M. Speer	Belle Vernon, Pa	Aug. 20, 1861	33, 108
Sand-washing machine	D. L. Turner	Rostraver, Pa	Mar. 12, 1867	62, 833
Sandal	W. Hall	Georgetown, Ill	May 19, 1868	77, 976
Sandal	R. Johnston	Huntsville, Ala	Jan. 9, 1872	122, 525
Sandal	W. McConnell	Philadelphia, Pa	Apr. 5, 1859	23, 480
Sandal, Adjustable	J. M. Wilkinson	Urbana, Ill	May 15, 1866	54, 804
Sandal, Ice	E. Fitzki	Philadelphia, Pa	Mar. 28, 1865	47, 006
Sanitary brace to keep the mouth closed during sleep.	F. Pinckard	New Orleans, La	Dec. 15, 1868	84, 965
Sap and other liquid boiler	J. S. Thompson	Lyndon, Vt	Feb. 11, 1868	74, 452
Sap-conductor	C. S. Curtis	Farmington, Ohio	Apr. 5, 1864	42, 252
Sap-conductor	H. Hecox	Rutland, N. Y	Sept. 4, 1860	29, 884
Sap-conductor	E. Mosher	Flushing, Mich	Jan. 17, 1860	26, 858
Sap-evaporator	W. F. Gibson	Ryegate, Vt	Oct. 17, 1871	119, 929
Sap-feeder	G. D. Chandler	West Concord, Vt	Nov. 2, 1869	96, 392
Sap from trees, Apparatus for collecting	E. W. Ormsbee	Montpelier, Vt	Sept. 4, 1860	29, 905
Sap-pan	H. Earl	Edwards, N. Y	Apr. 25, 1865	47, 401
Sap-protector	H. C. Cole and E. D. Sabin	Wallingford, Vt	June 24, 1873	140, 185
Sap-spile	W. Conner	Rensselaerville, N. Y	Apr. 7, 1868	76, 402
Sap-spile	M. Hays	Worcester, Mass	Jan. 24, 1865	45, 996
Sap-spile	J. M. Le Count and G. R. Boynton.	Hartford, Wis., and Chicago, Ill.	July 7, 1863	39, 155
Sap-spile	P. Morrison	Starksborough, Vt	Mar. 16, 1869	87, 960
Sap-spile	C. C. Post	Hinesburgh, Vt	Nov. 24, 1868	84, 302
Sap-spile	L. M. Reed	Troy, Ohio	Jan. 5, 1869	85, 534
Sap-spout	J. McCombs	Edinburgh, Ohio	Nov. 22, 1864	45, 163
Sap-spout	W. S. Gilmore	Chester, Ohio	Aug. 8, 1871	117, 767
Sap-spout	A. Leitch	Ryegate, Vt	July 25, 1865	48, 961
Sap-spout	R. F. Livermore	Starksborough, Vt	Feb. 4, 1868	74, 101
Sap-spout	C. C. Post	Hinesburgh, Vt	July 25, 1871	117, 326
Sap-spout	C. C. Post	Hinesburgh, Vt	July 25, 1871	117, 457
Sap-spout	E. B. Sargent	New Haven, Conn	Apr. 7, 1868	76, 530
Sap-spout	H. B. Sevey	Vienna, Me	Nov. 25, 1873	144, 871
Sap, Spout for conveying	M. Shelden and W. A. Chase	Calais, Vt	June 30, 1863	39, 072
Saponifier	H. Pemberton	Allegheny, Pa	Apr. 10, 1866	53, 865
Saponifying-apparatus	G. W. Hatfield	Nashville, Tenn	July 8, 1873	140, 701
Sash-adjuster	P. H. Hardy	Terre Haute, Ind	Dec. 31, 1867	72, 850
Sash adjuster, Ventilating	W. C. Stickney and J. McGee	Steubenville, Ohio	Sept. 1, 1868	81, 703
Sash adjuster, Window	G. Jones	Peekskill, N. Y	Apr. 15, 1862	34, 967
Sash and blind fastener	M. Adler and L. Knell	Buffalo, N. Y	Jan. 8, 1867	61, 035
Sash and blind fastener	W. E. and H. G. Arnold	Rochester, N. Y	Oct. 8, 1861	33, 423
Sash and blind fastener	L. Pollock	Fishkill Landing, N. Y	Apr. 16, 1867	63, 938
Sash and blind fastener, Combined	A. Hay	Morrisania, N. Y	Sept. 26, 1871	119, 271
Sash and blind machine	R. D. Hobart	Binghamton, N. Y	Aug. 30, 1870	106, 937
Sash and blind laying-out machine	G. W. Burton	Bordentown, N. J	Dec. 28, 1869	98, 225
Sash and door bolt	H. T. Woodman	Dubuque, Iowa	June 5, 1866	55, 410
Sash and door button	M. Judd	New Haven, Conn	Mar. 24, 1868	75, 923
Sash and door clamp	R. L. Greenlee	Chicago, Ill	Sept. 30, 1873	143, 236
Sash and door clamp	G. H. Hall and L. D. Farra	Germantown, Pa	Jan. 11, 1870	98, 765
Sash and door clamp	T. S. Urie	Hubbardston, Mich	May 27, 1873	139, 281
Sash and door fastener	J. B. Frost	Jackson, Mich	June 17, 1873	140, 026
Sash and fastener, Window	S. W. Cox	Albany, N. Y	July 23, 1872	129, 654
Sash and fastener, Window	A. Iske	Lancaster, Pa	Jan. 22, 1867	61, 433
Sash and fastener, Window	E. Smith	Cedar Falls, Iowa	July 5, 1870	105, 137
Sash and frame, Hot-bed	M. Cridge	Allegheny City, Pa	Sept. 8, 1868	81, 881
Sash and frame, Window	P. L. Butler	Cape Vincent, N. Y	Jan. 2, 1866	51, 799
Sash and frame, Window	O. K. Hight	Dowagiac, Mich	Nov. 3, 1868	83, 632
Sash and frame, Window	D. McKay	Chicago, Ill	July 15, 1873	140, 783
Sash and inside-shutter fastener, Combined	J. Bell	New York, N. Y	Aug. 21, 1849	6, 658
Sash and setting glass therein, Window	S. Coon	Ithaca, N. Y	Jan. 28, 1862	34, 244
Sash and shutter fastener, Combined	A. H. Wemple and T. D. Richardson.	New York, N. Y	Dec. 31, 1867	72, 948
Sash and shutter fastening	W. J. Miller	Washington, D. C	May 19, 1868	78, 115
Sash and window frame	J. Schnell	New York, N. Y	Aug. 4, 1868	80, 672
Sash, Applying springs to window	S. S. Camp		July 1, 1803	....
Sash, Applying springs to window	A. G. Safford	Boston, Mass	Aug. 8, 1854	11, 499
Sash, Attaching cord to window	P. A. Gladwin	Pawtucket, Mass	Apr. 19, 1859	23, 675
Sash, Attaching stop to	L. Fleischman	Rochester, N. Y	July 19, 1864	43, 578
Sash-balance	J. C. Anderson	Webster, Pa	Nov. 30, 1869	97, 263
Sash-balance	O. Armstrong	Oshkosh, Wis	Sept. 28, 1869	95, 150
Sash-balance	A. C. Arnold and O. G. Hanschildt.	Norwalk, Conn	May 28, 1872	127, 292
Sash-balance	G. W. Bishop	Saratoga Springs, N. Y	May 30, 1871	115, 418
Sash-balance	H. D. Chance	Llewellyn, Pa	Oct. 29, 1872	132, 631
Sash-balance	A. J. Chase	Boston, Mass	Aug. 13, 1872	130, 476
Sash-balance	P. Christiansen	Rochester, Minn	June 8, 1869	91, 088
Sash-balance	J. M. Connel	Newark, Ohio	Feb. 14, 1871	111, 728
Sash-balance	J. J. Cowell	Newark, N. J	Apr. 23, 1872	126, 031
Sash-balance	J. J. Cowell	Newark, N. J	Mar. 4, 1873	136, 366
Sash-balance	W. Damerel	Brooklyn, N. Y	May 3, 1870	102, 658
Sash-balance	C. Diehl	Philadelphia, Pa	Oct. 15, 1872	132, 146
Sash-balance	R. Faries	Decatur, Ill	Dec. 9, 1873	145, 289
Sash-balance	B. Frazee	Newark, N. J	May 21, 1872	126, 947
Sash-balance	L. Goodwin	Bangor, Me	Mar. 30, 1869	88, 471
Sash-balance	L. Goodwin	Bangor, Me	June 27, 1871	116, 302
Sash-balance	M. R. Green	Warwick, N. Y	Mar. 22, 1870	101, 007
Sash-balance	H. Gross	Hoboken, N. J	Oct. 29, 1872	132, 572
Sash-balance	J. C. M. Hamilton	Shaver's Creek, Pa	July 12, 1870	105, 330
Sash-balance	C. Harbaugh	Eaton, Ohio	Dec. 2, 1873	145, 173
Sash-balance	B. F. Hartman	Charlestown, Pa	Jan. 28, 1873	135, 221
Sash-balance	A. B. Hester	Kent, Ind	Nov. 1, 1864	44, 866
Sash-balance	A. B. Hester	North Vernon, Ind	June 23, 1868	79, 118
Sash-balance	J. D. Hopkins	London, England	Nov. 30, 1869	97, 400

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Sash-balance	S. W. Huntington	Augusta, Me	Aug. 24, 1869	93, 995
Sash-balance	J. G. Jones	Baltimore, Md	Sept. 14, 1869	94, 829
Sash-balance	G. N. Joss	New Philadelphia, Ohio	July 29, 1873	141, 356
Sash-balance	C. Kanzler and A. Nega	Saint Louis, Mo	Dec. 7, 1869	97, 648
Sash balance	W. H. King	Newark, N. J	May 28, 1872	127, 247
Sash-balance	C. Lamson	Newburyport, Mass	July 23, 1872	129, 669
Sash-balance	W. W. S. Orbeton	Bradford, Mass	Oct. 1, 1872	131, 773
Sash-balance	W. H. Pilgrim	Allegheny City, Pa	Sept. 14, 1869	94, 768
Sash-balance	T. J. Prosser	Chicago, Ill	Jan. 19, 1869	86, 034
Sash-balance	C. R. Rand	Dubuque, Iowa	Dec. 13, 1870	110, 159
Sash-balance	J. M. Simpson	Oshkosh, Wis	Mar. 4, 1873	136, 461
Sash-balance	G. E. Smith	Fitchburgh, Mass	Oct. 31, 1871	120, 543
Sash-balance	H. Smith	Titusville, Pa	Dec. 26, 1871	122, 288
Sash-balance	W. Stanfield	Flora, Ill	July 13, 1869	92, 549
Sash-balance	J. W. Trussell	Augusta, Me	June 18, 1872	127, 997
Sash-balance	C. Van Hoosen	Catskill, N. Y	May 9, 1871	114, 729
Sash-balance	P. A. Willson	Camden, N. J	May 4, 1869	89, 821
Sash-balance	L. S. Wright	Groton, N. Y	Sept. 9, 1873	142, 604
Sash-balance, Alarm	T. Denham and J. W. Briggs	Cleveland, Ohio	Mar. 3, 1858	19, 495
Sash balance and fastener, Window	W. Worthen	Danville, N. H	Oct. 21, 1856	15, 939
Sash balance and lock	W. H. Doe	Oshkosh, Wis	Apr. 26, 1870	102, 379
Sash-balance, Arrangement in	J. R. Payson	Covington, Ky	Nov. 24, 1857	18, 703
Sash-balance, Mode of controlling cog-gear	J. McMurtry	Lexington, Ky	Sept. 15, 1857	18, 223
Sash balance, Window	R. A. Warner	Columbus, Ga	July 6, 1869	92, 407
Sash, Balancing	H. C. Brown	Xenia, Ohio	May 14, 1850	7, 359
Sash balancing and hoisting apparatus	R. Marquis	Xenia, Ohio	Aug. 22, 1854	11, 556
Sash-balancing device	S. S. Fargo	Bristol, Conn	Sept. 3, 1872	131, 055
Sash, Balancing window	A. T. Clark	Lancaster, Pa	May 23, 1854	10, 957
Sash-bead fastener	D. W. Dyer and J. H. McVaugh	Philadelphia, Pa	Mar. 10, 1868	75, 396
Sash bearer and fastener	I. Glynn	Syracuse, N. Y	Dec. 19, 1848	5, 976
Sash-bearer, Elastic roller	J. A. Pease	Philadelphia, Pa	Apr. 9, 1850	7, 267
Sash bearings, Window	J. B. Hornbake	Greenfield, Pa	Mar. 12, 1872	124, 491
Sash-blind	C. H. Anders	Myersville, Md	Apr. 27, 1869	89, 375
Sash-blind and panel-work machine, Window	J. Tichenor	Ithaca, N. Y	Mar. 25, 1833	....
Sash-bolt	J. C. Cooke	Bridgeport, Conn	Mar. 8, 1870	100, 505
Sash-bolt	U. Cramer	New Philadelphia, Ohio	Aug. 27, 1872	130, 902
Sash bolt and spring, Window	M. Merriman	New Haven, Conn	Apr. 14, 1835	....
Sash-bolt, Curved	E. G. Connelly	Indianapolis, Ind	Feb. 21, 1854	10, 541
Sash by means of a heavy weight, Method of counterbalancing.	W. Maguire	Cincinnati, Ohio	Jan. 8, 1850	7, 003
Sash, Cast-iron window	I. McNary	Stafford, Conn	Feb. 23, 1828	....
Sash, Cast-iron window	J. S. Stoddard	Macedon, N. Y	Oct. 14, 1835	....
Sash, Casting metal window	T. J. Sloan	New York, N. Y	Dec. 5, 1854	12, 035
Sash-clamp	E. F. Dunaway	Cincinnati, Ohio	Feb. 9, 1869	86, 740
Sash-clamp	B. Moore	Hart, Mich	May 3, 1870	102, 574
Sash-clamping machine	S. P. Smith	Half Moon, N. Y	May 1, 1855	12, 797
Sash cord, Attachment for window	S. N. Chapin	New Britain, Conn	Oct. 5, 1869	95, 426
Sash-cord-clamping device	C. R. Rand	Dubuque, Iowa	July 18, 1871	117, 205
Sash-cord fastener	J. Correja	Brooklyn, N. Y	Nov. 26, 1867	71, 365
Sash-cord fastener	C. Gies	New York, N. Y	Oct. 11, 1870	108, 131
Sash-cord fastener	H. Harris and F. Hewitt	Newark and Bloomfield, N. J.	July 22, 1873	141, 050
Sash-cord fastener	W. N. Jackson	Muncie, Ind	Feb. 14, 1871	111, 847
Sash-cord fastener	J. R. Payson	Covington, Ky	Apr. 19, 1859	23, 699
Sash-cord fastener	G. A. Wilbur	Woonsocket, R. I	July 18, 1871	117, 227
Sash-cord fastening	J. G. Gabel	Lebanon, Pa	June 15, 1869	91, 326
Sash, Cord for window	S. Wales	Boston, Mass	Oct. 10, 1865	50, 405
Sash-cord guide	C. B. Clark	Buffalo, N. Y	July 15, 1873	140, 887
Sash-cord guide-block	J. M. Ford	Brooklyn, N. Y	Dec. 28, 1869	98, 365
Sash-cord guide	W. M. Griscom	Reading, Pa	Dec. 23, 1873	145, 863
Sash-cord guide	W. Shaw	Brooklyn, N. Y	May 13, 1873	138, 944
Sash cord, Method of attaching window	C. Swift	Mount Carroll, Ind	Mar. 5, 1867	62, 701
Sash-cord sheave	W. T. Jaquith and R. Calhoun	Allegheny, Pa	July 13, 1869	92, 453
Sash, Device for lowering, raising, and fastening	J. Ashcroft	Brooklyn, N. Y	Mar. 5, 1872	124, 242
Sash, Device for operating window	J. R. Baker	Kendallville, Ind	July 25, 1865	48, 889
Sash, Device for operating window	F. Baumgartner	Brooklyn, N. Y	Dec. 29, 1868	85, 356
Sash, Device for suspending window	T. Morton	New York, N. Y	Aug. 15, 1871	118, 042
Sash door and blind, Mortising and tenoning for	I. Gray	Dunstable, N. H	May 29, 1835	....
Sash dovetailing and relishing machine	G. L. King	Philadelphia, Pa	Mar. 24, 1863	37, 968
Sash, Dovetailing window	D. C. Smith	Montgomery, Ill	Sept. 20, 1870	107, 555
Sash elevator and fastener	B. Roy	Saint Clair, Mich	Feb. 9, 1869	86, 865
Sash elevator and lock	M. W. Montgomery	Cleveland, Ohio	May 14, 1872	126, 733
Sash elevator and lock, Window	S. Mills	New York, N. Y	July 31, 1860	29, 439
Sash elevator, Elastic	S. A. Chase	Boston, Mass	Nov. 5, 1867	70, 411
Sash elevator, Window	W. Huey	Christiana, Pa	Feb. 15, 1859	22, 954
Sash elevator, Window	J. Le Ferre	Charlestown, Mass	May 21, 1867	64, 988
Sash elevator, Window	J. Le Ferre	Charlestown, Mass	Oct. 15, 1867	69, 952
Sash, Expanding window	M. Nutting	Portland, Me	Oct. 5, 1852	9, 306
Sash, Expanding window	M. Nutting	Portland, Me	Oct. 12, 1852	9, 331
Sash-fastener	C. C. Algeo	Pittsburgh, Pa	Nov. 12, 1872	132, 945
Sash-fastener	J. Andrews	Marlborough, Mass	Jan. 2, 1872	122, 348
Sash-fastener	J. Andrews	Marlborough, Mass	Sept. 3, 1872	130, 970
Sash-fastener	D. Armstrong	Chicago, Ill	Oct. 27, 1868	83, 439
Sash-fastener	S. D. Arnold	New Britain, Conn	June 20, 1871	116, 006
Sash-fastener	W. E. Arnold	Rochester, N. Y	Mar. 13, 1855	12, 500
Sash-fastener	W. E. Arnold	Rochester, N. Y	Apr. 17, 1855	12, 710
Sash-fastener	G. L. Bailey	Portland, Me	May 23, 1871	115, 147
Sash-fastener	W. Baker	Utica, N. Y	Feb. 8, 1848	5, 437
Sash-fastener	W. B. Barnard	Waterbury, Conn	Jan. 29, 1861	31, 221
Sash-fastener	N. Barnum	Saint Louis, Mo	Dec. 13, 1859	26, 405
Sash-fastener	L. Bartoo	East Aurora, N. Y	June 19, 1860	28, 729
Sash-fastener	L. L. Bates	Boston, Mass	Sept. 9, 1873	142, 667
Sash-fastener	B. Beach	West Meriden, Conn	Jan. 29, 1867	61, 505
Sash-fastener	R. E. Beckwith	Nashua, N. H	Dec. 17, 1872	133, 916
Sash-fastener	R. E. Beckwith	Nashua, N. H	Feb. 18, 1873	135, 963
Sash-fastener	J. Bestwick, jr	Dedham, Mass	Nov. 23, 1858	22, 105
Sash-fastener	S. W. Bidwell	Hartford, Conn	Feb. 17, 1863	37, 671
Sash-fastener	G. W. Bishop	Saratoga Springs, N. Y	Apr. 15, 1873	137, 883
Sash-fastener	G. W. Bishop	Saratoga Springs, N. Y	Sept. 2, 1873	142, 431

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Sash-fastener	J. Bishop	Northville, Mich	Feb. 4, 1873	135, 396
Sash-fastener	J. V. Bogert and M. R. Perkins	New York, N. Y., and Portsmouth, N. H.	Nov. 10, 1868	83, 824
Sash-fastener	B. Bray	Methuen, Mass	May 1, 1866	54, 286
Sash-fastener	T. L. Braynard	New York, N. Y	July 24, 1860	29, 240
Sash-fastener	E. K. Breckenridge	West Meriden, Conn	Jan. 3, 1871	110, 733
Sash-fastener	F. W. Brocksieper	New Haven, Conn	Apr. 23, 1872	125, 879
Sash-fastener	F. W. Brocksieper and J. B. Sargent.	New Britain, Conn	May 11, 1858	20, 238
Sash-fastener	G. Brosius	Ranch's Gap, Pa	Nov. 12, 1867	70, 795
Sash-fastener	J. Broughton	Chicago, Ill	Jan. 27, 1857	16, 464
Sash-fastener	D. Bull	Amboy, Ill	Aug. 3, 1869	93, 274
Sash-fastener	T. H. Burridge	Saint Louis, Mo	July 16, 1867	66, 673
Sash-fastener	E. Burstow	Horsham, England	Nov. 18, 1873	144, 655
Sash-fastener	J. C. Butterworth	Providence, R. I	Apr. 16, 1861	32, 043
Sash-fastener	C. H. Cain	Fremont, Ohio	Feb. 2, 1869	86, 359
Sash-fastener	H. O. Candee	New York, N. Y	Nov. 19, 1872	133, 200
Sash-fastener	S. Carhart and W. Moore	Brooklyn, N. Y	June 29, 1858	20, 759
Sash-fastener	O. Cate	Boston, Mass	Apr. 21, 1868	76, 891
Sash-fastener	O. Charter	Bristol, Conn	June 1, 1858	20, 405
Sash-fastener	M. Chittenden	Danbury, Conn	Sept. 20, 1859	25, 487
Sash-fastener	T. P. Coin	Boonsborough, Iowa	July 22, 1873	140, 994
Sash-fastener	A. Cole and E. Davis	Saratoga Springs, N. Y	July 22, 1873	141, 120
Sash-fastener	D. Cole	Marshall, Ill	Nov. 13, 1866	59, 558
Sash-fastener	A. Conant	Lowell, Mass	Sept. 29, 1868	82, 603
Sash-fastener	J. J. Crooke	New York, N. Y	Apr. 8, 1856	14, 600
Sash-fastener	J. M. Crossman and G. S. Rice.	South Orange, N. J., and Tarrytown, N. Y.	Oct. 31, 1871	120, 419
Sash-fastener	W. J. De Grummond	Cincinnati, Ohio	Nov. 17, 1868	84, 093
Sash-fastener	J. L. Devol	Parkersburgh, W. Va	May 11, 1869	89, 975
Sash-fastener	D. M. Donehoo	Beaver, Pa	June 24, 1873	140, 256
Sash-fastener	J. H. Douglass	Meriden, Conn	Oct. 20, 1868	83, 266
Sash-fastener	J. E. Downs	Lowell, Mass	Sept. 22, 1868	82, 392
Sash-fastener	W. Edson	Boston, Mass	Nov. 17, 1868	84, 098
Sash-fastener	J. W. Elliot	Leicester, Mass	June 12, 1866	55, 475
Sash-fastener	A. H. Emery	Mexico, N. Y	June 21, 1859	24, 450
Sash-fastener	R. J. Falconer	Washington, D. C	Aug. 31, 1858	21, 328
Sash-fastener	G. E. Farmer, jr	New York, N. Y	Oct. 29, 1872	132, 529
Sash-fastener	H. Fickel	Dayton, Ohio	Aug. 30, 1870	106, 928
Sash-fastener	T. Floyd	Chambersburgh, Pa	Feb. 17, 1857	16, 671
Sash-fastener	W. H. Forbes	New York, N. Y	Mar. 2, 1858	19, 501
Sash-fastener	J. M. Forrest	Norfolk, Va	Nov. 8, 1859	26, 027
Sash-fastener	G. P. Foster	Taunton, Mass	Apr. 11, 1848	5, 505
Sash-fastener	M. Gee	Oakland, Cal	Aug. 12, 1873	141, 640
Sash-fastener	A. Gilbert, jr	Lowell, Mass	Aug. 28, 1855	13, 491
Sash-fastener	O. H. Gilbert	Darien, Wis	Nov. 11, 1873	144, 451
Sash-fastener	L. D. Gillette	Meriden, Conn	Nov. 11, 1873	144, 528
Sash-fastener	P. A. Gladwin	Pawtucket, Mass	Dec. 28, 1858	22, 421
Sash-fastener	P. A. Gladwin	North Providence, R. I	Oct. 2, 1860	30, 218
Sash-fastener	W. Gorman	New Britain, Conn	Nov. 1, 1870	108, 778
Sash-fastener	L. D. Gould	Newark, N. J	Sept. 8, 1868	81, 889
Sash-fastener	H. Haslam	New Britain, Conn	Jan. 5, 1869	85, 586
Sash-fastener	G. F. Hedrich	Buffalo, N. Y	Mar. 26, 1867	63, 157
Sash-fastener	E. Herbster	Chicago, Ill	Nov. 12, 1867	70, 714
Sash-fastener	H. Hochstrasser	Philadelphia, Pa	Sept. 27, 1853	10, 045
Sash-fastener	G. M. Hubbard	New Haven, Conn	Oct. 31, 1871	120, 441
Sash-fastener	B. S. Hyers	Pekin, Ill	Dec. 18, 1866	60, 633
Sash-fastener	G. Jelley and J. W. Gowell	Boston, Mass	Oct. 29, 1867	70, 221
Sash-fastener	R. Johnson	Frederick, Md	May 29, 1860	28, 491
Sash-fastener	G. Jones	Peekskill, N. Y	June 10, 1862	35, 523
Sash-fastener	E. M. Judd	New Britain, Conn	Nov. 2, 1858	21, 968
Sash-fastener	J. W. Judd	New Haven, Conn	Jan. 1, 1867	60, 901
Sash-fastener	M. Judd	New Britain, Conn	Sept. 4, 1847	5, 279
Sash-fastener	M. Judd	New Britain, Conn	June 30, 1863	39, 052
Sash-fastener	M. Judd	Wallingford, Conn	June 17, 1873	139, 895
Sash-fastener	T. M. Judd and G. M. Hubbard	New Haven, Conn	Aug. 30, 1870	106, 830
Sash-fastener	H. H. Kelley	Philadelphia, Pa	Oct. 7, 1868	82, 847
Sash-fastener	W. W. Kellogg	Lynn, Mass	Feb. 10, 1857	16, 595
Sash-fastener	H. B. Kimble	Rochester, N. Y	Mar. 7, 1854	10, 596
Sash-fastener	G. King, J. Gomber, and L. T. Shope.	Frederick, Md	July 23, 1867	67, 060
Sash-fastener	F. Kramer	Saint Louis, Mo.	Aug. 18, 1868	81, 178
Sash-fastener	W. H. Lazelle	Hartford, Conn	Dec. 17, 1850	7, 841
Sash-fastener	G. Leining	Roxbury, Mass	July 25, 1865	48, 960
Sash-fastener	G. H. Lupton	Cleveland, Ohio	Oct. 29, 1867	70, 236
Sash-fastener	T. P. I. Magoun	Worcester, Mass	Jan. 14, 1873	134, 813
Sash-fastener	W. S. Mallory	Batavia, N. Y	Sept. 1, 1863	39, 737
Sash-fastener	M. R. Margerum	Trenton, N. J	Mar. 2, 1869	87, 418
Sash-fastener	W. K. Marvin	New York, N. Y	Nov. 10, 1868	83, 983
Sash-fastener	J. B. Masser	Sunbury, Pa	Dec. 12, 1865	51, 469
Sash-fastener	W. W. Maughlin	Baltimore, Md	June 25, 1867	66, 160
Sash-fastener	W. W. Maughlin	Baltimore, Md	June 15, 1869	91, 465
Sash-fastener	W. G. McGill	Cincinnati, Ohio	Feb. 21, 1865	46, 481
Sash-fastener	J. S. McGlumphy	Wind Ridge, Pa	Apr. 5, 1870	101, 486
Sash-fastener	C. Merrill	Malden, Mass	Dec. 19, 1854	12, 100
Sash-fastener	J. A. Minor	Hartford, Conn	Sept. 23, 1862	36, 524
Sash-fastener	T. W. H. Moseley	Columbus, Ohio	May 2, 1848	5, 549
Sash-fastener	G. Nettleton	Woodbury, Conn	July 1, 1862	35, 803
Sash-fastener	J. G. Nicolay	Springfield, Ill	Oct. 11, 1870	108, 171
Sash-fastener	O. W. Noble	Wakefield, Mass	Sept. 23, 1873	143, 026
Sash-fastener	H. North	New Britain, Conn	June 23, 1868	79, 248
Sash-fastener	W. Patton	Towanda, Pa	Oct. 9, 1855	13, 656
Sash-fastener	W. Patton	Towanda, Pa	Aug. 12, 1856	15, 523
Sash-fastener	H. Perkins	Mansfield, Mass	June 14, 1870	104, 344
Sash-fastener	H. S. Phillips	Westfield, Mass	June 3, 1862	35, 489
Sash-fastener	D. A. Pratt	New York, N. Y	May 22, 1866	54, 953
Sash-fastener	J. C. Rankin	Mount Vernon, N. Y	Apr. 10, 1866	53, 870
Sash-fastener	S. G. Rice	Albany, N. Y	Dec. 3, 1861	33, 869

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Sash-fastener	S. M. Richards	Litchfield, Ill	Aug. 22, 1865	49, 592
Sash-fastener	S. M. Richards	Chicago, Ill	Oct. 15, 1867	69, 840
Sash-fastener	O. M. Ridgeway	La Porte, Ind	Mar. 26, 1867	63, 306
Sash-fastener	A. C. Rodgers	Philadelphia, Pa	June 4, 1867	65, 508
Sash-fastener	A. C. Rodgers	Suffield, Conn	July 29, 1873	141, 385
Sash-fastener	W. J. Ross	Worcester, Mass	May 22, 1866	54, 961
Sash-fastener	A. H. Rowe	Hartford, Conn	Aug. 1, 1865	49, 159
Sash-fastener	H. Rugee	Milwaukee, Wis	June 14, 1864	43, 134
Sash-fastener	P. T. Share	Baltimore, Md	Oct. 11, 1870	108, 194
Sash-fastener	J. D. Shewell	Boston, Mass	Dec. 30, 1873	145, 972
Sash-fastener	C. Sholl	Mount Joy, Pa	July 29, 1862	36, 031
Sash-fastener	H. Smiley and W. T. Longhead	Boston, Mass	July 11, 1871	116, 878
Sash-fastener	J. R. Smith	Salem, Mass	Apr. 23, 1867	64, 160
Sash-fastener	H. B. Snyder	Cherry Grove, Ohio	July 27, 1869	93, 132
Sash-fastener	W. B. Snyder and R. Hubbard	Bridgeport, Conn	June 7, 1870	103, 938
Sash-fastener	W. E. Sparks	New Haven, Conn	Mar. 12, 1872	124, 515
Sash-fastener	W. E. Sparks	New Haven, Conn	May 14, 1872	126, 754
Sash-fastener	J. Stevens	Chicopee Falls, Mass	Jan. 29, 1867	61, 578
Sash-fastener	S. E. Strickland	Amboy, Ill	Aug. 6, 1867	67, 606
Sash-fastener	F. Tarbell	Boston, Mass	July 28, 1857	17, 910
Sash-fastener	R. Thomas	Waterbury, Conn	June 9, 1868	78, 772
Sash-fastener	W. H. Thomas	Brooklyn, N. Y	Oct. 11, 1870	108, 210
Sash-fastener	N. Thompson	Brooklyn, N. Y	Sept. 19, 1871	119, 198
Sash-fastener	T. R. Timby	Saratoga, N. Y	May 3, 1870	102, 622
Sash-fastener	W. H. Truesdell	Elgin, Ill	Jan. 29, 1867	61, 692
Sash-fastener	F. B. Van Vleck and G. Nichols	Plainfield, N. J	July 24, 1866	56, 642
Sash-fastener	R. Vose	New York, N. Y	Jan. 9, 1866	51, 982
Sash-fastener	S. Walker	Boston, Mass	Oct. 9, 1860	30, 380
Sash-fastener	G. W. Wareham	Dayton, Ohio	Jan. 9, 1866	51, 983
Sash-fastener	W. M. and C. A. Warren	Watertown, Conn	Dec. 1, 1868	84, 596
Sash-fastener	A. Westcott	Syracuse, N. Y	July 18, 1865	48, 856
Sash-fastener	G. D. Whitmore	Boston, Mass	June 9, 1863	38, 853
Sash-fastener	J. B. Whitney	New York, N. Y	Feb. 27, 1872	124, 102
Sash-fastener	J. M. Whitney	Astoria, N. Y	May 15, 1860	28, 322
Sash-fastener	J. Wiard	New Britain, Conn	Apr. 2, 1867	63, 593
Sash-fastener	T. O. Wilson	Fishersville, N. H	Feb. 9, 1869	86, 792
Sash-fastener	J. B. Witherle	Upton, Mass	June 8, 1858	20, 526
Sash-fastener	G. F. Wright	Arlington, Mass	Sept. 10, 1872	131, 321
Sash-fastener	F. Zell	Louisville, Ky	June 16, 1868	79, 046
Sash fastener and adjuster	A. Bedford	Cold Water, Mich	Dec. 15, 1868	84, 987
Sash fastener and stopper, Self-acting	J. C. Cochrane	Rochester, N. Y	Aug. 21, 1849	6, 660
Sash fastener and tightener	T. Frost	Piermont, N. Y	Feb. 25, 1873	136, 232
Sash-fastener and weather-strip, Combined	E. D. Sprague	Youngstown, Ohio	July 22, 1873	141, 178
Sash-fastener, Arrangement of	H. R. Noll	Lewisburgh, Pa	Apr. 5, 1853	9, 649
Sash fastener, Door and window	P. Rosenblatt	Greenville, Tenn	Feb. 5, 1867	61, 874
Sash-fastener, Eccentric	L. B. Page	Hartford, Conn	Sept. 4, 1849	6, 696
Sash fastener, Window	H. G. Arnold	Rochester, N. Y	Oct. 15, 1867	69, 746
Sash fastener, Window	R. Bates	Cohasset, Mass	Feb. 11, 1868	74, 192
Sash fastener, Window	E. K. Breckenridge	West Meriden, Conn	Sept. 13, 1859	25, 379
Sash fastener, Window	E. Calderwood	Portland, Me	Jan. 9, 1866	51, 918
Sash fastener, Window	C. B. Clark	Mount Pleasant, Iowa	Dec. 8, 1863	40, 819
Sash fastener, Window	J. H. Coburn	Lowell, Mass	Sept. 10, 1861	33, 237
Sash fastener, Window	E. Culver and T. J. Pomeroy	Shelburne and East Hampton, Mass.	Apr. 28, 1863	38, 290
Sash fastener, Window	J. Eby	Manheim, Pa	May 19, 1863	38, 572
Sash fastener, Window	J. M. Evarts	New Haven, Conn	Sept. 19, 1848	5, 778
Sash fastener, Window	J. Haggart	New York, N. Y	Nov. 20, 1847	5, 375
Sash fastener, Window	J. W. Hansel	Peoria, Ill	Jan. 14, 1868	73, 325
Sash fastener, Window	H. Johnston	New York, N. Y	Aug. 13, 1872	130, 504
Sash fastener, Window	J. Jones	Rochester, N. Y	Sept. 3, 1846	4, 737
Sash fastener, Window	W. S. McLean	Allegheny, Pa	May 2, 1846	4, 495
Sash fastener, Window	W. S. McLean	Allegheny City, Pa	June 13, 1848	5, 624
Sash fastener, Window	C. Partello	Watertown, N. Y	Nov. 12, 1872	133, 050
Sash fastener, Window	I. Pierson	Hartford, Conn	Feb. 18, 1868	74, 718
Sash fastener, Window	B. D. Skidmore	New York, N. Y	May 19, 1863	38, 609
Sash fastener, Window	H. Smith	Presque Isle, Me	June 11, 1867	65, 701
Sash fastener, Window	Z. B. Wakeman	Rockford, Ill	Dec. 4, 1866	60, 293
Sash fastener, Window	C. R. Webb	Philadelphia, Pa	Aug. 13, 1872	130, 396
Sash fastener, Window	C. F. Wickwire	Cortland, N. Y	Nov. 5, 1867	70, 487
Sash fastener, Window	S. H. Williams	Shoemakersville, Pa	May 5, 1863	38, 440
Sash-fastening	C. M. Amsden	Wooster, Ohio	Jan. 21, 1868	73, 562
Sash-fastening	B. Beach	West Meriden, Conn	July 17, 1866	56, 347
Sash-fastening	F. Beals and C. T. Grilley	New Haven, Conn	Nov. 15, 1864	45, 016
Sash-fastening	E. S. Bitner	Lockhaven, Pa	May 22, 1866	54, 843
Sash-fastening	T. H. Bowerman and C. J. Dart	Cold Water, Mich	Aug. 18, 1868	81, 131
Sash-fastening	W. Brown	Duncannon, Pa	Oct. 6, 1868	82, 797
Sash-fastening	J. W. Childs	Cincinnati, Ohio	July 23, 1867	66, 948
Sash-fastening	C. B. Clark	New Haven, Conn	Feb. 6, 1866	52, 388
Sash-fastening	R. W. Clough	Williamsburgh, N. Y	Jan. 5, 1864	41, 057
Sash-fastening	P. L. Clow	Cohoes, N. Y	Dec. 2, 1862	37, 069
Sash-fastening	I. B. Cottrell	South Orange, N. J	Jan. 23, 1866	52, 242
Sash-fastening	H. De Baun	Paterson, N. J	July 3, 1866	55, 981
Sash-fastening	J. K. Farnworth	Alderley Edge, England	Nov. 6, 1866	59, 521
Sash-fastening	W. W. Hosford	New Britain, Conn	June 5, 1866	55, 298
Sash-fastening	F. M. Hubbard	Protection, N. Y	May 5, 1863	38, 392
Sash-fastening	B. S. Hyers	Pekin, Ill	Oct. 23, 1866	59, 026
Sash-fastening	P. V. Joseff	Chicago, Ill	Oct. 18, 1864	44, 730
Sash-fastening	O. S. Judd	New Britain, Conn	Sept. 26, 1865	50, 136
Sash-fastening	R. Lee	Cincinnati, Ohio	May 30, 1865	47, 962
Sash-fastening	J. Lydy	Georgetown, Ohio	May 29, 1866	55, 131
Sash-fastening	W. M. Merriel	Jefferson, Ind	July 24, 1866	56, 592
Sash-fastening	R. E. Monaghan	West Chester, Pa	July 3, 1866	56, 080
Sash-fastening	C. Morrill	New York, N. Y	June 20, 1871	116, 076
Sash-fastening	J. R. Murphy	Pittsburgh, Pa	Apr. 28, 1863	38, 324
Sash-fastening	H. Naylor	Pekin, Ill	July 31, 1866	56, 786
Sash-fastening	C. Perley	New York, N. Y	May 18, 1869	90, 188
Sash-fastening	W. Shaw	Hudson, N. Y	July 19, 1864	43, 608
Sash-fastening	A. M. Smith	Brooklyn, N. Y	June 7, 1864	43, 045

Index of patents issued from the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Sash-fastening	N. Thompson	Brooklyn, N. Y	Apr. 4, 1871	113, 467
Sash-fastening	F. Walker	Memphis, Tenn	Sept. 1, 1868	81, 848
Sash-fastening	M. V. B. White	Ballston, N. Y	Aug. 6, 1867	67, 472
Sash-fastening	J. R. Whittemore	Chicopee Falls, Mass	Apr. 2, 1867	63, 592
Sash fastening and hoisting device	A. W. Livingstone	Bluffton, Ind	Mar. 23, 1869	88, 049
Sash, Fastening and supporting window	J. Osborn		Nov. 24, 1803	
Sash-fastening, Automatic	J. Hollely	Brooklyn, N. Y	Oct. 28, 1873	143, 982
Sash fastening, Car	W. H. Burridge	Cleveland, Ohio	Nov. 29, 1864	45, 223
Sash, Fastening, raising, and supporting window	L. Kennedy		Sept. 7, 1802	
Sash fastening, Spring and bolt	P. F. Hazard	Philadelphia, Pa	July 11, 1837	262
Sash fastening, Window	E. K. Breckenridge	West Meriden, Conn	May 12, 1863	38, 462
Sash fastening, Window	J. K. Butler	Yarmouth, Canada	Aug. 29, 1871	118, 512
Sash fastening, Window	J. P. Ellis	Flushing, N. Y	June 28, 1864	43, 297
Sash fastening, Window	O. S. Garretson	Buffalo, N. Y	May 26, 1868	78, 274
Sash fastening, Window	J. Hornig	Newark, N. J	July 24, 1860	29, 273
Sash fastening, Window	R. Hutton	Brooklyn, N. Y	Jan. 1, 1867	60, 735
Sash fastening, Window	S. Reed	Rising Sun, Md	Nov. 9, 1869	96, 616
Sash fastening, Window	A. M. Smith	Jamaica, N. Y	Feb. 3, 1863	37, 602
Sash fastening, Window	M. B. Stafford	New York, N. Y	Jan. 27, 1863	37, 528
Sash fastening, Window	F. Thrasher and W. Holden	Akron, Ohio	Feb. 2, 1858	19, 267
Sash for hot-beds, &c	J. Taylor	Lock No. 4, Monongahela River, Pa.	Mar. 11, 1873	136, 789
Sash for roof of hot-house	J. N. Woodward and W. Holden	Aurora, Illinois	June 6, 1865	48, 126
Sash-frame	J. E. Cowdery	Wheatland, Iowa	Oct. 15, 1867	69, 773
Sash frame and fastener	J. M. Hale	Georgia Plains, Vt	Aug. 17, 1866	93, 711
Sash frame, Window	E. Clark	Lancaster, Pa	Apr. 23, 1867	64, 074
Sash frame, Window	J. H. Osgood, jr	Boston, Mass	Mar. 31, 1868	76, 096
Sash frame, Window	C. A. Smith	Philadelphia, Pa	Feb. 27, 1872	124, 169
Sash, Friction-spring for supporting window	E. D. Williams	Philadelphia, Pa	May 31, 1859	24, 254
Sash from sheet-metal, Manufacture of window	H. and G. Zielecke	Brooklyn, N. Y	Dec. 10, 1872	133, 740
Sash, Green-house	I. F. Hersam	Stoneham, Mass	Dec. 26, 1865	51, 717
Sash guide-block	A. Bicknell	South Reading, Mass	Nov. 3, 1868	83, 685
Sash, Hanging and locking	C. A. Schaefer	Chicago, Ill	May 21, 1867	64, 910
Sash, Hanging and operating window	H. T. Stanard	Wayne, Mich	Feb. 12, 1861	31, 472
Sash, Hanging and ventilating window	C. Allen	Petersburgh, Ill	July 2, 1867	66, 276
Sash-hanging chain	M. Magrath	New York, N. Y	Mar. 21, 1871	112, 938
Sash, Hanging window	M. Bomberger	Hummelstown, Pa	Nov. 13, 1855	13, 774
Sash, Hanging window	E. W. Bullard	Hardwick, Mass	Dec. 4, 1855	13, 863
Sash, Hanging window	T. Bullivant	London, England	Mar. 24, 1868	75, 853
Sash, Hanging window	G. Dare	Auburn, N. Y	June 4, 1861	32, 462
Sash, Hanging window	D. N. Dunzack	Salem, Mass	June 26, 1855	13, 124
Sash, Hanging window	F. Follet	Pittsburgh, Va	Oct. 15, 1822	
Sash, Hanging window	T. Fry	Brooklyn, N. Y	May 15, 1860	28, 267
Sash, Hanging window	T. T. Hall	Marietta, Ohio	Dec. 21, 1858	22, 365
Sash, Hanging window	W. W. Hopkins		Feb. 24, 1804	
Sash, Hanging window	R. Johnson	Frederick, Md	Aug. 10, 1858	21, 136
Sash, Hanging window	S. D. Nims	Palmer, Mass	Dec. 23, 1851	8, 611
Sash, Hanging window	C. H. Palmer	New York, N. Y	Feb. 11, 1868	74, 413
Sash, Hanging window	L. E. Payne	Yazoo City, Miss	Aug. 14, 1855	13, 435
Sash, Hanging window	W. Robertson	Plymouth, Ind	June 11, 1867	65, 608
Sash, Hanging window	A. Roehrig	Williamsburgh, N. Y	June 12, 1866	55, 538
Sash, Hanging window	J. W. Ross	Zanesville, Ohio	Nov. 6, 1855	13, 764
Sash, Hanging window	L. W. Thickstun	Chatfield, Minn	Sept. 18, 1860	30, 095
Sash, Hanging window	C. P. Weaver	Philadelphia, Pa	July 29, 1856	15, 447
Sash, Hanging window	W. Webster	Morrisania, N. Y	Feb. 3, 1857	16, 559
Sash, Hoisting and lowering window	J. M. Merrymon and K. Ferguson.	Indianapolis, Ind	Aug. 1, 1865	49, 134
Sash-holder	J. R. Adams	West Galway, N. Y	Dec. 24, 1872	134, 186
Sash-holder	C. C. Algeo	Pittsburgh, Pa	Apr. 1, 1873	137, [illegible]
Sash-holder	A. H. Allison	Charlottesville, Ind	Jan. 30, 1872	123, [illegible]
Sash-holder	W. W. Amos	Olathe, Kans	Apr. 2, 1872	125, 161
Sash-holder	W. W. Amos	Olathe, Kans	Oct. 22, 1872	132, 381
Sash-holder	S. I. Anderson, P. Walden, and E. P. More.	West Eaton, N. Y	Oct. 14, 1873	143, 655
Sash-holder	J. Andrews	Marlborough, Mass	Aug. 6, 1872	130, 269
Sash-holder	F. Babcock	Middletown, Conn	Sept. 29, 1868	82, 580
Sash-holder	W. Bacheller	West Newbury, Mass	May 2, 1871	114, 253
Sash-holder	H. W. Baker	Burlington, W. Va	June 4, 1872	127, 448
Sash-holder	H. O. Ball	Sioux City, Iowa	June 25, 1872	128, 276
Sash-holder	R. R. Ball	West Meriden, Conn	June 20, 1871	116, 009
Sash-holder	R. R. Ball	West Meriden, Conn	Jan. 30, 1872	123, 141
Sash-holder	W. T. Bansmith	Aberdeen, Md	Mar. 21, 1871	112, 886
Sash-holder	C. Bean	North Providence, R. I	Feb. 15, 1870	99, 815
Sash-holder	G. T. Beardsley	Oxford, N. Y	Nov. 22, 1870	109, 374
Sash-holder	G. W. Bishop	Saratoga Springs, N. Y	July 12, 1870	105, 299
Sash-holder	G. W. Bishop	Saratoga Springs, N. Y	Oct. 18, 1870	108, 438
Sash-holder	W. I. Blackman	Columbus, Miss	Oct. 22, 1872	132, 432
Sash-holder	J. H. Bloodgood	Bridgeport, Conn	Jan. 3, 1871	110, 728
Sash-holder	C. S. Bonney	Syracuse, N. Y	Sept. 6, 1870	107, 157
Sash-holder	W. B. Bradford	Charlotte, N. C	Jan. 14, 1873	134, 727
Sash-holder	W. Branch and M. J. Liddell	Laingsburgh, Mich	Nov. 26, 1872	133, 352
Sash-holder	E. K. Breckenridge	West Meriden, Conn	Feb. 15, 1870	99, 827
Sash-holder	S. R. Brown	East Kingston, N. H	June 15, 1858	20, 544
Sash-holder	W. H. Brown	Bangor, Me	Apr. 2, 1872	125, 262
Sash-holder	I. Buckman	Williamsburgh, N. Y	May 21, 1872	126, 872
Sash-holder	C. M. Burns, jr	Philadelphia, Pa	June 20, 1871	116, 150
Sash-holder	W. Calhoun and J. Gibbons	West Troy, N. Y	July 16, 1872	129, 527
Sash-holder	J. J. Callen	East Mendon, N. Y	Apr. 9, 1872	125, 539
Sash-holder	S. Chard	Mianus, Conn	Dec. 30, 1873	145, 988
Sash-holder	A. H. Chase	Lowell, Mass	Aug. 20, 1872	130, 622
Sash-holder	C. B. Clark	Buffalo, N. Y	Nov. 8, 1870	108, 968
Sash-holder	C. B. Clark	Buffalo, N. Y	May 21, 1872	127, 027
Sash-holder	D. N. B. Coffin, jr	Newton, Mass	June 13, 1871	115, 822
Sash-holder	N. C. Cole	Beaver Dam, Wis	Dec. 14, 1869	97, 764
Sash-holder	P. Conver	Farmington, Ill	Apr. 16, 1872	125, 790
Sash-holder	J. Court	Memphis, Tenn	Dec. 12, 1871	121, 852
Sash-holder	J. M. Cowles	Burlington, Iowa	June 20, 1871	116, 162
Sash-holder	E. Culver	Shelburne Falls, Mass	May 7, 1872	126, 380

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Invention.	Inventor.	Residence.	Date.	No.
Sash-holder	R. M. Dalbey	Springfield, Ohio	Nov. 9, 1869	96, 678
Sash-holder	A. Davis	Boston, Mass	May 4, 1869	89, 741
Sash-holder	F. M. Davis	La Cygne, Kans	Sept. 23, 1873	142, 994
Sash-holder	J. Davis	Council Hill Station, Ill	Oct. 6, 1863	40, 161
Sash-holder	T. H. Davis	Saint Joseph, Mo	Apr. 12, 1870	101, 715
Sash-holder	J. L. Devol and J. M. Okey	Parkersburgh, W. Va	July 15, 1873	140, 898
Sash-holder	W. A. Devon	Port Richmond, N. Y	Jan. 19, 1869	86, 062
Sash-holder	J. J. Diehl	Harrisburgh, Pa	Mar. 28, 1870	113, 146
Sash-holder	J. F. Dingee	Bedford Station, N. Y	Apr. 4, 1871	113, 275
Sash-holder	D. M. Donehoo	Beaver Court-House, Pa	Apr. 13, 1869	88, 855
Sash-holder	H. W. Drott	Cumberland, Md	Feb. 7, 1871	111, 524
Sash-holder	C. H. Eccleston	Oxford, N. Y	Jan. 23, 1872	122, 939
Sash-holder	C. H. Eccleston and L. Coville	Oxford, N. Y	June 4, 1872	127, 584
Sash-holder	W. A. Eisenhower	Friedensburgh, Pa	May 3, 1870	102, 667
Sash-holder	J. S. Elkins	Marquette, Wis	July 27, 1869	93, 071
Sash-holder	W. R. Elliott	Troy, Kans	May 9, 1871	114, 541
Sash-holder	A. C. Faivre	Meadville, Pa	Sept. 19, 1871	119, 132
Sash-holder	J. Frick	Philadelphia, Pa	Nov. 1, 1864	44, 860
Sash-holder	J. G. and O. S. Garretson	Buffalo, N. Y	Nov. 16, 1869	96, 908
Sash-holder	P. W. Gates	Chicago, Ill	Jan. 31, 1871	111, 337
Sash-holder	L. Gibbs	Canton, Ohio	July 27, 1869	93, 079
Sash-holder	W. A. Goranflo	Allentown, Pa	Feb. 16, 1869	86, 982
Sash-holder	J. F. Graham	Warrensburgh, Mo	May 6, 1873	138, 494
Sash-holder	P. W. Greenwood	Peterborough, N. H	Sept. 27, 1870	107, 773
Sash-holder	A. F. Gregory and C. H. Ensign.	Bridgeport, Conn	Dec. 7, 1869	97, 502
Sash-holder	A. and L. L. Griffin	Scranton City, Pa	Mar. 26, 1872	124, 949
Sash-holder	H. R. Halsey	La Fayette, Ill	July 4, 1871	116, 706
Sash-holder	J. C. Hanna	Rossville, Iowa	Nov. 21, 1871	121, 098
Sash-holder	J. W. Hansel	Peoria, Ill	Mar. 23, 1869	88, 164
Sash-holder	E. W. Haven	Brandon, Vt	Apr. 20, 1869	89, 147
Sash-holder	C. Hicks	Lancaster, Ky	Sept. 21, 1869	95, 110
Sash-holder	J. Honsinger	Harrisburgh, Pa	July 12, 1870	105, 206
Sash-holder	P. B. Hovey	New London, Conn	Mar. 21, 1871	112, 812
Sash-holder	J. Howland	Ashland, Ohio	Nov. 9, 1869	96, 701
Sash-holder	T. R. and W. L. Hubbard	Brooklyn, N. Y	Dec. 12, 1871	121, 785
Sash-holder	R. B. Hugunin	Cleveland, Ohio	Sept. 28, 1869	95, 350
Sash-holder	R. B. Hugunin	Cleveland, Ohio	Dec. 28, 1869	98, 380
Sash-holder	R. B. Hugunin	Cleveland, Ohio	Mar. 1, 1870	100, 486
Sash-holder	R. B. Hugunin	Cleveland, Ohio	June 14, 1870	104, 314
Sash-holder	R. B. Hugunin	New York, N. Y	May 16, 1871	114, 942
Sash-holder	R. B. Hugunin	New York, N. Y	Apr. 8, 1873	137, 682
Sash-holder	H. C. Hunt	Amboy, Ill	Sept. 20, 1870	104, 498
Sash-holder	G. H. Johnson and F. Bottner	Bridgeport, Conn	Mar. 26, 1872	124, 958
Sash-holder	W. G. Jones and S. M. Rankin	Long Green, Md	Apr. 4, 1871	113, 303
Sash-holder	A. R. Judd	North Adams, Mass	Aug. 20, 1872	130, 643
Sash-holder	M. Judd	New Haven, Conn	Apr. 6, 1869	88, 573
Sash-holder	M. Judd	New Haven, Conn	Apr. 4, 1871	113, 673
Sash-holder	W. F. Kells	San Francisco, Cal	Sept. 27, 1870	107, 691
Sash-holder	G. N. Kendall	Wooster, Ohio	May 2, 1871	114, 445
Sash-holder	B. Kindblade	Geneva, Ill	May 4, 1869	89, 832
Sash-holder	G. King	Frederick, Md	Oct. 11, 1870	108, 155
Sash-holder	W. H. King	Newark, N. J	Jan. 30, 1872	123, 110
Sash-holder	W. H. King	Newark, N. J	Jan. 30, 1872	123, 111
Sash-holder	W. H. King	Newark, N. J	May 28, 1872	127, 248
Sash-holder	W. H. King and J. Rowland	Newark, N. J., and Williamsburgh, N. Y.	Feb. 21, 1871	111, 946
Sash-holder	E. U. Kinsey	Passaic, N. J	Apr. 30, 1872	126, 216
Sash-holder	D. R. Kline	Allentown, Pa	Feb. 1, 1870	99, 325
Sash-holder	E. Knapp	San Francisco, Cal	Apr. 29, 1873	138, 258
Sash-holder	A. J. Kramers	Marion, Iowa	Dec. 20, 1870	110, 248
Sash-holder	J. S. Kuder and W. Seiple	Tiffin, Ohio	Oct. 5, 1869	95, 592
Sash-holder	D. P. Lacey	Orfordville, Wis	Aug. 18, 1868	81, 179
Sash-holder	D. P. Lacey	Orfordville, Wis	Mar. 9, 1869	87, 683
Sash-holder	D. J. La Due	Carroll City, Iowa	July 16, 1872	129, 038
Sash-holder	H. F. Lawrence	New York, N. Y	July 9, 1872	128, 736
Sash-holder	B. S. Lawson	New York, N. Y	Aug. 31, 1869	94, 420
Sash-holder	B. B. Lewis	New York, N. Y	June 29, 1869	91, 945
Sash-holder	A. Liesche	Syracuse, N. Y	Dec. 31, 1872	134, 385
Sash-holder	Z. Lockwood	Saratoga Springs, N. Y	June 13, 1871	115, 971
Sash-holder	Z. Lockwood	Saratoga Springs, N. Y	July 16, 1872	129, 149
Sash-holder	S. L. Loomis	Byron, N. Y	Oct. 20, 1868	83, 292
Sash-holder	A. W. Lozier	Yonkers, N. Y	June 4, 1872	127, 493
Sash-holder	A. W. Lozier	Yonkers, N. Y	June 25, 1872	128, 406
Sash-holder	W. W. Lyman	West Meriden, Conn	Dec. 5, 1871	121, 531
Sash-holder	A. C. Manning	Norwich, Conn	July 5, 1870	104, 974
Sash-holder	E. P. Masterson	Port Jervis, N. Y	June 11, 1872	127, 906
Sash-holder	A. Maxwell	Shelburne Falls, Mass	May 21, 1872	126, 891
Sash-holder	T. J. McCarver	Oregon City, Oreg	Aug. 15, 1871	118, 038
Sash-holder	G. M. McConnell	Jacksonville, Ill	Jan. 23, 1872	123, 034
Sash-holder	T. McDonough	Mont Clair, N. J	July 23, 1872	129, 845
Sash-holder	J. W. Megaw	Wilmington, Del	Feb. 28, 1871	112, 268
Sash-holder	N. J. Meigs	West Haven, Conn	May 17, 1870	103, 223
Sash-holder	A. D. Millard	Canton, Ohio	Sept. 13, 1870	107, 281
Sash-holder	G. F. Moore	Wilmington, Ohio	Apr. 2, 1872	125, 320
Sash-holder	J. B. Morgan	Davenport, Iowa	Mar. 21, 1871	112, 833
Sash-holder	J. H. Morse	Peoria, Ill	May 16, 1871	114, 842
Sash-holder	O. W. Noble	Darlington, Wis	Jan. 16, 1872	122, 776
Sash-holder	J. Obreiter	Lancaster, Pa	Dec. 1, 1868	84, 504
Sash-holder	C. Partello	Watertown, N. Y	Jan. 28, 1873	135, 358
Sash-holder	W. Patton	Towanda, Pa	May 21, 1872	127, 100
Sash-holder	J. Peck	New Haven, Conn	Mar. 19, 1872	124, 696
Sash-holder	A. W. Pennington	Rochester, N. Y	July 4, 1871	116, 628
Sash-holder	A. W. Pennington	Rochester, N. Y	July 16, 1872	129, 248
Sash-holder	A. Perron	Stevens's Point, Wis	Aug. 27, 1872	130, 864
Sash-holder	W. E. Phelps	Elmwood, Ill	Aug. 2, 1870	105, 976
Sash-holder	D. Pike	New Orleans, La	Jan. 14, 1873	134, 925
Sash-holder	H. Polley	San Francisco, Cal	Aug. 13, 1872	130, 532

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Sash-holder	H. Polley	San Francisco, Cal	Oct. 22, 1872	132,490
Sash-holder	J. A. Prints	Reading, Pa	Aug. 9, 1870	106,279
Sash-holder	G. B. Ransom	Chester, Conn	Oct. 3, 1871	119,534
Sash-holder	G. W. Reisinger	Harrisburgh, Pa	Apr. 18, 1871	113,930
Sash-holder	C. Rich	Winchester, N. H	Sept. 17, 1872	131,463
Sash-holder	G. W. Richardson	Columbus, Ky	Aug. 27, 1872	130,868
Sash-holder	G. W. Richardson	Columbus, Ky	July 22, 1873	141,078
Sash-holder	J. F. Rickel	Byron, Ill	Sept. 19, 1871	119,050
Sash-holder	J. C. Robie	Binghamton, N. Y	July 2, 1872	128,661
Sash-holder	C. W. Rockhold	Peoria, Ill	Feb. 22, 1870	100,075
Sash-holder	A. C. Rodgers	Philadelphia, Pa	Mar. 9, 1869	87,708
Sash-holder	T. F. Rose	Barnegat, N. J	Oct. 8, 1872	131,972
Sash-holder	A. V. Sanford	Binghamton, N. Y	Oct. 31, 1871	120,540
Sash-holder	J. E. Scott	Baltimore, Md	Apr. 23, 1872	126,095
Sash-holder	E. S. Scripture	New Haven, Conn	July 6, 1858	20,822
Sash-holder	R. M. Seldis	New York, N. Y	Dec. 19, 1871	122,068
Sash-holder	W. Senk	Syracuse, N. Y	June 10, 1873	139,825
Sash-holder	N. Y. Shaw	Greenville, N. Y	June 28, 1870	104,802
Sash-holder	S. H. Shaw	Lynn, Mass	Oct. 24, 1871	120,334
Sash-holder	C. C. Shephard	Passaic, N. J	Jan. 2, 1872	122,496
Sash-holder	C. Sholl	Mount Joy, Pa	June 15, 1869	91,490
Sash-holder	R. L. Sibbett	New Kingston, Pa	May 3, 1870	102,604
Sash-holder	W. H. Sible	Harrisburgh, Pa	Jan. 12, 1869	85,863
Sash-holder	E. D. Slater	Greenville, N. Y	Oct. 25, 1870	108,642
Sash-holder	H. T. Stanard	Wayne, Mich	June 25, 1861	32,657
Sash-holder	H. W. Stephenson, jr	Cincinnati, Ohio	Sept. 24, 1872	131,637
Sash-holder	G. A. Sturges	Delhi, N. Y	Apr. 27, 1869	89,356
Sash-holder	G. A. Sturges	Delhi, N. Y	July 22, 1873	141,184
Sash-holder	H. B. Swartz	Milton, Ohio	Oct. 11, 1870	108,204
Sash-holder	E. H. Sweetser	Hamburgh, Iowa	Aug. 20, 1872	130,766
Sash-holder	J. H. Teahl and J. C. Zimmerman	Eberly's Mills, Pa	May 11, 1869	89,954
Sash-holder	H. P. Tenant	East Germantown, Ind	Mar. 12, 1872	124,640
Sash-holder	C. T. Tessier	New York, N. Y	Nov. 21, 1871	121,138
Sash-holder	C. H. Tessy	Utica, N. Y	Oct. 8, 1872	131,980
Sash-holder	A. Thomas	Milton, Ill	Jan. 16, 1872	122,743
Sash-holder	H. Thomas	San Francisco, Cal	Mar. 11, 1873	136,681
Sash-holder	R. M. Thompson	Coshocton, Ohio	Jan. 26, 1869	86,191
Sash-holder	A. Thomson	Champaign, Ill	Mar. 21, 1871	112,985
Sash-holder	L. A. Tuttle	Berea, Ohio	Apr. 22, 1873	138,057
Sash-holder	A. Van Patten and J. F. Kelsey	Weyauwega, Wis	Mar. 8, 1870	100,694
Sash-holder	F. Walker	New Orleans, La	Feb. 9, 1869	86,887
Sash-holder	F. Walker	New Orleans, La	Dec. 5, 1871	121,695
Sash-holder	W. M. Walton	Newark, N. J	Oct. 26, 1869	96,291
Sash-holder	J. Ware	West Swanzey, N. H	Aug. 26, 1873	142,305
Sash-holder	E. W. Warren	Cambridge, N. Y	Jan. 7, 1873	134,715
Sash-holder	G. W. Warren	Bristol, Ind	Jan. 9, 1872	122,689
Sash-holder	W. M. Warren	Watertown, Conn	Feb. 21, 1871	111,995
Sash-holder	J. R. Watson	Alleghany City, Pa	Jan. 21, 1873	135,184
Sash-holder	T. Weaver	Harrisburgh, Pa	Aug. 19, 1873	141,904
Sash-holder	S. N. Weston	Fitchburgh, Mass	Apr. 9, 1872	125,509
Sash-holder	G. W. Wheat	Philipsburgh, Pa	Sept. 20, 1870	107,575
Sash-holder	E. H. Wheeler	Scranton, Pa	Nov. 15, 1870	109,362
Sash-holder	B. M. Whiting	San Francisco, Cal	Mar. 28, 1871	113,123
Sash-holder	J. Wilkinson	Albany, N. Y	Mar. 8, 1870	100,577
Sash-holder	E. S. Wills	Philadelphia, Pa	Oct. 10, 1871	119,730
Sash-holder	B. Wilmot	Montana, Iowa	May 23, 1871	115,260
Sash-holder	B. F. Wilson	Geddes, N. Y	Apr. 13, 1869	88,939
Sash-holder	G. W. Wright and O. R. Cook	Salem, Ohio	July 23, 1872	129,774
Sash-holder	J. C. Young	Toledo, Ohio	Oct. 26, 1869	96,295
Sash-holder	W. C. Young	Danville, Pa	Feb. 13, 1872	123,657
Sash-holder	J. F. Zacharias	Leesburgh, Va	June 14, 1870	104,395
Sash-holder	G. W. Bishop	Saratoga Springs, N. Y	May 31, 1870	103,547
Sash holder and balance	L. Gathman	Chicago, Ill	Oct. 3, 1871	119,457
Sash-holder and blind-opener, Combined	E. F. Driggs	Brooklyn, N. Y	Dec. 4, 1866	60,156
Sash holder and fastener	W. N. Martin	Providence, R. I	Oct. 15, 1861	33,488
Sash holder and fastener	A. P. Danfield	Chester, Pa	Nov. 5, 1872	132,812
Sash holder and tightener, Combined	C. P. Mixer	Worcester, Mass	Feb. 13, 1862	123,577
Sash-holder for car windows and blinds	A. Leffelholz and A. Prier	Milwaukee, Wis	Mar. 28, 1871	113,070
Sash-holder for railway-car	E. L. Ferguson	Buffalo, N. Y	Nov. 6, 1866	59,505
Sash holder or fastening	E. Andrews	Pottsville, Pa	Apr. 21, 1868	76,876
Sash holder, Window	A. Bigony	Winchester, Ohio	Dec. 21, 1869	98,143
Sash-laying-out machine	H. Kingsbury	Rochester, N. Y	Aug. 12, 1873	141,647
Sash-lifter	P. A. Altmaeir	Harrisburgh, Pa	Nov. 9, 1869	96,651
Sash-lock	H. G. Arnold	Rochester, N. Y	June 8, 1869	90,913
Sash-lock	R. R. Ball	West Meriden, Conn	Apr. 27, 1869	89,272
Sash-lock	R. R. Ball	West Meriden, Conn	Apr. 27, 1869	89,273
Sash-lock	M. L. Ballard and R. B. Killin	Canton, Ohio	Jan. 26, 1869	86,124
Sash-lock	E. K. Breckenridge	West Meriden, Conn	Feb. 5, 1867	61,708
Sash-lock	E. L. Brown	Norwich, N. Y	Dec. 6, 1870	109,801
Sash-lock	C. B. Clark	Buffalo, N. Y	June 11, 1867	65,645
Sash-lock	A. Cooper	Harrisburgh, Pa	Apr. 26, 1870	102,227
Sash-lock	G. W. Dubuisson	Norwich, Conn	July 26, 1870	105,787
Sash-lock	S. Easter	Charlestown, Mass	Aug. 10, 1869	93,425
Sash-lock	J. U. Gerow	Brooklyn, N. Y	Nov. 17, 1868	84,107
Sash-lock	C. T. Gibson	Baltimore, Md	Jan. 28, 1873	135,217
Sash-lock	G. McGregor and G. Voll	Cincinnati, Ohio	Mar. 30, 1869	88,318
Sash-lock	J. Hollingsworth	Chicago, Ill	Feb. 6, 1866	52,492
Sash-lock	J. Hughes	New Berne, N. C	Nov. 22, 1870	109,516
Sash-lock	G. King	Frederick, Md	May 4, 1869	89,587
Sash-lock	G. King	Frederick, Md	May 25, 1869	90,558
Sash-lock	D. P. Lacey and J. A. Bartlett	Orfordville, Wis	Sept. 4, 1866	57,733
Sash-lock	J. Marsh	Rochester, N. Y	Jan. 1, 1856	14,028
Sash-lock	W. L. McKibbin	Buck Valley, Pa	Feb. 9, 1869	86,773
Sash-lock	P. Miles	Hartford, Conn	June 17, 1862	35,617
Sash-lock	W. Miller	Boston, Mass	May 30, 1871	115,341
Sash-lock	J. W. Moffitt	Harrisburgh, Pa	Feb. 16, 1869	86,936
Sash-lock	M. Norton	Cambridge, Mass	Mar. 25, 1851	7,996

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Sash-lock	M. P. Norton	Troy, N. Y	July 7, 1857	17, 747
Sash-lock	L. Paige	Cavendish, Vt	July 15, 1856	15, 343
Sash-lock	W. Patton	Towanda, Pa	Sept. 8, 1859	18, 155
Sash-lock	O. Redmond	Rochester, N. Y	Oct. 7, 1856	15, 857
Sash-lock	A. Ridell	Chicago, Ill	Nov. 28, 1865	51, 222
Sash-lock	C. Sholl	Mount Joy, Pa	Dec. 13, 1870	110, 078
Sash-lock	A. M. Smith	Chicago, Ill	Dec. 24, 1867	72, 692
Sash-lock	W. A. Sublett	San Francisco, Cal	Jan. 19, 1869	85, 973
Sash-lock	J. B. Tinker	Buffalo, N. Y	Mar. 5, 1867	62, 575
Sash-lock	E. H. Tobey	Bridgeport, Conn	Oct. 13, 1868	83, 112
Sash lock and bolt	L. O. Cameron	Allegheny City, Pa	Mar. 23, 1869	88, 129
Sash lock and stop	D. D. Mackay	Whitestone, N. Y	Oct. 1, 1867	69, 456
Sash lock and support	F. P. Canfield	Boston, Mass	Oct. 8, 1867	69, 540
Sash lock, Window	A. C. Arnold	Norwalk, Conn	Oct. 10, 1865	50, 321
Sash lock, Window	W. E. Arnold	Rochester, N. Y	Sept. 29, 1863	40, 137
Sash lock, Window	W. E. Arnold	Rochester, N. Y	Sept. 29, 1863	40, 138
Sash lock, Window	W. H. Betts	Brooklyn, N. Y	Apr. 21, 1868	76, 981
Sash lock, Window	J. K. Clark	Mount Pleasant, Iowa	Mar. 12, 1867	62, 817
Sash lock, Window	B. Hotchkiss	New Haven, Conn	Feb. 21, 1871	112, 042
Sash lock, Window	N. F. Mathewson	Barrington, R. I	Dec. 24, 1867	72, 516
Sash, Machine for coping	T. B. Jones	Paterson, N. J	Feb. 23, 1864	41, 706
Sash, Machine for cutting the molding for	O. K. Collins	Murfreesborough, Tenn	Mar. 2, 1858	19, 492
Sash, Machine for dovetailing window	C. W. Strout	Calais, Me	Nov. 5, 1861	33, 667
Sash, Machine for dressing circular	L. Gilson	Brighton, Mass	Nov. 15, 1853	10, 230
Sash, Machine for laying out	J. N. Kikendall, jr	Virginia, Ill	July 4, 1871	116, 602
Sash, Machine for laying out window	D. Worthington	Hartford, Conn	Apr. 27, 1809	....
Sash, Machine for making window	J. Farnham	Owego, N. Y	Jan. 7, 1809	....
Sash, Machine for making window	J. Travers	Roslyn, N. Y	Sept. 2, 1873	142, 420
Sash, Machine for making window	C. Thompson	Poughkeepsie, N. Y	Dec. 6, 1830	....
Sash, Machine for marking out	J. Rogers	Poultney, Vt	May 9, 1854	10, 895
Sash, Machine for preparing stuff for window	C. B. Rogers	Norwich, Conn	Sept. 20, 1838	935
Sash, Machine for tenoning	F. G. Chapman	Chicago, Ill	Sept. 13, 1870	107, 222
Sash-machinery	A. Downs	Saint Clair, Mich	Nov. 8, 1845	4, 262
Sash-machinery	J. Leavens	Springfield, Mass	June 12, 1847	5, 150
Sash, Machinery for making window	A. Miner	Elbridge, N. Y	July 9, 1823	....
Sash, Machinery for making window	J. Richards, jr	Elbridge, N. Y	Nov. 12, 1828	....
Sash, &c., Making	D. Berlew	Delaware, Ohio	Jan. 13, 1857	16, 427
Sash-making machine	S. C. Ellis	Jersey City, N. J	Mar. 8, 1870	100, 610
Sash, Making window	S. Parsons	....	Nov. 20, 1797	....
Sash, Manufacturing window	A. Miner	Elbridge, N. Y	Nov. 19, 1833	....
Sash, Manufacturing window	C. Thompson	Poughkeepsie, N. Y	Dec. 6, 1832	....
Sash-marker	G. M. Nickason	Ellenville, N. Y	May 3, 1870	102, 700
Sash, Metallic	C. Hartwell	Boston, Mass	Mar. 16, 1858	19, 661
Sash, Metallic	W. E. Worthen	New York, N. Y	Apr. 24, 1860	28, 030
Sash, Metallic window	F. M. Campbell	Saint Louis, Mo	July 29, 1873	141, 204
Sash, Metallic window	J. D. Moran	New York, N. Y	July 8, 1873	140, 588
Sash, Metallic window	C. Neer	New York, N. Y	Feb. 7, 1865	46, 305
Sash, Method of counterbalancing window	W. T. Barnes	Buffalo, N. Y	Dec. 4, 1849	6, 917
Sash-molding	R. L. Anderton	New York, N. Y	Nov. 4, 1873	144, 307
Sash molding, Window	L. Wiegel and J. Lehnbeater	Cincinnati, Ohio	Oct. 15, 1872	131, 341
Sash-mortising gage, Window	W. P. Boyd	Thorntown, Ind	Nov. 24, 1868	84, 407
Sash, Mortising window	O. Ellis	Orange, Mass	Jan. 16, 1834	....
Sash of railway-car windows, Hanging	M. Messer and A. Steinbrener	Cleveland, Ohio	Aug. 14, 1860	29, 631
Sash of ventilating-windows, Device for operating	E. Lockwood	Bordentown, N. J	May 15, 1866	54, 818
Sash operated by moving the lower sash, Arrangement of catches on the upper.	W. Race	Seneca Falls, N. Y	July 1, 1851	8, 186
Sash operating device	S. P. Rogers	Belmont, Ohio	Sept. 12, 1871	118, 974
Sash, Operating window	J. C. Grant	Salem, Mass	Sept. 15, 1857	18, 200
Sash, Operating window	H. Smith	Salem, Mass	Jan. 30, 1866	52, 333
Sash-operator	D. A. Danforth	Elkhart, Ind	Apr. 20, 1869	89, 205
Sash, Planing-machine for window	I. Gay	Dunstable, N. H	May 29, 1835	....
Sash-pulley	A. F. Hines	Washington, D. C	Apr. 6, 1869	88, 763
Sash raising and lowering device, Window	J. D. Cramer	San Francisco, Cal	Mar. 10, 1868	75, 249
Sash, Raising and lowering window	J. M. Merrymon	Indianapolis, Ind	Dec. 20, 1864	45, 564
Sash, Relishing-machine for tenoning	G. L. Sullivan and E. Lippincott	Chicago, Ill	Nov. 8, 1870	109, 075
Sash, Removable window	R. H. Kirch	Utica, N. Y	Feb. 9, 1858	19, 301
Sash retainer, Window	J. H. Weeks	Philadelphia, Pa	Feb. 21, 1865	46, 512
Sash, Reversible window	W. P. Nelson	Saint Louis, Mo	June 6, 1871	115, 766
Sash, roof, sky-light, &c., Frame for	J. L. Jackson	New York, N. Y	July 4, 1871	116, 714
Sash-rope fastening	L. Russell	Otsego, Mich	Jan. 28, 1873	135, 368
Sash-rope guide	W. W. Fifield	Medford, Mass	Jan. 11, 1870	98, 752
Sash-rope plate	A. Iske	Lancaster, Pa	Apr. 23, 1867	64, 109
Sash, Securing window	A. Kimball	Fitchburgh, Mass	Mar. 14, 1854	10, 651
Sash, shutter, and slat, Mode of securing and operating window.	E. P. House	Washington, D. C	May 26, 1863	38, 680
Sash, Sliding	G. Warren	Boston, Mass	Sept. 1, 1868	81, 850
Sash-spring	R. Dirks	Philadelphia, Pa	Feb. 11, 1862	34, 352
Sash-spring	J. Hooker	....	Nov. 19, 1804	....
Sash spring and catch, Window	M. L. Stevens	Waterbury, Conn	Jan. 9, 1835	....
Sash, Spring-balance for window	F. H. Smith	Plainville, Conn	May 24, 1859	24, 154
Sash, Spring-bolt for holding up window	N. Briggs	New York	Oct. 13, 1813	....
Sash, Spring-catch for window	W. Toshach	New York, N. Y	June 27, 1865	48, 463
Sash, Spring-fastener for window	G. W. and E. B. Robinson	Boston, Mass	Feb. 7, 1842	2, 452
Sash, Spring for fastening window	J. Ballthorpe	....	May 22, 1811	....
Sash-spring holder	R. F. Brown	Lewisburgh, Pa	Feb. 12, 1867	61, 923
Sash, Spring-lock for ventilating	M. Claver	New York, N. Y	Sept. 12, 1871	118, 909
Sash, Spring-lock for ventilating	A. Freutal	New York, N. Y	Sept. 12, 1871	118, 921
Sash, Spring-roller for window	C. F. Brown	Bridgeport, Conn	Jan. 17, 1860	26, 830
Sash spring, Window	J. Eaton	....	Apr. 14, 1804	....
Sash spring, Window	H. Hammond	Lewisberry, Pa	Sept. 8, 1837	379
Sash spring, Window	F. Henshaw	Washington, D. C	May 22, 1866	54, 903
Sash-spring window-fastener	J. Bacon	Bedford, Mass	June 20, 1838	796
Sash-stiles, Machine for mortising	J. B. Smith	Milwaukee, Wis	July 11, 1854	11, 253
Sash-stop	R. E. Buchanan	Carrollton, Ill	Mar. 24, 1868	75, 852
Sash-stop	C. Cole	Ithaca, N. Y	May 7, 1867	64, 492
Sash-stop	B. Doe	Boston, Mass	Jan. 14, 1868	73, 305
Sash-stop	J. G. Garretson and F. D. Clark	Buffalo, N. Y	Dec. 3, 1867	71, 603
Sash-stop	J. R. Hall	Georgetown, Ill	Dec. 3, 1867	71, 745

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Sash-stop	C. R. Jenkins	Philadelphia Pa	Nov. 19, 1867	71, 017
Sash-stop	W. J. and A. T. Manker	Indianapolis, Ind	Apr. 13, 1869	88, 969
Sash-stop	H. Soggs	Columbus, Pa	Nov. 12, 1867	70, 760
Sash-stop	W. H. Sutherland	Seven Mile, Ohio	Feb. 11, 1868	74, 446
Sash-stop	M. V. B. White	Ballston, N. Y	Aug. 24, 1869	94, 051
Sash-stop	O. E. Woodbury	Madison, Wis	Dec. 10, 1867	71, 938
Sash stop and holder	J. P. Labar	Milford, Mich	Jan. 18, 1870	98, 872
Sash stop and holder	F. Walker	New Orleans, La	Nov. 10, 1868	84, 031
Sash stop and lock	R. Reynolds	Stockport, N. Y	Apr. 13, 1869	88, 907
Sash stop and lock	W. H. Sullenberger	Harrisburgh, Pa	Dec. 29, 1868	85, 345
Sash stop and lock	N. Thompson	Brooklyn, N. Y	Nov. 7, 1871	120, 796
Sash-stop for windows and doors	F. Baumgartner	Brooklyn, N. Y	Mar. 10, 1868	75, 347
Sash stop or fastener	S. Hedges	Hudson, N. Y	Sept. 15, 1863	39, 993
Sash stop or fastening	S. P. Loomis and T. Hawk	Mauch Chunk, Pa	June 23, 1863	38, 968
Sash-stop to windows, Attaching	N. S. McFarlan	Syracuse, N. Y	July 3, 1860	28, 994
Sash stop, Window	J. K. Andrews	New Providence, Pa	Sept. 17, 1867	68, 933
Sash stop, Window	F. Ball	Wilton Junction, Iowa	Apr. 14, 1868	76, 582
Sash stop, Window	R. H. Cooper	Saint Louis, Mo	Dec. 31, 1867	72, 807
Sash stop, Window	A. R. Dyett	New York, N. Y	Feb. 11, 1868	74, 324
Sash stop, Window	J. G. Jewell	Washington, D. C	Oct. 29, 1867	70, 222
Sash stop, Window	J. G. Jewell	Washington, D. C	July 14, 1868	79, 835
Sash stop, Window	G. R. Vanderbilt	Mount Vernon, N. Y	Dec. 10, 1867	72, 128
Sash-stopper	W. E. Arnold	Rochester, N. Y	Mar. 27, 1849	6, 227
Sash-stopper	C. C. Cameron	Harper's Ferry, Va	July 2, 1850	7, 471
Sash-stopper	G. H. Gray, sr	Clinton, Miss	Apr. 2, 1850	7, 240
Sash-stopper	J. N. McIntire	New York, N. Y	Dec. 17, 1867	72, 313
Sash-stopper	J. Osborn	Weymouth, Mass	June 3, 1851	8, 135
Sash stopper and fastener	C. C. Felton	Dedham, Mass	Apr. 20, 1852	8, 885
Sash stopper and fastener	J. B. S. Hadaway	East Weymouth, Mass	Nov. 16, 1852	9, 404
Sash stopper and fastener	J. D. Smith	New Britain, Conn	Oct. 19, 1852	9, 348
Sash stopper and lock	W. Van Gaasbeck	William's Bridge, N. Y	Oct. 4, 1864	44, 565
Sash-stopper, Arrangement of	N. Myers and F. C. Smith	Charlestown and Harper's Ferry, Va.	June 25, 1850	7, 460
Sash-stopper, Spiral-spring	W. B. Barnard	Bristol, Conn	Mar. 12, 1850	7, 155
Sash-stopper, Spring-and-tackle	J. W. Hoffman	Philadelphia, Pa	July 10, 1849	6, 584
Sash-stopper, Spring, inclined plane, and roller	S. E. Winslow	Kensington, Pa	Apr. 2, 1850	7, 254
Sash stopper, Vibrating	W. Ferrell	Mount Holly, N. J	Apr. 17, 1849	6, 323
Sash stopper, Window	J. Warren	New York, N. Y	Aug. 11, 1863	39, 513
Sash-strip fastener, Window	C. Purnell	Allegheny City, Pa	July 2, 1872	128, 507
Sash-stuff, Machine for trying	E. Basford	Livermore, Mass	Apr. 28, 1810	....
Sash-supporter	J. Ayers	Greenbush, N. Y	Apr. 2, 1867	63, 456
Sash-supporter	N. E. Baker	Holyoke, Mass	Oct. 13, 1857	18, 376
Sash-supporter	S. D. Baldwin	Chicago, Ill	July 24, 1866	56, 515
Sash-supporter	W. H. Brown	Bangor, Me	Dec. 12, 1871	121, 701
Sash-supporter	C. S. Bruff	Baltimore, Md	Aug. 19, 1856	15, 557
Sash-supporter	E. A. Campbell	William's Bridge, N. Y	Oct. 10, 1865	50, 332
Sash-supporter	E. A. Campbell	William's Bridge, N. Y	May 29, 1866	55, 057
Sash-supporter	R. M. Campbell	Cambridgeport, Mass	Nov. 17, 1868	84, 088
Sash-supporter	F. P. Catlin	Hudson, Mich	Jan. 16, 1866	52, 119
Sash-supporter	C. E. Condon	Harrisburgh, Pa	May 22, 1866	55, 003
Sash-supporter	W. Conner	Wilmington, Del	Sept. 26, 1865	50, 098
Sash-supporter	C. H. Dana	West Lebanon, N. H	Aug. 5, 1856	15, 476
Sash-supporter	A. Davis	Boston, Mass	Nov. 3, 1868	83, 697
Sash-supporter	C. F. Dodge	Williamsport, Pa	May 26, 1868	78, 193
Sash-supporter	J. H. Durham and S. Rising	La Fayette, Ind	June 18, 1867	65, 890
Sash-supporter	H. Ehl	Utica, N. Y	Apr. 16, 1867	63, 787
Sash-supporter	W. C. Fisher	Charlestown, Mass	May 16, 1865	47, 709
Sash-supporter	H. C. Goodspeed	New York, N. Y	Nov. 3, 1868	83, 626
Sash-supporter	B. G. Hildreth	Philadelphia, Pa	Nov. 5, 1861	33, 647
Sash supporter	R. B. Hugunin	New York, N. Y	Dec. 20, 1870	110, 365
Sash-supporter	J. W. Hutchings	Bridgeport, Conn	Apr. 16, 1867	63, 900
Sash-supporter	G. F. Joyce	Boston, Mass	May 10, 1870	102, 827
Sash-supporter	C. Kane	Allegheny City, Pa	Nov. 19, 1867	71, 018
Sash-supporter	P. Keffer	Berks County, Pa	Nov. 2, 1869	96, 325
Sash-supporter	W. M. Kirkpatrick	Littleton, Ill	Apr. 9, 1867	63, 730
Sash-supporter	W. C. McGill	Cincinnati, Ohio	Aug. 22, 1865	49, 541
Sash-supporter	W. Morehouse	Buffalo, N. Y	Nov. 19, 1861	33, 750
Sash-supporter	G. Nimmo	Jersey City, N. J	Mar. 5, 1867	62, 673
Sash-supporter	D. J. Osborn	Windsor Locks, Conn	Apr. 9, 1867	63, 743
Sash-supporter	J. F. Peabody	Salem, Mass	Feb. 1, 1859	22, 821
Sash-supporter	W. Randall	May, Mich	Aug. 18, 1868	81, 207
Sash-supporter	C. R. Rode	New York, N. Y	May 8, 1855	12, 833
Sash-supporter	J. M. Sawtell	Chicopee, Mass	May 21, 1867	65, 015
Sash-supporter	A. M. Sawyer	Athol, Mass	Aug. 15, 1865	49, 442
Sash-supporter	C. A. Schaefer	Chicago, Ill	May 21, 1867	64, 911
Sash-supporter	W. S. Van Holsen	Saugerties, N. Y	Sept. 25, 1866	58, 322
Sash-supporter	J. A. Watrous	West Meriden, Conn	June 30, 1868	79, 525
Sash-supporter	M. V. B. White	Troy, N. Y	June 26, 1866	55, 940
Sash-supporter	J. E. Wootten	Cressona, Pa	Apr. 2, 1867	63, 599
Sash supporter and fastener	J. C. Bonnell	Fort Madison, Iowa	July 30, 1867	67, 258
Sash supporter and fastener	A. Cutter	East Boston, Mass	Nov. 12, 1867	70, 818
Sash supporter and fastener	W. F. Hill	Portland, Me	Apr. 24, 1866	54, 158
Sash supporter and fastener	J. Hopkins	Madison, Wis	May 1, 1866	54, 354
Sash supporter and fastener	C. W. Krebs	Baltimore, Md	Feb. 4, 1862	34, 384
Sash supporter and fastener	J. W. and S. A. Livingston	Hartford, Conn	Oct. 9, 1866	58, 655
Sash supporter and fastener	F. R. Miller and E. Prescott	Pittsburgh, Pa	Nov. 5, 1867	70, 593
Sash supporter and fastener	I. H. Waite	Otisco, Mich	Apr. 10, 1866	53, 907
Sash supporter and lock	W. Race	Lockport, N. Y	Jan. 12, 1864	41, 236
Sash-supporter for car-window	H. R. Smith	Philadelphia, Pa	May 29, 1860	28, 511
Sash-supporter, Friction	S. G. Crane	Rochester, N. Y	Jan. 17, 1860	26, 873
Sash-supporter, Friction-roller	J. Maynard	Philadelphia, Pa	Feb. 5, 1850	7, 071
Sash supporter, Window	A. T. Boon	Galesburgh, Ill	Jan. 29, 1867	61, 510
Sash supporter, Window	J. W. Briggs	Cleveland, Ohio	Apr. 17, 1860	27, 947
Sash supporter, Window	B. Britten	Galena, Ill	Feb. 5, 1867	61, 801
Sash supporter, Window	F. P. Catlin	Hudson, Wis	May 5, 1863	38, 372
Sash supporter, Window	S. Cooper	Windsor, Conn	May 17, 1859	24, 077
Sash supporter, Window	S. Cooper	Windsor, Conn	Jan. 3, 1860	26, 653
Sash supporter, Window	L. Y. Gardiner	Amsterdam, N. Y	Oct. 9, 1860	30, 307

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Sash supporter, Window	E. M. Griswold	Hagerstown, Md	Jan. 22, 1867	61, 335
Sash supporter, Window	J. O. Harris	Ottawa, Ill	Mar. 21, 1865	46, 900
Sash supporter, Window	H. C. Hunt	Amboy, Ill	June 19, 1866	55, 659
Sash supporter, Window	H. F. Jenks	Providence, R. I	Feb. 21, 1865	46, 472
Sash supporter, Window	J. N. McLean	New Philadelphia, Ohio	Apr. 21, 1863	38, 236
Sash supporter, Window	J. McMahan	Amelia, Ohio	Oct. 9, 1860	30, 337
Sash supporter, Window	J. S. Merrill	Newtown, Md	Dec. 17, 1867	72, 314
Sash supporter, Window	W. H. Mitchell	San Francisco, Cal	Oct. 4, 1859	25, 666
Sash supporter, Window	S. G. Morrison	Williamsport, Pa	Oct. 29, 1861	33, 596
Sash supporter, Window	J. R. Payson	Chicago, Ill	Nov. 5, 1867	70, 604
Sash supporter, Window	J. G. Perry	South Kingston, R. I	Jan. 3, 1865	45, 747
Sash supporter, Window	A. H. Read	Factoryville, Pa	Feb. 9, 1869	86, 689
Sash supporter, Window	D. Rickford	Westerly, R. I	Feb. 7, 1860	27, 032
Sash supporter, Window	D. Russell	Drewersburgh, Ind	May 1, 1855	12, 785
Sash supporter, Window	B. E. Sampson	Boston, Mass	June 18, 1867	65, 835
Sash supporter, Window	J. W. Simpson	Newark, N. J	Dec. 10, 1867	72, 096
Sash supporter, Window	F. N. Violet	Fond du Lac, Wis	Dec. 31, 1867	72, 765
Sash supporter, Window	R. Vose	New York, N. Y	Mar. 19, 1867	63, 120
Sash supporter, Window	P. Wenzell	Mentz, Germany	Mar. 3, 1868	75, 226
Sash supporter, Window	R. L. Young	North Topeka, Kans	Mar. 12, 1872	124, 588
Sash, Supporting and locking window	W. Shaw	Hudson, N. J	Nov. 5, 1861	33, 666
Sash, Supporting window	D. C. Lyall	New York, N. Y	Apr. 10, 1860	27, 816
Sash suspender, Window	J. H. Williams	Oakland, Cal	Jan. 3, 1865	45, 784
Sash-sustainer	G. C. Hinman	New Haven, Conn	Mar. 7, 1854	10, 598
Sash, Sustaining window	E. T. Briggs	Salem, Mass	Sept. 15, 1857	18, 182
Sash-tightener	W. E. Swett	San Francisco, Cal	Oct. 17, 1871	120, 010
Sash-tightener	J. D. Winslow	Wilmington, Del	May 28, 1867	65, 146
Sash-tightening device. Window	G. Jones	Peekskill, N. Y	Jan. 6, 1863	37, 346
Sash to window-cord, Mode of attaching	H. J. Adams	Leavenworth, Kans	Aug. 22, 1865	49, 489
Sash tool, Metallic	A. J. Campbell	New York, N. Y	June 7, 1864	43, 008
Sash, Ventilating window	C. Pullinger	Philadelphia, Pa	Sept. 16, 1873	142, 941
Sash ventilator, Window	J. C. Bates	Cold Spring, N. Y	Mar. 11, 1873	136, 638
Sash ventilator, Window	J. C. Bates	Cold Spring, N. Y	July 29, 1873	141, 254
Sash-weight	P. Ashen	Philadelphia, Pa	Apr. 15, 1873	137, 753
Sash-weight	M. G. Burkhardt	Cincinnati, Ohio	Feb. 13, 1872	123, 551
Sash-weight	J. B. Cornell	New York, N. Y	Dec. 13, 1859	26, 416
Sash-weight	S. Harris	Philadelphia, Pa	Aug. 27, 1867	68, 192
Sash-weight	C. S. Knight	Ware, Mass	July 9, 1872	128, 735
Sash-weight attachment	F. Brady, jr	Washington, Pa	May 9, 1871	114, 523
Sash weight, Window	J. T. Foster	Jersey City, N. J	Nov. 8, 1870	108, 994
Sash weight, Window	H. A. Harvey	New York, N. Y	May 21, 1867	64, 976
Sash weight, Window	H. Lanergan	Boston, Mass	Mar. 29, 1864	42, 090
Sash-weights, Molding	W. Ferguson and J. Anderson	New York, N. Y	Mar. 16, 1869	87, 832
Sash-weights, Molding	W. Ferguson and J. Anderson	New York, N. Y	Sept. 20, 1870	107, 468
Sash-weights, Molding	W. W. Pullis	Saint Louis, Mo	Apr. 5, 1870	101, 504
Sash-weights, Molding	S. Williamson	Cincinnati, Ohio	Feb. 12, 1867	61, 976
Sash, Window	A. G. Buzby	Philadelphia, Pa	May 16, 1871	114, 915
Sash, Window	D. H. Carpenter	Hartford, Conn	Sept. 24, 1872	131, 662
Sash, Window	E. P. Carter	China, N. Y	Jan. 8, 1861	31, 074
Sash, Window	J. C. Currier	Bradford, Vt	May 20, 1862	35, 302
Sash, Window	G. Dewey	Blooming Valley, Pa	Apr. 30, 1867	64, 288
Sash, Window	A. K. Eddowes	Philadelphia, Pa	Jan. 21, 1868	73, 586
Sash, Window	F. G. Ford	New York, N. Y	June 10, 1862	35, 513
Sash, Window	W. S. Ford	New York, N. Y	June 12, 1855	13, 032
Sash, Window	D. R. Gould	Chestertown, N. Y	June 18, 1867	65, 902
Sash, Window	H. Gross	Tiffin, Ohio	Aug. 25, 1868	81, 493
Sash, Window	J. Groves	New York, N. Y	Oct. 24, 1871	120, 267
Sash, Window	J. Ingham	Wyalusing, Pa	Jan. 29, 1834	....
Sash, Window	S. Kepner	Pottstown, Pa	July 20, 1869	92, 841
Sash, Window	J. Liness	Chicago, Ill	Mar. 17, 1868	75, 556
Sash, Window	W. H. McCoy and J. F. Muth	Wheeling and Grafton, Va	Apr. 24, 1860	27, 998
Sash, Window	W. L. McDowell	Philadelphia, Pa	May 13, 1873	138, 755
Sash, Window	H. L. Myers	Kingston, Ohio	Apr. 26, 1870	102, 303
Sash, Window	D. W. Noyes	Bennington, Vt	May 13, 1873	138, 921
Sash, Window	L. E. Payne	Yazoo City, Miss	May 8, 1855	12, 828
Sash, Window	M. R. Perkins, J. V. Bogert, and J. F. Lowell.	Portsmouth, N. H., New York, N. Y., and Boston, Mass.	Jan. 5, 1869	85, 611
Sash, Window	C. J. Schirer and T. W. Cross	Boston, Mass	Mar. 21, 1845	3, 963
Sash, Window	F. E. Sessions	Worcester, Mass	Aug. 19, 1856	15, 578
Sash, Window	S. Short	New London, Conn	July 29, 1851	8, 259
Sash, Window	R Thomas	Parkersburgh, W. Va	Sept. 17, 1867	69, 046
Sash, Window	T. Thrasher and H. B. Horton	Akron, Ohio	Nov. 10, 1857	18, 611
Sash, Window	H. Tupper	Bay City, Mich	Aug. 13, 1867	67, 820
Sash-work, Machine for laying out and striking	J. Bliss	Somerset, Conn	June 17, 1817	......
Satchel, &c	F. C. Schmidt	Newark, N. J	Aug. 8, 1871	117, 935
Satchel and carpet-bag lock	W. Roemer	Newark, N. J	Dec. 28, 1869	98, 299
Satchel-fastening	J. T. Connelly and B. Conlan	Newark, N. J	Feb. 13, 1872	123, 557
Satchel-fastening	P. P. Lynch	Newark, N. J	Jan. 16, 1872	122, 840
Satchel-lock	B. Steinmetz	Paris, France	Aug. 1, 1865	49, 207
Satchel, School	H. Wallis	Saint Louis, Mo	Jan. 28, 1873	135, 254
Satchel-staple	W. Roemer	Newark, N. J	Mar. 12, 1872	124, 449
Satchels, Device for fastening handles to	M. Schwerin	Newark, N. J	July 4, 1871	116, 634
Sauce-pan	H. F. David	Spava, Ill	Nov. 21, 1854	11, 961
Sauce-pan	F. Schifferle	Saint Louis, Mo	Sept. 27, 1870	107, 818
Sauce-pan handle	J. Kinzer	Pittsburgh, Pa	May 17, 1870	103, 055
Sauce, Pepper	E. McIlhenny	New Iberia, La	Sept. 27, 1870	107, 701
Saucer, dish, &c	J. Gibson, jr	Albany, N. Y	Aug. 8, 1871	117, 766
Sausage and other meats, Coverings for	M. W. Brown	New York, N. Y	Apr. 4, 1871	113, 396
Sausage-case, Device for cleaning	M. Hensy	Burlington, Ohio	June 22, 1869	91, 628
Sausage-composition	J. L. Chevalier	Newark, N. J	Oct. 15, 1867	69, 769
Sausage-cutter	S. Bayha and F. Rapp	Wheeling, Va	Apr. 8, 1833	....
Sausage-cutter	G. A. Coffman	Middlebrook, Va	Feb. 28, 1845	3, 935
Sausage-cutter	S. Fahrney	Washington County, Md	Dec. 9, 1828	....
Sausage-cutter	S. L. Hoar	Salisburgh, Pa	Feb. 1, 1833	....
Sausage-cutter	J. Knopp	Columbiana, Ohio	Dec. 30, 1873	146, 007
Sausage-cutter	G. Neff	Dauphin County, Pa	Mar. 19, 1811	....
Sausage-cutter	J. Peters	Hummelstown, Pa	Aug. 11, 1857	17, 980

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Sausage-cutter	J. Robinson	Lancaster County, Pa	Feb. 27, 1830	....
Sausage-cutter	J. Wagner	Brunswick Township, Pa	Mar. 19, 1833	....
Sausage cutting and stuffing machine	S. Fahrney	Boonsborough, Md	Feb. 1, 1831	....
Sausage-cutting machine	J. Braman	Baltimore, Md	Mar. 8, 1832	....
Sausage-cutting machine	C. Otis	Greene, Pa	Nov. 29, 1832	....
Sausage-filler	S. R. Atkins and J. R. Hitchcock.	Plantsville, Conn	Feb. 21, 1860	27, 196
Sausage-filler	J. Edson and W. G. Bell	Boston, Mass	Jan. 23, 1872	122, 941
Sausage-filler	M. Feuerstein	Williamsburgh, N. Y	Jan. 21, 1868	73, 591
Sausage-filler	J. G. Perry	South Kingston, R. I	July 6, 1858	20, 815
Sausage-filler	J. G. Perry	South Kingston, R. I	June 26, 1860	28, 900
Sausage-filler	J. G. Perry	South Kingston, R. I	Aug. 28, 1860	29, 814
Sausage-filler	J. G. Perry	South Kingston, R. I	Aug. 19, 1862	36, 232
Sausage-filler	J. G. Perry	South Kingston, R. I	Aug. 19, 1862	36, 233
Sausage-filler	J. G. Perry	South Kingston, R. I	June 14, 1864	43, 131
Sausage-filler	J. G. Perry	South Kingston, R. I	Jan. 3, 1865	45, 743
Sausage-filler	J. G. Perry	Kingston, R. I	Mar. 24, 1868	75, 965
Sausage-filler	J. G. Perry	Kingston, R. I	Mar. 24, 1868	75, 966
Sausage-filler	A. Shepard	Southington, Conn	May 22, 1860	28, 414
Sausage-filler	O. W. Stow	Plantsville, Conn	July 4, 1865	48, 798
Sausage-filling machine	J. G. Perry	South Kingston, R. I	Mar. 20, 1860	27, 565
Sausage-machine	J. Bills	Southington, Conn	Mar. 13, 1860	27, 422
Sausage-machine	J. Burns and J. Walter	Waynesburgh, Pa	Jan. 16, 1835	....
Sausage-machine	P. Fanestock and J. Monn, jr	Quincy, Pa	Mar. 11, 1835	....
Sausage-machine	R. V. Jones	Johnstown, Pa	Nov. 2, 1858	21, 965
Sausage-machine	A. and J. Keagy	Morrison Cove, Pa	June 15, 1835	....
Sausage-machine	T. Lockett	Warren County, Ga	May 8, 1849	6, 422
Sausage-machine	G. D. Mettetal	Pittsburgh, Pa	Aug. 29, 1839	1, 306
Sausage-machine	J. G. Perry	South Kingston, R. I	May 15, 1860	28, 298
Sausage-machine	J. H. Potts	Fayette, Mo	Oct. 12, 1842	2, 815
Sausage-machine	W. Sniff	Fultonham, Ohio	Dec. 1, 1857	18, 778
Sausage-machine	E. Wade	Elizabethtown, N. J	Jan. 26, 1829	....
Sausage-making machine	A. Glendening	Loudoun County, Va	Sept. 9, 1824	....
Sausage, Meat and vegetable	J. H. Zumstein	New York, N. Y	June 27, 1871	116, 389
Sausage-meat cutter	E. Clark	Hartford, Conn	Aug. 31, 1844	3, 723
Sausage-meat cutter	W. Pittenger	Rome, Ohio	Mar. 26, 1844	3, 509
Sausage-meat cutter	J. Segondy	Saint Louis, Mo	Aug. 14, 1866	57, 197
Sausage-meat, Cutting	J. Fahrney	Quincy, Pa	Jan. 23, 1834	....
Sausage-meat, Cutting	V. Glass	Funkstown, Md	Feb. 6, 1834	....
Sausage-meat, Cutting	A. Henkel	New Market, Va	Feb. 13, 1836	....
Sausage-meat, Cutting	D. S. Middlekauff	Hagerstown, Md	Jan. 23, 1834	....
Sausage-stuffer	T. W. Bailey	Lewiston, Pa	Mar. 30, 1852	8, 834
Sausage-stuffer	P. Bradford	New Haven, Conn	June 19, 1866	55, 760
Sausage-stuffer	A. L. Brouse and U. Weidman	Lake, Ohio	Sept. 21, 1869	95, 078
Sausage-stuffer	P. W. Brownback	Limerick Station, Pa	Sept. 16, 1873	142, 897
Sausage-stuffer	A. Crane	Altoona, Pa	Oct. 13, 1863	40, 245
Sausage-stuffer	H. Curtner	Anna, Ohio	July 6, 1869	92, 281
Sausage-stuffer	H. S. De Zeng	Geneva, N. Y	Mar. 1, 1859	23, 080
Sausage-stuffer	J. J. Flansburgh	Berne, N. Y	Oct. 19, 1869	95, 891
Sausage-stuffer	C. Forschner	New York, N. Y	Oct. 5, 1869	95, 454
Sausage-stuffer	C. Forschner	New York, N. Y	Oct. 10, 1871	119, 700
Sausage-stuffer	R. V. Jones	Johnstown, Pa	Jan. 11, 1859	22, 559
Sausage-stuffer	S. S. Jones	Leicester, N. Y	Nov. 28, 1848	5, 945
Sausage-stuffer	J. Kinzer	Pittsburgh, Pa	July 31, 1860	29, 385
Sausage-stuffer	C. Kramer	Allegheny, Pa	Apr. 3, 1860	27, 722
Sausage-stuffer	S. McNair	Hatborough, Pa	Nov. 26, 1850	7, 800
Sausage-stuffer	F. Mickels	Quincy, Ill	May 6, 1873	138, 674
Sausage-stuffer	J. Mickley and J. E. Hartman	Cashtown, Pa	Dec. 6, 1870	109, 831
Sausage-stuffer	P. Miles	New York, N. Y	Feb. 12, 1867	62, 052
Sausage-stuffer	P. Miles	New York, N. Y	Jan. 21, 1868	73, 453
Sausage-stuffer	A. Nittinger, jr	Philadelphia, Pa	Jan. 1, 1861	31, 030
Sausage-stuffer	T. Parker	Shelby, Ohio	Oct. 12, 1869	95, 830
Sausage-stuffer	J. G. Perry	Kingston, R. I	Sept. 13, 1859	25, 440
Sausage-stuffer	J. G. Perry	South Kingston, R. I	Apr. 10, 1860	27, 828
Sausage-stuffer	J. G. Perry	South Kingston, R. I	July 14, 1863	39, 244
Sausage-stuffer	S. R. Plumb	Southington, Conn	Apr. 10, 1860	27, 829
Sausage-stuffer	M. Riling	Altoona, Pa	Feb. 12, 1861	31, 403
Sausage-stuffer	J. P. Troxell	Hancock, Md	Jan. 14, 1868	73, 410
Sausage-stuffer	J. P. Troxell	Hancock, Md	June 2, 1868	78, 555
Sausage-stuffer	J. Wagner	Pittsburgh, Pa	Mar. 29, 1859	23, 416
Sausage-stuffer	J. J. Weeks	Buckram, N. Y	Sept. 19, 1854	11, 706
Sausage-stuffer	H. Whaler, H. Metz, and L. Heintzle.	Freeport, Ill	Oct. 4, 1870	108, 070
Sausage-stuffer and lard-press	A. Bishop	Smithville, Ohio	Aug. 9, 1870	106, 250
Sausage-stuffer and lard-press	N. S. Underkuffler	Norritonville, Pa	Sept. 22, 1868	82, 453
Sausage-stuffing, &c., apparatus	J. A. Moore	Bethlehem, Pa	Aug. 5, 1873	141, 451
Sausage-stuffing machine	S. Fahrney	Washington County, Md	Feb. 16, 1830	....
Saw	S. Anderson	West Burlington, N. Y	May 5, 1868	77, 439
Saw	E. Andrews	Williamsport, Pa	Dec. 29, 1868	85, 417
Saw	E. Andrews	Williamsport, Pa	Jan. 24, 1871	111, 164
Saw	J. E. Atwood	Trenton, N. J	Dec. 11, 1866	60, 321
Saw	J. E. Atwood	Trenton, N. J	Nov. 12, 1867	70, 680
Saw	J. G. Baker	Philadelphia, Pa	June 23, 1868	79, 185
Saw	S. Barry	Dayton, Ohio	June 23, 1868	79, 099
Saw	A. Bee	White Oak, W. Va	Jan. 1, 1867	60, 827
Saw	A. Boynton	Wright Township, Mich	Nov. 27, 1866	59, 951
Saw	E. M. Boynton	Grand Rapids, Mich	Jan. 14, 1868	73, 226
Saw	W. E. Brooke	Trenton, N. J	Sept. 20, 1870	107, 593
Saw	H. Broomell and A. W. Wilson	Christiana, Pa	May 3, 1870	102, 653
Saw	C. N. Brown	Providence, R. I	Dec. 10, 1872	133, 828
Saw	I. S. and C. N. Brown	Westerly, R. I	Oct. 24, 1865	50, 553
Saw	I. S. and C. N. Brown	Providence, R. I	Jan. 29, 1867	61, 513
Saw	I. S. and C. N. Brown	Providence, R. I	Mar. 12, 1867	62, 813
Saw	I. S. and C. N. Brown	Providence, R. I	Apr. 7, 1868	76, 395
Saw	I. S. and C. N. Brown	Providence, R. I	Nov. 2, 1869	96, 305
Saw	B. F. Burgess	Norvell, Mich	Sept. 22, 1868	82, 289
Saw	E. Clark	Rushville, Ill	Apr. 3, 1849	6, 258
Saw	W. Clemson	Middletown, N. Y	Aug. 14, 1866	57, 088

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Saw	W. Clemson	Middletown, N. Y	Mar. 24, 1868	75, 733
Saw	W. Clemson	Middletown, N. Y	Mar. 24, 1868	75, 734
Saw	W. Clemson	Middletown, N. Y	Mar. 16, 1869	87, 910
Saw	S. Cook	Alpena, Mich	July 22, 1873	141, 036
Saw	H. Cramer	Sonora, Cal	Oct. 19, 1869	95, 884
Saw	R. Cromelien	Washington, D. C	Mar. 28, 1865	46, 996
Saw	J. Crookes	Saint Louis, Mo	July 22, 1873	141, 122
Saw	P. Crosby	New York, N. Y	Apr. 10, 1860	27, 779
Saw	J. Davis	Buffalo, N. Y	Jan. 7, 1868	72, 983
Saw	A. Dawes	Waltham, Mass	June 27, 1865	48, 376
Saw	H. P. Dillingham	Norwalk, Ohio	Dec. 5, 1865	51, 385
Saw	C. Disston	Philadelphia, Pa	Mar. 19, 1867	63, 024
Saw	C. Disston	Philadelphia, Pa	Apr. 2, 1867	63, 486
Saw	C. Disston	Philadelphia, Pa	May 21, 1867	64, 953
Saw	C. Disston	Philadelphia, Pa	Aug. 11, 1868	80, 929
Saw	H. Disston	Philadelphia, Pa	Oct. 4, 1870	108, 011
Saw	H. Disston	Philadelphia, Pa	Feb. 28, 1871	112, 227
Saw	H. Disston and I. O. Hill	Philadelphia, Pa	Feb. 7, 1871	111, 619
Saw	E. S. Drake	Portland, Me	Apr. 11, 1865	47, 255
Saw	W. L. Earing	Oswego, N. Y	Nov. 7, 1871	120, 633
Saw	J. E. Emerson	San Francisco, Cal	Mar. 20, 1860	27, 537
Saw	J. E. Emerson	Trenton, N. J	July 3, 1866	56, 142
Saw	J. E. Emerson	Trenton, N. J	Aug. 28, 1866	57, 627
Saw	J. E. Emerson	Trenton, N. J	Feb. 12, 1867	62, 020
Saw	J. E. Emerson	Trenton, N. J	Mar. 26, 1867	63, 232
Saw	J. E. Emerson	Trenton, N. J	July 16, 1867	66, 692
Saw	J. E. Emerson	Trenton, N. J	Feb. 18, 1868	74, 521
Saw	J. E. Emerson	Trenton, N. J	May 3, 1870	102, 520
Saw	J. E. Emerson	Trenton, N. J	Mar. 14, 1871	112, 569
Saw	J. E. Emerson	Trenton, N. J	Apr. 25, 1871	113, 992
Saw	J. E. Emerson	Trenton, N. J	June 27, 1871	116, 421
Saw	J. E. Emerson	Trenton, N. J	Feb. 6, 1872	123, 466
Saw	J. E. Emerson and W. S. Winsor.	Trenton, N. J., and Jamestown, N. Y.	Feb. 18, 1868	74, 522
Saw	J. E. Emerson and W. S. Winsor.	Trenton, N. J., and Titusville, Pa.	Feb. 18, 1868	74, 523
Saw	W. L. Gage	Saint Louis, Mo	Jan. 17, 1871	110, 966
Saw	G. B. Goodnow	Detroit, Mich	Mar. 29, 1870	101, 258
Saw	G. B. Green	Staffordshire, England	Sept. 12, 1871	118, 800
Saw	J. Holden	Middletown, N. Y	Mar. 5, 1872	124, 268
Saw	E. Humphrey	Boston, Mass	Feb. 18, 1868	74, 541
Saw	J. Huther	Cleveland, Ohio	Jan. 2, 1872	122, 320
Saw	M. W. Geffords	Muskegan, Mich	Aug. 22, 1871	118, 370
Saw	N. Jenkins	New York, N. Y	Feb. 2, 1869	86, 407
Saw	M. Jincks	Wallace, N. Y	Mar. 19, 1872	124, 825
Saw	N. Johnson	Jasper, N. Y	Nov. 12, 1872	133, 036
Saw	H. Knowles	Washington, D. C	Aug. 27, 1850	7, 603
Saw	J. L. Kranser	Tylersburgh, Pa	Dec. 3, 1867	71, 625
Saw	H. A. Lanman	Columbus, Ohio	July 20, 1869	92, 846
Saw	J. Lippincott	Pittsburgh, Pa	Mar. 13, 1866	53, 157
Saw	J. Lippincott	Pittsburgh, Pa	June 5, 1866	55, 423
Saw	C. V. Littlepage	Austin, Tex	Apr. 26, 1870	102, 286
Saw	C. V. Littlepage	Austin, Tex	Dec. 19, 1871	121, 970
Saw	J. K. Lockwood	Alpena, Mich	Nov. 12, 1867	70, 728
Saw	V. Luppert and P. St. Pierre	Williamsport, Pa	Aug. 19, 1873	141, 939
Saw	T. P. Marshall	Trenton, N. J	May 7, 1872	126, 407
Saw	A. C. Martin and J. Woodrough	Hamilton, Ohio	Jan. 8, 1867	61, 014
Saw	E. Marx	New York, N. Y	Nov. 4, 1873	144, 341
Saw	G. Maulick	Trenton, N. J	Feb. 9, 1869	86, 850
Saw	G. Maulick	Trenton, N. J	July 12, 1870	105, 349
Saw	E. Miall, jr.	London, England	June 29, 1869	92, 080
Saw	W. P. Miller	San Francisco, Cal	Oct. 9, 1866	58, 664
Saw	W. P. Miller	New York, N. Y	Sept. 1, 1868	81, 811
Saw	W. P. Miller	New York, N. Y	Sept. 1, 1868	81, 812
Saw	W. F. Williman	Philadelphia, Pa	Oct. 4, 1870	108, 040
Saw	C. Mitzelfield	Detroit, Mich	Aug. 9, 1870	106, 187
Saw	G. B. Montgomery	Winslow, Ind	Aug. 25, 1868	81, 525
Saw	J. Neal	Trenton, N. J	June 11, 1867	65, 687
Saw	J. Phillips	Chicago, Ill	Sept 27, 1870	107, 808
Saw	D. Ricker	San Francisco, Cal	Oct. 17, 1871	119, 998
Saw	E. J. Robinson	Canton, Ohio	Sept. 25, 1866	58, 297
Saw	D. Sattler	Mifflin, Ohio	Aug. 25, 1868	81, 413
Saw	D. Sattler	Napoleon, Ohio	Nov. 14, 1871	121, 007
Saw	S. Scholfield	Providence, R. I	May 27, 1873	139, 426
Saw	S. W. Shailer	Deep River, Conn	July 12, 1870	105, 261
Saw	C. T. Shoemaker	Philadelphia, Pa	June 5, 1866	55, 375
Saw	J. Smith	Philadelphia, Pa	Oct. 4, 1870	107, 059
Saw	J. H. Smith and E. G. Peckham	Toledo, Ohio	Sept. 21, 1869	95, 052
Saw	N. W. Spaulding	Sacramento City, Cal	Sept. 10, 1861	33, 270
Saw	A. P. Sproul	Cherryfield, Me	Dec. 10, 1872	133, 810
Saw	W. R. Stephenson	Transfer Station, Pa	July 30, 1867	67, 369
Saw	L. Stewart	Washington, D. C	May 16, 1854	10, 932
Saw	D. Talbot	Ironton, Mo	Oct. 2, 1860	30, 265
Saw	P. Thompson	Pittsburgh, Pa	Aug. 8, 1871	117, 944
Saw	E. W. Tilton	Oshkosh, Wis	Apr. 2, 1867	63, 581
Saw	J. H. Tuttle	Seneca, N. Y	June 21, 1853	9, 807
Saw	W. G. Tuttle	Geneva, N. Y	Jan. 6, 1863	37, 312
Saw	W. G. Tuttle	Geneva, N. Y	Mar. 3, 1863	37, 835
Saw	J. P. Tyler	Penn Yan, N. Y	July 20, 1869	92, 909
Saw	G. Walker	Middletown, N. Y	Jan. 7, 1868	73, 210
Saw	J. L. Warren	Detroit, Mich	Dec. 8, 1868	84, 722
Saw	T. Welham	Philadelphia, Pa	Jan. 3, 1871	110, 705
Saw	J. Woodrough	Hamilton, Ohio	May 15, 1866	54, 827
Saw and grist mill	J. Eunals	New Market, Md	Apr. 10, 1810	....
Saw and grist mill	W. Prim	Lebanon, Pa	Oct. 6, 1830	....
Saw and grist mills, Working	J. D. De Lacy	New York, N. Y	Mar. 28, 1812	....
Saws and grooving tools, Arbor for	J. Rand	Boston, Mass	May 23, 1871	115, 103
Saws and planing machines, Feed-roller for	A. Parker	Cleveland, Ohio	Sept. 6, 1864	44, 110

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Invention.	Inventor.	Residence.	Date.	No.
Saw and saw-teeth	J. M. Johnston	Mayfield, Cal	May 25, 1869	90, 365
Saw-arbor	A. W. Wilson	Smithville, N. J	June 25, 1872	128, 268
Saw-attachment	J. Giglin	Boston, Mass	July 1, 1873	140, 495
Saw, Back	W. Clemson	Middletown, N. Y	Oct. 17, 1871	119, 967
Saw-backs, Machine for forming	C. Major	Brooklyn, N. Y	Aug. 26, 1873	142, 250
Saw, Band	C. A. Young	Providence, R. I	June 3, 1873	139, 644
Saw-band guide	W. P. Welch	Boston, Mass	June 16, 1868	78, 905
Saw, Belt	D. A. Cameron	Butler, Pa	Mar. 21, 1854	10, 678
Saw-belt	W. Carey	Poughkeepsie, N. Y	Feb. 17, 1836	....
Saw, Belt	G. Thompson	Nashua, N. H	Aug. 25, 1868	81, 434
Saw, Belt or band	A. Stewart	Baltimore, Md	July 5, 1817	....
Saw belt, Timber	B. Barker	Ellsworth, Me	Jan. 6, 1836	....
Saw bench, Circular	B. F. Dunklee	Concord, N. H	Mar. 21, 1871	112, 908
Saw bench, Circular	B. F. Dunklee	Concord, N. H	Mar. 18, 1873	136, 979
Saw-bench rest	E. Moore	Goffstown, N. H	Dec. 3, 1872	133, 661
Saw-blade-curving machine	B. S. Bishop	Menasha, Wis	Oct. 10, 1871	119, 813
Saw blades, Device for allowing for contraction or expansion of buck.	A. Pruyn	Albany, N. Y	Feb. 21, 1860	27, 240
Saw blades, Device for simultaneously hardening and straightening circular.	H. Disston	Philadelphia, Pa	Jan. 26, 1869	86, 286
Saw-blade-grinding machine	C. H. Colby	Brooklyn, N. Y	Nov. 12, 1872	132, 898
Saw-blade-grinding machine	H. Disston	Philadelphia, Pa	Aug. 21, 1860	29, 680
Saw-blade-grinding machine	C. J. Gardner	Philadelphia, Pa	Nov. 1, 1870	108, 775
Saw-blade-grinding machine, Hand	D. M. Mefford	Norwalk, Ohio	Aug. 2, 1870	106, 071
Saw-blades, Machine for glazing and polishing	J. Taylor and J. Prest	Sheffield, England	Aug. 6, 1872	130, 333
Saw-blades, Machine for grinding or polishing	W. Southwell	Kensington, Pa	May 4, 1852	8, 929
Saw-blades, Mode of manufacturing	H. Disston	Philadelphia, Pa	Apr. 2, 1867	63, 487
Saw-buck	E. H. Clark	Appleton, Wis	July 13, 1869	92, 514
Saw-buck	H. J. Dill	Cummington, Mass	Dec. 10, 1867	71, 998
Saw-buck	L. D. Howard	Saint Johnsbury, Vt	May 24, 1870	103, 335
Saw-buck	A. B. Sprout	Muncy, Pa	Dec. 27, 1870	110, 507
Saw-buck	H. Tyler	Ypsilanti, Mich	June 14, 1870	104, 230
Saw-buckle	C. W. Hubbard	Pittsburgh, Pa	July 29, 1873	141, 225
Saw buckle and frame	J Reilly	Baltimore, Md	Jan. 5, 1869	85, 694
Saw, Buhl	T. Leavitt	Everett, Mass	Dec. 13, 1870	110, 051
Saw-carriage, Device for	L. Black and M. Gaffney	Logan, Ohio	Nov. 17, 1868	84, 046
Saw, Chain	D. Kennedy	New York, N. Y	Feb. 4, 1868	74, 097
Saw, Circular	S. Bonnel	Chatham, N. J	Sept. 26, 1823	....
Saw, Circular	H. Disston	Philadelphia, Pa	Jan. 14, 1868	73, 238
Saw, Circular	J. E. Emerson	Trenton, N. J	Apr. 13, 1869	88, 949
Saw, Circular	J. F. Folmar	Philadelphia, Pa	Aug. 18, 1868	81, 267
Saw, Circular	J. Glove	Fayetteville, N. C	Oct. 16, 1839	1, 372
Saw, Circular	W. F. Hill	New York	July 11, 1818	....
Saw, Circular	L. Hitchcock	Springfield, Mass	June 29, 1833	....
Saw, Circular	W. Kendall, jr	Kennebeck, Me	May 18, 1826	....
Saw, Circular	J. Weible and H. S. Robinson	Detroit, Mich	Mar. 16, 1869	87, 891
Saw, Circular or cylindrical	L. R. Bump	Wareham, Mass	Aug. 29, 1828	....
Saw, Circular reacting	W. Avery	Cazenovia, N. Y	Dec. 8, 1826	....
Saw, Circular revolving	T. Howe	Spencer, Mass	Feb. 19, 1829	....
Saw, Circular stone	R. Deering, sr	Louisville, Ky	Oct. 3, 1854	11, 746
Saw-clamp	B. Blackstone	Warren, Ill	Sept. 14, 1869	94, 702
Saw-clamp	J. H. Dunbar	Plymouth, Conn	Sept. 11, 1860	29, 956
Saw-clamp	L. O. Fairbanks	Bridgeton, Me	Sept. 1, 1857	18, 069
Saw-clamp	I. Fonda	Laconia, N. H	Aug. 6, 1872	130, 206
Saw-clamp	T. L. Kenworthy	Collinsville, Ohio	July 2, 1872	128, 548
Saw-clamp	W. N. Kington	Bowensburgh, Ill	June 30, 1868	79, 478
Saw-clamp	P. Merrill	Port Sanilac, Mich	Apr. 12, 1870	101, 754
Saw-collar	F. A. Huntington	San Francisco, Cal	Dec. 26, 1871	122, 116
Saw, Compound rotary	A. Stewart	Boston, Mass	Sept. 29, 1825	....
Saw, Cotton-gin	T. C. Craven	Albany, N. Y	July 24, 1866	56, 684
Saw, Cross-cut	W. Clemson	Middletown, N. Y	Aug. 22, 1871	118, 198
Saw, Cross-cut	S. S. Disston	Philadelphia, Pa	Jan. 21, 1868	73, 516
Saw, Cross-cut	P. Longwell	Poplar, Ohio	July 26, 1870	105, 704
Saw, Cross-cut	A. M. Seabury	Johnstown, N. Y	Nov. 19, 1867	71, 227
Saw, Cross-cut circular	A. H. Foote	New London, Conn	July 14, 1830	....
Saw, Cross-cut steam	L. Kirk	Reading, Pa	Mar. 27, 1847	5, 040
Saw, Cylindrical	C. Murdock	Hartford, Conn	Dec. 15, 1868	85, 021
Saw, Drag	J. Bailey	Prairie Township, Ind	June 30, 1863	39, 028
Saw, Drag	W. A. Purves	Madrid, N. Y	Apr. 21, 1863	38, 264
Saws, Dressing	J. Batchelor	Camden, N. Y	Apr. 20, 1858	19, 978
Saw-dressing machine	J. Mallory	Penn Yan, N. Y	Sept. 13, 1870	107, 270
Saw-dressing machine	P. Maltby	Dayton, Ohio	Aug. 18, 1857	18, 017
Saw-dressing machine	A. B. Spencer	Newton, Ohio	June 6, 1846	4, 564
Saw, Driving the whip	J. Coppinger	Frederick, Ga	Mar. 19, 1810	....
Sawdust as it is formed, Removing	O. H. Burdett	Moorefield, Ohio	Mar. 26, 1861	31, 779
Sawdust-burner	E. S. Chase	Eau Claire, Wis	May 18, 1869	90, 239
Sawdust-burning furnace	F. Braun	Miesbach, Bavaria	May 17, 1864	42, 816
Sawdust-burning furnace	W. Duryea and W. Ennis	Glen Cove and Hudson, N. Y.	Apr. 30, 1867	64, 224
Sawdust for use in the arts, Preparing	F. H. Snyder	Jersey City, N. J	May 13, 1873	138, 821
Sawdust to furnaces, Apparatus for feeding	S. Kennedy	Hibbetts, Ohio	Aug. 28, 1860	29, 794
Saw, Endless	G. Kammerl	New York, N. Y	Dec. 1, 1863	40, 757
Saw-filer	A. M. Beardsley	White Pigeon, Mich	Oct. 13, 1857	18, 378
Saw-filer	A. H. Burdine	Chulahoma, Miss	Sept. 14, 1858	21, 483
Saw-filer	J. J. Near	Oneida, N. Y	Sept. 15, 1857	18, 224
Saw-filer	J. A. Raw	Bethlehem, Pa	Nov. 7, 1871	120, 773
Saw-filer	A. Robbins, A. Shewman, and L. R. Bigelow.	Watkins, N. Y	Feb. 24, 1857	16, 695
Saw-filer	J. Smith	Agawam, Mass	Oct. 13, 1857	18, 415
Saw-filer	J. S. Tripp	Danby, N. Y	Apr. 17, 1860	27, 937
Saw-filer	S. Wood	White Pine, Pa	May 24, 1859	24, 172
Saw-filing	A. M. Beardsley	Constantine, Mich	Feb. 3, 1857	16, 521
Saw-filing	P. Crosby	New York, N. Y	Jan. 17, 1860	26, 838
Saw-filing	J. Erdle	West Bloomfield, N. Y	Jan. 8, 1856	14, 055
Saw-filing	E. Stoker	Georgetown, D. C	Nov. 8, 1836	....
Saw filing and setting	H. R. Howlett	New York, N. Y	Oct. 21, 1856	15, 940
Saw filing and setting machine	H. D. Chance and D. Rishe	Llewellyn, Pa	Oct. 4, 1870	107, 872
Saw filing and setting machine	N. G. Ross	Mitchellville, Iowa	Sept. 9, 1873	142, 585

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Invention.	Inventor.	Residence.	Date.	No.
Saw filing and setting machine	A. C. Smith and J. K. Creighton	East Birmingham, Pa	Sept. 22, 1857	18,250
Saw-filing apparatus	N. J. Wemmer	Philadelphia, Pa	Mar. 18, 1841	2,011
Saw-filing apparatus, Flexible	F. E. Frey	Bucyrus, Ohio	Dec. 31, 1872	134,425
Saw-filing apparatus, Mill	J. Sheffield	Pultneyville, N. Y	June 6, 1854	11,033
Saw-filing clamp	C. Kending	Safe Harbor, Pa	Jan. 14, 1868	73,344
Saw-filing clamp	E. E. Van Etten	Mount Morris, N. Y	July 16, 1867	66,754
Saw-filing device	A. P. Durant	Athens, Ohio	Apr. 1, 1872	137,424
Saw-filing gage	J. E. Emerson	Trenton, N. J	Feb. 14, 1871	111,829
Saw-filing gage	O. Tyson	Otho, Iowa	Dec. 28, 1869	98,447
Saw, Filing gin	S. Yeatman	Providence, Ala	Oct. 16, 1860	30,442
Saw-filing instrument	G. S. Norris	Glen's Falls, N. Y	May 17, 1870	103,055
Saw-filing machine	J. Andt	Wheeling, Va	Feb. 24, 1845	3,927
Saw-filing machine	N. G. Barnum	Malaga, N. J	Oct. 4, 1864	44,504
Saw-filing machine	A. M. Beardsley	Elkhart, Ind	Apr. 19, 1859	23,655
Saw-filing machine	H. C. Bell	Emporia, Kans	Oct. 19, 1869	95,871
Saw-filing machine	W. B. Bizzell	La Grange, N. C	July 1, 1873	140,399
Saw-filing machine	G. Blythe	Chillicothe, Mo	Nov. 19, 1872	133,194
Saw-filing machine	G. Blythe	Chillicothe, Mo	Mar. 25, 1873	137,172
Saw-filing machine	C. P. Case	Troy, Pa	July 6, 1869	92,266
Saw-filing machine	C. P. Case	Troy, Pa	May 16, 1871	114,921
Saw-filing machine	T. M. Chapman	Old Town, Me	Sept. 2, 1851	8,330
Saw-filing machine	T. M. Chapman	Old Town, Me	Jan. 30, 1872	123,151
Saw-filing machine	T. M. Chapman	Old Town, Me	June 4, 1872	127,462
Saw-filing machine	H. Clendenen	Beverly, Ohio	July 21, 1868	80,141
Saw-filing machine	J. W. H. Doubler	Chicago, Ill	Oct. 30, 1866	59,193
Saw-filing machine	J. J. Engelman	Chillicothe, Mo	Nov. 11, 1873	144,522
Saw-filing machine	J. Erdle	West Bloomfield, N. Y	Nov. 24, 1857	18,684
Saw-filing machine	C. P. Traser and C. C. Hinchman	Allowaystown and Clarksborough, N. J.	May 15, 1866	54,709
Saw-filing machine	A. Hadley	Lynn, Mass	May 24, 1859	24,118
Saw-filing machine	P. Hatch	East Corinth, Vt	Nov. 26, 1867	71,302
Saw-filing machine	G. F. Hawley	Vienna, Ill	July 22, 1862	35,935
Saw-filing machine	C. F. Henis	Baltimore, Md	May 20, 1873	139,149
Saw-filing machine	H. How	Georgetown, Mass	July 20, 1858	20,945
Saw-filing machine	T. M. Hustin	Orange, Ind	Sept. 14, 1869	94,890
Saw-filing machine	D. H. Iseminger	McLean, Ill	Oct. 20, 1868	83,168
Saw-filing machine	T. E. King	West Andover, Ohio	June 7, 1859	24,309
Saw-filing machine	J. S. McClure	Salem City, N. J	Aug. 2, 1864	43,698
Saw-filing machine	P. McMahon	Scottsville, N. Y	May 1, 1860	28,094
Saw-filing machine	H. H. Mellen	Boonville, Ind	July 5, 1870	105,108
Saw-filing machine	C. J. Miller	Brattleborough, Vt	Apr. 13, 1869	88,893
Saw-filing machine	P. Norton and F. D. Cottle	Tisbury, Mass	Jan. 9, 1849	6,015
Saw-filing machine	S. P. Ochiltree and E. C. Johnson	Monmouth, Ill	May 9, 1865	47,683
Saw-filing machine	S. P. Ochiltree, W. S. Weir, jr., and N. P. Baymount.	Monmouth, Ill	Oct. 11, 1864	44,647
Saw-filing machine	W. W. Parsons	Stanstead, Canada	Dec. 30, 1873	146,017
Saw-filing machine	G. W. Rathbun	North Providence, R. I	Feb. 23, 1869	87,289
Saw-filing machine	J. H. Rector	Syracuse, N. Y	Apr. 24, 1866	54,206
Saw-filing machine	G. Robinson and H. O. Silver	Sodus, N. Y	May 18, 1869	90,125
Saw-filing machine	C. B. Rogers	Saybrook, Conn	Dec. 7, 1844	3,849
Saw-filing machine	H. Stone and J. S. Cole	Blackstone, Mass	Oct. 6, 1857	18,324
Saw-filing machine	R. H. Strong	Galesburgh, Ill	Apr. 12, 1870	101,938
Saw-filing machine	E. Stubbs	West Elkton, Ohio	Jan. 15, 1867	61,277
Saw-filing machine	A. Sweetland	Syracuse, N. Y	Sept. 18, 1866	58,151
Saw-filing machine	C. and B. D. Tabor	Ischua, N. Y	Nov. 9, 1858	22,040
Saw-filing machine	J. Temple	Terre Haute, Ind	Aug. 11, 1868	81,035
Saw-filing machine	A. Thompson	Ridgeway, Pa	May 18, 1869	90,207
Saw-filing machine	W. Tucker	Philadelphia, Pa	Jan. 8, 1869	90,972
Saw-filing machine	W. Tucker	Fiskedale, Mass	Aug. 16, 1870	106,431
Saw-filing machine	G. Z. Vanderslice and B. L. Churchill.	Philipsburgh, Pa	May 24, 1870	103,529
Saw-filing machine	J. H. Van Nortwick	Sturgis, Mich	Sept. 8, 1868	82,047
Saw-filing machine	S. K. Wilsey	Kirkwood, Riverside Post-Office, N. Y.	Jan. 23, 1872	122,929
Saw-filing machine, Circular	I. F. Brown	Columbus, Ga	Oct. 2, 1849	6,769
Saw-filing machine, Gin	L. M. Asbill	Ridge, S. C	Dec. 31, 1872	134,451
Saw-filing machine, Gin	J. W. Elliott	Prattville, Ala	May 3, 1859	23,835
Saw-filing machine, Hand	J. S. Harris	Poultney, Vt	June 21, 1838	801
Saw-filing machinery, Vise-jaw for	G. W. Putnam	Moreau, N. Y	May 27, 1851	8,113
Saw-filing vise	C. S. Bonney	Philadelphia, Pa	Feb. 18, 1873	135,883
Saw for concave or convex work, Method of adjusting circular.	J. M. Kern	Morgantown, Va	Apr. 15, 1856	14,705
Saw for cutting hedge for plashing	D. Gore	Carlinville, Ill	July 13, 1869	92,602
Saw for cutting off piles under water, Method of applying circular.	E. E. Cole	Boston, Mass	Sept. 14, 1844	3,737
Saw for cutting round tenons, &c., Rotary	C. Whitsitt	Connersville, Ind	Sept. 25, 1839	1,337
Saw for cutting timber	J. Ruthren	New York, N. Y	Nov. 30, 1835	
Saw for felling trees	W. Hunt	New York, N. Y	Jan. 6, 1836	
Saw for felling trees	S. Warner	Enfield, Mass	Mar. 22, 1864	42,034
Saw for making clapboards, Circular	R. Eastman and J. Jaquith	Brunswick, Mass	Mar. 16, 1820	
Saw for making stuffing for upholstering	G. W. Marble	Charlestown, N. H	July 19, 1870	105,469
Saw for preparing blocks for matches, Circular	J. Morgan	Portland, Me	June 27, 1839	1,203
Saw for sawing and smoothing boards	G. F. Woolston	Orangeburgh District, S. C.	Sept. 30, 1851	8,393
Saw for sawing boards or timber, Double-tooth	S. Dawley	Annesville, N. Y	Jan. 14, 1831	
Saw for sawing fellies	G. Steck	Hughesville, Pa	June 7, 1870	104,074
Saw for sawing fret-holes in fan-sticks	J. W. White	Weymouth, Mass	Oct. 3, 1871	119,678
Saw for sawing lumber, &c., Manner of applying circular.	J. K. Mayo	Orrington, Me	Mar. 20, 1844	3,494
Saw for sawing machinery, Self-setting or self-raking.	A. Arnold	Washington, D. C	June 24, 1856	15,163
Saw for sawing stone	A. Eames	Springfield, Mass	July 27, 1852	9,147
Saw for sawing stone	J. E. Emerson	Trenton, N. J	Apr. 25, 1871	113,993
Saw for sawing stone	J. E. Emerson	Trenton, N. J	June 4, 1872	127,585
Saw for sawing timber, Annular	R. Grant	Baltimore, Md	Oct. 8, 1838	973
Saw for sawing timber, wood, metal, marble, &c., Chain.	P. P. Quimby	Belfast, Me	June 3, 1834	
Saw for squaring and marking, Device attached to hand.	H. Smith	Camden, N. J	May 18, 1858	20,313

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Invention.	Inventor.	Residence.	Date.	No.
Saw for water-wheels	O. Willis	McDowell County, N. C	Sept. 20, 1853	10, 042
Saw-frame	E. Andrews	Williamsport, Pa	May 31, 1870	103, 700
Saw-frame	E. M. Boynton	West Newbury, Mass	July 5, 1870	105, 032
Saw-frame	B. Butler and C. F. Ramsay	Saint Johnsbury, Vt	Oct. 20, 1868	83, 131
Saw-frame	W. Clemson	Middletown, N. Y	June 27, 1871	116, 269
Saw-frame	W. Cotter	London, England	Oct. 15, 1872	132, 140
Saw-frame	J. H. Graham	Brooklyn, N. Y	Aug. 8, 1871	117, 769
Saw-frame	W. Hankin	Williamsburgh, N. Y	June 28, 1870	104, 847
Saw-frame	W. Hankin	Hawley, Pa	July 23, 1872	129, 731
Saw-frame	W. Hankin, sr	Hawley, Pa	Nov. 12, 1872	133, 027
Saw-frame	M. J. Jones	Fredonia, N. Y	Jan. 14, 1868	73, 341
Saw-frame	C. Majer	Williamsburgh, N. Y	Apr. 5, 1870	101, 481
Saw-frame	H. S. Miller	Philadelphia, Pa	May 30, 1871	115, 499
Saw-frame	H. S. Miller	Philadelphia, Pa	May 30, 1871	115, 500
Saw-frame	D. and E. Moore	Brooklyn, N. Y	Sept. 7, 1869	94, 500
Saw-frame	T. D. Roberts	Middletown, N. Y	Nov. 29, 1864	45, 274
Saw-frame	T. P. Rollins	Detroit, Mich	Feb. 8, 1870	99, 596
Saw-frame	W. H. Sullenberger	Harrisburgh, Pa	Oct. 17, 1871	120, 123
Saw-frame	S. P. Tift	Groton, Conn	May 28, 1872	127, 387
Saw-frame	A. Whitlock	Danbury, Conn	July 20, 1869	92, 767
Saw frame, Armed	S. Sperry	Nashville, Tenn	June 18, 1828	....
Saw-frame bolt	F. Washbourne	New York, N. Y	Dec. 31, 1867	72, 766
Saw frame, Buck	J. G. Baker	Philadelphia, Pa	Feb. 21, 1871	112, 007
Saw frame, Buck	W. Clemson	Middletown, N. Y	Oct. 10, 1871	119, 696
Saw frame, Buck	W. Clemson	Middletown, N. Y	Feb. 13, 1872	123, 556
Saw frame, Buck	W. Clemson	Middletown, N. Y	Feb. 4, 1873	135, 408
Saw frame, Buck	J. C. Dietrich	Rochester, N. Y	Apr. 4, 1871	113, 639
Saw frame, Buck	H. Disston	Philadelphia, Pa	Mar. 19, 1867	63, 025
Saw frame, Buck	L. Hancock	Alton, Ill	May 9, 1871	114, 554
Saw frame, Buck	W. Hankin	Hawley, Pa	Aug. 22, 1871	118, 233
Saw frame, Buck	W. Hankin	Williamsburgh, N. Y	Oct. 24, 1871	120, 157
Saw frame, Buck	H. M. Hayward	Boston, Mass	Aug. 27, 1867	68, 194
Saw frame, Buck	G. R. Kimball	Middletown, N. Y	Aug. 2, 1870	105, 949
Saw frame, Buck	W. Morehouse	Buffalo, N. Y	Mar. 23, 1865	47, 032
Saw frame, Buck	S. Oppenheimer	Peru, Ind	July 30, 1867	67, 343
Saw frame, Buck	T. D. Roberts	Middletown, N. Y	June 27, 1871	116, 490
Saw frame, Hand	C. Richardson	Newark, N. J	June 18, 1867	65, 947
Saw frame, Veneer	B. Crehore	Milton, Mass	May 22, 1828	....
Saw frame, Wood	E. W. Bates	Waterville, Me	Mar. 24, 1863	37, 999
Saw frame, Wood	J. Dillingham	Turner, Me	Apr. 15, 1862	34, 946
Saw frame, Wood	J. Havens	Auburn, N. Y	Jan. 28, 1868	73, 890
Saw frame, Wood	J. Haynes	Hollis, Me	Aug. 9, 1859	25, 015
Saw frame, Wood	W. H. Livingston	New York, N. Y	Sept. 18, 1860	30, 073
Saw frame, Wood	W. H. Livingston	New York, N. Y	Sept. 18, 1860	30, 076
Saw frame, Wood	W. Morehouse	Buffalo, N. Y	Jan. 24, 1865	46, 013
Saw frame, Wood	H. F. Shaw	West Roxbury, Mass	July 21, 1863	39, 330
Saw frames, Machine for manufacturing wood	T. Batchelder	Cadia, N. H	Oct. 3, 1854	11, 744
Saw-frames, Toggle-joint for	G. R. Kimball	Middletown, N. Y	Feb. 27, 1872	123, 998
Saw from the friction of the article sawed, Manner of relieving the collar of a circular.	M. Andrews and J. Sproat	Taunton, Mass	Dec. 31, 1839	1, 457
Saw-gage	W. Clemson	Middletown, N. Y	Mar. 29, 1870	101, 229
Saw-gage	A. E. Hoffmann	Philadelphia, Pa	Feb. 9, 1869	86, 837
Saw-gage	G. W. Kirby	Detroit, Mich	Nov. 4, 1873	144, 209
Saw-gage	W. P. Miller	New York, N. Y	Mar. 26, 1872	124, 906
Saw-gage	C. W. Tschurny	Fremont, Ohio	Sept. 21, 1869	95, 166
Saw-gage	O. Westgate	Riceville, Pa	Nov. 14, 1854	11, 953
Saw gage, Angular	E. G. Stanley and J. Goodrich	Fitchburgh, Mass	Oct. 2, 1866	58, 498
Saw, Gage-attachment for hand	A. F. Gray and J. C. Fincher	Thibodeaux, La	Aug. 7, 1855	13, 390
Saw, Gage-attachment for hand	M. Kennedy	Troy, N. Y	June 2, 1857	17, 432
Saw gage, Circular	A. O. and W. P. Horn	Addison, N. Y	Jan. 12, 1869	85, 740
Saw gage, Circular	W. P. Miller	New York, N. Y	Oct. 27, 1868	83, 524
Saw gage, Circular	C. J. Ulmer	East Cambridge, Mass	Apr. 29, 1873	138, 454
Saw gage, Circular	L. Wright	Newark, N. J	Dec. 18, 1860	30, 998
Saw gage, Gang	O. C. Meigs	Dubuque, Iowa	Nov. 29, 1870	109, 643
Saw gage, Gang	N. C. Moody	Manistee, Mich	Sept. 9, 1873	142, 643
Saw gaging and filing machine	E. Andrews	Elmira, N. Y	July 14, 1857	17, 774
Saw, Gaging-device attached to hand	W. McNiece	Conshohocken, Pa	Apr. 5, 1859	23, 531
Saw gang, Band	W. J. McLane	New York, N. Y	May 14, 1872	126, 727
Saw gang, Band	H. Sillman	Brooklyn, N. Y	Jan. 21, 1873	135, 164
Saw gang-gate, Marble	L. B. Clogston	West Rutland, Vt	Oct. 17, 1871	119, 968
Saw-gate	O. B. Judd	Rockton, N. Y	Oct. 1, 1850	7, 684
Saw gate, Guide for gang	R. A. Parsons	Clinton, Iowa	July 27, 1869	92, 996
Saw-gates, Device for preventing tremulous vibration of.	D. Reynolds	Ogden, Ind	Feb. 8, 1859	22, 892
Saw-gates, Machine for giving motion to	S. Herrick	Clermont County, Ohio	July 21, 1817	....
Saw-gates, Method of hanging and operating	W. M. Helton	Bloomington, Ind	Jan. 3, 1854	10, 366
Saw-gear	J. R. Williamson and S. Forsythe.	Seabeck, Wash	Oct. 21, 1862	36, 748
Saw-gin for ginning cotton	E. Carver	Bridgewater, Mass	Apr. 4, 1844	3, 521
Saw-gin for ginning cotton	J. H. Sherard	Livingston, Ala	Apr. 30, 1844	3, 568
Saw-gin for ginning cotton, Forming the ribs of	E. Carver	Bridgewater, Mass	June 12, 1838	777
Saw-grinder	E. E. W., and E. C. Strange	Taunton, Mass	Dec. 15, 1868	84, 916
Saw, Grinding	J. G. Baker	Washington, D. C	Feb. 2, 1864	41, 419
Saw, Grinding	A. S. Nippes	Lower Merion, Pa	Apr. 21, 1857	17, 110
Saw, Grinding and polishing	W. J. Lippincott	Pittsburgh, Pa	Oct. 24, 1865	50, 606
Saw grinding and polishing machine	S. S. Campbell	Montreal, Canada	Mar. 15, 1859	23, 228
Saw grinding and polishing machine	J. A. Hendrick	Providence, Pa	Feb. 1, 1859	22, 803
Saw grinding and polishing machine	C. W. Hubbard	Pittsburgh, Pa	Feb. 21, 1860	27, 221
Saw grinding and polishing machine	J. H. Weaver	Waynesville, Ohio	Nov. 1, 1864	44, 903
Saw, Grinding circular	J. Andrews	Elmira, N. Y	Oct. 2, 1860	30, 190
Saw, Grinding circular	W. Clemson	East Woburn, Mass	May 27, 1856	14, 950
Saw-grinding machine	E. L. Abbott, J. H. Harrison, and W. P. Welch.	Boston, Mass	May 4, 1869	89, 724
Saw-grinding machine	E. Andrews	Elmira, N. Y	Dec. 16, 1856	16, 223
Saw-grinding machine	E. Andrews	Elmira, N. Y	Mar. 10, 1857	16, 782
Saw-grinding machine	E. Andrews	Williamsport, Pa	Aug. 18, 1868	81, 126
Saw-grinding machine	E. C. Atkins	Indianapolis, Ind	Aug. 6, 1867	67, 480
Saw-grinding machine	J. G. Baker	Philadelphia, Pa	Mar. 14, 1865	46, 843

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Invention.	Inventor.	Residence.	Date.	No.
Saw-grinding machine	J. G. Baker	Philadelphia, Pa	Apr. 3, 1866	53, 725
Saw-grinding machine	J. G. Baker	Philadelphia, Pa	May 15, 1866	54, 813
Saw-grinding machine	J. G. Baker	Philadelphia, Pa	Oct. 27, 1868	83, 443
Saw-grinding machine	H. R. Burger	Richmond, Va	Sept. 11, 1860	29, 950
Saw-grinding machine	S. W. Clemens	Cleveland, Ohio	July 16, 1872	129, 003
Saw-grinding machine	W. Clemson	East Woburn, Mass	May 25, 1858	20, 330
Saw-grinding machine	W. Clemson	East Woburn, Mass	May 31, 1859	24, 196
Saw-grinding machine	J. Crookes	Saint Louis, Mo	Mar. 13, 1866	53, 120
Saw-grinding machine	J. D. Custer	Norristown, Pa	Oct. 2, 1860	30, 209
Saw-grinding machine	W. Dougherty	Philadalphia, Pa	June 19, 1860	28, 742
Saw-grinding machine	W. Dougherty	Philadelphia, Pa	Sept. 25, 1860	30, 130
Saw-grinding machine	T. Gamble	Richmond, Va	May 18, 1869	90, 163
Saw-grinding machine	C. W. Hubbard	Pittsburgh, Pa	July 14, 1868	79, 980
Saw-grinding machine	D. M. Mefford	Norwalk, Ohio	Apr. 8, 1873	137, 706
Saw-grinding machine	A. S. Nippes	Lower Merion, Pa	Sept. 23, 1856	15, 773
Saw-grinding machine	J. Richards	Columbus, Ohio	Feb. 12, 1867	61, 955
Saw-grinding machine	C. T. Shoemaker	Philadelphia, Pa	Feb. 20, 1872	123, 945
Saw-grinding machine	G. Walker	Port Jervis, N. Y	Feb. 1, 1859	22, 834
Saw-grinding machine	G. Walker	Middletown, N. Y	Feb. 22, 1870	100. 089
Saw-grinding machine	B. D. Whitney	Winchendon, Mass	Apr. 9, 1867	63, 773
Saw-grinding machine, Circular	T. Birch and A. Sowden	Covington, Ky., and Cincinnati, Ohio.	Nov. 12, 1867	70, 788
Saw-grinding machine, Circular	J. Pedder and G. Abel	Temperanceville, Pa	Aug. 29, 1871	118, 482
Saw-grinding machine, Circular	S. D. Tucker	New York, N. Y	Dec. 8, 1868	84, 721
Saw-grinding machine, Circular	S. D. Tucker	New York, N. Y	Apr. 27, 1869	89, 448
Saw-grinding machine, Hand	E. S. Piper	Rochester, N. Y	Jan. 24, 1871	111, 147
Saw guard, Circular	J. W. Clark	Iola, Kans	June 4, 1867	65, 347
Saw guard, Circular	O. A. Dean	Bethel, Vt	Aug. 12, 1873	141, 702
Saw guard, Circular	H. Gross	Tiffin, Ohio	May 27, 1856	14, 957
Saw guard, Circular	I. Holliday	South Brooklyn, N. Y	Aug. 17, 1869	93, 716
Saw guard, Circular	R. S. Janes	Bethel, Vt	Dec. 7, 1858	22, 252
Saw guard, Circular	J. Madden	Cleveland, Ohio	Dec. 24, 1867	72, 652
Saw guard, Circular	G. W. Shipman	Ischua, N. Y	Mar. 7, 1871	112, 504
Saw-guide	J. Arthur	Anoka, Minn	July 9, 1872	128, 776
Saw-guide	P. Pryibil	New York, N. Y	Jan. 7, 1873	134, 704
Saw-guide	C. Purdy	Bedford, Ohio	Dec. 21, 1869	98, 189
Saw-guide	A. Rittenhouse	Smithville, Ohio	May 2, 1871	114, 346
Saw-guide, Adjustable	F. H. Palmer	Whitefield, N. H	June 24, 1873	140, 157
Saw guide and jointer	G. A. Smith	Bleecker, N. Y	June 1, 1869	90, 791
Saw guide and support, Scroll	J. Richards	Columbus, Ohio	May 27, 1862	35, 390
Saw guard, Band	J. Lemman	Cincinnati, Ohio	June 16, 1868	78, 880
Saw guide, Circular	A. Middlebrook	Glasgow, Mo	Aug. 16, 1870	106, 387
Saw guide, Circular	T. Milner	Houston, Tex	June 9, 1868	78, 752
Saw guide, Circular	S. Taylor	Olamon, Me	June 17, 1873	140, 096
Saw guide, Circular	D. W. Washburn	Brewer, Me	Apr. 25, 1871	114, 235
Saw guide, Mill	J. Norcross	Eatonton, Ga	Aug. 4, 1843	3, 210
Saw guide, Scroll	S. Ide	Madina, N. Y	Nov. 28, 1871	121, 373
Saw guide, Scroll	A. L. Johnson	New York, N. Y	Aug. 25, 1868	81, 376
Saw guide, Scroll	G. Nidekorn and J. Dubernet	New York, N. Y	July 7, 1863	39, 164
Saw guide, Scroll	G. W. Staats	Newcastle, Pa	Sept. 15, 1868	82, 171
Saw, Guiding circular, &c	O. Rice	Cincinnati, Ohio	July 8, 1856	15, 304
Saw, Guiding cross-cut	R. Fanning	Clarksfield, Ohio	Aug. 29, 1854	11, 603
Saw guiding, Reciprocating	C. B. Hutchinson	Auburn, N. Y	Apr. 10, 1855	12, 679
Saw guiding, Reciprocating-scroll	J. C. Clime	Philadelphia, Pa	Apr. 6, 1858	19, 893
Saw-gummer	N. Barlow	New York, N. Y	Nov. 2, 1858	21, 935
Saw-gummer	H. Baughman	Dorn's Gold Mines, S. C	Feb. 18, 1873	135, 962
Saw-gummer	W. G. Blacklidge	Metamora, Ind	July 8, 1873	140. 672
Saw-gummer	R. S. Cramer and C. C. Blossom	Somerville, Ohio	Dec. 7, 1852	9, 440
Saw-gummer	L. A. Dole	Salem, Ohio	Sept. 9, 1856	15, 718
Saw-gummer	L. A. Dole	Salem, Ohio	Nov. 15, 1864	45, 117
Saw-gummer	A. B. Douglas	Clyde, Ohio	May 31, 1870	103, 726
Saw-gummer	J. E. Emerson	Trenton, N. J	July 16, 1867	66, 693
Saw-gummer	M. Ernsberger	Bremen, Ohio	Apr. 6, 1858	19, 835
Saw-gummer	A. K. Foster	Hallettsville, Tex	July 4, 1865	48, 546
Saw-gummer	L. Gibbs	Fremont, Ohio	Dec. 16, 1873	145, 643
Saw-gummer	D. Huffman	Luray, Va	Mar. 14, 1871	112, 711
Saw-gummer	J. Jack	Fayetteville, Ohio	Oct. 10, 1854	11, 788
Saw-gummer	N. Johnson	Jasper, N. Y	Mar. 23, 1869	88, 176
Saw-gummer	N. Johnson	Jasper, N. Y	Oct. 19, 1869	96, 008
Saw-gummer	O. B. Judd	Little Falls, N. Y	Apr. 28, 1857	17, 153
Saw-gummer	S. J. Lewis and W. Alston	Bordentown, N. J	Sept. 30, 1856	15, 811
Saw-gummer	G. Munday	Montezuma, Ohio	Mar. 1, 1870	100, 312
Saw-gummer	W. Newcomb	Johnsonville, N. Y	Feb. 23, 1869	87, 191
Saw-gummer	J. D. Otstot	Springfield, Ohio	Nov. 2, 1852	9, 368
Saw-gummer	W. Porter	Mexico, N. Y	July 19, 1859	24, 829
Saw-gummer	W. Reed	Allentown, Pa	Aug. 22, 1871	118, 274
Saw-gummer	P. Roche	Binghamton, N. Y	July 3, 1866	56, 100
Saw-gummer	A. R. Silver	Salem, Ohio	Dec. 1, 1868	84, 514
Saw-gummer	N. W. Spaulding	San Francisco, Cal	Dec. 24, 1861	34, 042
Saw-gummer	J. P. Spofford	Brocket's Bridge, N. Y	Jan. 10, 1854	10, 415
Saw-gummer	A. and P. Staffer	Salt Creek, Ind	June 15, 1869	91, 380
Saw-gummer	N. F. Stone	Chicago, Ill	Mar. 21, 1871	112, 979
Saw-gummer	N. F. Stone and W. C. Ward	Menard County, Ill	Feb. 2, 1858	19, 265
Saw-gummer	R. W. Thompson	Pittsburgh, Pa	Oct. 1, 1872	131, 831
Saw-gummer	W. Tucker	Fiskedale, Mass	Feb. 18, 1873	136, 110
Saw-gummer	A. H. Wellington	Woodstock, Vt	Dec. 10, 1861	33, 913
Saw-gummer	A. Wilson	Oshkosh, Wis	Aug. 13, 1872	130, 398
Saw-gummer	H. R. Wolfe	Consolation, Ky	Oct. 5, 1858	21, 729
Saw-gummer burrs, Device for grinding	C. E. Lewis	Northfield, Vt	Nov. 30, 1869	97, 415
Saw-gummer, Jointed bed-plate	H. O. Elmer	Mexico, N. Y	Sept. 28, 1852	9, 281
Saw-gumming	J. Draper	Harrisburgh, Ind	May 31, 1834	....
Saw gumming and jointing	H. O. Elmer	Mexico, N. Y	Feb. 2, 1858	19, 244
Saw gumming and sharpening device	J. B. Sweetland	Pontiac, Mich	Aug. 22, 1871	118, 403
Saw gumming and sharpening machine	E. W. Phelps	Elizabeth, N. J	June 21, 1870	104, 639
Saw-gumming device	D. J. Barnett	Albion, Ind	July 21, 1868	80, 115
Saw-gumming device	T. M. Chapman	Old Town, Me	Mar. 10, 1863	37, 853
Saw-gumming machine	H. Baughman	Dorn's Gold Mines, S. C	Dec. 9, 1873	145, 327
Saw-gumming machine	C. N. Brown	Providence, R. I	Feb. 11, 1873	135, 769

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Saw-gumming machine	C. P. Case and J. W. Meredith	Troy Township, Pa	Dec. 10, 1872	133, 830
Saw-gumming machine	T. S. Disston	Philadelphia, Pa	Jan. 14, 1868	73, 239
Saw-gumming machine	T. S. Disston	Philadelphia, Pa	Jan. 28, 1868	73, 880
Saw-gumming machine	J. E. Emerson	Trenton, N. J	Mar. 19, 1867	62, 948
Saw-gumming machine	S. P. Olney	Detroit, Mich	Aug. 26, 1873	142, 173
Saw-gumming machine	N. F. Stone	Athens, Ill	Nov. 25, 1862	37, 014
Saw-gumming machine	K. Weinberger	Milwaukee, Wis	Apr. 29, 1873	138, 354
Saw gumming or toothing machine	A. Bartholf	New York, N. Y	Mar. 31, 1868	76, 147
Saw gumming, Saw-mill	J. Case	Sodus, N. Y	Oct. 25, 1832	....
Saw, Hand	J. F. Allen	New York, N. Y	Dec. 24, 1867	72, 582
Saw, Hand	R. M. Breckenridge	Meriden, Conn	Jan. 23, 1866	52, 131
Saw, Hand	T. S. Disston	Philadelphia, Pa	Sept. 23, 1873	143, 128
Saw, Hand	A. W. Elmer	Springfield, Mass	July 16, 1867	66, 690
Saw, Hand	J. E. Emerson	Trenton, N J	Sept. 22, 1868	82, 299
Saw, Hand	J. Gorham	Bairdstown, Ga	May 13, 1856	14, 863
Saw, Hand	I. Jennings	New York	Apr. 17, 1809	....
Saw, Hand	O. H. Langdon	Homer, N. Y	May 30, 1871	115, 328
Saw, Hand	W. H. Livingston	Johnstown, N. Y	Apr. 23, 1867	64, 118
Saw, Hand	T. D. Roberts	Utica, N. Y	Apr. 28, 1863	38, 338
Saw, Hand	E. H. Roe	Jersey City, N. J	June 25, 1867	66, 174
Saw, Hand	D. Welch and W. W. Armington	Lowell, Mass	Oct. 24, 1865	50, 667
Saw, Hand wood	C. M. Day	Ann Arbor, Mich	Oct. 9, 1866	58, 616
Saw-handle	E. C. Atkins	Indianapolis, Ind	June 10, 1873	139, 756
Saw-handle	M. L. Ballard	Canton, Ohio	Apr. 1, 1873	137, 402
Saw-handle	W. Clemson	Middletown, N. Y	Aug. 9, 1870	106, 123
Saw-handle	W. Clemson	Middletown, N. Y	Feb. 11, 1873	135, 628
Saw-handle	W. Clemson	Middletown, N. Y	Dec. 16, 1873	145, 628
Saw-handle	J. C. Dietrich	Rochester, N. Y	Oct. 15, 1872	132, 258
Saw-handle	J. Flint	Rochester, N. Y	June 15, 1869	91, 428
Saw-handle	R. Gates	Parma, Ohio	Jan. 18, 1870	98, 863
Saw-handle	W. T. Harvey, jr	Philadelphia, Pa	Oct. 13, 1868	82, 943
Saw-handle	C. W. Hubbard	Pittsburgh, Pa	July 14, 1868	79, 979
Saw-handle	E. Morris, jr	New Haven, Conn	Jan. 1, 1867	60, 924
Saw-handle	W. W. Richardson	Chicago, Ill	Jan. 25, 1870	99, 110
Saw handle, Cross-cut	E. Andrews	Williamsport, Pa	June 14, 1870	104, 095
Saw handle, Cross-cut	E. M. Boynton	Grand Rapids, Mich	Feb. 15, 1870	99, 825
Saw handle, Cross-cut	W. Clemson	Middletown, N. Y	June 22, 1869	91, 716
Saw handle, Cross-cut	W. Clemson	Middletown, N. Y	July 30, 1872	130, 018
Saw handle, Cross-cut	W. Clemson	Middletown, N. Y	Sept. 3, 1872	130, 980
Saw handle, Cross-cut	T. S. Disston	Philadelphia, Pa	Jan. 3, 1871	110, 751
Saw handle, Cross-cut	A. C. Martin	Cincinnati, Ohio	Apr. 23, 1872	125, 899
Saw handle, Cross-cut	R. Reid	Philadelphia, Pa	May 9, 1871	114, 708
Saw handle, Cross-cut	E. W. Tilton	Oshkosh, Wis	Feb. 21, 1871	112, 094
Saw handle, Cross-cut	W. E. Travis	Ypsilanti, Mich	Apr. 15, 1873	137, 978
Saw-handles, Attaching	E. C. Atkins	Indianapolis, Ind	Dec. 18, 1860	30, 906
Saw-handles, Attaching	J. E. Emerson	Beaver Falls, Pa	July 9, 1872	128, 719
Saw-handles, Attaching	W. H. Gilliam	Seattle, Wash	Jan. 30, 1866	52, 285
Saw-handles, Attaching	N. Homes	Laona, N. Y	Oct. 16, 1866	58, 828
Saw-handles, Attaching	J. Ohlen	Columbus, Ohio	Aug. 18, 1868	81, 102
Saw-handles, Attaching	S. W. Valentine	Bristol, Conn	Feb. 14, 1871	111, 792
Saw-handles, Attaching	S. Wallwork	Philadelphia, Pa	Feb. 9, 1869	86, 889
Saw handles, Attaching cross-cut	D. Bearly	Newcastle, Ind	Oct. 31, 1865	50, 676
Saw handles, Attaching cross-cut	W. Clemson	Middletown, N. Y	July 16, 1872	129, 102
Saw handles, Attaching cross-cut	C. Diston	Philadelphia, Pa	Jan. 24, 1865	45, 980
Saw handles, Attaching cross-cut	S. Diston	Philadelphia, Pa	Nov. 17, 1868	84, 095
Saw handles, Attaching cross-cut	P. Donoghue	Loretto, Pa	June 9, 1868	78, 653
Saw handles, Attaching cross-cut	J. E. Emerson	Trenton, N. J	Dec. 3, 1867	71, 594
Saw handles, Attaching cross-cut	W. P. Miller	New York, N. Y	Mar. 31, 1868	76, 228
Saw handles, Attaching cross-cut	I. Pelham	Ithaca, N. Y	Sept. 25, 1860	30, 153
Saw-handles, Fastening	J. Neimeyer	Hamilton, Ohio	Feb. 28, 1860	27, 303
Saw-handles, Machine for making	E. S. Piper	Rochester, N. Y	Apr. 30, 1872	126, 232
Saw handles, Securing cross-cut	E. Andrews	Williamsport, Pa	Oct. 9, 1866	58, 569
Saw handles, Securing hand	H. Disston	Philadelphia, Pa	Mar. 6, 1860	27, 354
Saw heating and tempering furnace	J. Crookes	Saint Louis, Mo	Sept. 19, 1871	119, 078
Saw-holding clamp	J. Briggs	Stuyvesant, N. Y	July 24, 1866	56, 519
Saw-holding vise	H. S. Ross	Millville, Ohio	Jan. 11, 1870	98, 803
Saw, Horizontal or vertical radial	A. Stewart	Baltimore, Md	July 5, 1817	....
Saw-horse	J. B. Andrews	Bridgeton Centre, Me	July 27, 1869	93, 034
Saw-horse	C. H. Hardy	Bath, Me	Nov. 10, 1868	83, 958
Saw-horse	H. Lane	Windsor, Vt	Nov. 6, 1855	13, 755
Saw-horse	F. W. Mansfield	Fitchburgh, Mass	June 9, 1868	78, 750
Saw-horse	A. Stanley	New Britain, Conn	May 12, 1868	77, 779
Saw-horse, Folding	C. J. Fay	Hammonton, N. J	Mar. 15, 1864	41, 912
Saw-horse, Folding	E. Whittemore	North Paris, Me	Feb. 9, 1864	41, 560
Saw horse or buck	H. M. Haywood	Boston, Mass	Dec. 11, 1866	60, 371
Saw horse, Wood	G. Ives	Detroit, Mich	Mar. 5, 1861	31, 605
Saw horse, Wood	W. Tripp	Epsom, N. H	July 7, 1868	79, 614
Saw, Ice	J. Barker	Cambridge, Mass	Feb. 3, 1838	590
Saw, Ice	S. Scotton	Richmond, Ind	Dec. 2, 1856	16, 152
Saw in sawing fret-work, Vertical	E. and C. Boothe	Southbury, Conn	Apr. 22, 1826	....
Saw, Jack	A. Whitlock	Danbury, Conn	Aug. 16, 1870	106, 438
Saw, Jig	I. B. Arthur	Sidonsburgh, Pa	Mar. 23, 1869	88, 114
Saw, Jig	L. M. Berry and N. S. Graves	Boston, Mass	Jan. 5, 1864	41, 116
Saw, Jig	T. Blandin	Charlestown, Mass	June 21, 1870	104, 410
Saw, Jig	J. E. Chamberlin	Wilmington, Del	Oct. 27, 1868	83, 362
Saw, Jig	B. Merritt	Newton, Mass	Jan. 14, 1873	134, 760
Saw, Jig	C. D. Moore	Lawrence, Mass	Aug. 15, 1871	118, 041
Saw, Jig	A. F. Shaw	West Roxbury, Mass	Feb. 9, 1864	41, 539
Saw, Jig	M. E. Weller	Fort Plain, N. Y	Oct. 14, 1873	143, 650
Saw, Jig	A. H. Whitney	Essex, N. Y	Aug. 15, 1871	118, 087
Saw-jointer	W. R. Close	Bangor, Me	July 23, 1872	129, 788
Saw-jointer	S. D. Knight	Bryant, Ohio	Oct. 28, 1873	144, 111
Saw-jointer	S. McLean	Royalton, N. Y	Apr. 19, 1859	23, 744
Saw-jointer	J. Morton	Bangor, Me	Oct. 8, 1872	131, 964
Saw-jointer	W. B. Noyes	Dorchester, N. H	Mar. 3, 1868	75, 188
Saw jointer, Circular	J. R. Bullis	Bowling Green, Ohio	Jan. 26, 1869	86, 208
Saw jointer, Circular	E. H. Corbin	Winchester, Ind	Dec. 6, 1870	109, 806
Saw-knife	L. Graham	Paris, N. Y	July 29, 1834	....

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Invention.	Inventor.	Residence.	Date.	No.
Saw-leveling device, Hand	H. Disston and T. L. Morss	Philadelphia, Pa	May 25, 1858	20, 337
Saw-log dog	S. Sykes	Chippewa Falls, Wis	July 30, 1867	67, 375
Saw-logs, Device for turning	W. Richardson	Colfax, Cal	June 8, 1869	90, 959
Saw-logs, Setting	H. Merrell	Wheatland, N. Y	Sept. 3, 1846	4, 739
Saw logs, Setting	W. B. Palmer	Brookfield, N. Y	July 24, 1844	3, 678
Saw machine, Cross-cut	T. Cohoon	Cazenovia, N. Y	Apr. 11, 1808	....
Saw-machinery	J. Newton	Sweden, N. Y	Oct. 1, 1830	....
Saw, Meat	P. J. Hogan and A. Sowden	Cincinnati, Ohio	May 2, 1871	114, 509
Saw-mill	M. H. Abbot		Feb. 26, 1811	....
Saw-mill	S. F. Ames	Stanford, Ky	Dec. 5, 1865	51, 282
Saw-mill	L. Anderson	Painesville, Ohio	Oct. 15, 1867	69, 744
Saw-mill	E. Andrews	Williamsport, Pa	Nov. 28, 1865	51, 126
Saw-mill	E. Andrews	Williamsport, Pa	Mar. 29, 1870	101, 343
Saw-mill	E. Andrews	Williamsport, Pa	Mar. 21, 1871	112, 883
Saw-mill	E. G. Augustin	New York	July 17, 1835	....
Saw-mill	J. Baillie	Salem, Ohio	Feb. 11, 1868	74, 277
Saw-mill	E. Baldwin	Ashfield, Mass	Jan. 31, 1839	1, 074
Saw-mill	A. P. Barlow	Claremont, N. H	Dec. 17, 1867	72, 155
Saw-mill	A. P. Barlow	Claremont, N. H	Mar. 24, 1868	75, 834
Saw-mill	A. P. Barlow	Kalamazoo, Mich	Dec. 21, 1869	98, 013
Saw-mill	G. C. Barnes	Battle Creek, Mich	Oct. 8, 1861	33, 425
Saw-mill	S. Barnhart	Chillicothe, Ohio	Nov. 16, 1869	96, 868
Saw-mill	D. B. Bartholomew	Lancaster, Pa	Apr. 7, 1868	76, 384
Saw-mill	O. A. Bassett and E. Smith	Norwich, N. Y	Mar. 19, 1867	62, 995
Saw-mill	T. Beaudry	Levis, Canada	July 20, 1869	92, 777
Saw-mill	A. Bee	White Oak, W. Va	Apr. 16, 1867	63, 780
Saw-mill	J. L. Beers	McAllisterville, Pa	Jan. 8, 1867	61, 042
Saw-mill	A. Bencine	Milton, N. C	June 4, 1827	....
Saw-mill	B. Berndt	Williamsport, Pa	July 22, 1873	141, 028
Saw-mill	M. M. Bishop	Le Roy, N. Y	May 15, 1866	54, 673
Saw-mill	L. Bissell	Hartwick, N. Y	July 3, 1813	....
Saw-mill	G. W. Black	Montgomery County, Tenn.	Feb. 3, 1836	....
Saw-mill	V. Blaylock	Bellefontaine, Ohio	Mar. 24, 1832	....
Saw-mill	C. Bond	Richmond, Ind	Sept. 6, 1864	44, 069
Saw-mill	S. Bristow	Bedford, Ind	Jan. 1, 1867	60, 855
Saw-mill	W. C. Bronson	Erwin, N. Y	Apr. 6, 1852	8, 852
Saw-mill	G. Brown	Deerfield, N. Y	Apr. 7, 1829	....
Saw mill	J. Bruff	Somerset County, Md	Aug. 16, 1821	....
Saw-mill	W. Bryant	Nashville, Tenn	June 11, 1841	2, 127
Saw-mill	H. W. Bullard	Poughkeepsie, N. Y	May 7, 1872	126, 442
Saw-mill	W. B. Burns	East Saginaw, Mich	Apr. 15, 1862	34, 942
Saw-mill	I. Call	Woodstock, N. Y	Apr. 28, 1828	....
Saw-mill	M. P. Campbell	Barrington, N. Y	July 12, 1870	105, 302
Saw-mill	H. Caslow	York, Pa	July 28, 1863	39, 338
Saw-mill	T. E. Chandler	Indianapolis, Ind	Nov. 30, 1869	97, 357
Saw-mill	S. E. Chandler and J. C. Bartholomew.	Indianapolis, Ind	Jan. 4, 1870	98, 558
Saw-mill	L. Chapin	Walpole, N. H	June 1, 1832	....
Saw-mill	D. Cilley	Osceola Mills, Pa	Nov. 12, 1872	133, 015
Saw-mill	A. D. Clark	Hillsborough, Ohio	Dec. 3, 1872	133, 630
Saw-mill	G. H. Clemens	Cincinnati, Ohio	July 10, 1860	29, 058
Saw-mill	G. H. Clemens	United States Army	Jan. 3, 1865	45, 702
Saw-mill	G. H. Clemens	United States Army	Sept. 5, 1865	49, 721
Saw-mill	G. H. Clemens	Cincinnati, Ohio	Oct. 17, 1865	50, 455
Saw-mill	G. W. Coddington	Middletown, Ohio	Sept. 18, 1866	58, 068
Saw-mill	N. T. Coffin	Knightstown, Ind	Feb. 26, 1856	14, 305
Saw-mill	T. Cohoon	Washington, D. C	Jan. 5, 1816	....
Saw-mill	D. Collins	Genesee County, N. Y	Jan. 6, 1818	....
Saw-mill	W. S. Colwell	Pittsburgh, Pa	Dec. 17, 1872	133, 922
Saw-mill	W. S. Colwell and U. Baird	Pittsburgh and Allegheny, Pa.	Oct. 11, 1864	44, 606
Saw-mill	A. P. Conant	Smithland, Ky	Oct. 3, 1865	50, 223
Saw-mill	H. W. Conkling	Tecumseh, Mich	Aug. 10, 1869	93, 417
Saw-mill	N. and P. Crosby	Pomfret, N. Y	Mar. 27, 1835	....
Saw-mill	P. Crosby	New York, N. Y	Mar. 15, 1864	41, 908
Saw-mill	A. Cushing	Saint John, New Brunswick.	Jan. 6, 1863	37, 335
Saw-mill	J. Davis	Buffalo, N. Y	Dec. 18, 1866	60, 485
Saw-mill	J. Davis	Buffalo, N. Y	Dec. 18, 1866	60, 486
Saw-mill	W. Davis	Near Granville, Va	Apr. 2, 1850	7, 234
Saw-mill	J. C. Delavigne	New Orleans, La	July 30, 1867	67, 275
Saw-mill	M. Delude	Carrollton, Mich	Nov. 8, 1870	108, 981
Saw-mill	J. J. Deputy	Peoria, Ill	Apr. 12, 1864	42, 276
Saw-mill	J. J. Deputy	Peoria, Ill	Apr. 12, 1864	42, 277
Saw-mill	A. M. Dexter	Mattapoisett, Mass	July 4, 1871	116, 569
Saw-mill	J. A. Dorr	Williamsport, Pa	Oct. 4, 1870	107, 886
Saw-mill	J. R. Drake	Owego, N. Y	Apr. 27, 1832	....
Saw-mill	H. Dulheuer	....	Aug. 18, 1797	....
Saw-mill	R. Eaton	Concord, N. Y	Nov. 24, 1831	....
Saw-mill	D. A. Edie	Norrisville, Md	Dec. 19, 1871	122, 002
Saw-mill	M. J. Egery	Bangor, Me	May 2, 1871	114, 426
Saw-mill	A. R. Ehlers	Tannersville, Pa	June 2, 1868	78, 443
Saw-mill	A. J. Emlaw and E. Richmond	Grand Haven and Kelloggsville, Mich.	Nov. 22, 1859	26, 176
Saw-mill	U. Emmons	New York	Oct. 6, 1835	....
Saw-mill	O. Evans	Philadelphia, Pa	Apr. 15, 1811	....
Saw-mill	W. W. Ewing	Mahoning, Pa	Oct. 30, 1866	59, 200
Saw-mill	C. T. Fairchild	Salisbury, N. Y	June 28, 1864	43, 365
Saw-mill	J. Fecker	Cavetown, Md	July 18, 1865	48, 804
Saw-mill	W. M. Ferry, jr	Ferrysburgh, Mich	May 28, 1861	32, 418
Saw-mill	W. M. Ferry	Grand Haven, Mich	Apr. 18, 1871	113, 865
Saw-mill	W. M. Ferry	Grand Haven, Mich	Apr. 18, 1871	113, 866
Saw-mill	W. Fink	Williamsport, Pa	Oct. 31, 1848	5, 898
Saw-mill	G. Finnegan	Dublin, Ireland	Apr. 4, 1871	113, 412
Saw-mill	W. A. Flanders, J. B. Drake, and A. W. Fox.	Troy, N. Y., Williamsport, Pa., and Elmira, N. Y.	Oct. 13, 1857	18, 394
Saw-mill	C. M. Flint	Hancock, N. H	Dec. 27, 1870	110, 451
Saw-mill	D. and M. Fountain	Maryland	Apr. 5, 1817	....

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Saw-mill	P. G. Gardiner	New York, N. Y	Apr. 17, 1847	5, 070
Saw-mill	D. G. Gay	Eugene City, Oreg	Oct. 11, 1870	108, 250
Saw-mill	D. Gerrish	Boston, Mass	Apr. 11, 1836	....
Saw-mill	D. C. Gibbs	Fleetville, Pa	May 12, 1863	38, 477
Saw-mill	A. Gifford and R. L. Felts	Milroy, Ind	July 23, 1867	67, 038
Saw-mill	H. Gordon	Liberty Township, Pa	Feb. 28, 1833	....
Saw-mill	S. Goudy	Greensburgh, Ky	July 2, 1836	....
Saw-mill	W. Gowen	Wausau, Wis	Jan. 14, 1873	134, 795
Saw-mill	A. B. Graham	Lee, Mass	Sept. 28, 1827	....
Saw-mill	H. H. Gridley	Auburn, N. Y	Mar. 17, 1868	75, 678
Saw-mill	E. Guyer	Walcott, Vt	Mar. 18, 1862	34, 684
Saw-mill	A. Hackett	Pittsfield, Me	Sept. 29, 1868	82, 518
Saw-mill	D. W. Hall	Sparta, Ga	Nov. 27, 1832	....
Saw-mill	J. Hamilton	New York, N. Y	Aug. 2, 1864	43, 688
Saw-mill	P. Hamilton	Detroit, Mich	Dec. 5, 1865	51, 310
Saw-mill	S. W. Harris	Jamestown, N. Y	June 20, 1871	116, 161
Saw-mill	W. Hart	Cheshire, Conn	May 26, 1812	....
Saw-mill	S. Hedge	Brooklyn, N. Y	Apr. 22, 1851	8, 056
Saw-mill	L. Hedge and E. F. Johnson	New York	June 18, 1842	2, 677
Saw-mill	S. Hedge	New York, N. Y	May 8, 1849	6, 432
Saw-mill	J. Hendy	San Francisco, Cal	Apr. 17, 1866	53, 977
Saw-mill	W. Herrick	Northampton, Mass	Jan. 1, 1867	60, 725
Saw-mill	E. Highley	Beechy Mire, Ind	Apr. 26, 1870	102, 263
Saw-mill	M. Hillabold	Syracuse, Ind	Aug. 11, 1868	80, 824
Saw-mill	H. D. Hinternesch	Baltimore, Md	Mar. 31, 1868	76, 191
Saw-mill	J. R. Hoffman	Fort Wayne, Ind	July 6, 1869	92, 191
Saw-mill	J. R. Hoffman	Fort Wayne, Ind	Dec. 7, 1869	97, 640
Saw-mill	J. R. Hoffman	Fort Wayne, Ind	Dec. 20, 1870	110, 236
Saw-mill	J. A. Holford	Guionsville, Ind	Dec. 11, 1866	60, 374
Saw-mill	E. H. Hull	Warren, Ohio	Apr. 5, 1870	101, 465
Saw-mill	W. Inman	Middletown, N. Y	Dec. 24, 1867	72, 498
Saw-mill	E. P. Irons	Baltimore, Md	June 12, 1866	55, 497
Saw-mill	S. Jackson, jr	New York, N. Y	Nov. 20, 1866	59, 841
Saw-mill	J. H. Jenkins	Smithville, Mo	Jan. 31, 1860	27, 021
Saw-mill	P. and M. C. Jobson	Lockhaven, Pa	July 26, 1870	105, 804
Saw-mill	E. W. Johnson	Perth Amboy, N. J	Jan. 31, 1854	10, 473
Saw-mill	N. Johnson	Jasper, N. Y	May 21, 1872	127, 062
Saw-mill	O. B. Judd	Rockton, N. Y	Feb. 24, 1852	8, 757
Saw-mill	S. Kemper	Berger, Mo	May 9, 1871	114, 568
Saw-mill	J. E. Kenderdine	Lumberton, Pa	Mar. 10, 1843	2, 997
Saw-mill	N. Kirk	Clinton County, Ind	Nov. 19, 1833	....
Saw-mill	H. Knowles	New York, N. Y	Sept. 28, 1852	9, 284
Saw-mill	J. L. Knowlton	Bordentown, N. J	Feb. 23, 1864	41, 707
Saw-mill	J. L. Knowlton	Philadelphia, Pa	Apr. 7, 1868	76, 471
Saw-mill	J. Landers	Alleghany County, Md	Apr. 28, 1836	....
Saw-mill	D. Lane	Montpelier, Vt	Sept. 6, 1864	44, 100
Saw-mill	D. Lane	Montpelier, Vt	Nov. 20, 1866	59, 846
Saw-mill	F. Layaux	Monroe, La	June 27, 1871	116, 458
Saw-mill	C. E. Lewis	Bay City, Mich	May 16, 1871	114, 833
Saw-mill	M. Lewis	Chenango, N. Y	May 24, 1811	....
Saw-mill	J. B. Lowry and P. Eggleston	North East, Pa., and Mayville, N. Y.	June 11, 1841	2, 120
Saw-mill	M. A. McAfee	Talbotton, Ga	Sept. 24, 1872	131, 622
Saw-mill	G. L. McCahan	Baltimore, Md	July 13, 1869	92, 463
Saw-mill	A. McCreight	Tranquility, Ohio	Oct. 13, 1868	82, 970
Saw-mill	W. J. McGhee	Columbus, Ga	May 14, 1836	....
Saw-mill	H. E. Messimer	Williamsport, Pa	Feb. 13, 1872	123, 719
Saw-mill	E. Mobley	Fredericktown, Md	June 5, 1830	....
Saw-mill	C. D. Moore	Gilmanton, N. H	Mar. 29, 1870	101, 300
Saw-mill	E. Morgan	Clinton County, N. Y	Jan. 24, 1815	....
Saw-mill	R. S. Morison and B. B. Cushing	Frankfort, Me	Mar. 7, 1846	4, 395
Saw-mill	C. P. Morton	Philadelphia, Pa	Apr. 24, 1860	28, 005
Saw-mill	J. W. Moyer	Cherry Valley, N. Y	Apr. 21, 1868	77, 079
Saw-mill	T. B. Naylor	Jonesville, N. C	June 2, 1836	....
Saw-mill	I. H. Newton	Oakfield, Mich	Aug. 28, 1866	57, 556
Saw-mill	I. H. Newton	Oakfield, Mich	Mar. 19, 1867	63, 080
Saw-mill	W. B. Noyes	Dorchester, N. H	Feb. 26, 1867	62, 436
Saw-mill	J. C. and J. L. Nutt	Jefferson, Ohio	Dec. 20, 1864	45, 516
Saw-mill	C. D. Olmstead	Williamsport, Pa	Jan. 7, 1868	73, 031
Saw-mill	B. Overman	Greensborough, N. C	Dec. 11, 1827	....
Saw-mill	T. Payne	....	Dec. 2, 1799	....
Saw-mill	J. Pemberton	Jonesborough, Ind	Sept. 21, 1858	21, 588
Saw-mill	W. Renny	Milton, Fla	Nov. 23, 1869	97, 112
Saw-mill	A. Perrin	Paris, France	Dec. 14, 1869	97, 801
Saw-mill	A. Perrin	Paris, France	Mar. 22, 1870	101, 103
Saw-mill	S. Perry	Newport, N. Y	Sept. 12, 1865	49, 917
Saw-mill	A. S. Petticrew	Dayton, Ohio	Aug. 2, 1864	43, 740
Saw-mill	D. Philips	Georgetown, Pa	Mar. 12, 1841	2, 001
Saw-mill	D. C. Prescott	Marinette, Wis	Mar. 4, 1873	136, 541
Saw-mill	P. Pryibil	New York, N. Y	Aug. 28, 1866	57, 565
Saw-mill	C. Purdy	Bedford, Ohio	Aug. 30, 1870	106, 960
Saw-mill	J. Quinby	Boston, Mass	Apr. 25, 1806	....
Saw-mill	H. Quin	Huntington, N. J	Feb. 21, 1815	....
Saw-mill	A. Ralston	West Middletown, Pa	Aug. 30, 1853	9, 977
Saw-mill	A. Ransom	Clarence, N. Y	June 26, 1834	....
Saw-mill	I. Reed	Marshfield, Mass	Mar. 2, 1836	....
Saw-mill	J. J. Reinhart and W. Houghton	Loogootee, Ind	Apr. 16, 1872	125, 758
Saw-mill	M. Rich	Fairfield, Wis	May 13, 1851	8, 094
Saw-mill	J. Richards	Philadelphia, Pa	Apr. 25, 1871	114, 043
Saw-mill	B. F. and D. Richardson	Martinsburgh, Iowa	Nov. 8, 1870	109, 052
Saw-mill	H., jr., and L. Richardson	....	Apr. 28, 1802	....
Saw-mill	J. D. Richardson	Elizabethtown, Ky	May 31, 1864	42, 965
Saw-mill	S. H. Richardson	Bangor, Me	Jan. 16, 1872	122, 781
Saw-mill	J. E. and J. C. Rogers	Lewis Township, Pa	Oct. 8, 1864	44, 750
Saw-mill	J. M. Rees	Scott, Ohio	July 16, 1872	129, 495
Saw-mill	I. Ryan	Bridgewater, Mass	Nov. 24, 1825	....
Saw-mill	P. D. Shaw	Carson City, Nev	Nov. 1, 1864	44, 897
Saw-mill	G. H. Shearer	Bay City, Mich	Sept. 14, 1869	94, 919

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Saw-mill	W. Shumard; A. Lyon, and J. N. Robbins.	Goshen, Ohio	Apr. 9, 1867	63, 658
Saw-mill	J. Smith	Morris, N. J	Jan. 27, 1831	....
Saw-mill	J. H. Smith	Shell Mound, Miss	May 14, 1872	126, 843
Saw-mill	S. R. Smith and P. P. Lane	Cincinnati, Ohio	Dec. 7, 1858	22, 268
Saw-mill	W. D. Smith and A. J. Chase	Union, N. Y	Mar. 28, 1871	113, 217
Saw-mill	J. S. Snider	Lancaster, Ohio	Feb. 5, 1865	14, 206
Saw-mill	H. F. and G. S. Snyder	Williamsport, Pa	Apr. 5, 1870	101, 531
Saw-mill	H. F. Snyder and S. Weymouth	Williamsport, Pa	Feb. 13, 1872	123, 586
Saw-mill	C. Sommer	Chicago, Ill	Apr. 20, 1869	89, 178
Saw-mill	J. Spofford	Ipswich, Mass	June 23, 1807	....
Saw-mill	E. H. Stearns	Erie, Pa	Dec. 18, 1866	60, 648
Saw-mill	E. H. Stearns	Erie, Pa	June 13, 1871	115, 903
Saw-mill	F. T. Stevens	Columbia, N. H	Oct. 11, 1870	108, 201
Saw-mill	R. L. Stewart	Owossee, Mich	Mar. 19, 1867	63, 114
Saw-mill	J. Straub	Cincinnati, Ohio	Feb. 18, 1851	7, 943
Saw-mill	C. Strong	Hartford, Vt	Feb. 23, 1858	19, 454
Saw-mill	J. Stull	Philadelphia, Pa	Aug. 1, 1854	11, 444
Saw-mill	G. Sweney	Bucyrus, Ohio	Mar. 7, 1846	4, 393
Saw-mill	E. B. Talbott	Knoxville, Tenn	Apr. 27, 1869	89, 518
Saw-mill	S. Tarver	White County, Ark	Dec. 6, 1859	26, 381
Saw-mill	C. Taylor	McKeesport, Pa	Apr. 19, 1870	102, 065
Saw-mill	C. R. Tompkins and J. Wright	Rochester, N. Y	Apr. 21, 1868	77, 129
Saw-mill	J. Tracy	Brewer, Me	Nov. 28, 1865	51, 244
Saw-mill	J. Tracy	Brewer Village, Me	Mar. 26, 1867	63, 340
Saw-mill	C. Van Alstine	Manlius Centre, N. Y	Aug. 18, 1838	887
Saw-mill	L. Vance	Philadelphia, Pa	Mar. 8, 1864	41, 857
Saw-mill	L. B. Walker	Chicago, Ill	Apr. 14, 1868	76, 677
Saw-mill	C. Warren	Centre Groton, Conn	May 17, 1870	103, 261
Saw-mill	D. Washington	Peru, Mass	Feb. 25, 1836	....
Saw-mill	T. J. Wells	New York, N. Y	Apr. 11, 1846	4, 456
Saw-mill	S. Weymouth	Williamsport, Pa	Mar. 12, 1872	124, 524
Saw-mill	C. Whipple	Detroit, Mich	July 2, 1867	66, 271
Saw-mill	H. Whitcomb	Cornwall, Conn	Mar. 2, 1813	....
Saw-mill	T. White	Chester, S. C	Apr. 27, 1822	....
Saw-mill	E. Whiting	Ithaca, N. Y	Nov. 1, 1825	....
Saw-mill	H. D., E. N., and C. T. Wickes	East Saginaw, Mich	Oct. 29, 1872	132, 552
Saw-mill	W. M. Wilkin	Kalamazoo, Mich	Oct. 25, 1870	108, 665
Saw-mill	W. M. Wilkin	Detroit, Mich	June 7, 1870	103, 952
Saw-mill	S. Willard	New York, N. Y	June 30, 1836	....
Saw-mill	M. Woodard and J. E. Snyder	Missouri Valley, Iowa	Apr. 9, 1872	125, 647
Saw-mill	A. Wright	Canaan, N. Y	Mar. 7, 1810	....
Saw-mill	W. A. Wright and J. Molyneux	Bordentown, N. J	June 20, 1865	48, 349
Saw-mill	L. Tale	Utica, N. Y	Sept. 11, 1835	....
Saw-mill	W. Yaman	Connersville, Ind	Feb. 5, 1867	61, 912
Saw-mill and circular saw for cutting laths, &c	F. Shumard	Cincinnati, Ohio	Oct. 31, 1832	....
Saw mill, Band	H. Peterson	East Germantown, Ind	Apr. 23, 1872	125, 984
Saw-mill bed-plate	A. J. Croft	Williamsport, Pa	Nov. 22, 1870	109, 392
Saw-mill block	E. Rathburn	Conneaut, Ohio	Apr. 11, 1836	....
Saw-mill block	H. Wells	Florence, Mass	July 13, 1858	20, 910
Saw-mill block, Automatic	H. Wells	Florence, Mass	June 9, 1857	17, 537
Saw-mill blocks, Operating	B. Gardner	Florence, Mass	May 20, 1856	14, 909
Saw-mill blocks, Operating	A. B. Norris	Saint Louis, Mo	Dec. 27, 1859	26, 609
Saw-mill blocks, Operating	D. Russell	Drewersburgh, Ind	June 6, 1854	11, 036
Saw-mill carriage	J. Dane	West Derby, Vt	Apr. 22, 1845	4, 009
Saw-mill carriage	R. S. Eastham	Blanchester, Ohio	Sept. 11, 1855	13, 544
Saw-mill carriage	H. Gordon	Adams County, Pa	Apr. 8, 1835	....
Saw-mill carriage	D. Lane	Plainfield, Vt	Jan. 12, 1864	41, 224
Saw-mill carriage	T. H. Russell	Lebanon, N. H	Dec. 5, 1871	121, 664
Saw-mill carriage	G. Selden	Erie, Pa	Aug. 8, 1871	117, 936
Saw-mill carriage	B. F. and J. B. Smith	Webster, Mass	Apr. 22, 1873	138, 206
Saw-mill carriage for steadying the logs thereon	H. Stanton	Richfield, N. Y	July 16, 1844	3, 669
Saw-mill carriage head-block	J. Briggs	Schoharie, N. Y	July 9, 1814	....
Saw-mill carriages, Machinery for turning logs on	W. L. Oliver and A. J. Hancock	Indianapolis, Ind	June 2, 1863	38, 756
Saw-mill carriages, Mechanism for operating	A. S. T. Copeland	Pittsburgh, Pa	July 4, 1854	11, 210
Saw-mill carriages, Propelling	J. Michener	Chester Township, Ohio	Sept. 16, 1833	....
Saw-mill carriages, Self-setting apparatus for setting logs on.	B. Webb	Warren, N. Y	May 6, 1844	3, 577
Saw mill, Circular	D. H. Ball	Enterprise, Pa	Jan. 26, 1869	86, 271
Saw mill, Circular	E. W. Beckett	McConnellsville, Ohio	July 12, 1870	105, 294
Saw mill, Circular	M. Blackburn	Sullivan, Ind	June 17, 1873	140, 002
Saw mill, Circular	T. Blanchard	New York	Aug. 8, 1834	....
Saw mill, Circular	W. Bowman	Etna Green, Ind	Oct. 4, 1870	107, 861
Saw mill, Circular	V. H. Buschmann	Baltimore, Md	Feb. 2, 1869	86, 358
Saw mill, Circular	W. A. Campbell	Manistee, Mich	Jan. 21, 1873	134, 976
Saw mill, Circular	O. Child	Granville, Ill	Dec. 17, 1850	7, 832
Saw mill, Circular	M. W. Danks	Fulton, N. Y	Dec. 26, 1871	122, 161
Saw mill, Circular	P. Etches and J. D. Wilson	Muskegon, Mich	Jan. 2, 1872	122, 313
Saw mill, Circular	D. Evans	Eureka, Cal	Sept. 14, 1869	94, 878
Saw mill, Circular	W. M. Ferry	Grand Haven, Mich	Oct. 19, 1869	95, 889
Saw mill, Circular	W. C. Hart	Fulton, N. Y	July 16, 1872	129, 553
Saw mill, Circular	J. B. Jones	Houston, Tex	Oct. 22, 1872	132, 469
Saw mill, Circular	J. L. Knowlton	Philadelphia, Pa	Jan. 21, 1868	73, 536
Saw mill, Circular	D. Lane	Montpelier, Vt	Nov. 5, 1872	132, 841
Saw mill, Circular	P. P. Lane	Cincinnati, Ohio	Feb. 27, 1872	124, 142
Saw mill, Circular	J. R. Luce	Stevens Point, Wis	July 5, 1870	105, 100
Saw mill, Circular	J. Mills and A. G. Waldo	Milwaukee, Wis	Mar. 15, 1870	100, 784
Saw mill, Circular	P. Neeb	Buffalo, N. Y	Apr. 12, 1870	101, 760
Saw mill, Circular	N. G. Norcross	Lowell, Mass	Jan. 15, 1850	7, 027
Saw mill, Circular	J. Orm	Paducah, Ky	Sept. 1, 1868	81, 673
Saw mill, Circular	J. Orm	Paducah, Ky	July 13, 1869	92, 466
Saw mill, Circular	S. M. Palmer	Glen's Falls, N. Y	July 4, 1871	116, 625
Saw mill, Circular	F. Parker	Cato, N. Y	Sept. 7, 1869	94, 638
Saw mill, Circular	L. C. Pattee	Lebanon, N. H	Dec. 5, 1871	121, 466
Saw mill, Circular	J. Penman	Charlotte, N. C	Sept. 9, 1834	....
Saw mill, Circular	D. Philips	Pittsburgh, Pa	July 3, 1849	6, 580
Saw mill, Circular	F. J. Plummer	Worcester, Mass	July 7, 1868	79, 682
Saw mill, Circular	T. H. Russell	Northfield, Vt	Aug. 23, 1870	106, 729

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Saw mill, Circular	E. H. Stearns	Erie, Pa	Aug. 12, 1873	141, 672
Saw mill, Circular	A. Talbott	Richmond, Va	June 11, 1872	127, 936
Saw mill, Circular	J. Todd	Bellefonte, Pa	Dec. 31, 1867	72, 763
Saw mill, Circular	J. Trunick	Muscatine, Iowa	Dec. 21, 1869	98, 127
Saw mill, Circular	N. Zierden	Williamsport, Pa	May 14, 1872	126, 667
Saw-mill railway and propelling machinery, Circular	A. B. Reynolds	Cincinnati, Ohio	June 29, 1832	....
Saw-mill crank	A. Rodgers	Muskegon, Mich	Sept. 16, 1873	142, 816
Saw-mill crank	B. F. Snyder	Elmira, N. Y	Sept. 29, 1836	....
Saw-mill, crank-wheel, and gearing, and sawing lumber, Construction of.	I. Johnson, jr	Moriah, N. Y	May 7, 1829	....
Saw mill, Cross-cutting	R. Riker	Dexter, Me	Feb. 20, 1836	....
Saw-mill cross-head	T. Hermann	Grafton, Mich	July 23, 1867	66, 960
Saw mill, Curvilinear	D. Baker	Ipswich, Mass	Aug. 7, 1828	....
Saw mill, Curvilinear	T. Dugard	New York, N. Y	Nov. 20, 1849	6, 891
Saw mill, Descending	S. Belknap and S. Merrill	Georgetown, D. C	Feb. 15, 1811	....
Saw-mill dog	A. Andrews	Spencer, N. Y	Apr. 26, 1831	....
Saw-mill dog	A. M. Beard	Hillsborough, N. H	Feb. 26, 1867	62, 309
Saw-mill dog	P. Bennet	Hector, N. Y	Dec. 2, 1834	....
Saw-mill dog	P. Bennett	Ithaca, N. Y	Feb. 25, 1836	....
Saw mill dog	J. S. Brown	Seabrook, N. H	Aug. 23, 1870	106, 655
Saw-mill dog	D. Chase	Orange, Mass	May 21, 1872	126, 930
Saw-mill dog	J. Cobleigh	Morristown, Vt	Jan. 26, 1869	86, 136
Saw-mill dog	H. D. Donn	Oshkosh, Wis	Jan. 7, 1873	134, 653
Saw-mill dog	G. W. Hill	Waverly, N. Y	May 6, 1856	14, 844
Saw-mill dog	C. G. Jones	Orono, Me	Apr. 16, 1867	63, 799
Saw-mill dog	A. S. Rice and G. Tozer	Barton, N. Y	June 12, 1855	13, 043
Saw-mill dog	M. Rich	Ithaca, N. Y	Feb. 8, 1833	....
Saw-mill dog	M. Rich	Ithaca, N. Y	Feb. 25, 1836	....
Saw-mill dog	T. H. Russell	Taftsville, Vt	Aug. 29, 1854	11, 618
Saw-mill dog	E. H. Stearns	Erie, Pa	Nov. 25, 1873	145, 026
Saw-mill dog	J. A. Taplin	Fishkill, N. Y	Mar. 24, 1857	16, 888
Saw-mill dog	A. Thurber	Painted Post, N. Y	May 30, 1838	755
Saw-mill dog	J. Torrent	Muskegon, Mich	Nov. 25, 1873	145, 031
Saw-mill dog	R. Tower	Painesville, Ohio	Dec. 31, 1872	134, 405
Saw-mill dog	L. Yale	Newport, N. Y	July 29, 1841	2, 196
Saw-mill, Dog-block	B. F. Snyder	Painted Post, N. Y	Apr. 3, 1835	....
Saw-mill dog, Cast-iron	M. Rich	Ithaca, N. Y	Mar. 6, 1834	....
Saw-mill dog, Circular	J. Taber	Rockford, Ill	July 1, 1873	140, 442
Saw mill dog for setting logs	M. Rich	Ithaca, N. Y	Aug. 28, 1840	1, 751
Saw-mill-dog gage	M. Rich	Caroline, N. Y	Mar. 27, 1835	....
Saw-mill-dog iron	A. Andrews	Spencer, N. Y	Apr. 10, 1830	....
Saw-mill-dog iron	J. Pierce and J. and A. S. Whitley.	Candor, N. Y	Apr. 13, 1830	....
Saw-mill-dog iron	M. Rich	Candor, N. Y	Feb. 19, 1830	....
Saw-mill-dog iron	M. Rich	Candor, N. Y	Apr. 13, 1830	....
Saw-mill-dog lever	M. Rich	Caroline, N. Y	Mar. 25, 1835	....
Saw-mill dog, Self-setting	G. Henning	Ithaca, N. Y	Apr. 1, 1842	2, 531
Saw-mill dogs, Arranging and operating	D. A. Church	Friendship, N. Y	Apr. 16, 1841	2, 051
Saw-mill dogs, Device for gaging and setting	L. B. Fisher	Cold Water, Mich	Oct. 30, 1855	13, 715
Saw-mill dogs, Operating	G. W. Hearn	Princess Anne, Md	Mar. 10, 1857	16, 795
Saw-mill edger	G. Willett	Friendship, N. Y	Aug. 27, 1872	130, 887
Saw mill, Elevating	S. Brewster	Middlesex, N. J	Oct. 30, 1815	....
Saw mill-feed apparatus	P. Etches and J. D. Wilson	Muskegon, Mich	Apr. 23, 1872	126, 044
Saw-mill-feed device	J. E. Keyt	Louisville, Ky	May 11, 1869	90, 005
Saw-mill-feed motion	C. M. Day	New York, N. Y	June 12, 1855	13, 028
Saw-mill-feed motion	E. G. Dyer	Hamilton, Ohio	Aug. 21, 1860	29, 682
Saw-mill, Feeding	J. Kunsman	Reading, Pa	Apr. 10, 1847	5, 039
Saw-mill-feeding apparatus	N. Compton	New Garden, Ind	Oct. 21, 1846	4, 819
Saw-mill-feeding device	V. H. Buschmann	Baltimore, Md	Dec. 8, 1863	48, 816
Saw-mill, Feeding logs in	C. Ketcham	Penn Yan, N. Y	Dec. 9, 1851	8, 581
Saw-mill, Floating	J. C. Ely	New York	Oct. 21, 1829	....
Saw-mill for dye-woods	J. Elder	Hamilton, Mass	Feb. 16, 1816	....
Saw-mill for dye-woods	J. Elder	....	Apr. 11, 1816	....
Saw-mill for resawing boards, &c	P. Crosby	Fredonia, N. Y	Nov. 3, 1841	2, 321
Saw-mill for sawing boards, &c	I. Johnson, jr	Villenovia, N. Y	Feb. 8, 1826	....
Saw-mill for sawing timber with a direct or compound bevel.	J. Hamilton	New York, N. Y	Nov. 21, 1843	3, 342
Saw-mill for timber	J. Ambler	Philadelphia, Pa	Dec. 1, 1837	496
Saw-mill for timber	J. Secor	New York, N. Y	Apr. 28, 1838	717
Saw-mill gage	J. Behel and J. Nelson	Rockford, Ill	Feb. 12, 1867	61, 988
Saw-mill gage	W. A. Needham	Brimfield Mass	Sept. 9, 1835	....
Saw-mill-gage-setting machine	A. Blake	Lincoln, Ky	Nov. 27, 1807	....
Saw-mill-gate clasp	H. and N. Johnson	Erwin, N. Y	May 15, 1837	194
Saw-mill gate for curvilinear sawing	J. Hamilton	New York, N. Y	July 2, 1842	2, 704
Saw-mill, Guide for saw in	H. P. Dillingham	Norwalk, Ohio	Dec. 10, 1867	71, 859
Saw-mill, Hand	G. Harris	Philadelphia, Pa	May 3, 1810	....
Saw-mill head and tail block	E. A. Stearns	Cincinnati, Ohio	Apr. 15, 1856	14, 700
Saw-mill head and tail block	T. C. Theaker	Bucyrus, Ohio	Jan. 20, 1844	3, 411
Saw-mill head-block	T. C. Ball	Bellows Falls, Vt	Dec. 3, 1867	71, 678
Saw-mill head-block	H. Batchelder	Reading, Mass	Feb. 18, 1868	74, 486
Saw-mill head-block	D. C. Baughman	Fort Seneca, Ohio	Mar. 27, 1866	53, 393
Sam-mill head-block	C. B. Beall	Hamilton, Ohio	Dec. 14, 1869	97, 858
Saw-mill head-block	A. M. Beard	Hillsborough Bridge, N. H	Jan. 1, 1867	60, 847
Saw-mill head-block	A. M. Beard	Hillsborough, N. H	May 11, 1869	89, 969
Saw-mill head-block	C. H. Brookbank	Connersville, Ind	Nov. 19, 1867	70, 950
Saw-mill head-block	A. Buell	West Leyden, N. Y	Jan. 8, 1867	61, 046
Saw-mill head-block	G. Burket and S. M. Gaskill	Bluffton, Ohio	Mar. 19, 1867	63, 009
Saw-mill head-block	J. H. and G. Burket	Findlay and Bluffton, Ohio	Feb. 15, 1870	99, 858
Saw-mill head-block	J. Cain	Greenville, Pa	Sept. 3, 1872	131, 051
Saw-mill head-block	W. Carlton	Dunkirk, N. Y	Mar. 19, 1867	63, 015
Saw-mill head-block	J. A. Clark	Leavenworth, Ind	Apr. 19, 1870	102, 091
Saw-mill head-block	G. H. Clemens	United States Army	Feb. 13, 1866	52, 533
Saw-mill head-block	G. H. Clemens	Cincinnati, Ohio	Apr. 9, 1867	63, 614
Saw-mill head-block	P. M. Cummings	Muscatine, Iowa	June 4, 1872	127, 465
Saw-mill head-block	M. W. Danks	Fulton, N. Y	Oct. 13, 1863	40, 248
Saw-mill head-block	J. Duvall and J. Winterbottom	Kewaunee, Wis	May 17, 1870	103, 032
Saw-mill head-block	J. W. and W. Ebert	Zanesville, Ohio	Jan. 15, 1867	61, 178
Saw-mill head-block	C. R. Ely	Northfield, Vt	Dec. 17, 1867	72, 380

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Saw-mill head-block	J. S. Everitt and C. H. Avery	Oshkosh, Wis	Mar. 14, 1871	112, 572
Saw-mill head-block	C. M. Fairbanks	Lebanon, N. H	Nov. 5, 1872	132, 716
Saw-mill head-block	G. B. Getty	Bloomsburgh, Pa	June 17, 1873	140, 032
Saw-mill head-block	C. E. Grandy	Upton, Mass	June 7, 1870	103, 871
Saw-mill head-block	W. A. Greenleaf	Indianapolis, Ind	Sept. 12, 1871	118, 801
Saw-mill head-block	H. H. Gridley	Auburn, N. Y	May 1, 1866	54, 330
Saw-mill head-block	J. A. Griggs	Charleston, Ill	Aug. 7, 1866	56, 929
Saw-mill head-block	G. Hagenmeyer	Big River, Cal	Aug. 25, 1863	39, 647
Saw-mill head-block	J. W. Handshy	Zanesville, Ohio	Aug. 23, 1870	106, 578
Saw-mill head-block	S. W. Harris	Jamestown, N. Y	Oct. 31, 1871	120, 514
Saw-mill head-block	I. Hart	Clarksburgh, W. Va	Jan. 10, 1865	45, 824
Saw-mill head-block	J. F. Hartmann	Richmond, Ind	Sept. 28, 1869	95, 224
Saw-mill head-block	J. P. Haynes	Bedford, N. H	Dec. 3, 1867	71, 614
Saw-mill head-block	J. Hubbell	Zanesville, Ohio	June 25, 1867	66, 152
Saw-mill head-block	J. Hubbell	Zanesville, Ohio	Oct. 19, 1869	95, 904
Saw-mill head-block	W. S. Jenks	Port Huron, Mich	Nov. 7, 1871	120, 749
Saw-mill head-block	N. Johnson	Jasper, N. Y	Aug. 4, 1868	80, 632
Saw-mill head-block	J. King	Sapling Grove, Va	Feb. 20, 1841	1, 990
Saw-mill head-block	W. A. L. Kirk	Hamilton, Ohio	Feb. 28, 1871	112, 257
Saw-mill head-block	J. Kurtzeman	Lancaster, Ohio	July 12, 1859	24, 743
Saw-mill head-block	D. Lane	Montpelier, Vt	June 30, 1868	79, 484
Saw-mill head-block	D. Lane	Montpelier, Vt	July 28, 1868	80, 491
Saw-mill head-block	D. Lane	Montpelier, Vt	Dec. 26, 1871	122, 263
Saw-mill head-block	D. Lane	Montpelier, Vt	Mar. 11, 1873	136, 656
Saw-mill head-block	D. Lane	Montpelier, Vt	Mar. 11, 1873	136, 657
Saw-mill head-block	C. Leddel	Morristown, N. J	Dec. 17, 1872	133, 995
Saw-mill head-block	C. Leffingwell	Clarksburgh, Ohio	July 3, 1866	56, 145
Saw-mill head block	C. Leffingwell	Clarksburgh, Ohio	Aug. 17, 1869	93, 724
Saw-mill head-block	C. Leffingwell	Zanesville, Ohio	Nov. 30, 1869	97, 302
Saw-mill head-block	H. C. McEwen	Oakdale Station, Pa	Apr. 16, 1872	125, 750
Saw-mill head-block	B. F. McKinley	Cincinnati, Ohio	Dec. 11, 1866	60, 401
Saw-mill head-block	C. Meiners	Indianapolis, Ind	May 10, 1870	102, 847
Saw-mill head-block	D. Parkhurst	Saint Louis, Mo	Sept. 24, 1867	69, 122
Saw-mill head-block	D. Parkhurst	Saint Louis, Mo	June 22, 1869	91, 767
Saw-mill head-block	J. W. Parsons	Owenton, Ky	Aug. 14, 1866	57, 180
Saw-mill head-block	B. P. Perry	Richmond, Ind	Feb. 18, 1868	74, 588
Saw-mill head-block	G. A. Prescott and J. Barsaloux	Sandy Hill, N. Y	Nov. 25, 1873	144, 866
Saw-mill head-block	W. S. Reeder	Saint Louis, Mo	Mar. 3, 1868	75, 195
Saw-mill head-block	E. B. Requa	Jersey City, N. J	Nov. 3, 1863	40, 502
Saw-mill head-block	C. Roberts	Lake Village, N. H	Jan. 21, 1868	73, 465
Saw-mill head-block	G. W. Rodebaugh	Toledo, Ohio	May 15, 1866	54, 777
Saw-mill head-block	A. Rodgers	Muskegony, Mich	May 27, 1873	139, 264
Saw-mill head-block	G. Selden	Erie, Pa	Sept. 27, 1870	107, 728
Saw-mill head-block	G. Selden and O. C. Briggs	Erie, Pa	Feb. 1, 1870	99, 486
Saw-mill head-block	G. Selden and H. O. Kelsey	Erie, Pa	June 7, 1870	104, 068
Saw-mill head-block	A. Shearon	Richmond, Ind	May 17, 1870	103, 245
Saw-mill head-block	F. W. Shelley	Muncie, Ind	Oct. 4, 1870	107, 966
Saw-mill head-block	J. Sinclair	Richland Ohio	Feb. 28, 1832	....
Saw-mill head-block	S. R. Smith	Cincinnati, Ohio	July 28, 1868	80, 514
Saw-mill head-block	F. J. Staley	Indianapolis, Ind	Dec. 21, 1869	98, 215
Saw-mill head-block	F. J. Staley	Indianapolis, Ind	Dec. 13, 1870	110, 085
Saw-mill head-block	J. M. and S. F. Staunton	Manchester, N. H	May 1, 1866	54, 432
Saw-mill head-block	E. H. Stearns	Erie, Pa	Feb. 27, 1866	52, 904
Saw-mill head-block	A. W. and H. Thompson	Saginaw, Mich	Jan. 4, 1870	98, 528
Saw-mill head-block	W. B. Trunick	Louisville, Ky	Aug. 23, 1870	106, 744
Saw-mill head-block	J. W. Truax	Richford, Vt	July 5, 1859	24, 676
Saw-mill head-block	J. W. Truax	Richford, Vt	Aug. 28, 1860	29, 845
Saw-mill head-block	J. B. Wayne	Detroit, Mich	July 16, 1872	129, 378
Saw-mill head-block	W. Wellington	Hillsborough, N. H	May 10, 1870	102, 986
Saw-mill head-block	T. Whitmore	Dubuque, Iowa	Sept. 17, 1867	69, 055
Saw-mill head-block	G. Willett	Friendship, N. Y	Aug. 27, 1872	130, 886
Saw-mill head-block	G. Zschech	Indianapolis, Ind	Dec. 16, 1873	145, 712
Saw-mill head-block, Circular	S. R. Smith	Cincinnati, Ohio	Sept. 23, 1862	36, 552
Saw-mill-head-block indicator	G. Selden	Erie, Pa	Dec. 21, 1869	98, 111
Saw-mill head-block, Self-setting	N. Kimball	Pascoag, R. I	June 24, 1862	35, 690
Saw-mill head-blocks, Feed-motion for	E. G. Dyer	Hamilton, Ohio	Nov. 13, 1860	30, 623
Saw-mill head-blocks, Method of operating	J. M. Carlisle	Williamston Springs, S. C	June 10, 1856	15, 062
Saw-mill head-blocks, Method of operating	J. Kurtzeman	Lancaster, Ohio	June 10, 1856	15, 078
Saw-mill head-blocks, Ratchet-catch for	G. F. Page	Baltimore, Md	Jan. 3, 1854	10, 394
Saw-mill, Horse	S. R. Johnson	New York	Oct. 25, 1826	....
Saw-mill, Locomotive steam	W. G. Berry and J. T. Osborn	Cincinnati, Ohio	Nov. 26, 1826	....
Saw-mill, Log-carriage for	W. Lamb	Green Bay, Wis	Oct. 8, 1872	132, 086
Saw mill, Log-guide for circular	B. Fitts	Toledo, Ohio	Nov. 29, 1870	109, 605
Saw mill, Muley	L. Morrison and A. G. Harms	Allegheny City, Pa	May 4, 1869	89, 681
Saw mill, Muley	R. F. Wolcott	Claremont, N. H	Sept. 7, 1869	94, 683
Saw-mill noddle-iron	G. Hotchkiss	Windsor, N. Y	Mar. 12, 1850	7, 167
Saw mill or machine, Circular	G. Huling	Shaftsbury, Vt	Nov. 24, 1809	....
Saw-mill pitman, Adjustable stirrup for	S. C. Norcross	Dixfield, Me	Oct. 14, 1856	15, 893
Saw-mill, Portable	P. Crosby	Fredonia, N. Y	June 7, 1838	771
Saw-mill, Portable	P. Crosby	Fredonia, N. Y	Oct. 7, 1842	2, 804
Saw-mill, Portable	J. C. Mayo	Columbia, Va	July 29, 1841	2, 202
Saw-mill, Portable	T. T. Prosser	Oconomowock, Wis	Dec. 15, 1857	18, 860
Saw-mill, Portable	D. Russel	Tuscumbia, Ala	Oct. 27, 1835	....
Saw mill, Portable circular	G. Page	Baltimore, Md	July 16, 1841	2, 174
Saw-mill, Propelling	S. R. Morrison	Kinzua, Pa	Feb. 11, 1834	....
Saw mill, Reciprocal	W. Kendall, jr	Waterville, Me	Nov. 23, 1827	....
Saw mill, Reciprocating	W. Kendall	Waterville, Me	Dec. 31, 1827	....
Saw mill, Reciprocating	E. Rhodes	Philadelphia, Pa	July 12, 1870	105, 370
Saw-mill-refuse furnace	P. Walker	Muskegon, Mich	May 28, 1872	127, 393
Saw-mill saw	B. K. Barker	Johnsburgh, N. Y	Feb. 5, 1836	....
Saw-mill saw	L. Fisk	Schroon, N. Y	Aug. 17, 1835	....
Saw-mill saw, Hanging	E. H. and S. E. Parsons	Wilkesbarre, Pa	Apr. 30, 1850	7, 325
Saw mill, Scroll	B. Demming	Cleveland, Ohio	Apr. 14, 1868	76, 7[illegible]0
Saw mill, Scroll	W. H. Doane	Cincinnati, Ohio	May 12, 1863	38, 471
Saw mill, Scroll	J. Richards	Columbus, Ohio	May 27, 1862	35, 392
Saw mill, Scroll	E. Robbins	Worcester, Mass	Apr. 7, 1868	76, 349
Saw mill, Scroll	B. F. Williamson	Franklin County, Ohio	Dec. 3, 1867	71, 672
Saw-mill, Self-setting	F. Goodell and T. W. Harvey	New York	Nov. 3, 1841	2, 328

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Saw-mill, Self-setting	T. McCarty	Elmira, N. Y	Apr. 8, 1833	....
Saw-mill, Self-setting	H. Quin	New Alexandria, N. J	June 25, 1845	4, 091
Saw-mill, Self-tending	E. Moody and S. Morrill	Andover, N. H	Feb. 8, 1840	1, 486
Saw-mill sliding-crank	B. F. Snyder	Elmira, N. Y	Sept. 29, 1836	35
Saw-mill, Steam	R. McKean		Mar. 24, 1798	....
Saw-mill tail-block	J. Miller	Williamsport, Ohio	Jan. 20, 1844	3, 412
Saw-mill tail-block	C. D. Wright	East Haddam, Conn	Apr. 25, 1848	5, 537
Saw mill, Traveling cross-cut	S. K. Gore	Bradford County, Pa	May 4, 1812	....
Saw-mill wheel and machinery	J. Muir	Menallen, Pa	Sept. 26, 1835	....
Saw-mill which returns the log after each cut	M. Coates		Apr. 1, 1802	....
Saw-mill, Wind	J. Springer	Cape May, N. J	Dec. 27, 1815	....
Saw-mill with cylindrical saw	G. Hatheway	Rochester, Mass	Apr. 24, 1849	6, 380
Saw-mill without saw-gate	J. C. Yates	Columbia, Tenn	Apr. 21, 1838	700
Saw-mill, Animal-power	E. Owen	Prince George County, Va	Oct. 1, 1812	....
Saw-mills, Adjustable fender-posts for	H. Harpold	Racine, Ohio	June 30, 1857	17, 677
Saw-mills, Adjusting logs in	D. C. Baughman	Adams, Ohio	Jan. 12, 1864	41, 189
Saw-mills, Apparatus for setting logs in	T. C. Theaker	Mansfield, Ohio	May 21, 1850	7, 389
Saw-mills, Arranging saw-gates and fender-posts of	S. Darling, 2d	Groton, Vt	May 7, 1842	2, 615
Saw-mills, Automatic feed-motion for	H. C. Green	Clarence, Wis	Dec. 18, 1855	13, 944
Saw-mills by the motion of the carriage, Mode of setting the foot-block of.	D. V. Thomas	Richfield, N. Y	Sept. 17, 1842	2, 774
Saw-mills, Clamping and laterally feeding the log in	I. C. Past	Wilmington, Del	June 22, 1858	20, 660
Saw mills, Device for carrying lumber from the saw in circular.	J. H. Adams	Martinsville, Ind	June 15, 1869	91, 403
Saw-mills, Device for steadying logs in	R. Doty	Cardington, Ohio	Sept. 20, 1859	25, 492
Saw-mills, Device for turning logs in	B. L. Churchill and G. Z. Vanderslice.	Philipsburgh, Pa	Dec. 7, 1869	97, 662
Saw-mills, Drying saw-dust for steam	W. Avery	Syracuse, N. Y	Oct. 11, 1836	....
Saw-mills, Endless-chain carriage for	J. Murray	Baltimore, Md	Oct. 11, 1836	51
Saw-mills, Endless side-chain carriage for	J. Murray	Baltimore, Md	Oct. 11, 1836	....
Saw-mills for setting the log, Tail-block of	C. D. Wright	Colchester, Conn	Sept. 30, 1842	2, 791
Saw mills, Lubricating the slides of muley	A. P. Barlow	Claremont, N. H	Mar. 24, 1868	75, 835
Saw-mills, Machine for turning logs in	A. Rodgers	Muskegon, Mich	Mar. 19, 1872	124, 763
Saw-mills, Machine for turning logs in	E. Tarrant	Muskegon, Mich	Aug. 25, 1868	81, 432
Saw-mills, Machinery for handling logs in	E. H. Stearns	Erie, Pa	Nov. 28, 1871	121, 259
Saw-mills, Machinery for setting saw-logs and opening and shutting gate of.	N. P. Stearns	Linklaen, N. Y	Oct. 30, 1844	3, 868
Saw-mills, Operating double carriages in	F. B. Kendall	Bath, Me	Mar. 24, 1857	16, 876
Saw-mills, Operating head blocks of	L. B. Adams	Smithfield, Pa	May 27, 1856	14, 943
Saw-mills, Pitman-lubricator for	J. McKenzie	Saint Clair, Mich	June 24, 1873	140, 152
Saw mills, Roll for gang	H. F. Snyder	Williamsport, Pa	May 30, 1871	115, 538
Saw-mills, Running back the carriage of	S. Phelps	Mount Morris, N. Y	Sept. 18, 1835	....
Saw-mills, Save-all for	J. Hart and L. Fling	Cheshire, N. H	Jan. 18, 1812	....
Saw-mills, Self-acting head and tail block for	A. S. Walbridge	Burlington, Vt	Nov. 4, 1856	16, 034
Saw mills, Self-adjusting log-brace for	B. Cushwa	Clear Spring, Md	July 15, 1840	1, 691
Saw-mills, Self-setting head and tail block for	L. Heald	Bartlett, Ohio	June 3, 1843	3, 123
Saw-mills, Self-setting head and tail block for	J. J. Parker	Plymouth, Ohio	June 13, 1844	3, 629
Saw-mills, Setting head-blocks of	I. Robbins	Unityville, Pa	Apr. 28, 1857	17, 170
Saw-mills, Setting logs in	A. Brooks	Tolland, Conn	July 26, 1859	24, 850
Saw-mills, Setting logs in	D. Lane	Plainfield, Vt	July 9, 1861	32, 774
Saw-mills, Setting logs in	J. W. Robbins	Camden, Ohio	Apr. 15, 1851	8, 042
Saw-mills, Setting logs on the carriage of	J. Eaton and F. M. Stetson	Brookfield and Sangerfield, N. Y.	July 15, 1844	3, 667
Saw-mills, Setting logs on the carriage of	J. B. Squier	Liberty Township, Ohio	Oct. 9, 1844	3, 787
Saw-mills, Setting logs on the carriage of	B. Webb	Warren, N. Y	Apr. 1, 1845	3, 983
Saw-mills, Slab and siding holder for	J. Bassaloux and G. A. Prescott	Sandy Hill, N. Y	Feb. 4, 1873	135, 508
Saw mills, Slide-block for muley	A. P. Barlow	Kalamazoo, Mich	June 15, 1869	91, 200
Saw-mills, Sustaining logs in	J. Rohrer	Rohrersville, Md	May 29, 1841	2, 114
Saw-mills, Turning logs in	G. Willett	Richburgh, N. Y	Aug. 18, 1868	81, 316
Saw-mills without a carriage, Mode of controlling and guiding logs in.	C. B. Normand	Havre, France	Nov. 14, 1854	11, 944
Saw-pitman	H. C. Ellinwood	Garretsville, Ohio	Nov. 21, 1865	51, 029
Saw, Planing	W. S. Winsor	Port Orford, Oreg	Nov. 5, 1861	33, 673
Saw-plate-tempering machine	A. J. Rockafellow	Saint Louis, Mo	Nov. 26, 1867	71, 330
Saw-plates and setting teeth therein, Mode of constructing.	L. Stewart	Washington, D. C	Mar. 6, 1855	12, 493
Saw-plates and similar articles of steel, Apparatus for tempering.	G. Mercer and J. Hinton	Saint Louis, Mo	Apr. 28, 1868	77, 396
Saw-plates, Hardening	J. Dodge	Waterford, N. Y	Apr. 16, 1861	32, 102
Saw-plates, Method of attaching teeth to	P. B. Tyler	Springfield, Mass	Jan. 29, 1856	14, 172
Saw-plates, Mode of making	J. Cloud	Chester, Pa	Sept. 8, 1824	....
Saw, Reciprocating	C. Germann	Camden, Mich	Aug. 21, 1860	29, 688
Saw, Reciprocating	R. H. Osgood	Columbus, Ohio	Aug. 23, 1859	25, 214
Saw, Reciprocating mill	S. Tarver	Jackson, Ark	Oct. 20, 1857	18, 474
Saw, Rotary	R. S. Thomas	Rockingham, N. C	July 1, 1836	....
Saw, Round	Z. Cox		Mar. 14, 1794	....
Saw, Scroll	J. Atkinson	Burlington, N. J	Nov. 4, 1873	144, 181
Saw, Scroll	J. Atkinson and W. H. Kimball	Burlington, N. J	Sept. 17, 1872	131, 323
Saw, Scroll	G. L. Baar	Indianapolis, Ind	Nov. 19, 1861	33, 732
Saw, Scroll	C. M. Baxter	Lebanon, N. H	Sept. 29, 1868	82, 585
Saw, Scroll	H. L. Beach	New York, N. Y	Dec. 2, 1873	145, 084
Saw, Scroll	A. Beckman	New York, N. Y	Sept. 8, 1863	39, 790
Saw, Scroll	H. Bickford	Cincinnati, Ohio	Feb. 25, 1873	136, 207
Saw, Scroll	B. J. Camp	Marion, Ohio	Feb. 18, 1868	74, 497
Saw, Scroll	A. D. Campbell	Newark, N. J	Nov. 21, 1865	51, 105
Saw, Scroll	T. L. Cornell and S. Whitlock	Derby, Conn	Aug. 15, 1871	117, 987
Saw, Scroll	W. H. Doane	Cincinnati, Ohio	Jan. 24, 1865	45, 981
Saw, Scroll	W. H. Doane	Cincinnati, Ohio	Jan. 7, 1873	134, 650
Saw, Scroll	W. H. Doane and W. H. Dobson	Cincinnati, Ohio	Jan. 21, 1873	135, 099
Saw, Scroll	W. Dobson	Medina, N. Y	Sept. 29, 1868	82, 501
Saw, Scroll	W. H. Dobson	Rochester, N. Y	Jan. 31, 1871	111, 328
Saw, Scroll	W. Gardner	Clarksville Post-Office, N. J	Mar. 28, 1871	113, 042
Saw, Scroll	A. Giraudat	New York, N. Y	July 8, 1862	35, 817
Saw, Scroll	T. S. Greenman and C. A. Fenner.	Mystic Bridge and Mystic River, Conn.	Feb. 13, 1872	123, 561
Saw, Scroll	N. B. Hadley	Providence, R. I	Aug. 9, 1870	106, 153
Saw, Scroll	F. H. Hardenbergh	Hawley, Pa	Jan. 14, 1873	134, 882
Saw, Scroll	S. Harrington	Baltimore, Md	Dec. 5, 1865	51, 312

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Saw, Scroll	I. Hird	Cincinnati, Ohio	Oct. 3, 1871	119, 517
Saw, Scroll	H. H. Humphrey and H. Bickford.	Cincinnati, Ohio	May 23, 1871	115, 210
Saw, Scroll	R. McChesney	Birmingham, Conn	Apr. 12, 1870	101, 897
Saw, Scroll	R. McChesney	Birmingham, Conn	Nov. 1, 1870	108, 921
Saw, Scroll	L. Miller	Baltimore, Md	Apr. 18, 1871	113, 907
Saw, Scroll	G. M. Nickason	Ellenville, N. Y	Mar. 8, 1870	100, 551
Saw, Scroll	M. G. Ogden	Cincinnati, Ohio	July 5, 1870	105, 120
Saw, Scroll	I. R. Ritter	Reading, Pa	Oct. 24, 1871	120, 326
Saw, Scroll	J. W. Rowlingson	Binghamton, N. Y	July 22, 1873	141, 080
Saw, Scroll	A. M. Schilling	Chicago, Ill	Nov. 8, 1870	109, 660
Saw, Scroll	H. B. Smith	Smithville, N. J	Apr. 22, 1873	138, 103
Saw, Scroll	W. A. Sweet	Syracuse, N. Y	Jan. 7, 1862	34, 078
Saw, Scroll	E. A. Walker	Minneapolis, Minn	May 27, 1873	139, 284
Saw, Scroll	B. D. Wallace	Boston, Mass	Aug. 29, 1871	118, 498
Saw, Scroll	J. B. Wright	Jersey City, N. J	Dec. 30, 1873	146, 118
Saw-set	D. Agnew	Vincennes, Ind	Dec. 14, 1869	97, 852
Saw-set	H. Aiken	Dracut, Mass	May 24, 1830	....
Saw-set	H. Aiken	Middlesex, Mass	June 12, 1835	....
Saw-set	W. A. Alexander	Mobile, Ala	Jan. 22, 1867	61, 377
Saw-set	W. Avery	Salisbury Centre, N. Y	Sept. 9, 1856	15, 679
Saw-set	A. G. Bachelder	Lowell, Mass	May 18, 1852	8, 953
Saw-set	F. Bates	Niles, Mich	May 26, 1868	78, 357
Saw-set	J. Beach	Freeport, Pa	Nov. 22, 1859	26, 155
Saw-set	J. Beach and D. Culver	Hartford, Conn	Sept. 20, 1839	1, 331
Saw-set	J. Begbie	Philadelphia, Pa	Apr. 15, 1873	137, 756
Saw-set	A. and W. Boynton	Brooklyn, N. Y	Apr. 1, 1873	137, 410
Saw-set	W. J. Boynton	Battle Creek, Mich	Nov. 25, 1873	144, 947
Saw-set	J. N. Briggs	South Adams, Mass	Dec. 2, 1873	145, 087
Saw-set	J. F. Brodhead	Rondout, N. Y	Mar. 31, 1868	76, 046
Saw-set	L. Brooks	Great Falls, N. H	June 17, 1856	15, 119
Saw-set	L. Brooks	Great Falls, N. H	Mar. 29, 1859	23, 434
Saw-set	J. Buser	Philadelphia, Pa	Apr. 11, 1865	47, 187
Saw-set	T. C. Bush	New London, Conn	Dec. 18, 1855	13, 938
Saw-set	B. N. Butcher	Philadelphia, Pa	May 21, 1867	64, 835
Saw-set	A. Call	Springfield, Mass	Apr. 30, 1861	32, 179
Saw-set	S. H. Calligan	Forest City, Me	July 16, 1872	129, 456
Saw-set	A. L. Carrier	Washington, D. C	May 15, 1860	28, 252
Saw-set	A. Casey	New York, N. Y	Sept. 16, 1856	15, 731
Saw-set	B. S. Castle	Johnstown, Ohio	Sept. 30, 1873	143, 272
Saw-set	R. G. Chase	Alexandria, Va	Feb. 13, 1866	52, 638
Saw-set	E. Y. Clark	New York, N. Y	Apr. 19, 1870	101, 982
Saw-set	E. Y. Clark	New York, N. Y	Oct. 24, 1871	120, 243
Saw-set	J. Clarridge	Pancoastburgh, Ohio	Dec. 18, 1866	60, 619
Saw-set	W. Clemson	Middletown, N. Y	Aug. 21, 1860	29, 670
Saw-set	H. Clendenen	Washington County, Ohio	June 1, 1869	90, 638
Saw-set	J. Collar	Plantation No. 33, Me	Oct. 8, 1872	131, 938
Saw-set	T. Connolly	New York, N. Y	Jan. 1, 1867	60, 697
Saw-set	R. F. Cook	West Potsdam, N. Y	Dec. 23, 1873	145, 724
Saw-set	C. Deyhle	Hartford, Conn	Sept. 29, 1868	82, 500
Saw-set	J. T. Dickey	Farmington, Ill	June 7, 1870	103, 851
Saw-set	J. E. Emerson	Trenton, N. J	June 4, 1867	65, 358
Saw-set	J. E. Emerson	Beaver Falls, Pa	July 9, 1872	128, 718
Saw-set	J. Erdle	West Bloomfield, N. Y	June 23, 1857	17, 620
Saw-set	J. G. Ernst	York, Pa	Feb. 5, 1856	14, 188
Saw-set	I. Estell	Saint Louis, Mich	July 14, 1868	79, 964
Saw-set	A. R. Fenner	Cold Brook, N. Y	Sept. 27, 1864	44, 411
Saw-set	A. R. Fenner	Cold Brook, N. Y	Oct. 17, 1865	50, 463
Saw-set	A. R. Fenner	Cold Brook, N. Y	Dec. 7, 1869	97, 491
Saw-set	D. P. Foster	Shelburne Falls, Mass	Aug. 13, 1861	33, 063
Saw-set	J. Garman	Ebensburgh, Pa	June 11, 1872	127, 758
Saw-set	J. M. Geer	Holden, Mass	July 9, 1867	66, 484
Saw-set	B. Kilpatrick	Lowell, Mass	June 3, 1856	15, 007
Saw-set	W. E. Goodenough	Newark, N. J	Oct. 6, 1868	82, 825
Saw-set	C. E. Grandy	Stafford Springs, Conn	Apr. 8, 1873	137, 607
Saw-set	T. E. Grimes	Fremont, Ohio	Oct. 7, 1873	143, 447
Saw-set	J. Hanford, jr	Detroit, Mich	Nov. 15, 1864	45, 037
Saw-set	A. Harper and J. Würflein	Waverly Heights, Pa	Mar. 12, 1872	124, 489
Saw-set	H. A. Harris	Center, Tex	Feb. 15, 1870	99, 889
Saw-set	H. A. Harris	Center, Tex	Jan. 3, 1871	110, 6[illegible]0
Saw-set	H. C. Hart	Unionville, Conn	Oct. 28, 1873	144, 092
Saw-set	C. Herrmann	Evansville, Ind	May 15, 1869	90, 538
Saw-set	W. Hinds	Otsego, N. Y	Aug. 12, 1833	....
Saw-set	E. S. Holkins	Painesville, Ohio	Apr. 8, 1851	8, 026
Saw-set	J. A. Hopkins	Oxford, N. Y	May 8, 1866	54, 547
Saw-set	A. Johnson	West Newton, Ind	Oct. 6, 1868	82, 845
Saw-set	D. Jones	Allegheny, Pa	Oct. 3, 1871	119, 462
Saw-set	J. M. Jones	Commerce, Mo	Dec. 14, 1869	97, 927
Saw-set	O. B. Judd	Little Falls, N. Y	Apr. 21, 1857	17, 099
Saw-set	C. Keller	Schenectady, N. Y	July 30, 1872	129, 892
Saw-set	M. T. Klahre	Bloody Run, Pa	June 21, 1870	104, 467
Saw-set	H. R. Lavey	Bristol, Wis	Apr. 9, 1872	125, 465
Saw-set	S. F. Leach	Bangor, Me	Jan. 19, 1869	85, 941
Saw-set	O. Lesley	Attica, Ind	Mar. 14, 1854	10, 625
Saw-set	J. W. Leslie	Cairo, Ill	Mar. 4, 1873	136, 440
Saw-set	J. Lyle	Newark, N. Y	Aug. 7, 1866	57, 044
Saw-set	A. Lyon, W. Shumard, and J. N. Robbins.	Goshen, Ohio	May 12, 1868	77, 825
Saw-set	J. Madden	Youngstown, Ohio	Jan. 6, 1863	37, 297
Saw-set	E. Marshall	Brooklyn, N. Y	Dec. 22, 1857	18, 921
Saw-set	E. Marshall	New York, N. Y	Dec. 7, 1858	22, 256
Saw-set	G. W. May	Baldwinsville, Mass	June 20, 1871	116, 074
Saw-set	J. Merrill	Freeport, Me	Mar. 16, 1869	87, 956
Saw-set	J. Morton	Philadelphia, Pa	May 24, 1870	103, 359
Saw-set	W. Nash	New Britain, Conn	Feb. 5, 1867	61, 855
Saw-set	W. Nash	New Britain, Conn	Aug. 27, 1872	130, 936
Saw-set	O. Newton	Watertown, N. Y	July 21, 1863	39, 323
Saw-set	J. Noepel and B. Assman	Newark, N. J	Apr. 21, 1868	77, 082

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Saw-set	F. A. Parker	Shaftsbury, Vt	July 10, 1855	13,227
Saw-set	R. E. Poindexter	Anderson, Ind	July 16, 1872	129,249
Saw-set	H. K. Porter	Boston, Mass	June 7, 1870	103,925
Saw-set	R. Rawson	Warsaw, Ind	Oct. 15, 1861	33,492
Saw-set	J. J. Reichard	Canton, Ill	Nov. 3, 1868	83,792
Saw-set	J. J. Reichard	Canton, Ill	Nov. 3, 1868	83,793
Saw-set	W. O. Rust	Great Falls, N. H	Aug. 22, 1854	11,569
Saw-set	A. M. Shafer	Camden, Ohio	Nov. 12, 1867	70,751
Saw-set	D. Shaw	Cincinnati, Ohio	Oct. 31, 1871	120,549
Saw-set	A. Shoemaker	Carey, Ohio	June 14, 1859	24,408
Saw-set	H. Sloat	Watertown, N. Y	Oct. 26, 1869	96,156
Saw-set	L. T. Smart	Ossipee, N. H	Oct. 6, 1868	82,759
Saw-set	A. B. Smith and S. Osborn	Chambersburgh, Pa., and Trenton, N. J.	Mar. 11, 1873	136,777
Saw-set	E. Smith	Windsor, Vt	Jan. 23, 1866	52,218
Saw-set	S. Smith	Sharon, Conn	Oct. 4, 1859	25,681
Saw-set	W. A. Smith	Dresserville, N. Y	Sept. 27, 1870	107,733
Saw-set	I. Spaulding	Saratoga Springs, N. Y	Dec. 18, 1855	13,964
Saw-set	J. D. Spiller	Concord, N. H	Feb. 24, 1857	16,697
Saw-set	A. Stillman	Poland, N. Y	Sept. 26, 1848	5,810
Saw-set	H. Strait	Covington, Ky	Apr. 8, 1851	8,032
Saw-set	G. Swenson	Hackensack, N. J	July 1, 1873	140,441
Saw-set	J. G. Tattershall	Delphi, Ind	Apr. 29, 1873	138,297
Saw-set	T. Talyor	Port Deposit, Md	Aug. 15, 1835	....
Saw-set	M. E. True	Oakfield, N. Y	Oct. 14, 1873	143,598
Saw-set	W. Tunstill	Brooklyn, N. Y	Feb. 11, 1873	135,867
Saw-set	N. B. Tyler	Warren, Ohio	Aug. 10, 1869	93,648
Saw-set	R. W. Tyler	Wayne, Mich	Nov. 3, 1868	83,805
Saw-set	J. Uhl	Brooklyn, N. Y	Sept. 1, 1868	81,708
Saw-set	J. P. Van Vleck	Cooksville, Wis	Dec. 7, 1858	22,210
Saw-set	E. S. Watson	Chenango Forks, N. Y	May 20, 1856	14,936
Saw-set	W. B. Weaver	Reading Centre, N. Y	Aug. 25, 1868	81,442
Saw-set	E. Whiting	Berkshire, N. Y	Oct. 15, 1830	....
Saw-set	J. C. Woodward	Franklin, Conn	Oct. 1, 1867	69,525
Saw set and filer	T. E. Shaw	Omaha, Nebr	Mar. 21, 1871	112,970
Saw set and gage	W. B. Noyes and C. S. Baker	Manchester, N. H	Aug. 11, 1868	80,871
Saw set and gummer	J. Gardner	Viroqua, Wis	Apr. 9, 1867	63,715
Saw set and punch	H. Schauer	Allegheny City, Pa	Feb. 16, 1869	86,945
Saw set, Circular	E. W. Scott	Lowell, Mass	Oct. 23, 1849	6,817
Saw set, clamp, and vise, Combined	B. Blackstone	Warren, Ill	Oct. 26, 1869	96,077
Saw-set for mills	N. Urquart	Madison County, Ala	Feb. 7, 1832	....
Saw-set, Forcep	J. F. Brodhead	Rondout, N. Y	Feb. 28, 1854	10,587
Saw set, gummer, punch, and wire-cutter, Combined.	J. L. Devol	Parkersburgh, W. Va	Jan. 8, 1869	91,097
Saw-set, Nipper	J. Muzzy	Eddington, Me	Feb. 13, 1849	6,112
Saw-set, Roller	A. Bradway and E. Valentine	Monson, Mass	Aug. 31, 1852	9,229
Saw-set, Spring	J. Boggs	Philadelphia	Oct. 4, 1827	....
Saw-set, Vise	W. Hinds	Otsego, N. Y	July 1, 1851	8,185
Saw-setter	R. Grandy	New York	Dec. 21, 1822	....
Saw-setter	D. C. Jordan	New York	Dec. 2, 1822	....
Saw-setters, Gage for	I. Hatch	Westford, Vt	Oct. 12, 1829	....
Saw, Setting	J. Beach	Middletown, Conn	Oct. 28, 1822	....
Saw, Setting	J. H. Schreiner	Philadelphia, Pa	Aug. 19, 1826	....
Saw, Setting	J. Sommer	Franklin, Pa	Nov. 16, 1812	....
Saw setting and filing machinery	C. Lafferty	York Springs, Pa	Aug. 21, 1847	5,249
Saw setting and upsetting machine	A. A. Hibberd	Hermitage, N. Y	Sept. 16, 1862	36,462
Saw, Setting and using the teeth of	J. Russell	Brooke, Va	Oct. 14, 1815	....
Saw-setting clamp	C. E. Cook	Cambridge, Ohio	Dec. 29, 1857	18,957
Saw-setting device	H. Disston	Philadelphia, Pa	Jan. 28, 1868	73,879
Saw-setting device	A. Greely	Stephensville, Wis	Nov. 17, 1872	133,982
Saw-setting device	J. B. Schmid	Salem, Va	Mar. 25, 1873	137,150
Saw-setting device	C. T. Shoemaker	Philadelphia, Pa	Dec. 10, 1872	133,727
Saw-setting device	C. T. Shoemaker	Philadelphia, Pa	Dec. 24, 1872	134,320
Saw-setting machine	J. G. Baker	Philadelphia, Pa	Feb. 11, 1873	135,752
Saw-setting machine	C. Disston	Philadelphia, Pa	May 23, 1865	47,806
Saw-setting machine	W. H. Dobson	Cincinnati, Ohio	May 20, 1873	139,124
Saw-setting machine	R. B. White	Mendon, N. Y	Feb. 15, 1853	9,588
Saw-shaft, Rocker-box for	R. S. Lee and W. D. Leavitt	Cincinnati, Ohio	Mar. 29, 1859	23,377
Saw-sharpener	A. Bartlett	Chester Mass	Apr. 20, 1869	89,006
Saw-sharpener	G. Price	Peoria County, Ill	Aug. 24, 1869	94,028
Saw sharpener, Gin	J. McBride	Lilesville, N. C	July 2, 1872	128,553
Saw-sharpening	J. Armour	Helena, Ark	June 5, 1860	28,547
Saw-sharpening	C. P. Frazer	Allowaystown, N. J	Nov. 28, 1865	51,168
Saw-sharpening	O. A. Tefft	Plattsburgh, N. Y	July 7, 1868	79,787
Saw-sharpening	J. F. Tudor	Philadelphia, Pa	July 25, 1865	49,014
Saw sharpening and gumming apparatus	W. S. Spratt	Cincinnati, Ohio	Sept. 28, 1869	95,391
Saw sharpening and gumming machine	D. Backus	Omro, Wis	July 16, 1872	129,307
Saw sharpening and gumming machine	A. W. Newhall	Horseheads, N. Y	Mar. 31, 1868	76,236
Saw sharpening and setting machine	E. Duffy	Oakland, Cal	May 27, 1873	139,304
Saw-sharpening device	P. M. Bristol	Ludington, Mich	Sept. 15, 1868	82,078
Saw-sharpening device	J. B. Drake	Goshen, Ind	Sept. 23, 1873	143,067
Saw-sharpening device	J. H. Harrison	Boston, Mass	Apr. 20, 1869	89,042
Saw-sharpening device	D. Huffman	Luray, Va	Oct. 27, 1868	83,383
Saw-sharpening device	T. T. Markland, jr	Philadelphia, Pa	May 11, 1869	90,010
Saw-sharpening device	A. M. Newman	Terre Haute, Ind	Sept. 15, 1868	82,240
Saw-sharpening device	C. Willard	Bartonsville, Vt	Apr. 8, 1873	137,644
Saw-sharpening machine	N. H. Bolton	Omro, Wis	Nov. 7, 1871	120,700
Saw-sharpening machine	L. N. Borem	Kennard, Ohio	Oct. 26, 1869	96,078
Saw-sharpening machine	J. Borthwick	Philadelphia, Pa	Nov. 27, 1866	59,950
Saw-sharpening machine	J. A. Borthwick	Philadelphia, Pa	July 19, 1870	105,543
Saw-sharpening machine	T. M. Chapman	Old Town, Me	Nov. 11, 1873	144,383
Saw-sharpening machine	T. S. Davidson and H. Winningham.	Charlestown, S. C	Apr. 22, 1873	138,137
Saw-sharpening machine	F. E. Frey	Bucyrus, Ohio	May 20, 1873	139,139
Saw-sharpening machine	R. Hines and L. Beyer	Washington, D. C	June 20, 1871	116,189
Saw-sharpening machine	R. Hines and L. Beyer	Washington, D. C	June 20, 1871	116,190
Saw-sharpening machine	T. T. Markland, jr	Philadelphia, Pa	Apr. 2, 1867	63,407
Saw-sharpening machine	B. P. Pendexter	Minot, Me	June 16, 1868	78,995

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Saw-sharpening machine	E. W. Phelps	Elizabeth, N. J	Oct. 14, 1873	143, 712
Saw-sharpening machine	E. B. Rich	South Boston, Mass	Dec. 10, 1867	72, 083
Saw-sharpening machine	J. B. Smith	Milwaukee, Wis	Dec. 10, 1867	72, 100
Saw-sharpening machine	R. Sparks	Buffalo, N. Y	Mar. 21, 1865	46, 951
Saw-sharpening machine	Z. Sperry	Midland, Mich	Aug. 8, 1871	117, 827
Saw-sharpening machine	A. R. Stewart	Douglas Harbor, New Brunswick.	Nov. 17, 1868	84, 229
Saw-sharpening machine	C. Taylor	Saint John's, New Brunswick.	Mar. 5, 1867	62, 572
Saw-sharpening rest	J. F. Tuder	Philadelphia, Pa	Mar. 5, 1867	62, 705
Saw-sharpening swage	A. J. Hinds and J. S. Howe	Santa Cruz, Cal	Dec. 17, 1872	133, 988
Saw spindles, Method of suspending circular	H. Wells	Florence, Mass	Mar. 18, 1856	14, 480
Saw spindles to yield, Device allowing circular	H. Wells	Florence, Mass	Apr. 10, 1855	12, 705
Saw stave-jointer	W. H. Doane	Cincinnati, Ohio	Mar. 10, 1863	37, 858
Saw stock lubricator, Scroll	J. Richards	Columbus, Ohio	Oct. 21, 1862	36, 729
Saw stock, Scroll	J. Richards	Columbus, Ohio	May 27, 1862	35, 391
Saw, Stone	S. Chapman, jr	New York, N. Y	Nov. 29, 1853	10, 281
Saw, Stone	G. W. Cherry	New York, N. Y	Aug. 1, 1854	11, 410
Saw, Stone	P. Sweeney	Buffalo, N. Y	Aug. 30, 1859	25, 287
Saw, Stone and marble	J. T. Bruen	New York, N. Y	May 8, 1855	12, 813
Saw, Stone and marble	W. Watson	New York, N. Y	Aug. 1, 1854	11, 432
Saw, Stone and marble	H. H. White and E. A. Gray	East Poultney, Vt	Apr. 15, 1856	14, 684
Saw, Stone cutting and dressing	I. E. Newton	Waterbury, Conn	June 8, 1869	91, 155
Saw-straightening machine	J. S. Anderson	Flintville, Wis	Jan. 21, 1873	135, 059
Saw-strainer	T. V. Le Roy and A. Sanford	Newport, N. Y	July 25, 1832	....
Saw-strap	E. Andrews	Williamsport, Pa	June 1, 1869	90, 623
Saw-strap	O. Stone	Pittsford, N. Y	Oct. 6, 1834	....
Saw-swage	E. Andrews	Williamsport, Pa	Oct. 19, 1869	95, 869
Saw-swage	I. S. and C. N. Brown, and J. R. Wheeler.	Providence, R. I	June 4, 1872	127, 457
Saw-swage	J. S. Clark	New York, N. Y	Dec. 14, 1869	97, 763
Saw-swage	W. Clemson	Middletown, N. Y	Mar. 22, 1870	101, 099
Saw-swage	J. E. Emerson	Beaver Falls, Pa	Sept. 16, 1873	142, 779
Saw-swage	W. Ferguson	Canton, Ohio	Apr. 15, 1873	137, 767
Saw-swage	H. H. Gridley	Auburn, N. Y	Nov. 10, 1868	83, 956
Saw-swage	N. Johnson	Jasper, N. Y	Mar. 23, 1869	88, 177
Saw-swage	N. Johnson	Jasper, N. Y	Oct. 19, 1869	96, 009
Saw-swage	N. Johnson	Jasper, N. Y	Nov. 9, 1869	96, 506
Saw-swage	S. Kinney	Bignellville, N. Y	Jan. 11, 1870	98, 695
Saw-swage	W. A. L. Kirk	Hamilton, Ohio	Nov. 24, 1868	84, 361
Saw-swage	A. J. McCollum and G. D. Emery.	Indianapolis, Ind	Aug. 5, 1873	141, 572
Saw-swage	J. McDonald	Portville, N. Y	June 29, 1869	92, 076
Saw-swage	L. W. Pond	West Eau Claire, Wis	Apr. 26, 1870	102, 318
Saw-swage	S. B. Williams	Wheeling, W. Va	Nov. 19, 1872	133, 282
Saw swage, Circular	J. G. Baker	Philadelphia, Pa	June 23, 1868	79, 184
Saw, Swage for sharpening	J. E. Emerson	Trenton, N. J	Feb. 5, 1867	61, 818
Saw-swaging device	C. F. Henis	Baltimore, Md	Jan. 7, 1873	134, 666
Saw-swaging machine	C. F. Henis	Baltimore, Md	Jan. 7, 1873	134, 667
Saw-swaging machine	L. W. Pond	West Eau Claire, Wis	Apr. 26, 1870	102, 319
Saw-swaging machine	G. A. Prescott	Sandy Hill, N. Y	Jan. 28, 1873	135, 361
Saw, Swinging	E. W. Roff	Newark, N. J	Apr. 23, 1872	126, 093
Saw-table	C. H. Douglass	Hartford, Conn	Sept. 13, 1870	107, 346
Saw-table	M. Lepp	Albany, N. Y	May 24, 1870	103, 347
Saw-table	P. Neeb	Buffalo, N. Y	Jan. 3, 1871	110, 671
Saw table, Circular	A. Lachappelle	New York, N. Y	Sept. 24, 1872	131, 549
Saw table, Circular	H. C. Rosin	Detroit, Mich	Sept. 9, 1873	142, 733
Saw table, Circular	G. H. Sanborn	Boston, Mass	Apr. 21, 1868	76, 947
Saw-table for sawing irregular forms	G. A. Watkins	Cavendish, Vt	Aug. 2, 1870	106, 006
Saw-table gage	P. G. Finn	Erie, Pa	Dec. 3, 1872	133, 577
Saw-table gage	F. L. Sprague	Keene, N. H	Mar. 21, 1871	112, 861
Saw table, Gage for circular	R. N. Meriam	Worcester, Mass	Dec. 14, 1869	97, 950
Saw table, Reciprocating	C. C. Hinchman	Clarksborough, N. J	June 30, 1863	39, 009
Saw-tang	E. M. Boynton	Grand Rapids, Mich	Jan. 14, 1868	73, 227
Saw, Tempering	W. Clemson	Middletown, N. Y	Aug. 21, 1860	29, 671
Saw tempering and flattening apparatus	W. Clemson	Boston, Mass	Oct. 31, 1854	11, 857
Saw-tempering machine	E. C. Atkins	Indianapolis, Ind	Mar. 5, 1867	62, 591
Saw-trimmer	J. R. Failing and R. G. Nellis	Canajoharie, N. Y	Apr. 27, 1831	....
Saw-trimmer or engine-instrument	A. Clarke, jr	Berne, N. Y	Aug. 24, 1831	....
Saw, Two-edged	M. Cass and A. Bull	Caroline, N. Y	Aug. 31, 1827	....
Saw-teeth	N. Barlow	Newark, N. J	Apr. 10, 1855	12, 664
Saw-teeth	I. and T. Bird, jr	Calvin Township, Mich	Dec. 27, 1870	110, 430
Saw-teeth	I. S. Brown	Hopkinton, R. I	Jan. 8, 1861	31, 073
Saw-teeth	E. Colson	Fort Wayne, Ind	May 4, 1869	89, 559
Saw-teeth	E. Colson	Fort Wayne, Ind	Nov. 9, 1869	96, 674
Saw-teeth	P. Cook	Tonawanda, N. Y	Feb. 23, 1869	87, 092
Saw-teeth	J. E. Emerson	Trenton, N. J	Sept. 12, 1865	49, 868
Saw-teeth	J. E. Emerson	Beaver Falls, Pa	Apr. 29, 1873	138, 236
Saw-teeth	J. E. Emerson	Beaver Falls, Pa	Sept. 16, 1873	142, 781
Saw-teeth	G. H. Hiles	Chicago, Ill	May 17, 1870	103, 045
Saw-teeth	C. V. Littlepage	Austin, Tex	July 12, 1870	105, 345
Saw-teeth	I. Mason	Berlin, N. H	Sept. 11, 1860	29, 982
Saw-teeth	W. P. Miller	New York, N. Y	Aug. 26, 1873	142, 258
Saw-teeth	J. Newton	New York, N. Y	Aug. 24, 1869	94, 022
Saw-teeth	W. B. Noyes	Manchester, N. H	Oct. 5, 1869	95, 602
Saw-teeth	L. B. Southworth	Deep River, Conn	July 9, 1861	32, 796
Saw-teeth	G. F. Woolston	Orangeburgh, S. C	Mar. 11, 1851	7, 979
Saw-teeth blank	J. E. Emerson	Trenton, N. J	Nov. 8, 1870	108, 990
Saw-teeth blank	J. E. Emerson	Beaver Falls, Pa	Sept. 16, 1873	142, 780
Saw-teeth, Circular	N. Johnson	Jasper, N. Y	May 21, 1872	127, 061
Saw-teeth, Construction of	W. A. Wilson	Berlin Falls, N. H	Mar. 22, 1859	23, 330
Saw-teeth, Cutting	J. D. Custer	Norristown, Pa	June 25, 1861	32, 662
Saw-teeth, Cutting	S. G. Merriman	Southington, Conn	Apr. 11, 1836	....
Saw-teeth, Cutting	J. Morton	Philadelphia, Pa	Mar. 17, 1868	75, 563
Saw-teeth cutting and setting machine	C. G. Loynes	Lenox, Mass	Jan. 25, 1859	22, 737
Saw-teeth-cutting apparatus	K. H. Kinne	Mexico, N. Y	June 21, 1859	24, 466
Saw-teeth-cutting engine	C. Kaiser	New York, N. Y	Aug. 13, 1861	33, 041
Saw-teeth-cutting machine	S. Bevan	Philadelphia, Pa	Nov. 19, 1872	133, 190

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Saw-teeth-cutting machine	J. H. W. Onion and W. H. H. Larduskey.	Baltimore, Md	Feb. 18, 1873	135, 934
Saw-teeth-cutting machine	F. Shulte	Philadelphia, Pa	May 29, 1860	28, 508
Saw-teeth, Detachable	P. J. Hogan	Cincinnati, Ohio	Apr. 26, 1870	102, 400
Saw teeth, Device for spreading circular	W. H. Rudolph	Clarksville, Tenn	Oct. 4, 1870	107, 963
Saw-teeth dresser	C. M. Cowardin	Gardner, Tenn	July 16, 1872	129, 461
Saw-teeth, Dressing	J. Lough	Buckingham Village, Canada.	Nov, 24, 1868	84, 365
Saw-teeth-dressing device	W. Rowe	Westerville, Ohio	Aug. 26, 1873	142, 176
Saw-teeth-dressing machine	J. Lucia	Little Suamico, Wis	July 29, 1873	141, 366
Saw-teeth-filing machine	M. M. Pettis	Oxford, Mass	Dec. 4, 1866	60, 237
Saw-teeth-filing machine	E. Stoker	Piqua, Ohio	Nov. 8, 1836	76
Saw-teeth, Gage for	C. E. Grandy	Stafford Springs, Conn	Sept. 2, 1873	142, 390
Saw-teeth-grinding machine	I. S. and C. N. Brown	Providence, R. I	Nov. 19, 1867	70, 951
Saw-teeth-grinding machine	W. Clemson	Middletown, N. Y	June 28, 1870	104, 830
Saw-teeth-grinding machine	J. L. Otis	Leeds, Mass	Mar. 21, 1871	112, 838
Saw-teeth, Gumming and trimming	J. Spencer	Canajoharie, N. Y	Aug. 15, 1831	....
Saw teeth, Gumming cross-cut and saw-mill	H. Johnson	Sidney Plains, N. Y	Dec. 23, 1830	....
Saw teeth, Gumming cross-cut or saw-mill	P. Newton	Sidney, N. Y	June 19, 1830	....
Saw teeth, Gumming saw-mill and cross-cut	P. Newton	Sidney Plains, N. Y	Apr. 29, 1831	....
Saw-teeth, Insertable	W. H. Ivens	Trenton, N. J	May 9, 1871	114, 686
Saw-teeth, Insertable	N. Johnson	Jasper, N. Y	Dec. 24, 1872	134, 220
Saw-teeth, Insertable	H. G. Powell	Trenton, N. J	Aug. 20, 1872	130, 659
Saw-teeth, Insertable	J. W. Strange	Bangor, Me	Aug. 13, 1867	67, 682
Saw-teeth, Machine for elongating and spreading	J. Orm	Paducah, Ky	Aug. 30, 1870	106, 978
Saw-teeth, Machine to set	E. Waste, N. Millington, and D. Hutchins.	Bennington and Shaftsbury, Vt.	Mar. 28, 1838	660
Saw-teeth, Method of fastening diamonds into blocks or.	T. Smith	New York, N. Y	May 27, 1873	139, 337
Saw-teeth, Method of forming	C. V. Littlepage	Austin, Tex	Dec. 19, 1871	121, 951
Saw-teeth, Method of nibbing	P. B. Tyler	Springfield, Vt	May 16, 1854	10, 940
Saw teeth, Operating circular	M. L. Parry	Galveston, Tex	June 10, 1856	15, 082
Saw-teeth, Planing	G. Maulick	Trenton, N. J	Aug. 10, 1869	93, 631
Saw-teeth-planing machine	J. N. Wilkins	Waukegan, Ill	Sept. 1, 1857	18, 114
Saw-teeth-punching apparatus	J. E. Emerson	Trenton, N. J	Nov. 26, 1867	71, 473
Saw-teeth, Removable	J. Crookes	Saint Louis, Mo	Aug. 5, 1873	141, 427
Saw-teeth, Setting	W. Hartt	Camden, S. C	Dec. 7, 1821	....
Saw-teeth-setting device	G. W. Bugbee	Cincinnati, Ohio	Aug. 19, 1873	141, 990
Saw-teeth-setting device	H. Disston	Philadelphia, Pa	Nov. 5, 1867	70, 423
Saw-teeth-setting machine	T. S. and H. Disston	Philadelphia, Pa	Aug. 28, 1860	29, 772
Saw-teeth-setting swage	P. Crosby	Fredonia, N. Y	Aug. 25, 1857	18, 039
Saw-teeth-sharpening device	H. Disston	Philadelphia, Pa	Nov. 5, 1867	70, 424
Saw-teeth-sharpening machine	H. J. Perkins	Williamsport, Pa	July 12, 1870	105, 244
Saw-teeth-sharpening swage	J. E. Emerson	Trenton, N. J	June 5, 1866	55, 262
Saw-teeth swage	J. Conner	Philadelphia, Pa	Aug. 13, 1872	130, 484
Saw-teeth swage	E. Hamlin	Delanco, N. J	Dec. 22, 1868	85, 090
Saw-teeth swage	N. Johnson	Jasper, N. Y	Jan. 14, 1868	73, 338
Saw-teeth swage	A. J. Keyes	South Glen's Falls, N. Y	Apr. 9, 1872	125, 576
Saw-teeth swage	J. Lough	Buckingham, Canada	Feb. 21, 1871	111, 953
Saw-teeth swage	W. P. Miller	New York, N. Y	May 28, 1872	127, 182
Saw-teeth swage	G. B. Pattee	Ottawa, Canada	Dec. 20, 1870	110, 390
Saw-teeth swage	J. Sperrey	Philadelphia, Pa	Jan. 12, 1869	85, 770
Saw-teeth-swaging device	A. Pickett	Andover, Ohio	Dec. 31, 1872	134, 395
Saw-teeth-upsetting swage	J. Crookes	Saint Louis, Mo	July 2, 1867	66, 304
Saw-teeth-upsetting tool	N. F. Stone	Chicago, Ill	Apr. 17, 1866	54, 037
Saw-teething machine	A. Sowden	Cincinnati, Ohio	Aug. 14, 1866	57, 205
Saw wheel or pulley, Band	J. A. Roche and G. V. Orton	Chicago, Ill	July 15, 1873	140, 794
Saw, Whip	S. Barber and N. U. Tompkins	New York	June 1, 1808	....
Saw with detachable teeth	T. P. Marshall	Trenton, N. J	Mar. 21, 1871	112, 943
Saw, Wood	R. and A. F. Andrews	Avon, Conn	Jan. 24, 1854	10, 439
Saw, Wood	R. Blake	Albany, N. Y	July 26, 1859	24, 903
Saw, Wood	J. Hamilton	Brookfield, Mass	July 31, 1809	....
Saw, Wood	J. Hamilton	New York	June 10, 1830	....
Saw, Wood	A. Pruyn	Albany, N. Y	Sept. 11, 1860	29, 991
Saws, Adjustable bearing for circular	W. McKinstry	Washington, D. C	July 11, 1854	11, 282
Saws, Adjusting circular	S. W. Clemmens	Cleveland, Ohio	June 3, 1873	139, 544
Saws, Adjusting circular	J. Colville	Wilmington, N. C	Nov. 1, 1859	25, 996
Saws, Adjusting circular	J. P. Grosvenor	Lowell, Mass	Oct. 26, 1869	96, 224
Saws, Adjusting circular	A. L. Whitley	Saint Louis, Mo	Mar. 4, 1856	14, 379
Saws, Adjusting dishing	E. B. Wells	Uniontown, Pa	July 12, 1853	9, 846
Saws, Adjusting reciprocating	I. Z. A. Wagner	Philadelphia, Pa	Mar. 18, 1856	14, 485
Saws, Adjusting the rake of reciprocating	J. J. Watson	Buffalo, N. Y	Oct. 23, 1860	30, 523
Saws, Apparatus for jointing circular	I. France	Peru, Ind	Sept. 29, 1868	82, 508
Saws, Arranging and driving circular	W. B. Emery	Albany, N. Y	Jan. 9, 1855	12, 197
Saws, Banding pulleys for	D. H. Chamberlain	Boston, Mass	Jan. 3, 1854	10, 374
Saws by atmospheric pressure, Mode of straining	A. Brown and A. Coffin, jr	Sabine City, Tex	Aug. 14, 1855	13, 422
Saws by compressed air, Straining	J. A. Rapp and E. S. Wright	Buffalo, N. Y	July 26, 1853	9, 889
Saws, Centering circular	W. T. and L. H. Rand	Manchester, N. H	Dec. 12, 1865	51, 478
Saws, Collar for circular	J. B. Heald	Milford, N. H	Dec. 6, 1870	109, 898
Saws, Concaving circular	J. M. Kern	Morgantown, Va	Feb. 12, 1856	14, 268
Saws, Construction and mode of driving circular	T. J. Flanders	Manchester, N. H	Jan. 2, 1855	12, 126
Saws, Construction of circular	R. K. Hawley	Baltimore, Md	Mar. 13, 1860	27, 628
Saws, Construction of segmental circular	R. K. Hawley	Baltimore, Md	Sept. 13, 1859	25, 411
Saws, Contrivance for operating scroll	E. Beck	Allentown, Pa	June 28, 1859	24, 532
Saws, Deflecting-plate for circular	J. D. C. Carpenter	Cincinnati, Ohio	Oct. 5, 1858	21, 651
Saws, Device for adjusting mill	T. M. Chapman	Old Town, Me	Nov. 14, 1854	11, 930
Saws, Device for adjusting the rake of muley	W. J. Gaskill	Apalachin, N. Y	July 30, 1861	32, 941
Saws, Device for adjusting the rake of muley	C. W. Griffith	Dayton, Ohio	Oct. 23, 1860	30, 475
Saws, Device for allowing play to the arbor of circular.	H. R. Wolfe	Louisville, Ky	May 19, 1857	17, 346
Saws, Device for conveying sawdust from	W. L. Colwell	Pittsburgh, Pa	Dec. 21, 1869	98, 037
Saws, Device for setting laterally circular	J. D. C. Carpenter	Cincinnati, Ohio	Jan. 11, 1859	22, 546
Saws, Device for sheltering from dust the lower carrying-pulley of band.	J. Balla	Richmond, Ind	May 4, 1858	20, 135
Saws, Device for straining scroll	C. Rose	Allentown, Pa	July 3, 1860	29, 009
Saws, Device for straining wood	A. Fessenden	Boston, Mass	Jan. 29, 1861	31, 231
Saws, Device for straining wood	J. Haynes	Hollis, Me	Jan. 1, 1861	31, 054
Saws, Device to allow end-play independent of the driving-shaft of circular.	W. S. Reeder	Saint Louis, Mo	Feb. 17, 1857	16, 655

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Saws, Driving	I Brown	Baltimore, Md	July 19, 1853	9, 855
Saws, Driving and straining	J. and J. Fishwick	Lexington, Ky	July 25, 1854	11, 365
Saws, Driving circular	T. J. Alexander	Westerville, Ohio	July 28, 1857	17, 861
Saws, Driving circular	J. Broughton	Chicago, Ill	July 22, 1856	15, 368
Saws, &c., Driving circular	G. and D. Cook	New Haven, Conn	Jan. 18, 1853	9, 544
Saws, Driving circular	J. Harris, jr	Roston, Mass	Oct. 11, 1853	10, 108
Saws, Driving pairs of reciprocating	G. P. Ketcham	Bedford, Ind	Feb. 20, 1855	12, 412
Saws, Feed-roller to circular	J. Mutty	Brewer, Me	Jan. 23, 1866	52, 188
Saws, Feeding-roller for circular	E. C. Dicey	Montague, Mich	Oct. 13, 1868	83, 047
Saws, File for gaging the teeth of cross-cut	W. G. Tuttle	Geneva, N. Y	Mar. 2, 1869	87, 381
Saws for clapboards, Making and working circular	J. Kidder	Gorham, Me	Sept. 11, 1828	....
Saws for cutting veneers, Construction of	R. B. Richardson	New York	Oct. 6, 1824	....
Saws for mills, Hanging	C. B. Normand	Havre, France	Nov. 14, 1854	11, 945
Saws for saw-mills, Mode of straining	R. Cook and S. E. Burnham	Saratoga, N. Y	Feb. 1, 1842	2, 444
Saws, Form for and mode of operating circular	J. Slater	Macon, Ga	Nov. 7, 1854	11, 912
Saws, Forming teeth on mill	N. T. Coffin	Knightstown, Ind	July 12, 1853	9, 848
Saws, Framing and straining	E. S. Clapp	Montague, Mass	July 1, 1856	15, 220
Saws, Friction-roller for band	T. A. Ballou	Cleveland, Ohio	Jan. 7, 1868	73, 070
Saws, Hanging	N. T. Coffin	Knightstown, Ind	July 19, 1853	9, 856
Saws, Hanging	S. Dunham	North Bridgewater, Mass	Dec. 25, 1855	13, 982
Saws, Hanging	A. Felker	Bay City, Mich	Dec. 29, 1868	85, 294
Saws, Hanging	S. G. Mason	Rochester, N. Y	June 21, 1870	104, 613
Saws, Hanging	J. E. Merritt	Bangor, Me	Aug. 19, 1873	142, 036
Saws, Hanging	L. Morrison and A. G. Harms	Allegheny City, Pa	Apr. 5, 1870	101, 492
Saws, Hanging	R. L. Stewart	Owasso, Mich	Feb. 9, 1864	41, 544
Saws, Hanging path-finding	J. A. Taplin	Fishkill, N. Y	Jan. 2, 1855	12, 170
Saws, Hanging and adjusting circular	W. W. Hurlbut	Utica, N. Y	Feb. 12, 1856	14, 241
Saws, Hanging and operating reciprocating	C. Whipple	Lewiston, Me	Jan. 13, 1857	16, 416
Saws, Hanging and securing reciprocating mill	J. H. Totman	Plattsburgh, N. Y	Feb. 19, 1861	31, 498
Saws, Hanging and straining	L. Chapin	Walpole, N. H	Oct. 13, 1829	....
Saws, Hanging band	W. H. Sullenberger	Chambersburgh, Pa	Mar. 19, 1861	31, 768
Saws, Hanging circular	W. R. Close	Bangor, Me	May 2, 1865	47, 597
Saws, Hanging circular	D. Eldridge	Philadelphia, Pa	Nov. 20, 1860	30, 672
Saws, Hanging circular	W. W. Hurlbut	Boonville, N. Y	Dec. 25, 1855	13, 989
Saws, Hanging circular	W. McDonald	Calais, Me	Sept. 1, 1868	81, 661
Saws, Hanging circular	C. R. Tompkins	Rochester, N. Y	Aug. 31, 1869	94, 255
Saws, Hanging circular	J. Young	Bangor, Me	July 19, 1864	43, 617
Saws, Hanging, guiding, and adjusting muley	A. Winter	Pickens, S. C	Jan. 13, 1857	16, 421
Saws, Hanging mill	J. Rankin	Detroit, Mich	Sept. 13, 1853	10, 020
Saws, Hanging muley	D. Cilley	Osceola Mills, Pa	July 12, 1870	105, 174
Saws, Hanging muley	I. N. Forrester	Centroville, Va	Oct. 30, 1855	13, 716
Saws, Hanging reciprocating	L. Anderson	Painesville, Ohio	Jan. 17, 1860	26, 823
Saws, Hanging reciprocating	J. C. Cline	Philadelphia, Pa	Jan. 25, 1859	22, 705
Saws, Hanging reciprocating	A. Crosby	Fredonia, N. Y	Mar. 15, 1859	23, 286
Saws, Hanging reciprocating	P. Crosby	New York, N. Y	Oct. 4, 1859	25, 632
Saws, Hanging reciprocating	J. Gargett	Alma, Mich	July 20, 1869	92, 716
Saws, Hanging reciprocating	G. D. Lund	Yonkers, N. Y	Nov. 11, 1856	16, 062
Saws, Hanging reciprocating	J. H. More	West Troy, N. Y	Oct. 14, 1856	15, 890
Saws, Hanging reciprocating	J. Robingson	New Brighton, Pa	May 20, 1856	14, 930
Saws, Hanging reciprocating	C. Weston	Salem, Mass	May 8, 1860	28, 223
Saws, Hanging reciprocating gig	J. Stowell	Charlestown, Mass	Dec. 23, 1856	16, 295
Saws, Hardening	E. S. Piper	Indianapolis, Ind	June 11, 1867	65, 598
Saws, Hardening-pan for circular	J. Crookes	Saint Louis, Mo	July 2, 1867	66, 305
Saws, Horse-power for driving reciprocating	E. M. Fuller	Salisbury, N. Y	Dec. 21, 1858	22, 360
Saws in saw-mills, Hanging reciprocating	E. Andrews	Williamsport, Pa	Apr. 21, 1868	76, 969
Saws in saw-mills, Straining	E. Booth	Philadelphia, Pa	May 18, 1852	8, 954
Saws, Index for filing circular	J. B. Machamer	New Baltimore, Ohio	Apr. 6, 1869	88, 649
Saws, Jointing and burring	L. B. Southworth	Deep River, Conn	Mar. 29, 1864	42, 124
Saws, Machine for cutting the teeth of circular	E. Carver	Bridgewater, Mass	Aug. 12, 1840	1, 717
Saws, Machine for cutting the teeth of circular and other.	T. Sellick	Haverstraw, N. Y	Sept. 19, 1838	931
Saws, Machine for dressing the teeth of circular	J. Lough	Buckingham, Canada	May 21, 1872	127, 078
Saws, Machine for filing or smoothing the teeth of	E. Carver	Bridgewater, Mass	Aug. 12, 1840	1, 718
Saws, Machine for jointing the clearing-teeth of cross-cut.	J. H. Robson	Ovid, Mich	Apr. 19, 1870	102, 160
Saws, Machine for making tabs for cross-cut	T. S. Disston	Philadelphia, Pa	June 5, 1860	28, 565
Saws, Machine for sharpening gin	J. M. Bailey	Meridian, Miss	Jan. 28, 1873	135, 256
Saws, Machine for sharpening gin	A. H. Burdine	Chulahoma, Miss	July 20, 1858	20, 933
Saws, Machine for sharpening saw-mill	S. Morse	Sempronius, N. Y	Apr. 26, 1824	....
Saws, &c., Machinery for hardening and straightening.	H. Waterman	Williamsburgh, N. Y	May 27, 1851	8, 115
Saws, Manufacturing	S. Ustick	Washington, D. C	Aug. 11, 1832	....
Saws, Manufacturing circular	T. Taylor	Philadelphia, Pa	Apr. 12, 1870	101, 942
Saws, &c., Mechanical movement for working	E. Healy	Chicago, Ill	Aug. 27, 1867	68, 074
Saws, Mounting and guiding circular	G. F. S. Wright	Black Oak, S. C	Jan. 13, 1857	16, 424
Saws obliquely to shaft, Adjusting circular	A. D. Highfield	Philadelphia, Pa	Dec. 11, 1855	13, 932
Saws obliquely to their arbors, Mechanism for adjusting circular.	G. Hutton	New York, N. Y	June 17, 1856	15, 130
Saws obliquely to their shafts, Method of adjusting circular.	G. R. Scriven	Philadelphia, Pa	June 9, 1857	17, 521
Saws of circular-sawing-machines, Method of attaching the spreader to.	W. D. Leavitt	Cincinnati, Ohio	Aug. 31, 1858	21, 345
Saws of saw-mills without a gate, Method of straining.	C. Stigleman and A. Seeley	Alton, Ill	Dec. 16, 1844	3, 858
Saws on arbors, Mode of adjusting circular	C. B. Rogers	Norwich, Conn	Dec. 27, 1864	45, 677
Saws, Operating	F. T. Andrews	Georgetown, D. C	Feb. 21, 1854	10, 538
Saws, Operating circular	A. M. George	Nashua, N. H	Jan. 11, 1853	9, 532
Saws, Operating mill	B. Frazee	Durhamville, N. Y	Oct. 18, 1853	10, 130
Saws, Operating reciprocating	T. J. Alexander	Westerville, Ohio	Feb. 22, 1859	23, 004
Saws, Operating reciprocating	O. S. Woodcock	Connersville, Ind	Sept. 11, 1855	13, 554
Saws, Operating scroll	J. L. Lawton	Baltimore, Md	Oct. 3, 1857	18, 547
Saws, Operating scroll	H. F. Shaw	Boston, Mass	Mar. 2, 1858	19, 534
Saws, Packing-case for	H. Disston	Philadelphia, Pa	May 10, 1870	102, 923
Saws, Process for making concave-circular	T. S. Disston	Philadelphia, Pa	Dec. 6, 1870	109, 881
Saws, Rock-shaft for gang	A. P. Barlow	Kalamazoo, Mich	Apr. 6, 1869	88, 535
Saws, Saw-jointer for circular	J. H. Stevenson	Birmingham, Ohio	Feb. 28, 1871	112, 236
Saws, Shield and guide for circular	G. W. Rodeboy	Milwaukee, Wis	June 9, 1857	17, 518
Saws, Slide for hanging upright	A. P. Barlow	Saint John's, Canada	Dec. 15, 1868	84, 851
Saws, Stiffening circular	E. Pratt	Washington County, N. Y	Sept. 14, 1843	3, 262

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Invention.	Inventor.	Residence.	Date.	No.
Saws, Straightening	E. Rathburn and W. Tinker	Conneaut, Ohio	July 1, 1836	....
Saws, Strainer for scroll	J. Chase	Rochester, N. Y	Dec. 3, 1872	133, 563
Saws, Straining marble	W. B. Hatch	Elmira, N. Y	Apr. 15, 1856	14, 656
Saws, Straining muley	T. Sharp	North Greenbush, N. H	Mar. 11, 1856	14, 413
Saws, Straining reciprocating	G. P. Ketcham, jr	Bloomington, Ind	Feb. 9, 1858	19, 300
Saws, Straining wood	J. R. Webster	Boston, Mass	Jan. 14, 1868	73, 413
Saws, Tempering circular	J. Lippincott	Pittsburgh, Pa	Mar. 5, 1867	62, 546
Saws to any required dish, Adjusting circular	J. B. Pomroy	Chicago, Ill	Jan. 6, 1857	16, 339
Saws to arbors, Adjusting circular	J. Barnard	Alton, Ill	Feb. 14, 1865	46, 325
Saws to arbors, Attaching	G. W. Colborn	Gardiner, Me	May 16, 1871	114, 926
Saws to arbors, Attaching circular	A. L. Rice	Worcester, Mass	May 15, 1866	54, 774
Saws to arbors, Securing circular	J. Andrews	Brunswick, Me	Feb. 26, 1861	31, 523
Saws to arbors, Securing circular	J. Andrews	Brunswick, Me	Jan. 11, 1861	32, 503
Saws to circular stocks, Adjusting hand	J. Vaughan	Exchangeville, Pa	Nov. 17, 1857	18, 651
Saws to mandrels, Attaching circular	E. Calley	Franklin, N. H	Feb. 25, 1868	74, 749
Saws to play laterally independently of their shafts, Device for allowing circular.	A. P. Gross	Saint Louis, Mo	Feb. 17, 1857	16, 643
Saws to the same plane in sawing lumber, Device for adjusting two circular.	E. P. Cavett	Saint Louis, Mo	Jan. 19, 1858	19, 128
Saws, Use of	A. Field	Jericho, Vt	Mar. 6, 1835	....
Saws, Using circular	J. Brown	Boston, Mass	Aug. 13, 1823	....
Sawing a log by its own weight, Method of	T. A. Wolff	Ripley, Miss	May 8, 1855	12, 843
Sawing and boring machine	B. Klahr	Bernville, Pa	Jan. 31, 1865	46, 113
Sawing and boring machine	T. Smith	California, Mo	Sept. 29, 1868	82, 649
Sawing and cutting machine, Wood	J. N. Hodge	North White Creek, N. Y	July 30, 1861	32, 945
Sawing and grinding mill	G. and F. R. Baker	Tuscaloosa, Ala	July 7, 1835	....
Sawing and planing by combining the plane with a saw.	E. Pratt	North Granville, N. Y	July 20, 1843	3, 184
Sawing and planing machine	T. Bloomer	New York	Nov. 3, 1830	....
Sawing and planing machine	D. Close	Harmonsburgh, Pa	Aug. 8, 1854	11, 473
Sawing and planing machine	M. E. Tucker	Canaan, N. H	Nov. 26, 1872	133, 504
Sawing and slitting machine, Pit	J. Hamilton	New York	June 27, 1840	1, 652
Sawing and splitting machine, Timber	J. P. McDowell	Summit, Pa	Aug. 12, 1840	1, 721
Sawing and splitting machine, Wood	A. G. Hagerstrom	Red Wing, Minn	Jan. 28, 1873	135, 332
Sawing and splitting machine, Wood	J. A. Taplin	Fishkill, N. Y	Dec. 21, 1869	98, 206
Sawing-apparatus, Cross-cut	H. F. Willson	Elyria, Ohio	June 30, 1857	17, 719
Sawing beveled curves, Machine for	J. Creager	Cincinnati, Ohio	Oct. 18, 1859	25, 809
Sawing beveled curves, Machine for	J. C. Hintz	Cincinnati, Ohio	Dec. 1, 1857	18, 745
Sawing beveled surfaces, Machine for	A. C. Cook	Russellville, Ky	Jan. 3, 1854	10, 358
Sawing beveled surfaces, Machine for	J. McDiarmid	Brooklyn, N. Y	May 17, 1859	24, 040
Sawing boards	D. Flagg, jr	Gardiner, Me	Jan. 19, 1830	....
Sawing boards into required lengths, Machine for	T. Drake	Windsor, Conn	July 3, 1860	28, 975
Sawing boards, Machine for	O. Judd, jr	London, Mass	May 1, 1810	....
Sawing boards, Machinery for	W. Kendall, jr	Waterville, Me	Jan. 16, 1826	....
Sawing boards, Mill for	A. Clarke	....	Mar. 30, 1798	....
Sawing boards, Setting logs for	J. Sheffield	Williamson, N. Y	Apr. 16, 1842	2, 566
Sawing, boring, and mortising machines	L. J. Wallich	Knoxville, Ill	Nov. 15, 1864	45, 097
Sawing, boring, molding, and planing machines	J. H. Past	Paterson, N. J	July 29, 1862	36, 025
Sawing, &c., by lever-power	J. Walker	Phillips, Me	Feb. 25, 1836	....
Sawing circles	T. Armstrong	Anderson Township, Ohio	July 18, 1832	....
Sawing circular bevels, Machine for	J. Lemman	Cincinnati, Ohio	June 7, 1859	24, 314
Sawing circular stuff	T. Kenderdine, jr	Horsam, Pa	Aug. 12, 1840	1, 719
Sawing circular timber	B. Overman	Greensborough, N. C	Sept. 15, 1826	....
Sawing, Controlling the log for curved and bevel	C. B. Normand	Havre, France	Nov. 14, 1854	11, 946
Sawing down trees, Machine for	L. S. Alder	Cleona, Ind	July 8, 1862	35, 805
Sawing down trees, Machine for	M. Ludwig	Boston, Mass	July 17, 1855	13, 277
Sawing, Feeding-device for cross-cut	J. Darling	Cincinnati, Ohio	May 4, 1858	20, 147
Sawing fire-wood, Machine for	J. I. Efferenn	Springfield, Ill	Aug. 1, 1854	11, 417
Sawing fire-wood, &c., Machine for	E. A. Tubbs	Hampton, N. H	May 1, 1855	12, 809
Sawing furrow-boards	N. H. Dearborn	Conway, N. H	Dec. 28, 1831	....
Sawing given curvatures, Device for guiding the logs in.	T. Miles	Greenbush, N. Y	Oct. 13, 1857	18, 402
Sawing, Horse-power machine for cross-cut	E. and J. Z. Perin	Connersville, Ind	Jan. 12, 1858	19, 099
Sawing irregular forms, Machine for	H. S. Vrooman	Paterson, N. J	Dec. 22, 1863	41, 034
Sawing irregular forms, Mill for	O. Wright	Rochester, N. Y	Jan. 8, 1850	7, 011
Sawing irregular shapes, Machinery for	F. W. Harris	Lancaster, Mass	Sept. 27, 1845	4, 211
Sawing irregular shapes, Machinery for	T. C. Merrill	Newbury, Mass	July 11, 1848	5, 666
Sawing light lumber, Feed-motion for	J. F. Lovecraft	Rochester, N. Y	Dec. 12, 1854	12, 065
Sawing logs, Machinery for	O. Stoddard	Busti, N. Y	Jan. 3, 1854	10, 397
Sawing lumber, Feed-motion for	N. G. Norcross	Lowell, Mass	Mar. 28, 1854	10, 705
Sawing lumber, Machine for re-	S. P. Winne	Albany, N. Y	Feb. 10, 1857	16, 624
Sawing-machine	T. J. Alexander	Westerville, Ohio	Apr. 29, 1856	14, 757
Sawing-machine	T. J. Alexander	Westerville, Ohio	Mar. 9, 1858	19, 536
Sawing-machine	W. A. Allen	Baltimore, Md	Oct. 5, 1869	95, 406
Sawing-machine	C. Amsler	Saint Louis, Mo	Sept. 28, 1869	95, 302
Sawing-machine	P. M. Andriot	Oxford, Ohio	Aug. 5, 1873	141, 479
Sawing-machine	J. W. Arnold and H. W. Couch	West Macedon, N. Y	Aug. 30, 1864	43, 963
Sawing-machine	R. Atkinson	Cleveland, Ohio	Jan. 19, 1869	85, 894
Sawing-machine	J. K. Babcock	Shortsville, N. Y	Feb. 23, 1869	87, 233
Sawing-machine	L. Bach and L. C. Christlip	Tiffin, Ohio	Jan. 25, 1870	99, 131
Sawing-machine	J. T. Baggs	Bridgeport, Ohio	Sept. 13, 1870	107, 211
Sawing-machine	J. T. Baggs	Bridgeport, Ohio	Jan. 16, 1872	122, 695
Sawing-machine	J. T. Baggs	Bridgeport, Ohio	May 6, 1873	138, 552
Sawing-machine	N. B. Baldwin	Georgetown, Ill	Sept. 5, 1865	49, 692
Sawing-machine	J. M. Batchelor	Foxcroft, Me	Oct. 8, 1867	69, 613
Sawing-machine	J. L. Beadle	Marengo, N. Y	Apr. 13, 1858	19, 906
Sawing-machine	H. Bean	Fredonia, Ohio	July 4, 1871	116, 539
Sawing-machine	P. S. Beidler	South Easton, Pa	Aug. 25, 1868	81, 332
Sawing-machine	G. W. Bell	Rising Sun, Ind	Feb. 4, 1868	74, 038
Sawing-machine	G. W. Benson and F. F. Dolan	Sacramento, Cal	July 27, 1869	93, 043
Sawing-machine	E. Berrey	Auburn, Ind	July 19, 1864	43, 561
Sawing-machine	G. S. Birge	Drayton Plains, Mich	Jan. 30, 1872	123, 223
Sawing-machine	G. W. Boll	Columbus, Ind	May 31, 1870	103, 709
Sawing-machine	N. H. Bolton	Omro, Wis	Feb. 28, 1871	112, 114
Sawing-machine	I. W. Bowers	Ovid Centre, Mich	Aug. 25, 1863	39, 626
Sawing-machine	G. W. Braymer	Penn Township, Mich	Mar. 14, 1871	112, 682
Sawing-machine	J. Briggs	Lyons, Ohio	Aug. 11, 1868	80, 903
Sawing-machine	O. W. Brock	Etna, Ohio	Apr. 15, 1873	137, 758

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Sawing-machine	N. Brockway	Cambria, N. Y	Oct. 9, 1866	58, 586
Sawing-machine	D. J. Brougher	New York, N. Y	Feb. 27, 1872	124, 031
Sawing-machine	H. Brown	New York, N. Y	Nov. 10, 1857	18, 570
Sawing-machine	N. B. Brown	Antwerp, N. Y	Sept. 15, 1863	39, 880
Sawing-machine	R. B. Brown	Cambridge, Vt	Jan. 10, 1860	26, 746
Sawing-machine	U. B. Brown	Antwerp, N. Y	Dec. 27, 1864	45, 580
Sawing-machine	E. G. Budd	Budd's Lake, N. J	Aug. 27, 1872	130, 840
Sawing-machine	G. E. Burt, C. B. Ballard, and S. B. Hildreth.	Harvard, Mass., and Hartford, Vt.	June 25, 1872	128, 209
Sawing-machine	V. H. Buschman	Baltimore, Md	Apr. 18, 1865	47, 279
Sawing-machine	T. M. Bush	Huron County, Ohio	Apr. 1, 1862	34, 814
Sawing-machine	R. Canfield	Philadelphia, Pa	May 1, 1812	....
Sawing-machine	W. W. Carey and G. W. Harris	Lowell, Mass	July 2, 1872	128, 461
Sawing-machine	T. W. Carmichael	Rockville, Ind	July 16, 1872	129, 211
Sawing-machine	T. H. Carroll	Erie, Pa	Aug. 12, 1873	141, 761
Sawing-machine	J. Casson	Sheffield Parish, England	Mar. 16, 1869	87, 908
Sawing-machine	B. C. Chambers	Shady Plain, Pa	Dec. 17, 1872	134, 033
Sawing-machine	J. Chase	Rochester, N. Y	June 7, 1870	103, 843
Sawing-machine	M. N. Clark	Harrison City, Pa	July 26, 1870	105, 647
Sawing-machine	J. C. Clime	Philadelphia, Pa	Nov. 15, 1870	109, 178
Sawing-machine	W. M. Cochran	Indianapolis, Ind	Aug. 2, 1870	105, 910
Sawing-machine	C. Collins	Jonesborough, Ind	July 25, 1871	117, 259
Sawing-machine	J. Creager	Cincinnati, Ohio	Oct. 11, 1864	44, 609
Sawing-machine	P. Crosby	Fredonia, N. Y	Apr. 8, 1815	8, 022
Sawing-machine	J. D. Culver	Bellmore, Ind	Jan. 4, 1870	98, 568
Sawing-machine	J. D. Culver	Catlin Station, Ind	Oct. 31, 1871	120, 500
Sawing-machine	J. D. Culver	Bellmore, Ind	Apr. 23, 1872	126, 033
Sawing-machine	W. J. Cunningham	London, England	June 18, 1872	128, 024
Sawing-machine	J. H. Curell	Saint Louis, Mo	Nov. 1, 1870	108, 886
Sawing-machine	H. A. Current	Clarksville, Tenn	Feb. 25, 1873	136, 216
Sawing-machine	T. H. Cushing	Dover, N. H	Dec. 18, 1866	60, 621
Sawing-machine	W. C. Daniel	Point Pleasant, Mo	Oct. 29, 1872	132, 563
Sawing-machine	H. A. Daniels	Thomaston, Conn	Nov. 6, 1866	59, 368
Sawing-machine	H. A. Daniels	Thomaston, Conn	July 28, 1868	80, 338
Sawing-machine	M. E. Dean	Foxborough, Mass	May 10, 1870	102, 921
Sawing-machine	R. B. De Bare	Philadelphia, Pa	Oct. 20, 1868	83, 262
Sawing-machine	W. Detrick and J. D. Culver	Greencastle, Ind	June 3, 1873	139, 554
Sawing-machine	W. C. Doane	Chicago, Ill	Apr. 8, 1862	34, 883
Sawing-machine	W. H. Doane	Cincinnati, Ohio	July 2, 1872	128, 472
Sawing-machine	W. H. Doane and C. Mason	Chicago, Ill	July 27, 1858	20, 995
Sawing-machine	B. W. Durkee	Livonia, N. Y	May 29, 1866	55, 202
Sawing-machine	J. Eachus	Coatesville, Pa	Aug. 26, 1873	142, 154
Sawing-machine	G. H. Eddeman	Atlanta, Ga	Dec. 29, 1868	85, 436
Sawing-machine	J. A. Elston	Elston Station, Mo	Aug. 2, 1870	105, 928
Sawing-machine	J. A. Elston	Elston Station, Mo	Oct. 17, 1871	120, 051
Sawing-machine	J. A. Elston	Elston Station, Mo	Sept. 24, 1872	131, 510
Sawing-machine	W. Ennis and H. J. Bosworth	Hudson, Mich	Apr. 25, 1865	47, 404
Sawing-machine	T. B. Fagan	Mendon, Ohio	May 28, 1872	127, 326
Sawing-machine	R. Fanning	Clarksfield, Ohio	Jan. 12, 1864	41, 210
Sawing-machine	H. Featherstone and P. Engman.	New Orleans, La	July 13, 1858	20, 870
Sawing-machine	J. Felton	Fairmont, Ind	Mar. 21, 1871	112, 794
Sawing-machine	S. Fletcher	Hollis, N. H	Dec. 7, 1869	97, 621
Sawing-machine	J. T. Foster	Jersey City, N. J	Oct. 20, 1857	18, 443
Sawing-machine	H. C. Freeman	Lewisville, Ind	Sept. 24, 1867	69, 202
Sawing-machine	J. Frey	Battle Creek, Mich	Feb. 21, 1865	46, 460
Sawing-machine	J. Frey and J. M. Eichholtz	Osnaburgh and Canton, Ohio	Aug. 25, 1868	81, 356
Sawing-machine	J. Fry	Brookfield, Ill	Jan. 21, 1868	73, 520
Sawing-machine	H. Fryatt and E. C. Edmonds	Buffalo, N. Y	Apr. 10, 1866	53, 804
Sawing-machine	B. Fulghum	Richmond, Ind	Sept. 19, 1854	11, 693
Sawing-machine	B. Fulghum	Richmond, Ind	July 24, 1855	13, 305
Sawing-machine	B. Fulghum	Richmond, Ind	Aug. 16, 1859	25, 108
Sawing-machine	W. Gardiner	Stoneborough, Pa	May 11, 1869	90, 043
Sawing-machine	S. A. Gardner	Round Hill, Pa	Dec. 7, 1869	97, 626
Sawing-machine	A. Gandron	Detroit, Mich	Aug. 17, 1869	93, 873
Sawing-machine	P. Geiser	Waynesborough, Pa	Sept. 7, 1869	94, 502
Sawing-machine	P. A. Gerry	Dover, Me	Nov. 27, 1866	59, 994
Sawing-machine	H. D. Gillespie	Huntington, Ind	Mar. 22, 1870	101, 117
Sawing-machine	J. C. Gillett	Holly, Mich	Nov. 10, 1868	83, 954
Sawing-machine	A. and H. Goodman	Williamsburgh, Mo	Apr. 19, 1870	102, 112
Sawing-machine	W. W. Le Grande	Elkton, Ky	June 11, 1872	127, 697
Sawing-machine	G. Gregg	Lowe's Mills, Va	Jan. 20, 1857	16, 435
Sawing-machine	J. Groat	Peru, Ind	Oct. 10, 1871	119, 701
Sawing-machine	J. P. Grosvenor	Lowell, Mass	May 5, 1868	77, 606
Sawing-machine	E. R. Hall	Syracuse, N. Y	June 8, 1869	91, 121
Sawing-machine	E. R. Hall and W. H. Town	Syracuse, N. Y	Nov. 30, 1869	97, 393
Sawing-machine	E. H. Hancock	Augusta, Ga	July 26, 1859	24, 869
Sawing-machine	C. O. Hansen	Ferguson, Mo	Sept. 19, 1871	119, 139
Sawing-machine	E. Hard	Canal Dover, Ohio	Dec. 18, 1866	60, 628
Sawing-machine	I. R. Harmon	Whitestown, Ind	Jan. 7, 1868	73, 000
Sawing-machine	T. Harper	West Manchester, Pa	Sept. 26, 1865	50, 119
Sawing-machine	J. Harris	Grand Ledge, Mich	June 13, 1871	115, 848
Sawing-machine	J. J. Harris	Saint Louis, Mo	May 25, 1869	90, 534
Sawing-machine	A. Haseltine, jr	Haverhill, Mass	July 30, 1872	129, 952
Sawing-machine	H. Hassenpflug	Huntingdon, Pa	Dec. 18, 1866	60, 510
Sawing-machine	H. Hassenpflug	Huntingdon, Pa	May 28, 1867	65, 217
Sawing-machine	H. Hassenpflug	Huntingdon, Pa	June 11, 1867	65, 669
Sawing-machine	S. C. Howe	Allen's Prairie, Mich	Jan. 18, 1870	98, 968
Sawing-machine	L. S. Hayes	Greene, N. Y	Nov. 6, 1866	59, 394
Sawing-machine	L. F. Heath	Lansing, Mich	May 29, 1866	55, 099
Sawing-machine	D. Heller	Milton Centre, Ohio	Dec. 6, 1870	109, 900
Sawing-machine	N. F. Hersh	Round Hill, Pa	Nov. 9, 1869	96, 697
Sawing-machine	G. P. Hill and E. C. Dow	East Deering, N. H	May 24, 1870	103, 459
Sawing-machine	J. H. J. Hincke	Boston, Mass	July 16, 1872	129, 236
Sawing-machine	G. M. Hinckley	Milwaukee, Wiss	Nov. 19, 1872	133, 100
Sawing-machine	C. J. Holman	Oshkosh, Wis	Dec. 8, 1863	40, 837
Sawing-machine	J. O. Hough	De Witt County, Ill	Nov. 28, 1871	121, 369
Sawing-machine	C. L. and L. P. Hoyt	Aurora, Ill	Apr. 9, 1872	125, 570

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Sawing-machine	J. Hoyt	Stamford, Conn	Oct. 9, 1866	58, 726
Sawing-machine	S. Hunter	Andrew County, Mo	Nov. 10, 1868	83, 856
Sawing-machine	E. Inman	Eaton, Ind	Sept. 9, 1873	142, 699
Sawing-machine	P. Jacobus	Romulus, N. Y	Mar. 28, 1871	113, 057
Sawing-machine	T. Jenkyn	Thetford Centre, Vt	Apr. 28, 1868	77, 195
Sawing-machine	G. Johnson	Detroit, Mich	Feb. 19, 1867	62, 205
Sawing-machine	P. Johnson	Columbia, Cal	Dec. 6, 1870	109, 010
Sawing-machine	J. B. Jones	Xenia, Ohio	Feb. 4, 1868	74, 096
Sawing-machine	J. Kauffman	Gilboa, Ohio	June 7, 1870	103, 892
Sawing-machine	G. W. Kearns	Lilleyville, Pa	Nov. 1, 1870	108, 797
Sawing-machine	P. F. and E. A. King	Saint Louis, Mo	Apr. 4, 1871	113, 531
Sawing-machine	S. M. King	Lancaster, Pa	Apr. 7, 1868	76, 469
Sawing-machine	W. A. L. Kirk	Hamilton, Ohio	Aug. 8, 1865	49, 279
Sawing-machine	J. L. Knowlton	Bordentown, N. J	Oct. 20, 1863	40, 344
Sawing-machine	J. Kunz	Bay City, Mich	Mar. 27, 1866	53, 453
Sawing-machine	R. M. Lafferty	Three Rivers, Mich	Oct. 5, 1869	95, 490
Sawing-machine	J. R. and J. R. Lambert, jr	Rockville, Ind	Nov. 22, 1870	109, 426
Sawing-machine	P. P. Lane and J. P. Bodley	Cincinnati, Ohio	Jan. 28, 1868	73, 814
Sawing-machine	G. C. Lathrop	Danville, Mich	Sept. 3, 1867	68, 517
Sawing-machine	W. D. Leavitt	Cincinnati, Ohio	June 3, 1856	15, 012
Sawing-machine	J. F. Letellier and A. Leitelt	Grand Rapids, Mich	Nov. 2, 1869	96, 450
Sawing-machine	I. B. Lewis	Belvidere, Ill	Dec. 5, 1871	121, 636
Sawing-machine	B. Little and J. B. Lundberg	Coffee Creek, Ind	May 24, 1870	103, 349
Sawing-machine	S. Littlefield	Alfred, Me	Nov. 1, 1859	25, 972
Sawing-machine	J. R. Logan	Bellmore, Ind	Dec. 19, 1865	51, 601
Sawing-machine	J. R. Logan	Bellmore, Ind	July 9, 1867	66, 602
Sawing-machine	J. R. Logan	Rolla, Mo	May 26, 1868	78, 298
Sawing-machine	G. W. Lombard	Westminster, Mass	Oct. 18, 1870	108, 370
Sawing-machine	G. W. Lombard	Westminster, Mass	Feb. 24, 1871	112, 156
Sawing-machine	H. H. Low	Galena, Ill	Mar. 16, 1858	19, 644
Sawing-machine	W. G. Lumbard	Georgetown, Ill	Jan. 30, 1866	52, 304
Sawing-machine	D. R. MacLennan	Cincinnati, Ohio	July 17, 1866	56, 426
Sawing-machine	P. Mageo	Assumption Parish, La	Dec. 7, 1869	97, 539
Sawing-machine	G. Marshall	New York, N. Y	June 17, 1873	139, 965
Sawing-machine	I. M. Marston and H. R. Huling	Roxbury, Mass	Jan. 8, 1867	61, 079
Sawing-machine	N. Martin	Bay City, Mich	June 15, 1869	91, 461
Sawing-machine	D. Mater, jr	Bellmore, Ind	Aug. 13, 1872	130, 516
Sawing-machine	J. D. Matthews	Bowling Green, Ohio	Aug. 7, 1866	56, 965
Sawing-machine	J. D. Matthews	Niles, Mich	Jan. 24, 1871	111, 131
Sawing-machine	C. H. Mayo	Bath, Me	Nov. 22, 1870	109, 436
Sawing-machine	J. Mays	Yazoo City, Miss	Jan. 19, 1858	19, 145
Sawing-machine	M. McCool	Moundsville, W. Va	Oct. 8, 1872	132, 016
Sawing-machine	A. McFarland	Saint Johnsbury, Vt	Feb. 6, 1866	52, 434
Sawing-machine	R. M. McGrath	La Fayette, Ind	May 28, 1867	65, 251
Sawing-machine	W. Melville	Detroit, Mich	Jan. 2, 1866	51, 851
Sawing-machine	F. Meyer	Council Bluffs, Iowa	Feb. 13, 1872	123, 720
Sawing-machine	H. J. Miller	Shanesville, Ohio	Jan. 10, 1865	45, 847
Sawing-machine	W. T. Mills	Kalamazoo, Mich	July 16, 1861	32, 839
Sawing-machine	J. K. Milnor	Baltimore, Md	Nov. 28, 1871	121, 396
Sawing-machine	C. B. Morehous	Washington, Iowa	Apr. 23, 1872	125, 975
Sawing-machine	G. L. Mowry	Scott, N. Y	Oct. 22, 1867	70, 106
Sawing-machine	J. N. Moyer	Cherry Valley, N. Y	Jan. 24, 1865	46, 015
Sawing-machine	P. A. Myers	Round Hill, Pa	May 17, 1870	103, 225
Sawing-machine	W. Neideffer	Mitchell, Ind	Feb. 4, 1873	135, 575
Sawing-machine	J. C. Nelson	Kingston, Tenn	July 23, 1872	129, 747
Sawing-machine	I. M. Newcomb	Eden, Vt	June 12, 1855	13, 040
Sawing-machine	M. Newman	Unadilla, N. Y	July 18, 1865	48, 875
Sawing-machine	A. T. Nichols	Williamsport, Pa	Mar. 18, 1873	137, 022
Sawing-machine	A. T. Nichols	Williamsport, Pa	July 22, 1873	141, 163
Sawing-machine	M. P. Noel	Saint Cloud, Minn	Aug. 25, 1868	81, 400
Sawing-machine	S. W. Northrop	Albany, N. Y	Oct. 20, 1863	40, 356
Sawing-machine	S. W. Nyce	Blooming Grove, Pa	Apr. 2, 1872	125, 215
Sawing-machine	H. P. Ohm	Baltimore, Md	May 23, 1871	115, 092
Sawing-machine	H. P. Ohm	Baltimore, Md	Feb. 13, 1872	123, 723
Sawing-machine	E. Olds and P. Upham	Worcester, Mass	Dec. 21, 1809	....
Sawing-machine	E. Olds and P. Upham	Brookfield, Mass	Dec. 26, 1810	....
Sawing-machine	W. Oller	Scenery Hill, Pa	Nov. 16, 1869	96, 948
Sawing-machine	K. R. Olmsted	Chicago, Ill	Jan. 31, 1860	27, 024
Sawing-machine	A. V. B. Orr	Lancaster, Pa	Nov. 8, 1859	26, 047
Sawing-machine	B. Owen	Dayton, Ohio	June 25, 1872	128, 420
Sawing-machine	C. F. Packard	Greenwich, Conn	July 11, 1854	11, 257
Sawing-machine	A. G. Park	Leon, N. Y	Mar. 8, 1870	100, 660
Sawing-machine	F. C. G. Parr	Carter's Creek Station, Tenn.	Jan. 21, 1873	135, 007
Sawing-machine	J. Peery	Levant, Me	May 14, 1836	....
Sawing-machine	P. B. Perkins	Almond, N. Y	Aug. 2, 1864	43, 704
Sawing-machine	A. Perry	Richland, Ind	Dec. 14, 1869	97, 958
Sawing-machine	D. L. Pierce	Buffalo, N. Y	Apr. 26, 1864	42, 505
Sawing-machine	C. L. Pierce	Buffalo, N. Y	Apr. 3, 1866	53, 670
Sawing-machine	C. Pitts	Troy, N. Y	July 3, 1860	29, 003
Sawing-machine	J. T. Plass	New York, N. Y	Sept. 6, 1870	107, 195
Sawing-machine	D. R. Pratt	New Petersburgh, Ohio	Jan. 4, 1870	98, 628
Sawing-machine	D. R. Pratt	Greenfield, Ohio	Dec. 30, 1873	146, 021
Sawing-machine	T. T. Prosser	Oconomowoc, Wis	July 29, 1856	15, 438
Sawing-machine	P. Prytbil	New York, N. Y	Apr. 18, 1871	113, 926
Sawing-machine	H. F. Purmort	Saginaw City, Mich	Apr. 21, 1857	17, 112
Sawing-machine	S. W. Putnam	Fitchburgh, Mass	Aug. 7, 1866	57, 046
Sawing-machine	T. Reeves	Albion, Cal	Oct. 24, 1865	50, 697
Sawing-machine	G. Rehfuss	Philadelphia, Pa	Aug. 2, 1864	43, 742
Sawing-machine	A. Renetsky	Lincoln, Ill	July 26, 1870	105, 848
Sawing-machine	F. Rhoad	Liberty Centre, Ohio	July 5, 1870	104, 998
Sawing-machine	F. J. Richmond	Ashford, Conn	Jan. 26, 1864	41, 397
Sawing-machine	G. T. Riddle	Saint Louis, Mo.	Sept. 23, 1873	143, 033
Sawing-machine	F. W. Robinson	Richmond, Ind	Sept. 5, 1865	49, 791
Sawing-machine	C. B. Rogers	Norwich, Conn	Feb. 14, 1865	46, 425
Sawing-machine	C. Root and B. Bennett	De Ruyter, N. Y	Feb. 11, 1868	74, 432
Sawing-machine	A. E. Ross	Hollis, Me	May 19, 1868	78, 019
Sawing-machine	G. L. Rouse	Cincinnati, Ohi o	Oct. 15, 1872	132, 181

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Sawing-machine	C. W. Saladee	Circleville, Ohio	Jan. 11, 1870	98, 713
Sawing-machine	W. M. Salmon	Edwardsburgh, Mich	July 5, 1864	43, 431
Sawing-machine	G. Sanford	Bergen Point, N. J	May 7, 1872	126, 580
Sawing-machine	C. W. Sappenfield	Crawfordsville, Ind	Oct. 30, 1866	59, 275
Sawing-machine	A. Saur and A. B. Colton	Franklin, Ind	May 8, 1866	54, 608
Sawing-machine	A. Schamweber	Davenport, Iowa	July 16, 1872	129, 499
Sawing-machine	N. Schaumloeffel and G. P. Davis.	Martinsville, N. J	May 21, 1872	127, 106
Sawing-machine	J. B. Schenck	Matteawan, N. Y	Feb. 8, 1870	99, 600
Sawing-machine	J. G. Schiller	New Middletown, Ohio	Sept. 21, 1869	95, 148
Sawing-machine	I. W. Schmidt	Philadelphia, Pa	July 12, 1859	24, 762
Sawing-machine	C. L. Schulz	Baltimore, Md	May 28, 1872	127, 373
Sawing-machine	C. L. Schulz	Baltimore, Md	May 28, 1872	127, 374
Sawing-machine	D. S. Shanabrook	Greencastle, Pa	Nov. 8, 1870	109, 146
Sawing-machine	I. Shepard	Dowagiac, Mich	July 11, 1871	116, 877
Sawing-machine	P. L. Shepler	White House, Ohio	Aug. 25, 1868	81, 418
Sawing-machine	S. S. Sherman and H. B. Gunn	Eau Claire, Wis	Apr. 4, 1871	113, 698
Sawing-machine	W. H. Shugart	New Garden, Ind	Aug. 19, 1873	141, 959
Sawing-machine	A. Smith	Perrysburgh, Ohio	May 3, 1870	102, 606
Sawing-machine	A. E. Smith	Libertyville, Ill	July 25, 1871	117, 340
Sawing-machine	C. H. Smith	Faribault, Minn	Apr. 8, 1873	137, 626
Sawing-machine	F. D. Smith	Chicago, Ill	Nov. 15, 1870	109, 351
Sawing-machine	J. Smith	Woodburn, Oreg	July 16, 1872	129, 064
Sawing-machine	O. C. Smith and T. S. Doll	Menallen, Pa	May 17, 1870	103, 250
Sawing-machine	B. F. Southgate	Bridgewater, Vt	June 10, 1862	35, 550
Sawing-machine	J. J. Squire	Saint Louis, Mo	Oct. 17, 1854	11, 813
Sawing-machine	E. H. Stearns	Erie, Pa	Oct. 28, 1873	144, 154
Sawing-machine	W. Steschult	Glandorf, Ohio	Apr. 18, 1871	113, 943
Sawing-machine	W. H. Stewart	Logansport, Ind	Dec. 18, 1866	60, 649
Sawing-machine	N. Stillwell	Newark, N. J	May 31, 1870	103, 677
Sawing-machine	J. M. Stowell	Milwaukee, Wis	Aug. 26, 1873	142, 294
Sawing-machine	J. Strausbaugh, jr	Tiffin, Ohio	June 7, 1870	104, 077
Sawing-machine	J. P. Summers	Tiffin, Ohio	June 29, 1869	92, 124
Sawing-machine	J. P. Summers	Tiffin, Ohio	Nov. 26, 1872	133, 497
Sawing-machine	J. B. Sweetland	Pontiac, Mich	Feb. 5, 1867	61, 892
Sawing-machine	J. B. Sweetland	Pontiac, Mich	June 4, 1867	65, 517
Sawing-machine	J. B. Sweetland	Pontiac, Mich	Apr. 4, 1871	113, 703
Sawing-machine	M. Sweny	Warren County, Ohio	June 7, 1870	104, 079
Sawing-machine	Z. Swope	Lancaster, Pa	June 19, 1866	55, 738
Sawing-machine	E. Tarrant	Muskegon, Mich	Aug. 20, 1867	68, 013
Sawing-machine	H. Thompson	Worcester, Mass	Sept. 15, 1868	82, 257
Sawing-machine	H. Thompson	Worcester, Mass	Sept. 7, 1869	94, 668
Sawing-machine	J. Thompson and D. D. Dalrymple.	Cross Roads, Ohio	Aug. 19, 1862	36, 246
Sawing-machine	C. R. Tompkins	Rochester, N. Y	July 16, 1872	129, 193
Sawing-machine	E. Totman	Columbus, Pa	Aug. 2, 1864	43, 724
Sawing-machine	E. Totman	Columbus, Pa	Mar. 14, 1865	46, 833
Sawing-machine	A. W. Townshend	Washington, D. C	Feb. 9, 1869	86, 883
Sawing-machine	P. H. Turner	Madison, Wis	May 18, 1869	90, 320
Sawing-machine	W. P. Uhlinger	Philadelphia, Pa	June 8, 1869	91, 185
Sawing-machine	H. S. Vrooman	Logansport, Ind	June 3, 1856	15, 026
Sawing-machine	H. S. Vrooman	New York, N. Y	May 4, 1858	20, 184
Sawing-machine	J. Walling	Plymouth, Ind	Mar. 1, 1870	100, 471
Sawing-machine	A. E. and J. V. Warner	Norwalk, Ohio	May 30, 1865	48, 001
Sawing-machine	A. E. and J. V. Warner	Norwalk, Ohio	Dec. 4, 1866	60, 297
Sawing-machine	C. R. Warner and M. Bales	London, Ohio	Oct. 16, 1866	58, 921
Sawing-machine	W. W. and J. M. Waterbury	New Canaan, Conn	Apr. 4, 1871	113, 375
Sawing-machine	W. Weaver	Greenwich, N. Y	Jan. 30, 1872	123, 211
Sawing-machine	C. P. Wells	Collinsville, Conn	Mar. 29, 1870	101, 397
Sawing-machine	W. J. Wells	Delaware, Ohio	Sept. 20, 1864	44, 359
Sawing-machine	W. J. Wells	Delaware, Ohio	Apr. 17, 1866	54, 046
Sawing-machine	P. Werni and R. B. De Bare	Chicago, Ill	Dec. 3, 1867	71, 669
Sawing-machine	E. Wescott	Hudson City, N. J	Apr. 9, 1867	63, 679
Sawing-machine	G. Westinghouse	Schenectady, N. Y	July 18, 1865	48, 857
Sawing-machine	J. M. Westmoreland	Willis, Tex	Mar. 18, 1873	137, 042
Sawing-machine	S. Wheeler	Albany, N. Y	Apr. 8, 1873	137, 581
Sawing-machine	O. A. White and J. W. Bostwick	Norwalk, Ohio	Oct. 3, 1865	50, 292
Sawing-machine	C. P. Wiggins	Indianapolis, Ind	Feb. 14, 1865	46, 428
Sawing-machine	C. P. Wiggins	Indianapolis, Ind	July 18, 1865	48, 879
Sawing-machine	G. L. Willcox	Hebron, Conn	Aug. 28, 1866	57, 612
Sawing-machine	J. R. Williamson and S. Forsythe.	Seabeck, Wash	Oct. 21, 1862	36, 746
Sawing-machine	J. A. Wood	Far Rockaway, N. Y	July 5, 1870	105, 023
Sawing-machine	W. P. Wood	Washington, D. C	Feb. 26, 1856	14, 339
Sawing-machine	H. Woodward	Milwaukee, Wis	Aug. 17, 1869	93, 787
Sawing-machine	L. Wright	Newark, N. J	Jan. 2, 1855	12, 176
Sawing-machine	W. M. Wright	Galesburgh, Ill	Nov. 21, 1871	121, 144
Sawing-machine	A. Xander	Slatington, Pa	Aug. 19, 1873	141, 975
Sawing-machine	S. Yarion	Corunna, Mich	Sept. 15, 1868	82, 265
Sawing-machine	T. L. Yates	Utica, N. Y	July 3, 1866	56, 138
Sawing-machine	P. Youngs	Milwaukee, Wis	Jan. 30, 1855	12, 337
Sawing-machine adapted for the use of the auger and chisel.	B. Zurn	New York, N. Y	Sept. 9, 1862	36, 435
Sawing machine, Band	H. D. Bliss	Hamburgh, Iowa	Aug. 20, 1872	130, 618
Sawing machine, Band	O. Bonney, jr	San Francisco, Cal	Apr. 22, 1873	138, 121
Sawing-machine band	W. H. Doane and W. P. McKee	Cincinnati, Ohio	Nov. 14, 1871	120, 949
Sawing machine, Band	J. Richards	Philadelphia, Pa	May 9, 1871	114, 710
Sawing-machine band	J. Richards and W. H. Thorne	Philadelphia, Pa	June 28, 1870	104, 770
Sawing machine, Band	J. A. Roche and G. V. Orton	Chicago, Ill	Nov. 18, 1873	144, 797
Sawing machine, Band	H. Sillman	Brooklyn, N. Y	Apr. 29, 1873	138, 443
Sawing machine, Band	B. D. Whitney	Winchendon, Mass	May 7, 1872	126, 602
Sawing machine, Band	B. D. Whitney	Winchendon, Mass	May 14, 1872	126, 764
Sawing machine, Band	B. D. Whitney	Winchendon, Mass	Apr. 8, 1873	137, 583
Sawing machine, Bevel	H. E. Hughes	Cincinnati, Ohio	Mar. 3, 1863	37, 816
Sawing machine, Board	R. Jacobs	Wilton, N. Y	Feb. 22, 1831	....
Sawing-machine carriage	A. C. Miller	Morgantown, Va	July 13, 1858	20, 886
Sawing machine, Circular	W. H. Auld	Fairfield, Iowa	Jan. 22, 1861	31, 202
Sawing machine, Circular	C. D. Blakeslee	Grand Rapids, Mich	Feb. 4, 1868	74, 042

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Sawing machine, Circular	D. G. Canfield	Niagara Falls, N. Y	July 23, 1867	66, 947
Sawing machine, Circular	E. H. De Witt	Xenia, Ohio	Dec. 29, 1857	18, 005
Sawing machine, Circular	L. Fossce	Jeffersonville, Ind	Dec. 11, 1866	60, 354
Sawing machine, Circular	C. P. S. Wardwell	Lake Village, N. H	Mar. 10, 1857	16, 814
Sawing machine, Circular	S. Waterman	Williamsburgh, N. Y	Apr. 18, 1854	10, 778
Sawing machine, Circular	R. V. Whiting	Abington, Mass	Aug. 27, 1867	68, 137
Sawing machine, Circular	G. F. Woolston	Washington, D. C	Mar. 24, 1857	16, 894
Sawing machine, Clapboard	D. Newton	Dalton, N. H	July 20, 1843	3, 179
Sawing machine, Cross-cut	J. T. Armstrong	Jacksontown, Ohio	Aug. 17, 1858	21, 177
Sawing machine, Cross-cut	J. Battin	Newark, N. J	Mar. 1, 1859	23, 070
Sawing machine, Cross-cut	R. B. Brown	Williston, Vt	Apr. 10, 1847	5, 053
Sawing machine, Cross-cut	H. Burger	Danville, Ind	Mar. 18, 1841	2, 012
Sawing machine, Cross-cut	W. Cady	Eaton, Ohio	Jan. 6, 1857	16, 326
Sawing machine, Cross-cut	R. M. Cosby	Indianapolis, Ind	Apr. 20, 1858	19, 983
Sawing machine, Cross-cut	S. S. Dice	Stark County, Ohio	Apr. 2, 1861	31, 877
Sawing machine, Cross-cut	F. Field	Toledo, Ohio	July 31, 1855	13, 351
Sawing machine, Cross-cut	P. Fischer	Fort Adams, Miss	Feb. 26, 1861	31, 535
Sawing machine, Cross-cut	A. B. J. Flowers	Indianapolis, Ind	Jan. 5, 1864	41, 063
Sawing machine, Cross-cut	D. Foreman	Navarre, Ohio	Feb. 26, 1861	31, 537
Sawing machine, Cross-cut	J. Frey	Battle Creek, Mich	Oct. 6, 1863	40, 165
Sawing machine, Cross-cut	J. Hamilton	New York, N. Y	Aug. 16, 1859	25, 113
Sawing machine, Cross-cut	A. Heth and G. Hall	Adams Centre, N. Y	Aug. 24, 1858	21, 256
Sawing machine, Cross-cut	A. D. Hoffman	Belleville, Mich	Feb. 7, 1860	27, 053
Sawing machine, Cross-cut	M. W. Knox	Sheridan, N. Y	June 28, 1859	24, 564
Sawing machine, Cross-cut	J. W. Messenger	Windham, Ohio	Dec. 21, 1831	....
Sawing machine, Cross-cut	G. R. Moore	Westford, Mass	Dec. 22, 1857	18, 943
Sawing machine, Cross-cut	G. W. Parker	Fitzwilliam, N. H	May 31, 1859	24, 232
Sawing machine, Cross-cut	G. D. Pearson	Ypsilanti, Mich	Sept. 22, 1863	40, 059
Sawing machine, Cross-cut	H. H. Potter	Carthage, N. Y	Apr. 6, 1858	19, 870
Sawing machine, Cross-cut	J. H. Rauch	Ida, Mich	Sept. 1, 1863	39, 749
Sawing machine, Cross-cut	G. Telford	Pike, N. Y	Mar. 30, 1858	19, 801
Sawing machine, Cross-cut	S. A. Worthen	Morrisville, Vt	Dec. 11, 1860	30, 904
Sawing machine, Curvilinear	S. Warner	Enfield, Mass	June 12, 1855	13, 055
Sawing-machine device	W. P. Wood and S. De Vaughn	Washington, D. C	Sept. 23, 1856	15, 790
Sawing machine, Drag	I. Starr	Prairieville, Mich	Jan. 5, 1864	41, 105
Sawing machine, Endless sectional	H. Brown	New York, N. Y	Sept. 14, 1858	21, 482
Sawing-machine feed-device	L. W. Green	Williamsport, Pa	Aug. 29, 1871	118, 448
Sawing-machine feed-arrangement	T. J. Alexander	Westerville, Ohio	July 28, 1857	17, 860
Sawing-machine-feeding mechanism	P. P. Weis and F. Schutte	Philadelphia, Pa	Feb. 22, 1859	23, 054
Sawing-machine, Felly	J. Rice	Bloomington, Ind	Apr. 6, 1869	88, 586
Sawing machine, Fire-wood	S. A. Clemens	Rockford, Ill	Oct. 29, 1861	33, 571
Sawing machine, Fire-wood	A. Winter	Rondout, N. Y	Sept. 19, 1854	11, 707
Sawing-machine, Carpenter's, &c	D. Parmelee	Redding, Conn	Oct. 25, 1810	....
Sawing, Machine for curvilinear	E. Conger	Milmore, Ohio	Aug. 6, 1861	32, 978
Sawing-machine for edging, slitting, and resawing lumber.	A. Cushing	Saint John's, New Brunswick.	Jan. 6, 1863	37, 334
Sawing-machine for felling trees	M. Ludwig	Boston, Mass	June 30, 1857	17, 686
Sawing-machine for resawing boards	A. C. Ross	Almont, Mich	May 31, 1859	24, 240
Sawing-machine for sawing planks, Reciprocating	W. C. Huntington	Newark, N. J	Aug. 17, 1858	21, 200
Sawing-machine gage-attachment	G. W. Worden	Fayetteville, N. Y	Oct. 9, 1855	13, 670
Sawing-machine gage, Circular	J. D. Riley	Cincinnati, Ohio	Feb. 12, 1867	62, 071
Sawing-machine guard	A. W. Pagett	Springfield, Ohio	Mar. 9, 1869	87, 700
Sawing-machine, Hand	J. A. Talpey	Somerville, Mass	July 1, 1862	35, 790
Sawing machine, Hoop	J. Raub	Highland, Pa	Sept. 11, 1860	29, 993
Sawing-machine, Horse-power	A. Trono	Nebraska, Ohio	May 24, 1870	103, 394
Sawing-machine, Horse-power	O. A. White and I. W. Bostwick	Norwalk, Ohio	Sept. 12, 1865	49, 944
Sawing machine, Jig	A. Thompson and Z. Waters	Bloomington, Ill	July 27, 1869	93, 138
Sawing machine, Jig	F. Willcox	Newark, N. J	June 24, 1862	35, 725
Sawing machine, Lath	J. M. Stowell	Milwaukee, Wis	Mar. 18, 1873	136, 944
Sawing machine, Locomotive cross-cut	J. Walker	Sunbury, Ohio	Oct. 11, 1859	25, 778
Sawing machine, Log	H. C. Boardman	Morrisville, Vt	May 18, 1869	90, 071
Sawing machine, Lumber	B. E. Parkhurst	Brunswick, Me	Aug. 7, 1855	13, 399
Sawing-machine mitering-attachment	A. Aitken	East Corinth, Vt	June 11, 1872	127, 728
Sawing-machine, Picker	J. Haw	Old Church, Va	June 23, 1857	17, 626
Sawing-machine, Portable	C. S. Brown	Homer, N. Y	Apr. 22, 1862	35, 058
Sawing-machine, Portable	S. R. Smith and P. P. Lane	Cincinnati, Ohio	July 26, 1859	24, 913
Sawing machine, Portable cross-cut	S. Scotton	Richmond, Ind	Mar. 24, 1857	16, 883
Sawing machine, Portable cross-cut	S. Scotton	Wayne County, Ind	June 2, 1857	17, 454
Sawing-machine, Portable horse-power	D. Pierce	Poughkeepsie, N. Y	Apr. 3, 1829	....
Sawing machine, Portable reciprocating circular	O. E. Stephens	McCall's Ferry, Pa	Mar. 17, 1857	16, 854
Sawing-machine, Portable steam	S. R. Wilmot	New York, N. Y	Aug. 14, 1855	13, 444
Sawing-machine, Portable steam	S. R. Wilmot and R. G. Fairbanks.	Watertown, Conn., and Brooklyn, N. Y.	June 16, 1857	17, 601
Sawing-machine, Re-	L. J. Cobb	Chicago, Ill	May 31, 1870	103, 568
Sawing-machine, Re-	W. D. Leavitt	Cincinnati, Ohio	Oct. 19, 1858	21, 838
Sawing-machine, Re-	J. York, jr	Monroe, Mich	June 21, 1870	104, 681
Sawing machine, Rotary	H. Brown	New York, N. Y	June 29, 1858	20, 696
Sawing machine, Scroll	L. D. Barrand	New York, N. Y	June 11, 1861	32, 507
Sawing machine, Scroll	H. L. Beach	New York, N. Y	Nov. 26, 1867	71, 265
Sawing machine, Scroll	J. M. Blackstock	Tarentum, Pa	June 29, 1869	91, 900
Sawing machine, Scroll	G. Cooke	Napier, Canada	May 16, 1871	114, 768
Sawing machine, Scroll	J. J. Curtis	East Boston, Mass	June 2, 1857	17, 425
Sawing machine, Scroll	W. E. Dean	Worcester, Mass	Aug. 20, 1872	130, 623
Sawing machine, Scroll	S. De Vaughn	Washington, D. C	Aug. 30, 1859	25, 250
Sawing machine, Scroll	W. H. Doane	Cincinnati, Ohio	June 13, 1865	48, 161
Sawing machine, Scroll	W. H. Doane	Cincinnati, Ohio	May 28, 1872	127, 225
Sawing machine, Scroll	W. H. Dobson	Mecina, N. Y	July 6, 1869	92, 288
Sawing machine, Scroll	W. H. Dobson	Rochester, N. Y	May 16, 1871	114, 778
Sawing machine, Scroll	W. H. Dobson and W. H. Doane	Cincinnati, Ohio	Dec. 12, 1871	121, 856
Sawing machine, Scroll	T. W. Dowling	Pontiac, Mich	Sept. 24, 1872	131, 669
Sawing machine, Scroll	T. W. Dowling	Pontiac, Mich	Dec. 30, 1873	145, 993
Sawing machine, Scroll	N. T. Edson	New Orleans, La	Sept. 12, 1871	118, 796
Sawing machine, Scroll	M. Foley	Appleton, Wis	Oct. 21, 1873	143, 895
Sawing machine, Scroll	T. B. and C. Greene	Abington, Ind	July 27, 1869	93, 082
Sawing machine, Scroll	G. S. Grigg	Pottsville, Pa	Mar. 4, 1873	136, 433
Sawing machine, Scroll	A. Hanauer	Covington, Ky	Sept. 20, 1864	44, 304
Sawing machine, Scroll	M. Hansen	San Francisco, Cal	July 22, 1873	141, 048
Sawing machine, Scroll	A. A. Hoffman	New York, N. Y	Jan. 31, 1865	46, 106

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Sawing machine, Scroll	W. W. Hubbard	Manchester, N. H	Aug. 11, 1868	80, 958
Sawing machine, Scroll	S. Ide	Medina, N. Y	Mar. 26, 1872	124, 956
Sawing machine, Scroll	S. Ide	Medina, N. Y	May 28, 1872	127, 241
Sawing machine, Scroll	H. Lawrence	Fredericton, Canada	May 13, 1873	138, 808
Sawing machine, Scroll	S. G. Mason	Rochester, N. Y	May 16, 1871	114, 835
Sawing machine, Scroll	A. W. Mitchell	Detroit, Mich	June 20, 1871	116, 208
Sawing machine, Scroll	J. S. Moseley	Syracuse, N. Y	Apr. 25, 1871	114, 180
Sawing machine, Scroll	J. D. Powers	Orwell, Vt	May 14, 1872	126, 740
Sawing machine, Scroll	A. M. Schilling	Chicago, Ill	Mar. 30, 1869	88, 417
Sawing machine, Scroll	E. Sirret, jr	Buffalo, N. Y	July 13, 1858	20, 900
Sawing machine, Scroll	H. D. Stover and E. S. Wright	New York, N. Y	June 3, 1862	35, 492
Sawing machine, Scroll	J. A. Talpey	Somerville, Mass	Dec. 26, 1865	51, 761
Sawing machine, Scroll	E. A. Tripp	Newark, N. J	Apr. 12, 1870	101, 788
Sawing machine, Scroll	U. B. Vidal	Philadelphia, Pa	Jan. 19, 1858	19, 168
Sawing machine, Scroll	E. A. Walker	Minneapolis, Minn	Sept. 2, 1873	142, 361
Sawing machine, Scroll	R. M. Washburne	Burlington, Iowa	Sept. 7, 1869	94, 678
Sawing machine, Scroll	D. R. Williams, sr	Paris, Ky	Aug. 20, 1872	130, 680
Sawing machine, Scroll	W. P. Wood	Washington, D. C	June 19, 1860	28, 800
Sawing machine, Scroll	L. Wright	Newark, N. J	May 16, 1865	47, 777
Sawing machine, Scroll	S. M. Young	Jacksonville, Ill	Feb. 14, 1871	111, 895
Sawing-machine, Self-feeding	T. J. Wells	New York, N. Y	Dec. 16, 1862	37, 188
Sawing machine, Steam cross-cut	S. M. King	Lancaster, Pa	July 31, 1860	29, 384
Sawing machine, Stone	R. Morgan	Saint Louis, Mo	Aug. 17, 1869	93, 898
Sawing-machine table	J. Creager	Cincinnati, Ohio	Mar. 21, 1871	112, 788
Sawing-machine table	H. O. Reed	Boston, Mass	Sept. 16, 1873	142, 813
Sawing machine, Table-gage circular	M. B. Tidey	Ithaca, N. Y	Mar. 10, 1857	16, 812
Sawing machine, Wood	I. Allard	Belfast, Me	Oct. 16, 1866	58, 933
Sawing machine, Wood	J. Case	La Fayette, Ind	Feb. 16, 1864	41, 667
Sawing machine, Wood	B. F. Glick	Newark, Ind	Sept. 30, 1873	143, 330
Sawing machine, Wood	M. Dewey	Clarendon, N. Y	Mar. 15, 1864	41, 910
Sawing machine, Wood	J. A. Edick	Newfane, N. Y	July 29, 1862	35, 997
Sawing machine, Wood	S. Funck	Quincy, Ill	Jan. 28, 1873	135, 216
Sawing machine, Wood	E. R. Hall	Mexico, N. Y	Apr. 20, 1869	89, 217
Sawing machine, Wood	G. M. D. and B. E. Harreld	Washington, Iowa	Feb. 23, 1869	87, 100
Sawing machine, Wood	F. L. Hartenstein and S. Hyman	Nashville, Tenn	May 14, 1872	126, 808
Sawing machine, Wood	I. Keller	Randolph, Ohio	June 22, 1869	91, 544
Sawing machine, Wood	S. Lewis	Tiffin, Ohio	May 21, 1850	7, 381
Sawing machine, Wood	I. G. Ringstad	Decorah, Iowa	Aug. 26, 1873	142, 121
Sawing machine, Wood	J. Skinner	Stockwell, Ill	Nov. 11, 1873	144, 482
Sawing machine, Wood	D. Snell	Springfield, Ohio	Oct. 27, 1868	83, 416
Sawing machine, Wood	C. A. Tower	Detroit, Mich	June 18, 1872	128, 189
Sawing machine, Wood	W. F. Veber	Perrysburgh, Ohio	Oct. 27, 1863	40, 438
Sawing machine, Wood	L. Watson	Canton, Mich	Sept. 23, 1862	36, 544
Sawing machine, Wood	J. Weldy	Dayton, Ohio	Feb. 25, 1862	34, 541
Sawing machine, Wood	R. Wilson	Council Bluffs, Iowa	June 25, 1872	128, 445
Sawing machine, Wood and bark	T. Farrington	....	May 9, 1792	....
Sawing-machines, Arrangement of devices in	D. B. Bartholomew	Lancaster, Pa	Dec. 11, 1860	30, 864
Sawing-machines, Arrangement of devices for suspending and adjusting sticks in.	E. Page	Platea, Pa	Feb. 10, 1857	16, 606
Sawing machines, Arrangement of devices to feed and gig back the carriage in circular.	H. Wells	Florence, Mass	Jan. 19, 1858	19, 166
Sawing-machines, Arrangement of mechanism in	J. C. Cline	Camden, N. J	Oct. 23, 1860	30, 463
Sawing machines, Clamping logs in cross-cut	S. Woodard	New London, N. H	Aug. 25, 1857	18, 066
Sawing machines, Device for clamping and feeding the bolt in felly.	D. E. Butler	Chesterfield, Ohio	Nov. 23, 1858	22, 107
Sawing machines, Device for governing lateral motion of carriage in gigging back in circular.	W. M. Ferry, jr	Ferrysburgh, Mich	May 4, 1858	20, 150
Sawing-machines, Feeding and gigging-back movement in.	J. Gilman	South Merrimack, N. H	May 28, 1861	32, 419
Sawing-machines, Feeding lumber laterally in	S. R. Smith	Florence, Mass	Jan. 20, 1857	16, 454
Sawing-machines, Feeding the saw to the stuff in	J. F. Gamble	Concord, Pa	Aug. 23, 1859	25, 189
Sawing machines, Gearing for feed-rollers in re	D. B. Bartholomew	Lancaster, Pa	Dec. 29, 1857	18, 948
Sawing machines, Holding and setting the log in circular.	J. H. Bachelder	Rome, Mich	Sept. 29, 1857	18, 269
Sawing-machines, Operating guide-rollers and feed-clamp in.	L. J. Wicks	New York, N. Y	Sept. 19, 1854	11, 708
Sawing-machines, Producing motion for	J. W. Maxey	Plymouth, Ind	Mar. 10, 1868	75, 441
Sawing-machinery	A. S. T. Copeland	Pittsburgh, Pa	July 29, 1856	15, 414
Sawing, Machinery for curvilinear and compound bevel.	J. Hamilton	New York	Apr. 15, 1843	3, 053
Sawing, Machinery for miter	D. S. Stow	Cohoes, N. Y	Oct. 2, 1849	6, 767
Sawing machinery, Governing the cut of circular	A. C. Martin and M. M. Wombaugh.	Cincinnati, Ohio	Dec. 22, 1857	18, 942
Sawing machinery, Wood	J. M. Toy	Greenfield, Ohio	Apr. 24, 1849	6, 398
Sawing-mill	W. M. Ferry, jr	Ferrysburgh, Mich	July 21, 1857	17, 829
Sawing-mill	W. Hawkins and W. C. Clary	Milwaukee, Wis	Mar. 30, 1858	19, 774
Sawing-mill	D. S. Howard	Lyonsdale, N. Y	Sept. 18, 1855	13, 573
Sawing-mill	F. B. Kendall	Bath, Me	July 21, 1857	17, 840
Sawing-mill	J. G. Kennedy	Cincinnati, Ohio	June 23, 1857	17, 629
Sawing mill, Circular	P. Eggleston	Mobile, Ala	Mar. 3, 1857	16, 725
Sawing-mill feed and jigging movement	G. D. Lund	Yonkers, N. Y	Sept. 1, 1857	18, 098
Sawing-mill feed-regulator	R. Eickemeyer	Yonkers, N. Y	Aug. 19, 1856	15, 559
Sawing, Mill for curvilinear	J. Hamilton	New York, N. Y	Apr. 13, 1852	8, 872
Sawing-mill for warped and curved surfaces	J. W. Cochran	New York, N. Y	Dec. 11, 1847	5, 394
Sawing-mills, Feeding	C. and G. S. Dilkes	Allowaystown, N. J	Sept. 9, 1856	15, 689
Sawing-mills, Lateral feed-motion for	K. R. Olmsted	Chicago, Ill	Nov. 10, 1857	18, 599
Sawing-mills, Self-reversing feed-motion for	D. and A. A. Methven	Wooster, Ohio	May 5, 1857	17, 226
Sawing-mills, Self-setting tail-block for	J. Dawson	Barnesville, Ohio	July 15, 1856	15, 330
Sawing, mortising, tenoning, and grooving machine.	B. Overmen	Greensborough, N. C	May 27, 1830	....
Sawing off logs, Machine for	I. D. Russell and S. Waterman	New York, N. Y., and Greenwich, Conn.	May 19, 1843	3, 092
Sawing off timber, Applying steam-power to	R. Nichols	New Orleans, La	July 21, 1826	....
Sawing or felling trees, Machine for	S. Ingersoll	Greenwich, Conn	May 8, 1855	12, 821
Sawing plank or timber so as to leave no stub-short.	J. Sweet	Bethlehem, Mass	Feb. 15, 1810	....
Sawing shingles and other lumber, Machine for	F. Muzzy	Bangor, Me	July 8, 1862	35, 832
Sawing shingles from the block, Machine for	A. F. French	Franklin, Vt	Jan. 29, 1861	31, 232

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Sawing ship-timbers, &c., Mill for	J. W. Cochran	London, England	Aug. 21, 1849	6, 653
Sawing thin boards, Machine for	J. Myers and R. G. Eunson	New York, N. Y	May 23, 1854	10, 965
Sawing timber	A. Jones, jr	Bethlehem, Mass	Mar. 14, 1810	....
Sawing timber	D. Stein	Vanderburgh County, Ind	Dec. 14, 1830	....
Sawing timber	J. Webb	Brooklyn, Conn	May 14, 1836	....
Sawing timber concave and convex	A. Bard and S. Heywood	Lunenburgh, Mass	July 8, 1834	....
Sawing timber, Guide-gage for	J. Hoke	Grand Detour, Ill	Dec. 29, 1857	18, 974
Sawing timber in a circular form, Machine for	J. Linsey	Cazenovia, N. Y	Feb. 4, 1809	....
Sawing timber, &c., Machine for cross	T. J. Marsh	Liberty, Ind	Sept. 28, 1843	3, 287
Sawing timber without a stub-short	E. Cook	Bethlehem, Mass	Jan. 20, 1810	....
Sawing timber without a stub-short, Carriage-block for.	W. Underwood	Herkimer, N. Y	Sept. 6, 1810	....
Sawing veneers spirally from the log, Machine for.	B. F. and I. T. Barker	Belfast and Mountville, Me	Mar. 13, 1860	27, 420
Sawing volutes, Machine for	E. Whiten	Hingham, Mass	Sept. 30, 1851	8, 400
Sawing wedges or shingles, Machine for	J. Taggart	Roxbury, Mass	May 8, 1855	12, 848
Sawing winding forms, Machine for	J. C. Hintz	Cincinnati, Ohio	Jan. 25, 1859	22, 726
Sawing wood	J. Pinneo, jr	Hanover, N. Y	Apr. 21, 1836	....
Sawing wood by hand, horse, or water power	J. Blood and S. A. Hurd	Fairfield County, Conn	May 22, 1832	....
Sawing wood by wind-power	J. Wisner	East Aurora, N. Y	Aug. 23, 1864	43, 941
Sawing wood for fuel and blocks for shingles	H. Mitchell	Rutland, N. Y	June 14, 1834	....
Sawing wood in a circular form, Machine for	R. Smith	Norwich, Conn	Apr. 20, 1810	....
Sawing wood into planks and boards, &c., Machine for.	P. Tomlinson	Derby, Conn	Apr. 3, 1829	....
Sawing, Working-power for	A. West	Pontiac, Mich	Aug. 22, 1865	49, 575
Sawyer, Expeditious	J. H. Morison	Boscawen, N. H	Mar. 18, 1814	....
Scabbard-frog	H. Metcalfe	New York, N. Y	Apr. 9, 1872	125, 604
Scabbard to belt, Mode of attaching	W. Lewis	Brooklyn, N. Y	Jan. 24, 1860	26, 949
Scaffold	D. D. Adams	Brookline, Mass	Jan. 1, 1867	60, 659
Scaffold	G. Adams, jr	Alexander, N. Y	May 11, 1869	89, 840
Scaffold	J. Anderson, A. O. Smith, and I. C. Wallace.	Lakeville, Mich	June 12, 1869	85, 777
Scaffold	T. Anderson	North Franklin, N. Y	July 2, 1872	128, 579
Scaffold	F. App	Selin's Grove, Pa	Mar. 2, 1869	87, 389
Scaffold	G. W. Baker	Lincoln, Ill	Jan. 18, 1870	98, 908
Scaffold	B. Best	Dayton, Ohio	July 2, 1867	66, 286
Scaffold	L. B. Carpenter	Milwaukee, Wis	Jan. 22, 1867	61, 395
Scaffold	C. Crow	Onarga, Ill	Mar. 26, 1867	63, 142
Scaffold	J. F. Darley	Nebraska City, Nebr	Jan. 14, 1873	134, 737
Scaffold	M. D. Drake	Trenton, Ky	July 8, 1873	140, 688
Scaffold	C. Foster	Philadelphia, Pa	Jan. 29, 1856	14, 156
Scaffold	A. C. Funston	West Philadelphia, Pa	June 19, 1855	13, 086
Scaffold	A. Gates	Burnside, Ill	Feb. 18, 1873	135, 902
Scaffold	J. Gorman	Elizabeth, N. J	Oct. 29, 1872	132, 656
Scaffold	S. Hollabaugh and T. W. Letts	Mount Union, Pa	Feb. 7, 1871	111, 540
Scaffold	E. R. Holzer	Philadelphia, Pa	May 12, 1868	77, 733
Scaffold	E. R. Holzer	Philadelphia, Pa	May 3, 1870	102, 542
Scaffold	A. S. Kinnear	Volga, Ind	Dec. 17, 1867	72, 406
Scaffold	H. Littlefield	Lewis, Iowa	Aug. 8, 1865	49, 283
Scaffold	H. Littlefield	Lewis, Iowa	Apr. 2, 1867	63, 536
Scaffold	N. Martz	Lykens, Pa	Feb. 7, 1871	111, 660
Scaffold	D. Y. Miller	Huntsville, Ill	June 10, 1873	139, 726
Scaffold	E. P. Newbanks and H. M. Powell.	Lincoln, Ill	July 17, 1866	56, 437
Scaffold	F. Odenbaugh	Middletown, Pa	Nov. 10, 1868	83, 994
Scaffold	J. Redick	Butler, Ohio	Aug. 29, 1871	118, 553
Scaffold	C. Robinson	Rochester, Minn	Dec. 3, 1867	71, 791
Scaffold	H. Swineford	Mifflinburgh, Pa	Feb. 1, 1870	99, 492
Scaffold	C. M. Tanner	Mentor, Ohio	Nov. 27, 1866	60, 085
Scaffold	G. W. Wells	Lawton, Mich	Feb. 15, 1870	99, 799
Scaffold	J. P. Wright	Canton, Minn	Apr. 9, 1867	63, 775
Scaffold, Adjustable	P. Cavalier	Plain View, Minn	Nov. 26, 1867	71, 454
Scaffold, Adjustable	J. Dillon	New York, N. Y	Nov. 4, 1873	144, 263
Scaffold, Adjustable	W. A. Jester	Holliday's Cove, W. Va	Oct. 29, 1872	132, 583
Scaffold, Adjustable	F. Stein and H. Hearing	New York, N. Y	July 27, 1869	93, 019
Scaffold, Adjustable	J. S. Tilley	West Troy, N. Y	July 15, 1873	140, 858
Scaffold and ladder	J. E. Rauch	Selin's Grove, Pa	Feb. 8, 1870	99, 706
Scaffold and ladder	R. Rowan	Parnassus, Pa	June 30, 1868	79, 399
Scaffold, Beam-adjusting	A. N. Westgate	Acushnet, Mass	Oct. 1, 1872	131, 920
Scaffold-bracket	H. Beckwith	Grass Lake, Mich	Dec. 4, 1866	60, 122
Scaffold-bracket	H. Beckwith	Grass Lake, Mich	Apr. 9, 1867	63, 693
Scaffold-bracket	J. Chattin	Marion, Iowa	Jan. 4, 1870	98, 539
Scaffold-bracket	C. Eddy	Grass Lake, Mich	Jan. 1, 1867	60, 866
Scaffold-bracket	N. Lovell	Adrian, Mich	Oct. 12, 1869	95, 815
Scaffold-bracket	C. Mudge	Ovid, Mich	Sept. 27, 1870	107, 706
Scaffold-bracket	E. Parker	Plymouth, Conn	Feb. 15, 1870	99, 941
Scaffold-bracket	J. M. Taylor	Dublin, Ind	June 7, 1870	104, 081
Scaffold-bracket	S. D. Van Pelt	Anderson, Ind	Apr. 21, 1868	77, 131
Scaffold-bracket for roofing	J. R. Kennett	Geddes, N. Y	Nov. 15, 1870	109, 221
Scaffold-bracket for roofing	J. W. Tallmadge	Plainville, Conn	May 2, 1871	114, 365
Scaffold, Builder's	J. E. Bliss	Oxford, Ind	Dec. 10, 1867	71, 960
Scaffold, Builder's	J. R. Lemon	Toledo, Ohio	Apr. 10, 1860	27, 815
Scaffold, Builder's and painter's	C. Mudge	Ovid, Mich	Apr. 28, 1868	77, 308
Scaffold, Building	N. B. Crawford	Bennington, Vt	Nov. 19, 1867	71, 139
Scaffold, Building	J. Lamb and F. Livings	Aurora and East Enterprise, Ind.	Jan. 14, 1868	73, 346
Scaffold, Elevating	F. Rudolph	New York, N. Y	Jan. 2, 1855	12, 168
Scaffold, Extension	P. L. Hains	Freeburgh, Pa	Oct. 26, 1869	96, 226
Scaffold, Extension	J. Hughes	New Berne, N. C	Nov. 8, 1870	109, 012
Scaffold, Extension	I. Noggle	Butler, Ill	July 30, 1872	129, 958
Scaffold, Extension	A. Sweet	Westfield, Pa	Jan. 17, 1871	111, 094
Scaffold, Extension	C. M. Tanner	Mentor, Ohio	June 25, 1867	66, 187
Scaffold for gathering fruit, &c	A. J. Wright	Cleveland, Ohio	Dec. 14, 1869	97, 979
Scaffold for shingling roofs	J. W. Rodefer	Abingdon, Va	July 22, 1856	15, 390
Scaffold, Painter's	J. Bauch	Selin's Grove, Pa	Sept. 14, 1869	94, 913
Scaffold, Painter's	J. Blomgren and C. Anderson	Galesburgh, Ill	Sept. 24, 1867	69, 168
Scaffold-pole clamp	H. Haering and H. Allis	New York, N. Y	Oct. 7, 1873	143, 448
Scaffold, Portable	A. E. Herrington and J. D. Richards.	Schoolcraft, Mich	June 1, 1869	90, 842

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Scaffold, Portable	R. M. Lytle	Trinne, Tenn	Aug. 14, 1860	29, 607
Scaffold, Roof	N. B. Crawford	Bennington, Vt	Nov. 19, 1867	71, 140
Scaffold, Roofing	P. Richmond	Aberdeen, Ind	Jan. 14, 1868	73, 387
Scaffold-support	R. A. Edmonston	Georgetown, D. C	Aug. 5, 1873	141, 498
Scaffold-supporter	D. B. Hay	Dayton, Ohio	May 10, 1870	102, 937
Scaffold, Workmen's	W. H. Berger	Danville, Pa	May 31, 1870	103, 546
Scaffolds, Method of holding and adjusting	W. A. Devon	Richmond, N. Y	Nov. 20, 1866	59, 824
Scaffolds, Supporting	J. K. Lewis	Rising Sun, Ind	July 10, 1860	29, 086
Scaffolding	J. V. Cook and E. J. Crossman	Auburn, N. Y	Aug. 30, 1870	102, 783
Scaffolding	J. M. Dearborn	Boston, Mass	Apr. 29, 1856	14, 764
Scaffolding	E. Duchamp	Saint Martinsville, La	Jan. 17, 1860	26, 840
Scaffolding	J. W. Glover and W. B. and B. E. Orner	Martinsville, Ind	July 28, 1868	80, 346
Scaffolding	A. R. and B. F. Monson	Shelbina, Mo	July 12, 1870	105, 248
Scaffolding	J. D. Pettit	Rochester, Ind	Apr. 25, 1871	114, 034
Scaffolding	M. T. Williams	Milwaukee, Wis	Aug. 4, 1868	80, 581
Scaffolding, Adjustable	A. J. Heavner	Pittsfield, Ill	Aug. 15, 1871	118, 128
Scaffolding, and elevating the same	P. Knapp	Woodford, Vt	June 28, 1864	43, 315
Scaffolding-bracket	J. S. Wilson	Indianapolis, Ind	Jan. 14, 1868	73, 274
Scaffolding-brackets to buildings, Securing	T. J. Gifford	Salem, Mass	Mar. 13, 1860	27, 441
Scaffolding for building	J. H. Martin	Columbus, Ohio	Mar. 3, 1868	75, 176
Scaffolding for dry-docks	J. E. Simpson	Brooklyn, N. Y	Jan. 1, 1867	60, 947
Scagliola-shining, Making	S. Pinistri	New York	June 18, 1827	....
Scalding-apparatus	F. G. Chesman	Du Page, Ill	June 11, 1872	127, 670
Scale-beam	S. G. Barker	Carbondale, Pa	Nov. 4, 1862	36, 898
Scale-beam	E. P. Crain	New York, N. Y	Sept. 3, 1867	68, 490
Scale-beam	H. S. Cushing	Blossburgh, Pa	May 8, 1866	54, 509
Scale-beam	A. B. Davis	Philadelphia, Pa	July 30, 1867	67, 274
Scale-beam	J. F. Keeler	Pittsburgh, Pa	July 12, 1864	43, 511
Scale-beam	J. F. Keeler	Pittsburgh, Pa	Sept. 11, 1866	57, 921
Scale-beam	J. F. Keeler	Pittsburgh, Pa	May 19, 1868	78, 098
Scale-beam	S. T. McDougall	New York, N. Y	Feb. 26, 1850	7, 122
Scale-beam	W. P. Pierce	Saint Johnsbury, Vt	Apr. 9, 1850	7, 270
Scale-beam	J. H. Usher	Buffalo, N. Y	Oct. 25, 1870	108, 654
Scale-beam	J. Weeks	Buffalo, N. Y	Nov. 23, 1869	97, 253
Scale beam and balance	J. Edwards	New York, N. Y	May 19, 1806	....
Scale beam and balance	A. Pollock	Boston, Mass	July 31, 1815	....
Scale beam and balance	S. A. Rogers	Philadelphia, Pa	Feb. 19, 1825	....
Scale beam and weight	A. H. Free	Troy, N. Y	Jan. 9, 1838	562
Scale beam, Calculating	G. A. Smythe	Reading, Pa	Feb. 18, 1868	74, 624
Scale-beam-graduating machine	W. W. Reynolds	Brandon, Vt	Nov. 28, 1871	121, 420
Scale-beam, Hollow-headed	J. F. Keeler	Pittsburgh, Pa	June 9, 1868	78, 748
Scale beam, Letter	R. Murdock	Baltimore, Md	Aug. 21, 1866	57, 361
Scale beam, Weighing	W. Yost	Goshen, Ohio	Mar. 4, 1856	14, 382
Scale-beams, Box or case for	A. B. Davis	Philadelphia, Pa	Mar. 31, 1868	76, 169
Scale-beams, Machine for milling knife-edge of	H. Fairbanks	Saint Johnsbury, Vt	Dec. 28, 1869	98, 363
Scale-beams, Machine for milling knife-edges of	T. J. Rockwood	Saint Johnsbury, Vt	Oct. 12, 1869	95, 729
Scale-beams, Manufacture of	J. Edwards	New York, N. Y	Nov. 19, 1816	....
Scale-boards and match-splints, Machine for cutting.	J. K. Mayo	Portland, Me	Nov. 7, 1865	50, 833
Scale-boards, Machine for cutting	J. Carrington	Litchfield, Conn	Apr. 27, 1812	....
Scale-pan	J. P. Chatillon	New York, N. Y	Oct. 7, 1873	143, 490
Scale-pans, Machine for forming	F. Meyer	Newark, N. J	Dec. 19, 1871	122, 045
Scale-pans, Suspending	R. Murdoch	Baltimore, Md	Mar. 10, 1868	75, 448
Scale-pivots, Machine for grinding	F. Meyer	Newark, N. J	May 14, 1867	64, 616
Scale-scoop	F. Meyer	Newark, N. J	Oct. 8, 1867	69, 691
Scale, Tonic and diatonic mutation	J. H. Scott	Kickapoo, Ill	Nov. 21, 1871	121, 066
Scale, Tuning	M. L. Bennett	Waverly, N. Y	July 5, 1870	105, 029
Scales	J. Benham	McLean, N. Y	Nov. 19, 1867	70, 942
Scales	H. N. and J. C. Bill	Willimantic, Conn	Apr. 3, 1860	27, 683
Scales	S. W. Cox	New Haven, Conn	Oct. 15, 1867	69, 774
Scales	J. C. Dell	Philadelphia, Pa	Dec. 3, 1867	71, 588
Scales	S. S. Hitchcock	Chicago, Ill	Jan. 29, 1861	31, 243
Scales	C. E. Hoffmann	Jersey City, N. J	Aug. 7, 1866	56, 940
Scales	W. W. Kelly	Reedtown, Ohio	Aug. 23, 1859	25, 203
Scales	E. B. Lake	Bridgeport, N. J	Dec. 31, 1867	72, 864
Scales	C. C. Lyman	Edinborough, Pa	July 7, 1868	79, 583
Scales	J. S. McPherson	New Vienna, Ohio	Jan. 16, 1855	12, 246
Scales	J. Saugster	Buffalo, N. Y	Dec. 5, 1865	51, 357
Scales	A. Turnbull	West Meriden, Conn	Sept. 13, 1859	25, 474
Scales, Adjustable elastic measuring	B. E. Chassaing	Buenos Ayres, Argentine Republic.	Nov. 7, 1871	120, 621
Scales, Adjustable weight for	H. Andres	Troy, N. Y	Nov. 14, 1871	120, 927
Scales and dumping-platform, Combined	J. Cobleigh	Morrison, Ill	Dec. 17, 1872	134, 031
Scales, Automatic calculator for	J. Johnson	Saco, Me	Aug. 21, 1866	57, 392
Scales, Automatic grain?	J. R. Gates	Indianapolis, Ind	Jan. 11, 1859	22, 604
Scales, Automatic grain	A. Gummer	Indianapolis, Ind	Apr. 3, 1860	27, 712
Scales, Automatic grain-weighing	H. Fairbanks	Saint Johnsbury, Vt	July 13, 1869	92, 436
Scales, Automatic weighing and distributing	H. Fairbanks	Saint Johnsbury, Vt	Jan. 17, 1871	110, 965
Scales, Bag-holder weighing	A. H. Bell	Cedar Falls, Iowa	Oct. 14, 1873	143, 658
Scales, Bag-holder weighing	H. T. Budge and N. W. Russell	Cedar Falls, Iowa	Apr. 29, 1873	138, 315
Scales, Balance	G. W. Chandler	Fitchburgh, Mass	July 27, 1869	93, 054
Scales, Bent-lever	J. King, jr	Fort Wayne, Ind	May 29, 1866	55, 117
Scales, Charging	T. and H. Fairbanks	Saint Johnsbury, Vt., and Hanover, N. H.	Sept. 29, 1868	82, 610
Scales, Coin and letter	D. Cumming, jr	New York, N. Y	Sept. 15, 1863	39, 890
Scales, Compound-lever and self-weighing	H. H. Grover	Springwater, N. Y	Dec. 17, 1830	....
Scales, Computing-arrangement for weighing	H. D. Lathrop and A. Gay	Bedford, Ohio	Feb. 1, 1870	99, 326
Scales, Constructing weighing	J. Ball	Buffalo, N. Y	Apr. 20, 1839	1, 131
Scales, Counter	H. B. Osgood	New Haven, Conn	Aug. 10, 1858	21, 145
Scales, Counter	E. H. Parker	Bucksport, Me	May 26, 1843	3, 112
Scales, Counter	F. Scheurer	New York, N. Y	July 10, 1855	13, 232
Scales, Counter	G. White	Louisville, Ky	Nov. 16, 1839	1, 410
Scales, Double-lever	E. A. and A. Hibbard	Lunenburgh, Vt	May 29, 1835	....
Scales, Drafting	J. Lyman	Lenox, Mass	June 16, 1863	38, 904
Scales, Drafting	J. Lyman	Lenox, Mass	Feb. 7, 1865	46, 256
Scales, Drafting	S. H. Wiley	Salisbury, N. C	Dec. 5, 1865	51, 375
Scales, Druggists	A. Cyrani and C. Reinhardt	Brooklyn, N. Y	May 27, 1873	139, 372

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Scales, Elastic graduated	R. M. Bache	Philadelphia, Pa	Apr. 5, 1870	101, 411
Scales, Electro-magnetic grain	N. M. Phillips	New York, N. Y	Apr. 22, 1856	14, 753
Scales, &c., Engine for dividing	S. Hedge	Windsor, Vt	June 20, 1827	....
Scales for canals, railways, &c., Lever	E. Ellicott and S. A. Abbott	Philadelphia, Pa	Feb. 6, 1849	6, 097
Scales for drafting garments	N. B. Starr	Philadelphia, Pa	July 10, 1826	....
Scales for hay or cattle, Platform	D. H. Dewey	Canton, Ill	Jan. 25, 1870	99, 160
Scales for indicating tonnage of boats, Hydrostatic	A. Amsden	Springfield, Ohio	Mar. 8, 1864	41, 824
Scales for showing weights and prices	W. H. Phinney	Pawtucket, R. I	Aug. 30, 1870	106, 869
Scales for steam-engines, Sliding	A. Jillson	Cumberland, R. I	May 17, 1864	42, 776
Scales for weighing cargoes, Hydrostatic	J. R. Burville	Springfield, Ohio	June 22, 1869	91, 714
Scales for weighing ice	T. T. Fowler	Washington, D. C	July 24, 1866	56, 547
Scales, Grain	C. H. Hunter	Indianapolis, Ind	May 8, 1860	28, 236
Scales, Hydrostatic	I. R. Amsden	Buffalo, N. Y	Oct. 29, 1867	70, 312
Scales, Hydrostatic	O. D. Hudson	Waupun, Wis	Feb. 21, 1871	112, 043
Scales, Indicating-attachment to weighing	W. F. Sweet	Jackson, Pa	Sept. 14, 1869	94, 925
Scales, Jack	H. M. Hervey	Madison, Ohio	Apr. 14, 1868	76, 628
Scales, Letter	T. Fairbanks	Saint Johnsbury, Vt	Nov. 8, 1859	26, 026
Scales, Machine for milling knife-edge of	T. J. Rockwood	Saint Johnsbury, Vt	Aug. 11, 1868	81, 007
Scales, Mariner's compass	J. Reid	Knoxville, Md	Sept. 11, 1866	57, 970
Scales or weighing-apparatus	A. H. Platt and W. S. Rosecrans	Cincinnati, Ohio	Oct. 1, 1861	33, 403
Scales, Pendulum	M. L. Morse	Cambridge, Conn	Feb. 21, 1810	....
Scales, Perpetual-balance	R. H. Wright	Boston, Mass	June 9, 1810	....
Scales, Platform	J. Bryson	Quincy, Ill	Aug. 12, 1873	141, 697
Scales, Platform	J. H. Conklin	Yorktown, N. Y	Apr. 4, 1865	47, 165
Scales, Platform	A. B. Davis	Philadelphia, Pa	Sept. 17, 1861	33, 297
Scales, Platform	J. Decker	Sparta, N. J	Aug. 11, 1868	80, 857
Scales, Platform	H. J. Drew	Dixon, Ill	Oct. 27, 1863	40, 400
Scales, Platform	C. H. Earle	Green Bay, Wis	Apr. 20, 1858	19, 985
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Nov. 20, 1849	6, 895
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Jan. 13, 1857	16, 381
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Dec. 20, 1859	26, 484
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Dec. 20, 1859	26, 485
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Feb. 18, 1862	34, 417
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Mar. 18, 1862	34, 676
Scales, Platform	E. S. Fargo	Dixon, Ill	Oct. 20, 1863	40, 337
Scales, Platform	W. P. Goolman	Dublin, Ind	Aug. 20, 1867	67, 871
Scales, Platform	W. P. Goolman	Kansas City, Mo	May 23, 1871	115, 190
Scales, Platform	D. Hazard	Milton, Del	Dec. 10, 1867	72, 037
Scales, Platform	J. Holcomb	Brandon, Vt	Dec. 11, 1860	30, 922
Scales, Platform	G. W. Jackson	Wyalusing, Pa	Nov. 19, 1867	71, 179
Scales, Platform	J. F. Keeler	Cleveland, Ohio	Sept. 26, 1854	11, 729
Scales, Platform	J. F. Keeler	Cleveland, Ohio	June 8, 1858	20, 4[illegible]2
Scales, Platform	J. F. Keeler	Pittsburgh, Pa	Feb. 18, 1868	74, 696
Scales, Platform	J. F. Keeler	Pittsburgh, Pa	June 17, 1873	139, 891
Scales, Platform	J. Kelly	Sag Harbor, N. Y	Jan. 5, 1858	19, 061
Scales, Platform	M. Kennedy	New York, N. Y	Aug. 9, 1870	106, 174
Scales, Platform	M. Kennedy	New York, N. Y	Apr. 4, 1871	113, 529
Scales, Platform	C. C. Lyman	Edinborough, Pa	July 16, 1867	66, 722
Scales, Platform	C. C. Lyman	Edinborough, Pa	Sept. 3, 1867	68, 371
Scales, Platform	C. C. Lyman	Edinborough, Pa	May 24, 1870	103, 478
Scales, Platform	W. Maguire	Baltimore, Md	Aug. 10, 1869	93, 630
Scales, Platform	S. T. McDougall	New York, N. Y	Nov. 22, 1853	10, 256
Scales, Platform	A. B. Morey	Saint Louis, Mo	Dec. 20, 1859	26, 512
Scales, Platform	R. Newell	Lebanon, Ind	May 11, 1852	8, 942
Scales, Platform	W. W. Reynolds	Brandon, Vt	Aug. 20, 1867	67, 908
Scales, Platform	W. W. Reynolds	Brandon, Vt	Oct. 15, 1872	132, 321
Scales, Platform	S. E. Robbins	Boston, Mass	Aug. 6, 1867	67, 454
Scales, Platform	E. Sampson	Cornish, N. H	Nov. 22, 1853	10, 264
Scales, Platform	E. Sampson	Windsor, Vt	July 25, 1854	11, 388
Scales, Platform	E. Sampson	Saint Johnsbury, Vt	Dec. 7, 1858	22, 244
Scales, Platform	E. Sampson	Saint Johnsbury, Vt	May 24, 1859	24, 143
Scales, Platform	E. Sampson	Waterford Junction, N. Y	Dec. 23, 1862	37, 259
Scales, Platform	E. Sampson	Lansingburgh, N. Y	Oct. 17, 1865	50, 537
Scales, Platform	E. Sampson	Lansingburgh, N. Y	Aug. 28, 1866	57, 640
Scales, Platform	E. Sampson	Nassau, N. Y	Nov. 21, 1871	121, 200
Scales, Platform	L. M. Severance	Dixon, Ill	Nov. 11, 1862	36, 918
Scales, Platform	L. M. Severance	Dixon, Ill	Oct. 27, 1863	40, 434
Scales, Platform	L. M. Severance	Dixon, Ill	Aug. 6, 1867	67, 506
Scales, Platform	L. M. Severance	Dixon, Ill	Sept. 7, 1869	94, 517
Scales, Platform	F. M. Strong and T. Ross	Vergennes, Vt	Jan. 15, 1856	14, 119
Scales, Platform	F. M. Strong and T. Ross	Brandon, Vt	May 24, 1859	24, 162
Scales, Platform	F. M. Strong and T. Ross	Brandon, Vt	Oct. 14, 1862	36, 678
Scales, Platform	F. M. Strong and T. Ross	Brandon, Vt	June 26, 1866	55, 96[illegible]
Scales, Platform	J. H. Truex	Rochester, N. Y	Jan. 3, 1871	110, 6[illegible]6
Scales, Platform	J. Underwood and S. F. Stevens	Montpelier, Vt	Sept. 26, 1848	5, 813
Scales, Platform	V. Vincent	New York, N. Y	July 19, 1870	105, 522
Scales, Platform	R. F. Wolcott	Claremont, N. H	Nov. 1, 1859	25, 991
Scales, Platform	H. Wood	Manchester, England	Sept. 13, 1870	107, 317
Scales, Platform weighing	S. C. Baker and J. Root	Altoona and York, Pa	May 30, 1871	115, 268
Scales, Platform weighing	R. J. McKeone	Inverness, Mich	Dec. 20, 1870	110, 261
Scales, Platform weighing	W. W. Reynolds	Brandon, Vt	Apr. 7, 1868	76, 523
Scales, Plotting	L. H. Parsons	Lambertville, N. J	Sept. 30, 1851	8, 398
Scales, Pocket or "charm" letter	G. S. Rice	New York, N. Y	June 21, 1870	104, 499
Scales, Portable	H. Maranville	Akron, Ohio	Oct. 3, 1865	50, 2[illegible]4
Scales, Portable platform	H. K. Bugbee	Williamstown, N. J	Sept. 15, 1868	82, 204
Scales, Portable platform	J. Howe, jr., F. M. Strong, and T. Ross	Brandon, Vt	May 20, 1862	35, 348
Scales, Postal	M. L. M. Hussey	New York, N. Y	Feb. 4, 1868	73, 976
Scales, Preponderating	E. Skinner	Camillus, N. Y	Aug. 23, 1825	....
Scales, Railway platform	T. Fairbanks	Saint Johnsbury, Vt	Nov. 1, 1859	25, 962
Scales, Railway platform	W. Maguire	Baltimore, Md	June 29, 1869	92, 069
Scales, Railway platform	L. Pusey	Downingtown, Pa	Dec. 23, 1856	16, 286
Scales, Recording weighing	H. Fairbanks	Saint Johnsbury, Vt	Sept. 13, 1870	107, 240
Scales, Registering	D. Wolf	Easton, Kans	Oct. 27, 1868	83, 580
Scales, Registering weighing	H. Paddock	Saint Johnsbury, Vt	Sept. 13, 1870	107, 226
Scales, Revolving	H. V. Sakulinski	Munich, Bavaria	Nov. 23, 1869	97, 138
Scales, Rule and letter	T. F. Taylor	Lawrenceville, N. Y	Oct. 15, 1867	69, 948
Scales, Self-indicating weighing	J. G. Dyer	Chicago, Ill	May 11, 1869	89, 862

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Scales, Self-registering weighing	H. Fairbanks	Saint Johnsbury, Vt	Sept. 13, 1870	107, 239
Scales, Spring	S. Ingersoll	Brooklyn, N. Y	Oct. 5, 1869	95, 588
Scales, Spring	J. Jochum	Brooklyn, N. Y	June 14, 1870	104, 160
Scales, Spring	D. Klauberg	New York	June 12, 1830	....
Scales, Spring	J. E. Thomson	Buffalo, N. Y	July 2, 1872	128, 677
Scales, Spring weighing	J. V. Mathivet	Cleveland, Ohio	Sept. 13, 1870	107, 272
Scales, Steelyard	T. C. Hargrave	Boston, Mass	Feb. 18, 1873	135, 908
Scales, Tailors'	W. G. Cummins	Civil District No. 10, Tenn	May 3, 1870	102, 505
Scales, Tailors'	H. Matheson	Toronto, Canada	Mar. 12, 1872	124, 602
Scales, Tailors' compound	A. H. Flores	New York, N. Y	Feb. 9, 1869	86, 829
Scales, Union-platform	A. Sanborn	Saint Johnsbury, Vt	July 24, 1855	13, 331
Scales, Weigh-lock	E. Sampson	Lansingburgh, N. Y	Aug. 28, 1866	57, 641
Scales, Weighing	D. D. Allen	Adams, Mass	May 2, 1871	114, 248
Scales, Weighing	A. Assmann	Rahway, N. J	May 31, 1870	103, 541
Scales, Weighing	W. Black	Baltimore, Md	May 30, 1871	115, 419
Scales, Weighing	D. Buvy	Danville, Pa	Jan. 25, 1870	99, 148
Scales, Weighing	W. Z. Conner	Shelbyville, Ind	Sept. 23, 1873	142, 991
Scales, Weighing	G. W. Dickinson	Charleston, Ill	Aug. 23, 1870	106, 560
Scales, Weighing	L. Eddy	Taunton, Mass	Dec. 24, 1867	72, 615
Scales, Weighing	T. Fairbanks	Saint Johnsbury, Vt	May 10, 1870	102, 792
Scales, Weighing	T. Fairbanks and H. Paddock	Saint Johnsbury, Vt	Feb. 14, 1871	111, 733
Scales, Weighing	O. Forsyth and J. H. Truex	Rochester, N. Y	Mar. 3, 1868	75, 146
Scales, Weighing	L. H. Franklin	Poland, N. Y	July 16, 1867	66, 825
Scales, Weighing	C. E. Gage	Fond du Lac, Wis	Sept. 10, 1867	68, 728
Scales, Weighing	W. P. Goolman and W. Holtzeclaw, jr.	Springtown, Ind	Aug. 3, 1852	9, 170
Scales, Weighing	W. D. Guseman	Morgantown, Va	May 17, 1859	24, 023
Scales, Weighing	W. D. Guseman	Morgantown, Va	Oct. 4, 1859	25, 638
Scales, Weighing	S. S. Hamilton	Taylor's Falls, Minn	Jan. 12, 1869	85, 816
Scales, Weighing	S. Harris	Philadelphia, Pa	July 21, 1868	80, 169
Scales, Weighing	S. Harris	Philadelphia, Pa	Aug. 5, 1873	141, 556
Scales, Weighing	F. G. D. Holmes	Phillipsburgh, N. J	June 25, 1872	128, 397
Scales, Weighing	O. W. Jipson	Rochester, N. Y	Feb. 1, 1859	22, 810
Scales, Weighing	J. Kelly	Sag Harbor, N. Y	Mar. 4, 1856	14, 361
Scales, Weighing	J. S. and E. B. Lake	Smith's Landing and Bridgeport, N. J.	June 12, 1866	55, 503
Scales, Weighing	J. Mardin	Baltimore, Md	Sept. 9, 1835	......
Scales, Weighing	W. H. McCormick	Muncie, Ind	Nov. 1, 1870	108, 807
Scales, Weighing	J. L. McPherson	New Vienna, Ohio	Aug. 28, 1855	13, 497
Scales, Weighing	S. S. Mills and M. Bissell	Charleston, S. C	Feb. 5, 1856	14, 198
Scales, Weighing	S. Peirce	Cambridgeport, Mass	Apr. 19, 1859	23, 700
Scales, Weighing	W. P. Pierce	New York, N. Y	Nov. 16, 1869	96, 955
Scales, Weighing	J. P. Pope and J. T. Whipple	Chicago, Ill	Oct. 15, 1867	69, 933
Scales, Weighing	W. W. Reynolds	Brandon, Vt	July 30, 1867	67, 349
Scales, Weighing	E. Sampson	Vergennes, Vt	Dec. 23, 1856	16, 302
Scales, Weighing	E. Sampson and C. S. Collier	Wethersfield, Vt	Oct. 3, 1848	5, 825
Scales, Weighing	G. Scott	Montreal, Canada	July 11, 1871	116, 999
Scales, Weighing	R. Shaler	Madison, Conn	July 9, 1867	66, 524
Scales, Weighing	L. Shepard	Gold Hill, Nev	Mar. 6, 1866	53, 050
Scales, Weighing	J. W. Strange	Bangor, Me	July 5, 1859	24, 669
Scales, Weighing	F. M. Strong and T. Ross	Brandon, Vt	May 24, 1859	24, 161
Scales, Weighing	F. M. Strong and T. Ross	Brandon, Vt	Aug. 16, 1859	25, 148
Scales, Weighing	J. Weeks	Buffalo, N. Y	Nov. 2, 1869	96, 520
Scales, Weighing	H. P. Wheeler	Rochester, N. Y	May 9, 1871	114, 737
Scales, Weighing	J. D. Willoughby	Shippensburgh, Pa	Jan. 14, 1868	73, 273
Scales, Weighing	R. F. Wolcott	Claremont, N. H	Apr. 15, 1856	14, 702
Scales, Weights for	H. W. Comstock	La Fayette, Ind	Nov. 5, 1867	70, 531
Scalpels	A. G. Shaver	New Haven, Conn	Nov. 20, 1860	30, 696
Scarf	G. R. Dexter	New York, N. Y	Apr. 18, 1871	113, 748
Scarf-clasp	A. R. Weisz	Brooklyn, N. Y	Oct. 28, 1873	144, 170
Scarf-pin	W. Sherburne	Charlestown, Mass	Mar. 13, 1860	27, 479
Scarf-ring	J. Haack and S. Diolot	Hoboken, N. J., and New York, N. Y.	Apr. 1, 1873	137, 362
Scarf-ring	A. P. Mahew and I. D. Leonard	Newark, N. J	Sept. 30, 1873	143, 366
Scarf-supporter	A. D. George	Boston, Mass	June 11, 1867	65, 663
Scarificator	A. F. Ahrens	Philadelphia, Pa	Aug. 26, 1846	4, 717
Scarificator	F. Leypoldt	Philadelphia, Pa	May 15, 1847	5, 111
Scarificator	F. Leypoldt	Philadelphia, Pa	May 20, 1851	8, 095
Scarificator	G. Tiemann	New York	Aug. 26, 1834	....
Scarificator	G. Tiemann	New York	Aug. 20, 1846	4, 705
Scarifier, Soil	E. Crane	Elkhart City, Ill	Jan. 28, 1868	73, 876
Scarifier, Soil	E. Crane	Elkhart, Ill	Apr. 7, 1868	76, 404
Scene-shifting for theatrical and analogous purposes, Method of.	J. L. Peake	New York, N. Y	Mar. 28, 1871	113, 202
Scenic effects, Apparatus for producing	W. Callcott	London, England	Dec. 13, 1864	45, 449
School-apparatus, Panoramic	A. P. M. Jeffers	Allegan, Mich	Oct. 17, 1871	120, 072
School-chair	S. C. Brown	Richmond, Ind	Oct. 29, 1867	70, 319
School-chair	E. J. Piper	Springfield, Mass	Apr. 22, 1873	138, 190
School-desk	M. C. Stebbins and E. J. Piper	Springfield, Mass	Apr. 8, 1873	137, 732
School-desk seat	J. Cooley	Albany, N. Y	Dec. 30, 1873	145, 930
School-register	S. S. Nash	New York, N. Y	Sept. 6, 1870	107, 089
School-seat	C. G. Harrington and D. Mills	Northville, Mich	July 26, 1870	105, 676
School-seat	G. W. Hildreth	Lockport, N. Y	Sept. 6, 1870	107, 048
School-seat	W. H. Jeckel	New York, N. Y	Dec. 24, 1861	33, 994
School-seat	R. Patton	New York, N. Y	Aug. 20, 1861	33, 101
School-seat	D. I. Stagg	New York, N. Y	June 27, 1871	116, 369
School-seat	I. S. Wachob	Scranton, Pa	June 18, 1872	128, 191
School seat and desk	L. C. Abbott, S. D. Tuttle, and M. L. Holt.	Eaton, Ohio	July 21, 1868	80, 106
School seat and desk	W. Disbrow	San Francisco, Cal	Apr. 4, 1865	47, 093
School seat and desk	I. N. Peirce	Philadelphia, Pa	Mar. 27, 1866	53, 474
School seat and desk	A. E. Roberts	Des Moines, Iowa	June 23, 1868	79, 145
School seat and desk joint	I. Lancaster	Baltimore, Md	July 16, 1872	129, 239
School-seat joint	S. C. Clark	Northville, Mich	June 18, 1872	128, 114
School table and seat	T. Weaver	Harrisburgh, Pa	Nov. 29, 1864	45, 287
Schools, Apparatus for teaching in	M. McVicar	Potsdam, N. Y	July 29, 1873	141, 369
Schools, halls, churches, &c., Seat for	H. Ogborn	Richmond, Ind	Aug. 31, 1869	94, 335
Scissors	J. Allender	New London, Conn	Feb. 12, 1856	14, 219

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Scissors	F. B. Bowman	Waltham, Mass	Apr. 3, 1860	27, 685
Scissors	H. S. Breeden	Barry, Ill	Nov. 4, 1873	144, 251
Scissors	S. H. Brisbane	Fordham, N. Y	Oct. 27, 1868	83, 453
Scissors	J. Bryant	Brooklyn, Mass	Nov. 30, 1858	22, 159
Scissors	J. Bull	Galesburgh, Ill	Dec. 29, 1868	85, 427
Scissors	R. Cook	Saratoga Springs, N. Y	Jan. 21, 1868	73, 580
Scissors	J. A. Correa	Green Bay, Wis	Feb. 11, 1873	135, 692
Scissors	J. G. De Coursey	Philadelphia, Pa	July 24, 1860	29, 250
Scissors	R. S. Gladwin	West Meriden, Conn	June 27, 1871	116, 432
Scissors	W. W. Grier and R. H. Boyd	Hulton, Pa	Aug. 7, 1866	56, 928
Scissors	W. Howard	Middletown, Ohio	Oct. 24, 1865	50, 589
Scissors	S. W. Huntington	Augusta, Me	Sept. 10, 1872	131, 273
Scissors	A. H. Knapp	Newton Centre, Mass	Mar. 26, 1861	31, 849
Scissors	A. Murdock	North Bridgewater, Mass	Apr. 13, 1869	88, 895
Scissors	J. Reist	Philadelphia, Pa	Jan. 1, 1861	31, 032
Scissors	A. H. Rennie	Binghamton, N. Y	Jan. 28, 1868	73, 836
Scissors	F. G. Sanborn	Andover, Mass	Oct. 4, 1864	44, 556
Scissors	G. Turner	Bristol, Conn	Feb. 6, 1872	123, 371
Scissors	L. C. White	Waterbury, Conn	Apr. 3, 1866	53, 719
Scissors	A. Whitemore	Cambridgeport, Mass	Apr. 22, 1873	138, 061
Scissors and button-hole cutter, Combined	J. A. Althouse	New Harmony, Ind	Oct. 8, 1867	69, 605
Scissors and nippers	H. D. Walcott	Boston, Mass	Mar. 13, 1860	27, 501
Scissors and shears	W. B. Barnard	Waterbury, Conn	Oct. 22, 1867	69, 960
Scissors and shears	S. W. Huntington	Augusta, Me	July 7, 1868	79, 658
Scissors and shears	A. Thayer	Albany, N. Y	July 28, 1868	80, 432
Scissors and tape-line combined	M. J. Stubbings	Youngstown, Ohio	June 24, 1873	140, 227
Scissors, Button-hole	E. A. Franklin	Brenham, Tex	Feb. 27, 1872	124, 046
Scissors-case	D. B. Page	Henry, Ill	June 28, 1870	104, 760
Scissors, Combination	E. Clapp	Boston, Mass	Oct. 17, 1871	119, 918
Scissors-grinder holder	J. Harwood and F. L. Ames	Albany, N. Y	Sept. 5, 1871	118, 717
Scissors, Guide for	W. H. S. Lawrence	Bangor, Me	June 11, 1872	127, 777
Scissors, Magnetic	E. Provost and A. Rablat	New York, N. Y	Sept. 19, 1871	119, 177
Scissors, Manufacture of	H. Havell	Newark, N. J	Dec. 21, 1858	22, 367
Scissors, Pocket	A. J. Young	Dover, N. H	May 28, 1872	127, 207
Scissors-points, Cap for	C. W. Williams	New York, N. Y	Oct. 28, 1873	144, 177
Scissors-sharpener	N. Belcher	Boston, Mass	May 31, 1870	103, 705
Scissors-sharpener	C. A. Foster	Fitchburgh, Mass	Apr. 9, 1870	102, 106
Scissors-sharpener	E. Fuller	Biddeford, Me	May 7, 1872	126, 539
Scissors-sharpener	A. W. Gifford	Worcester, Mass	Feb. 12, 1867	61, 023
Scissors-sharpener	L. M. Gilbert	Warren, Mass	Jan. 7, 1868	72, 995
Scissors-sharpener	T. Halvorsen	New York, N. Y	Mar. 25, 1873	137, 135
Scissors-sharpener	G. Hinman	New Haven, Conn	Feb. 23, 1858	19, 467
Scissors-sharpener	T. K. Knapp	Worcester, Mass	Sept. 5, 1865	49, 764
Scissors-sharpener	W. H. Leach	Dorchester, Mass	Mar. 31, 1868	76, 086
Scissors-sharpener	J. C. Loveland	Springfield, Vt	Mar. 30, 1858	19, 784
Scissors-sharpener	C. E. Palmer	Boston, Mass	Aug. 17, 1869	93, 831
Scissors-sharpener	D. Porter	Cleveland, Ohio	Jan. 15, 1867	61, 249
Scissors-sharpener	W. E. Roberts	Orange, Conn	Nov. 24, 1857	18, 709
Scissors-sharpener	J. J. Russ	Worcester, Mass	Dec. 12, 1865	51, 483
Scissors-sharpener	A. Stereley	New Haven, Conn	Jan. 12, 1858	19, 106
Scissors-sharpener	J. J. Tobey	Boston, Mass	Nov. 20, 1866	59, 785
Scissors-sharpener and cloth-ripper, Combined	A. W. Gifford	Worcester, Mass	Nov. 5, 1867	70, 544
Scissors-sharpener and screw-driver, Combined	G. P. Bergen	Brooklyn, N. Y	Dec. 22, 1868	85, 163
Scissors, Stationery counter	A. Steward	Plano, Ill	Apr. 29, 1862	35, 116
Scissors-suspender	J. H. Kuttner	Hempstead, Tex	Dec. 15, 1868	84, 951
Scoop	T. B. Davis	New York, N. Y	Dec. 8, 1868	84, 803
Scoop	W. Craine	South Brookfield, N. Y	Mar. 23, 1869	88, 138
Scoop	A. Nonnamaker	Circleville, Ohio	Aug. 17, 1869	93, 736
Scoop and elevator	E. Morris	New York, N. Y	Dec. 12, 1848	5, 966
Scoop and flour-sifter	G. S. Wendell	New York, N. Y	Dec. 12, 1865	51, 525
Scoop and funnel	J. F. Dubber	Brooklyn, N. Y	Apr. 19, 1864	42, 356
Scoop and sifter	J. Baker	Trenton, Canada	Feb. 7, 1871	111, 605
Scoop and sifter	E. J. Smith and F. B. Perkins	Chicago, Ill	July 14, 1868	79, 922
Scoop and sifter, Flour, &c	C. Beneus	Elizabeth, N. J	Nov. 23, 1869	97, 025
Scoop and sifter, Flour	R. S. Mitchell	Seymour, Conn	Jan. 21, 1868	73, 628
Scoop and sifter, Flour	G. W. and C. L. Sherman	Waupun, Wis	Feb. 4, 1868	74, 157
Scoop, Cart-loading	A. Vreeland	Mont Clair, N. J	Dec. 9, 1873	145, 320
Scoop, Coal	H. A. Palmer	Rochester, N. Y	Aug. 3, 1869	93, 336
Scoop, Ditch-gage	D. Gore	Carlinville, Ill	Aug. 31, 1869	94, 303
Scoop, Excavating	A. T. Morris	Bloomfield, N. J	May 8, 1866	54, 649
Scoop, Excavating	J. Taggart	Roxbury, Mass	May 20, 1856	14, 933
Scoop, Fingered	H. Doolittle	East Cleveland, Ohio	Mar. 9, 1869	87, 553
Scoop for raising sunken coal	R. Stiles	Cincinnati, Ohio	May 6, 1873	138, 541
Scoop, Grain-bagging	G. B. Chaffin	Holden, Mass	Dec. 3, 1872	133, 562
Scoop, Grocer's	G. A. Bowers	Chicago, Ill	Oct. 15, 1872	132, 134
Scoop, Hand	D. N. Green	Cold Water, Mich	July 2, 1867	66, 322
Scoop, Potato	E. Brown and W. Pool	Birmingham, Mich	Mar. 12, 1867	62, 730
Scoop, Sand	J. Sheets	Columbia, Pa	Mar. 24, 1868	75, 989
Scoop-shovel	T. Blanchard	Boston, Mass	Jan. 21, 1862	34, 193
Scoop-shovel	E. Mudge and R. Tenny	Alexander, N. Y	Apr. 6, 1831	....
Scoop-shovel, &c	J. T. Page	Rochester, N. Y	July 21, 1868	80, 087
Scoop-shovel, Sheet iron and copper	M. Bull	Greenwich, N. Y	Sept. 28, 1831	....
Scoop-shovels, Manufacturing	J. and W. Smith	Williamstown, Mass	Feb. 25, 1835	....
Scoop, sifter, grater, and holder	F. Bucknam	Portland, Me	May 15, 1866	54, 679
Scoop, Vegetable	J. P. Unglish	Webster, N. Y	Mar. 15, 1870	100, 822
Scoop, Weighing	J. K. O'Neil	Kingston, N. Y	Mar. 20, 1866	53, 327
Scoop, Weighing	J. K. O'Neil	Kingston, N. Y	June 2, 1868	78, 604
Scoop, Weighing	D. H. Priest and J. R. Howard	Watertown and Charlestown, Mass.	Sept. 21, 1869	94, 9[illegible]4
Scoop, Wire	J. Taber	South Wolfborough, N. H	Aug. 20, 1872	130, 767
Scoops, Construction of	T. C. Bromley	Fort Howard, Wis	Dec. 10, 1867	71, 847
Scoops, Manufacture of	J. G. Knapp	Woodhaven, N. Y	Dec. 21, 1869	98, 072
Scourer: *See* Curriers' scourer. Grain-scourer. Knife-scourer. Knife and fork scourer.				
Scouring and hide-working machine	S. W. Fairfield and C. E. Getchell.	Salem, Mass	June 4, 1872	127, 586
Scouring and hulling machine	L. S. Chichester	Brooklyn, N. Y	Apr. 2, 1872	125, 172

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Invention.	Inventor.	Residence.	Date.	No.
Scouring and scrubbing machine	S. Kaufman	Fairbury, Ill	July 23, 1867	67, 058
Scouring-box	W. W. Langdon	New Hampton, Iowa	July 2, 1872	128, 551
Scouring piece-goods, Machine for	A. Roth and J. Lea	Philadelphia, Pa	July 18, 1854	11, 329
Scouring, washing, and wringing machine	W. H. Churchman	Indianapolis, Ind	Jan. 24, 1871	111, 176
Scow	E. J. Allen	Rondout, N. Y	Aug. 18, 1868	81, 125
Scow and boat	E. Sherman	Lansingburgh, N. Y	Mar. 2, 1809	....
Scow, Dumping	J. E. Bartlett	Boston, Mass	Mar. 11, 1873	136, 578
Scow, Dumping	A. T. Morris	Bloomfield, N. J	Apr. 22, 1873	138, 179
Scow, Dumping	H. W. Wilson	Boston, Mass	Feb. 2, 1869	86, 614
Scraper	H. Andrews	Fredonia, N. Y	Oct. 20, 1863	40, 317
Scraper	G. W. Bayley	Stuyvesant, N. Y	Dec. 5, 1871	121, 576
Scraper	I. W. Boatman	Seven Mile, Ohio	Jan. 5, 1869	85, 635
Scraper	W. J. Horner	Cincinnati, Ohio	Nov. 12, 1867	70, 749
Scraper	S. Horney	Richmond, Ind	Nov. 4, 1873	144, 202
Scraper	W. E. and F. A. Jacobs	Columbus, Ohio	Sept. 23, 1873	143, 016
Scraper	N. and A. Maybee	Monroe, Mich	May 26, 1868	78, 220
Scraper	W. D. Mayfield and J. M. Payne	Fort Worth, Tex	July 15, 1873	140, 935
Scraper	I. Munson	Wayne, Mich	Feb. 5, 1867	61, 854
Scraper	D. B. Nelson and M. Dyer	Elmira, N. Y	May 5, 1868	77, 644
Scraper	T. G. Phelps	Belmont, Cal	July 27, 1869	93, 000
Scraper	F. Post	Plano, Ill	June 16, 1868	78, 909
Scraper	A. H. Reid	Brandywine Manor, Pa	June 10, 1873	139, 816
Scraper	T. Ripley	Brooklyn, N. Y	Dec. 10, 1872	133, 890
Scraper	C. Schofield and G. I. Johns	Albion, Ill	Feb. 11, 1851	7, 929
Scraper	W. Watson	Danville, Ill	Aug. 24, 1869	94, 154
Scraper and brush, Foot	H. Warren	Hoboken, N. J	Dec. 4, 1860	30, 859
Scraper and cutter, Cotton	A. Remstetler and A. Windeck	Peoria, Ill	Feb. 4, 1868	74, 006
Scraper and ditcher, Road	G. Clark	Dover, Ill	Oct. 11, 1870	108, 238
Scraper and harrower, Cotton	J. M. P. Lyon	Bellefonte, Ala	Jan. 17, 1871	110, 988
Scraper and knife and fork cleaner	N. W. Foye	Cambridge, Mass	Mar. 27, 1866	53, 433
Scraper and spreader, Road	T. Penrose	Ellington, Ill	June 27, 1854	11, 173
Scraper and umbrella-stand, Foot	C. Gudehus and F. Staake	Philadelphia, Pa	July 9, 1867	66, 480
Scraper, Artist's	H. J. Haight	New York, N. Y	Jan. 28, 1873	135, 333
Scraper, Barn-yard	S. W. Langdon	Jefferson County, Iowa	May 1, 1866	54, 373
Scraper, Blacking-brush	J. Goodenough	Jerseyville, Ill	Aug. 4, 1868	80, 621
Scraper, Boiler	A. Poirel	New York, N. Y	Jan. 28, 1868	73, 832
Scraper, Boiler-flue	M. M. Ammidoun	West Roxbury, Mass	May 6, 1873	138, 465
Scraper, Boiler-flue	L. B. Brown	Petroleum Centre, Pa	July 20, 1869	92, 790
Scraper, Boiler-flue	J. H. Dann	Rouseville, Pa	Jan. 30, 1872	123, 155
Scraper, Boiler-flue	M. A. Salomons	Boston, Mass	July 20, 1869	92, 752
Scraper, Boiler-flue	C. W. Tremain	Chicago, Ill	Nov. 24, 1868	84, 320
Scraper, Boiler-flue	H. Voelker	Newark, N. J	June 20, 1871	116, 118
Scraper, Boiler-flue	A. Way	Painesville, Ohio	Apr. 23, 1872	125, 919
Scraper, Boiler-tube	J. Collicott	West Roxbury, Mass	Mar. 12, 1872	124, 421
Scraper, Boiler-tube	J. Hobday, jr	Ansonia, Conn	May 28, 1872	127, 237
Scraper, Boiler-tube	E. L. Pratt	Boston, Mass	July 2, 1867	66, 387
Scraper, Box	J. R. Bailey	Woonsocket, R. I	July 26, 1870	185, 766
Scraper, Box	J. R. Brown	Cambridgeport, Mass	Oct. 18, 1870	108, 321
Scraper, Box	W. Dutton	Boston, Mass	Feb. 9, 1869	86, 741
Scraper, Box	C., G. W., and J. D. Ellis	Philadelphia, Pa	Aug. 5, 1873	141, 549
Scraper, Box	F. B. Hill	East New York, N. Y	Nov. 8, 1870	109, 008
Scraper, Box	A. Tester	Brooklyn, N. Y	July 15, 1873	140, 857
Scraper, Box, ship, or mast	C. W. Harris	Philadelphia, Pa	July 4, 1865	48, 554
Scraper, Cabinet-maker's	H. Carver	Edinburgh, Va	Aug. 6, 1850	7, 543
Scraper, Cabinet-maker's	F. A., J. H., and D. G. Williams	Cincinnati, Ohio	July 24, 1866	56, 651
Scraper, Canal	T. Miller	Columbus, Ohio	Jan. 31, 1865	46, 128
Scraper, Chimney	S. K. Luce	Marion, Mass	Sept. 15, 1868	82, 136
Scraper, Combination of a guide-tooth with an inclined	J. F. Wood	Homer, La	June 18, 1850	7, 448
Scraper, Corn and cotton	C. Billups	Norfolk, Va	July 30, 1867	67, 252
Scraper, Corn and cotton	C. Marsh, 2d	Natchez, Miss	Feb. 28, 1871	112, 161
Scraper, Corn and cotton	G. Millhorn	Pyhalia, Miss	Nov. 15, 1870	109, 334
Scraper, Cotton	J. Lytch	Laurinburgh, N. C	June 14, 1870	104, 396
Scraper, Cotton	C. Marsh, 2d	Natchez, Miss	Dec. 17, 1872	134, 080
Scraper, Cotton	D. G. Rittenhouse	Shelby Depot, Tenn	June 7, 1870	103, 930
Scraper, Cotton	T. Saunders	Memphis, Tenn	Feb. 19, 1867	62, 228
Scraper, Cotton	J. Shepard	Columbia, Tex	Feb. 19, 1861	31, 484
Scraper, Cotton	J. C. Teague	Centre Hill, Miss	Sept. 4, 1860	29, 924
Scraper, Cotton	T. H. Tramtham	De Soto County, Miss	Apr. 4, 1871	113, 367
Scraper, Dirt	S. H. Dudley	Milton, Conn	Jan. 27, 1863	37, 498
Scraper, Dirt	H. J. England	Delhi, N. Y	Mar. 31, 1868	76, 179
Scraper, Dirt	F. Garber and S. Shimer	Terre Haute, Ind	July 22, 1862	35, 982
Scraper, Dirt	C. and J. L. Little and R. M. Dalbey	Van Wert County and Springfield, Ohio	Oct. 1, 1867	69, 452
Scraper, Dirt	A. J. Robison	Gypsum, N. Y	Apr. 12, 1859	23, 610
Scraper, Dirt	H. Warren	Fairfax, Vt	Jan. 2, 1872	122, 503
Scraper, Ditching and embanking	J. Branson, jr	Sangamon County, Ill	Mar. 18, 1842	2, 492
Scraper, Door	J. B. Lowry	Springfield, Ill	Oct. 8, 1872	132, 092
Scraper, Double revolving	A. Crafts and E. Weeks	Auburn, Ohio	Dec. 4, 1849	6, 918
Scraper, Dredging	D. Broleston	Chicago, Ill	Sept. 23, 1873	142, 988
Scraper, Dumping	M. S. Kahle	Lexington, Va	May 6, 1856	14, 817
Scraper, Earth	A. S. Babbit	Keeseville, N. Y	Jan. 24, 1871	111, 165
Scraper, Earth	H. Bowen and J. Hanna	Adrian, Mich	Dec. 10, 1872	133, 825
Scraper, Earth	J. H. Dalbey	Springfield, Ohio	Aug. 3, 1869	93, 281
Scraper, Earth	J. Y. Herston	Warrick County, Ind	Apr. 13, 1869	88, 785
Scraper, Earth	M. Kelley	Fairfield, Vt	Apr. 2, 1872	125, 199
Scraper, Earth	M. Newton	Kentland, Ind	Jan. 9, 1872	122, 619
Scraper, Earth	S. R. Owen	Stewartsville, Mo	Aug. 30, 1870	106, 865
Scraper, Earth	N. Peck	Jay, N. Y	Dec. 16, 1862	37, 176
Scraper, Earth	N. Peck	Jay, N. Y	Sept. 4, 1866	57, 757
Scraper, Earth	N. Peck	Jay, N. Y	Jan. 5, 1869	85, 609
Scraper, Earth	A. B. Smith	Huntsville, Tex	Aug. 27, 1872	130, 948
Scraper, Excavating	D. Marvin	Canandaigua, N. Y	Sept. 2, 1831	....
Scraper, Flue	F. A. Blake and H. A. Tyrrel	Worcester, Mass	Apr. 9, 1867	63, 695
Scraper, Foot	E. G. Burger	Ypsilanti, Mich	Aug. 14, 1860	29, 568
Scraper, Foot	O. A. Crane and H. J. Lewis	Green Point, N. Y	Apr. 3, 1855	12, 660

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Invention.	Inventor.	Residence.	Date.	No.
Scraper, Foot	G. T. Losier	Philadelphia, Pa	Apr. 17, 1866	53, 997
Scraper, Foot	A. Ralph	Centreville, Del	Oct. 15, 1861	33, 491
Scraper, Foot	A. Sahlstrom	Chicago, Ill	Apr. 4, 1871	113, 351
Scraper, Foot	J. Whait	Springfield, Mo	June 11, 1867	65, 624
Scraper, Foot	W. L. Williams	New York, N. Y	Mar. 29, 1859	23, 419
Scraper, Foot	W. L. Williams	New York, N. Y	Apr. 14, 1868	76, 808
Scraper for excavating and removing earth	J. Scholder	Canton, Ohio	Sept. 25, 1839	1, 341
Scraper for grinding-mill	T. E. Little	Janesville, Wis	Feb. 9, 1858	19, 302
Scraper for locomotives, Snow	C. C. Elliott	Esconawba, Mich	Mar. 5, 1867	62, 535
Scraper for removing snow from ice	D. J. Wyeth	Cambridge, Mass	Mar. 5, 1850	7, 153
Scraper for removing sparks from the smoke-stacks of locomotives.	J. A. Alter	Johnstown, Pa	Aug. 31, 1858	21, 309
Scraper for repairing and making roads, &c	S. G. Sutton	Yorkshire, N. Y	May 30, 1844	3, 604
Scraper, Gas-retort	F. Blair	Painesville, Ohio	Feb. 4, 1873	135, 397
Scraper, Grading	C. Evans and W. C. Bartlett	Morton, Ill	May 2, 1865	47, 531
Scraper, Grading and ditching	C. D. and M. C. Meigs	Romney, Ind	Jan. 9, 1872	122, 627
Scraper-handle, Method of attaching	E. C. Locke	Providence, R. I	Feb. 21, 1871	111, 952
Scraper, Hide	H. Lampert	Nunda, N. Y	Dec. 18, 1866	60, 636
Scraper, hiller, and cultivator, Cotton	C. Marsh, jr	Natchez, Miss	Apr. 4, 1871	113, 320
Scraper, Ice	H. W. Harkness and J. C. Mack	Bristol, Conn	June 13, 1865	48, 173
Scraper, Kettle	E. C. Fuller	Lowell, Mass	Sept. 26, 1865	50, 112
Scraper, Kettle and pan	E. J. Whitman	Oakland, Cal	Sept. 9, 1873	142, 602
Scraping-machine for chairs, &c	E. S. French	Hubbardstown, Mass	Sept. 20, 1864	44, 367
Scraper, Mast	R. N. Tate	New London, Conn	Dec. 20, 1859	26, 535
Scraper, Metallic	O. Teal	Salina, N. Y	Dec. 8, 1829	....
Scraper-operating apparatus	J. F. Brooks	Stafford Springs, Conn	July 6, 1869	92, 257
Scraper or cultivator, Cotton	T. J. Harris	Guntown, Miss	June 7, 1870	103, 877
Scraper or team shovel	G. Davis and J. Price	Lockport, N. Y	May 12, 1827	....
Scraper, Pan	G. Scherer	South Boston, Mass	Oct. 10, 1871	119, 791
Scraper, Plane	L. Bailey	Winchester, Mass	Aug. 7, 1855	13, 381
Scraper, polisher, and stand, Flat-iron	W. B. Mason	Boston, Mass	Mar. 2, 1869	87, 503
Scraper, Railway, snow, ice, and mud	B. Folsom	Detroit, Mich	Apr. 17, 1866	53, 968
Scraper, Railway-track	H. H. Nagley and T. Raney	Philadelphia, Pa	Dec. 30, 1841	2, 406
Scraper, Removable teeth for	J. Sweet	Hughesville, Pa	Apr. 2, 1850	7, 252
Scraper, Revolving road	E. M. Doty, J. L. Little, and P. A. Schindler.	Springfield, Ohio	Aug. 23, 1870	106, 674
Scraper, Revolving road	F. A. Jacobs	Columbus, Ohio	Sept. 24, 1872	131, 686
Scraper, Revolving road	W. Pinn	Massillon, Ohio	July 2, 1872	128, 654
Scraper, Revolving road	J. A. Stafford	Granville, Ohio	Sept. 24, 1872	131, 717
Scraper, Road	S. Alderman	Stafford Township, Ind	Mar. 30, 1869	88, 429
Scraper, Road	J. B. Beall and B. T. Grim	Westerville, Ohio	Dec. 11, 1866	60, 325
Scraper, Road	C. Blakeslee	Ashtabula, Ohio	Apr. 7, 1757	16, 963
Scraper, Road	R. S. Boyd	Smithland, Ky	Dec. 29, 1868	85, 424
Scraper, Road	J. F. Brooks	Stafford Springs, Conn	Jan. 21, 1862	34, 194
Scraper, Road	M. M. Brunner	Orange, N. J	Oct. 8, 1872	131, 996
Scraper, Road	E. P. H. Capron	Springfield, Ohio	May 19, 1868	78, 054
Scraper, Road	G. and D. C. Caward	Prattsburgh, N. Y	Nov. 22, 1859	26, 161
Scraper, Road	E. E. Coy	Longview, Tex	Mar. 26, 1872	125, 025
Scraper, Road	E. L. Dorsey	Winslow, Ind	Mar. 23, 1869	88, 018
Scraper, Road	E. B. Driskell	Paris, Ill	July 21, 1868	80, 155
Scraper, Road	S. H. Dudley	Milton, Conn	June 6, 1854	11, 021
Scraper, Road	J. C. Evans	Delaware, Ohio	Apr. 19, 1870	102, 102
Scraper, Road	N. Evinger	Sandford, Ind	June 11, 1867	65, 659
Scraper, Road	E. A. Field	Sidney, Me	July 25, 1865	48, 920
Scraper, Road	P. S. Foster	Richmond, Me	May 14, 1867	64, 655
Scraper, Road	G. B. Garlinghouse	North Madison, Ind	Jan. 31, 1871	111, 338
Scraper, Road	J. Gorton	Cohocton, N. Y	May 25, 1869	90, 355
Scraper, Road	J. Gustine and J. M. Rankin	Lewistown, Ill	May 6, 1856	14, 809
Scraper, Road	D. S. Hamilton	Elmira, N. Y	June 10, 1873	139, 669
Scraper, Road	R. Hamilton	Franklin, Ind	Jan. 26, 1869	86, 221
Scraper, Road	R. Hamilton	Franklin, Ind	Jan. 18, 1870	98, 957
Scraper, Road	R. Hamilton	Franklin, Ind	July 19, 1870	105, 567
Scraper, Road	O. Hopkins	Hackensack, N. J	Feb. 26, 1867	62, 421
Scraper, Road	L. Howe	Worcester, Mass	Oct. 12, 1869	95, 690
Scraper, Road	J. Howland	Rock Falls, Ill	Jan. 18, 1870	98, 969
Scraper, Road	W. W. Johnson	Harrison, Me	July 25, 1865	48, 951
Scraper, Road	W. W. Johnson	Harrison, Me	Feb. 19, 1867	62, 273
Scraper, Road	D. B. Jones	Wood Station, Ohio	June 14, 1870	104, 162
Scraper, Road	O. W. Kellogg	Ripon, Wis	Nov. 5, 1861	33, 650
Scraper, Road	C. Little	Van Wert, Ohio	Feb. 15, 1870	99, 921
Scraper, Road	L. W. T. Lodge	Petersburgh, Ky	Dec. 24, 1867	72, 511
Scraper, Road	J. W. McDonald	Chicago, Ill	Feb. 2, 1869	86, 431
Scraper, Road	J. Morton	Cincinnati, Ohio	Aug. 12, 1873	141, 808
Scraper, Road	D. Neff	Amsterdam, N. Y	Dec. 1, 1868	84, 570
Scraper, Road	W. T. Nichols	Chicago, Ill	Nov. 22, 1870	109, 440
Scraper, Road	W. T. Nichols	Chicago, Ill	Mar. 21, 1871	112, 835
Scraper, Road	R. W. Oliver	East Aurora, N. Y	Nov. 13, 1855	13, 810
Scraper, Road	W. Patterson	Salem, N. J	May 30, 1865	47, 977
Scraper, Road	N. Peck	Wilmington, N. Y	Jan. 3, 1860	26, 704
Scraper, Road	R. F. Read	San Francisco, Cal	Nov. 25, 1873	144, 925
Scraper, Road	G. N. Rex	Butler, Ind	Dec. 28, 1869	98, 417
Scraper, Road	W. W. Runwill	Roanoke, Ind	Mar. 9, 1869	87, 711
Scraper, Road	D. L. Shepard	Foxborough, Mass	Nov. 29, 1870	109, 768
Scraper, Road	J. Steffensen	Lyons, Iowa	Apr. 1, 1873	137, 499
Scraper, Road	P. M. Stephens	Deer Creek, Ill	Apr. 26, 1870	102, 444
Scraper, Road	D. E. Teal	New Lisbon, N. Y	June 25, 1872	128, 436
Scraper, Road	G. W. Thomas	Wickford, R. I	Apr. 7, 1857	17, 003
Scraper, Road	W. Thompson	Gardiner, Me	Oct. 29, 1872	132, 701
Scraper, Road	P. W. Thomson	Truro, Ill	Oct. 29, 1872	132, 549
Scraper, Road	B. M. Townsend	Quincy, Ill	Aug. 14, 1849	6, 643
Scraper, Road	H. Van Pelt	Bath, N. Y	June 9, 1857	17, 529
Scraper, Road	H. B. Van Voorhis	Pittsburgh, Pa	Apr. 18, 1871	113, 950
Scraper, Road	M. E. Warner and S. W. Kingsley.	Hatfield, Mass	Nov. 25, 1873	144, 935
Scraper, Road	W. P. Warren	Serena, Ill	June 24, 1873	140, 175
Scraper, Road	G. H. White	Huntington, N. Y	Apr. 9, 1867	63, 771
Scraper, Road	J. W. Williams	Kentland, Ind	Nov. 19, 1872	133, 281
Scraper, Road	J. F. Winchell	Springfield, Ohio	Nov. 24, 1868	84, 330

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Invention.	Inventor.	Residence.	Date.	No.
Scraper, Road	J. B. Wood	Swansea, Mass	Aug. 23, 1864	43, 942
Scraper, Road	W. S. Worley	Arcola, Ill	Oct. 31, 1871	120, 559
Scraper, Road	L. P. Wright	Chicago, Ill	May 20, 1873	139, 099
Scraper, Road	N. E. Yost	Corry, Pa	June 9, 1868	78, 713
Scraper, Rotary road	J. Wilson	Somerford, Ohio	Apr. 6, 1869	88, 686
Scraper, Self-loading	A. P. Routt and J. J. Keeton	Liberty Mills, Va	Feb. 28, 1871	112, 287
Scraper, Ship's	J. C. Gibbs	Middleborough, Mass	Aug. 27, 1861	33, 138
Scraper, Snow	J. Hood	Milwaukee, Wis	Feb. 24, 1863	37, 797
Scraper, Steam-boiler-flue	H. Freeman and J. Armbruster	Petroleum Centre, Pa	Dec. 3, 1872	133, 578
Scraper, Street	A. Dyson	Saint Louis, Mo	June 2, 1868	78, 583
Scraper, Street	C. Osgood	Cape Elizabeth, Me	May 7, 1872	126, 570
Scraper, Street	M. Smith	Lake, Ill	July 10, 1866	56, 285
Scraper, Street	J. K. Thompson	Chicago, Ill	Sept. 14, 1869	94, 792
Scraper, Street-railway	J. W. A. Jones	Memphis, Tenn	Mar. 24, 1868	75, 764
Scraper, Sugar-cane	A. Landry	East Baton Rouge, La	Aug. 30, 1870	106, 839
Scraper, Adjustable mouth-piece to road	S. Davis	Dartmouth, Mass	May 7, 1850	7, 340
Scraping and loading machine	D. Marrs	Friend's Creek Township, Ill.	Jan. 21, 1873	135, 042
Scraping-instrument	V. Davis	Stoneham, Mass	Feb. 11, 1873	135, 699
Scraping machines, Grading and road	E. H. More	Moresville, N. Y	July 5, 1864	43, 422
Scraping roads and clearing gutters, Machine for	N. Potter	East Hamburgh, N. Y	July 4, 1865	48, 591
Screen:				
See Ash-screen. Metal-screen.				
Camera-screen. Middlings-purifier screen.				
Car-window screen. Mosquito-screen.				
Carriage-step screen. Mosquito and fly screen.				
Churn-screen. Paper-screen.				
Coal-screen. Photographic screen.				
Fire-screen. Potato-screen.				
Flour-bolt screen. Pulp-screen.				
Fly-screen. Sand-screen.				
Folding screen. Spawning-screen.				
Gas-purifier screen. Steam-pipe screen.				
Grain-screen. Wash-stand screen.				
Grain-cleaning screen. Window-screen.				
Hand-screen. Winnower-screen.				
Heater-screen. Winnowing-screen.				
Screen	C. Lockwood	Haverstraw, N. Y	June 14, 1870	104, 173
Screen and shovel	A. Thayer	Albany, N. Y	Apr. 28, 1868	77, 333
Screen and weighing device, Combined	W. H. Taylor	Pittsburgh, Pa	Aug. 21, 1866	57, 457
Screen-guard attachment	G. Brain	Springfield, Ohio	Dec. 3, 1867	71, 691
Screening and sifting apparatus	S. C. Maine	Boston, Mass	Aug. 28, 1866	57, 529
Screening-apparatus	D. Kahnweiler	New York, N. Y	Jan. 9, 1872	122, 612
Screw	J. Absterdam	New York, N. Y	Oct. 23, 1866	58, 964
Screw	J. A. Ayres	Hartford, Conn	Apr. 14, 1863	38, 141
Screw	C. Bocking	Philadelphia, Pa	Apr. 6, 1869	88, 539
Screw	W. G. A. Bonwill	Dover, Del	Nov. 22, 1864	45, 133
Screw	F. W. Brooks	New York, N. Y	Oct. 1, 1872	131, 843
Screw	J. Frearson	Birmingham, England	Dec. 9, 1873	145, 411
Screw	H. A. Harvey	New York, N. Y	July 9, 1867	66, 585
Screw	P. N. Jacobus	Flat Brookfield, N. J	Aug. 4, 1868	80, 742
Screw	L. Marsh	Burlington, Vt	Oct. 15, 1861	33, 487
Screw	G. L. Morris	Taunton, Mass	Nov. 20, 1866	59, 923
Screw	T. T. Prosser	Chicago, Ill	Sept. 11, 1866	57, 966
Screw	D. R. Quick	New York, N. Y	June 6, 1871	115, 770
Screw	F. Washbourne	New York, N. Y	Dec. 1, 1868	84, 663
Screw, adapted to steam-engines, stills, &c., Water-tight swivel.	A. W. Hardenbrook	New York	Feb. 10, 1807	....
Screw and bolt	W. Weaver	Nashua, N. H	Feb. 13, 1866	52, 631
Screw and bolt threading machine, Metallic	B. L. Walker	Sing Sing, N. Y	Mar. 12, 1872	124, 645
Screw and clamp, Combined jack	T. R. and A. C. Jackson and C. S. Watson.	Sabine Pass, Tex	May 20, 1873	139, 157
Screw and clip for splicing broken carriage-tires, Hand.	A. B. Sheaffer	Ephrata, Pa	Mar. 22, 1870	101, 053
Screw and nut	S. J. Peet	Boston, Mass	Apr. 29, 1873	138, 277
Screw and nut, Anti-friction	C. F. Spencer	Rochester, N. Y	June 5, 1860	28, 613
Screw and nut for clamps, &c	J. Adt	New Haven, Conn	Jan. 11, 1870	98, 656
Screw and nut, Metal	H. G. Pearson	New York, N. Y	Apr. 4, 1871	113, 557
Screw and nut threading machinery	S. Groom	Troy, N. Y	July 28, 1846	4, 671
Screw and pipe wrench, Combined	J. W. Close	Buffalo, N. Y	Nov. 16, 1869	96, 776
Screw and screw-driver	A. S. Apgar	New York, N. Y	Mar. 29, 1870	101, 207
Screw and screw-nail machine	R. Boeklen	Brooklyn, N. Y	Nov. 15, 1870	109, 171
Screw and tack head	G. R. Willmott	West Meriden, Conn	Apr. 9, 1861	32, 020
Screw, Archimedean	J. Black	Northumberland, Pa	Jan. 17, 1818	....
Screw, Archimedean	J. Cooper	Augusta County, Va	Dec. 14, 1819	....
Screw-auger	J. Smith	Derby, Conn	July 13, 1827	....
Screw, Binding	F. Schurz	Paloma, Ill	Apr. 15, 1873	137, 801
Screw-blank arranging and conveying apparatus	E. S. Pierce	Hartford, Conn	Apr. 13, 1869	88, 900
Screw-blank arranging and conveying apparatus	E. S. Pierce	Hartford, Conn	Apr. 13, 1869	88, 901
Screw-blank arranging and distributing apparatus	H. A. Harvey	New York, N. Y	Apr. 26, 1864	42, 475
Screw-blank arranging and distributing apparatus	H. A. Harvey	New York, N. Y	Apr. 26, 1864	42, 476
Screw-blank arranging and distributing apparatus	H. A. Harvey	New York, N. Y	Apr. 26, 1864	42, 477
Screw-blank arranging and feeding machine	T. J. Sloan	New York, N. Y	Feb. 25, 1851	7, 958
Screw-blank, &c., arranging machine	T. J. Sloan	New York, N. Y	Sept. 30, 1851	8, 397
Screw-blank, &c., assorting machine	T. J. Sloan	New York, N. Y	May 6, 1851	8, 089
Screw-blank-conveying apparatus	E. S. Pierce	Hartford, Conn	Feb. 18, 1868	74, 717
Screw-blank-conveying apparatus	E. S. Pierce	Hartford, Conn	May 4, 1869	89, 598
Screw-blank die	C. R. Gardner	Detroit, Mich	Aug. 12, 1856	15, 512
Screw-blank-feeding apparatus	T. Newbury	Taunton, Mass	Apr. 5, 1853	9, 648
Screw-blank-feeding apparatus	E. S. Pierce	Hartford, Conn	Oct. 29, 1867	70, 257
Screw-blank-feeding apparatus	E. S. Pierce	Hartford, Conn	Aug. 25, 1868	81, 404
Screw-blank-feeding machine	D. M. Robertson	Manchester, N. H	Feb. 12, 1861	31, 405
Screw-blank-feeding mechanism	E. S. Pierce	Hartford, Conn	Dec. 3, 1867	71, 638
Screw-blank-head-nicking apparatus	H. A. Harvey	New York, N. Y	May 17, 1864	42, 768
Screw-blank-head-shaving apparatus	H. A. Harvey	New York, N. Y	May 17, 1864	42, 767
Screw-blank-head-shaving machine	J. F. Stanett	New York, N. Y	Oct. 25, 1870	108, 648

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Invention.	Inventor.	Residence.	Date.	No.
Screw-blank-head-shaving machine	A. Wood	Worcester, Mass	Feb. 1, 1859	22, 837
Screw-blank-head-shaving machinery	C. Whipple	Providence, R. I	Apr. 12, 1853	9, 669
Screw-blank-head turning or shaving machine	C. Whipple	Providence, R. I	Apr. 6, 1843	3, 029
Screw-blank-heading die	H. A. Harvey	New York, N. Y	Sept. 6, 1864	44, 090
Screw-blank-heading machinery	T. H. Harvey	New York, N. Y	Sept. 3, 1846	4, 738
Screw-blank machine	R. F. Berwick	New York, N. Y	Oct. 10, 1848	5, 837
Screw-blank-making machine	C. W. Smith	New York, N. Y	Dec. 6, 1864	45, 352
Screw-blank nicking and shaving machine	E. Nugent and J. Fanning	Brooklyn, N. Y	Nov. 18, 1873	144, 693
Screw-blank-nicking machine	A. Wood	Worcester, Mass	July 26, 1870	105, 873
Screw-blank pointing and heading machine	C. Whipple	Providence, R. I	Dec. 14, 1852	9, 477
Screw-blank pointing and threading machine	T. J. Sloan	New York, N. Y	Apr. 26, 1853	9, 688
Screw-blank-threading machine	T. Newbury	Taunton, Mass	Apr. 19, 1853	9, 677
Screw-blank-threading machine	E. Nugent and J. Fanning	Brooklyn, N. Y	Dec. 2, 1873	145, 121
Screw-blank-threading machine	E. Savage	Berlin, Conn	Nov. 21, 1854	11, 974
Screw-blank-threading machinery	D. F. Mellen	New York, N. Y	Apr. 24, 1866	54, 188
Screw-blank turning and pointing machine	J. Dennis, jr	Washington, D. C	May 22, 1866	54, 873
Screw-blanks, Arranging and feeding	E. Savage	East Berlin, Conn	Nov. 6, 1855	13, 767
Screw-blanks, Device for griping	D. F. Mellen	New York, N. Y	Oct. 2, 1866	58, 446
Screw-blanks, Impressing the thread upon	S. McCormick	Dublin, Ireland	June 6, 1854	11, 001
Screw blanks, &c., Mechanism for griping wood	T. J. Sloan	New York, N. Y	Aug. 24, 1852	9, 222
Screw-blanks, rivets, &c., Machinery for shaving the heads of.	J. Crum	Ramapo, N. Y	Mar. 30, 1852	8, 838
Screw-blanks, rivets, &c., Method of heading	W. E. Ward	Portchester, N. Y	Dec. 28, 1852	9, 508
Screw-boat, Portable	J. Francis	New York	Apr. 23, 1833	....
Screw-bolt	F. Mutimer	Rockford, Ill	Nov. 21, 1871	121, 060
Screw-bolt	F. Tudor	Boston, Mass	Oct. 20, 1868	83, 225
Screw-bolt and lock-nut	J. B. Smith	Milwaukee, Wis	Mar. 9, 1869	87, 717
Screw-bolt and nut	T. English	Dulwich, England	Feb. 18, 1873	135, 898
Screw-bolt and nut	L. Paige	Cavendish, Vt	Jan. 3, 1854	10, 368
Screw-bolt, Spring-headed	D. R. Pratt	New York, N. Y	Feb. 1, 1870	99, 473
Screw-bolt-threading machine	E. M. Mayo	Cincinnati, Ohio	Nov. 26, 1867	71, 512
Screw-bolt washer	N. Thompson	Brooklyn, N. Y	Feb. 22, 1870	100, 214
Screw, Boot-crimper	J. Edson	Boston, Mass	Nov. 30, 1869	97, 286
Screw boring and cutting machine	A. A. Wilder	Detroit, Mich	Jan. 31, 1845	3, 897
Screw-cap-nicking device	W. Willhouse and G. W. Briggs	New Haven, Conn	Jan. 13, 1871	110, 761
Screw-cap-nicking-machine	C. E. Thompson and W. Walker	New Haven, Conn	Sept. 24, 1867	69, 271
Screw-cap-threading-machine	J. L. Mason	New York, N. Y	Mar. 31, 1868	76, 229
Screw-caps, Machine for making sheet-metal	J. L. Mason	New York, N. Y	Apr. 13, 1869	88, 885
Screw-caps, Manufacture of sheet-metal	J. L. Mason	New York, N. Y	Apr. 13, 1869	88, 886
Screw-capping device	O. W. Swift	New Haven, Conn	Oct. 15, 1867	59, 863
Screw-capping die	G. W. Briggs	New Haven, Conn	Jan. 14, 1873	134, 845
Screw-chasers, Hob for cutting	G. C. Schneider	Washington, D. C	June 9, 1857	17, 522
Screw, Clamp	C. L. Kingsley	Meriden, Conn	Dec. 10, 1867	71, 885
Screw-clamp for bending axle-trees	L. Wilkinson	New Haven, Conn	Nov. 20, 1866	59, 931
Screw-clamp for planking vessels	J. D. Hathaway	Medford, Mass	July 2, 1867	66, 332
Screw-clamp, Hand	W. Ormsby	Boston, Mass	Nov. 20, 1866	59, 861
Screw-clamp, Hand	H. Schmidt	New York, N. Y	Aug. 14, 1866	57, 195
Screw, Coffin	W. H. Nichols	East Hampton, Conn	July 26, 1859	24, 911
Screw-collar attachment	J. Hooper	Pittsburgh, Pa	Apr. 6, 1869	88, 632
Screw, Compound zigzag	J. Woodhull	Rochester, N. Y	Dec. 31, 1828	....
Screw, Cork	C. Chinnock	Brooklyn, N. Y	May 27, 1862	35, 362
Screw-cutter	J. M. Evarts	Westville, Conn	June 16, 1857	17, 563
Screw-cutter	J. W. Lyon	Brooklyn, N. Y	Sept. 9, 1856	15, 700
Screw-cutter	J. K. Nelson	Green Point, N. Y	Apr. 9, 1867	63, 741
Screw-cutter	T. Whitaker	Cincinnati, Ohio	Sept. 14, 1858	21, 531
Screw-cutter	M. M. Young	Chelsea, Mass	June 12, 1866	55, 571
Screw cutting and heading machine, Metal	J. Mason	....	Mar. 30, 1815	....
Screw-cutting bit, Spiral	G. Page	New Hampshire	Nov. 17, 1836	....
Screw-cutting-device	G. W. Brown and A. T. Gifford	Providence, R. I	Oct. 3, 1871	119, 565
Screw-cutting device	W. W. P. Clement	Canoe Station, Ala	Oct. 1, 1872	131, 811
Screw-cutting device	J. B. Low	Ravenna, Ohio	Feb. 11, 1873	135, 830
Screw-cutting device	S. North	Syracuse, N. Y	Apr. 23, 1872	125, 980
Screw-cutting die	E. D. Barrett	New Haven, Conn	Jan. 1, 1867	60, 822
Screw-cutting die	S. D. Bates and S. W. Murray	Lewisburgh and Milton, Pa.	Apr. 1, 1873	137, 283
Screw-cutting die	J. Carroll	Oakland, Cal	Oct. 3, 1871	119, 445
Screw-cutting die	C. G. Cross	Chicago, Ill	Feb. 20, 1866	52, 783
Screw-cutting die	L. R. Faught	Philadelphia, Pa	May 30, 1871	115, 291
Screw-cutting die	P. W. Gates	Chicago, Ill	May 8, 1847	5, 103
Screw-cutting die	J. Griffiths	Philadelphia, Pa	Jan. 18, 1853	9, 547
Screw-cutting die	A. Hoermann	New York, N. Y	Sept. 15, 1868	82, 118
Screw-cutting die	P. Hoffner	Rising Sun, Ind	Feb. 8, 1859	22, 918
Screw-cutting die	J. O. Morse	Englewood, N. J	Sept. 28, 1869	95, 371
Screw-cutting die	N. Nelson	Galesburgh, Ill	Nov. 1, 1870	108, 815
Screw-cutting die	S. W. Putnam, jr	Fitchburgh, Mass	June 11, 1872	127, 793
Screw-cutting die	W. E. Ward	Port Chester, N. Y	Jan. 14, 1873	134, 777
Screw-cutting-die holder	A. Phinney	Bainbridge, N. Y	May 18, 1869	90, 190
Screw-cutting-die holder	B. L. Walker	Sing Sing, N. Y	Oct. 24, 1871	120, 351
Screw-cutting-die plate	W. T. Cole	New York, N. Y	Dec. 27, 1870	110, 437
Screw-cutting-die plate	E. P. Gleason	Providence, R. I	June 19, 1860	28, 747
Screw-cutting-die plate	T. Shrewsbury	New York, N. Y	Sept. 21, 1869	95, 154
Screw-cutting-die stock	J. J. Grant	Greenfield, Mass	Feb. 25, 1873	136, 153
Screw-cutting-die stock	E. C. C. Kellogg	Hartford, Conn	May 23, 1865	47, 898
Screw-cutting-die stock	D. McArthur	New Haven, Conn	Dec. 31, 1867	72, 747
Screw-cutting-die stock	P. McGlew	Waterford, N. Y	June 10, 1856	15, 080
Screw-cutting-die stock	W. Pimlott	Syracuse, N. Y	Oct. 31, 1865	50, 731
Screw-cutting die, Wooden	W. O. Hickok	Harrisburgh, Pa	Nov. 2, 1858	21, 961
Screw-cutting dies, Arrangement of	A. Mayer	Philadelphia, Pa	Jan. 11, 1853	9, 537
Screw-cutting dies in the die-stock, Arrangement of	S. Goodfellow	New Orleans, La	Dec. 6, 1853	10, 293
Screw-cutting machine	W. N. Adams	Olmstead, Ohio	May 5, 1857	17, 187
Screw-cutting machine	J. S. Atkinson	Ormsby Borough, Pa	Feb. 21, 1871	111, 899
Screw-cutting machine	J. Blackall	Albany, N. Y	July 29, 1837	318
Screw-cutting machine	J. R. Brown	Boston, Mass	Sept. 15, 1863	39, 968
Screw-cutting machine	J. R. Brown	Providence, R. I	Nov. 28, 1865	51, 257
Screw-cutting machine	J. M. Carpenter	Pawtucket, R. I	Apr. 18, 1871	113, 740
Screw-cutting machine	J. M. Carpenter	Pawtucket, R. I	Oct. 17, 1871	119, 916
Screw-cutting machine	P. Chapin	Baltimore, Md	Apr. 27, 1858	20, 036
Screw-cutting machine	R. H. Cole	Saint Louis, Mo	Mar. 30, 1858	19, 752

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Screw-cutting machine	C. S. Crane and W. H. Lavinia	Chicago, Ill	Mar. 18, 1873	136, 818
Screw-cutting machine	J. Dougherty	San Francisco, Cal	Mar. 30, 1869	88, 400
Screw-cutting machine	G. Emig	Cincinnati, Ohio	Jan. 14, 1873	134, 871
Screw-cutting machine	M. B. Flynn	Brooklyn, N. Y	Oct. 14, 1873	143, 665
Screw-cutting machine	S. W. Goodyear	Meriden, Conn	Mar. 14, 1865	46, 846
Screw-cutting machine	J. J. Chant	Greenfield, Mass	Nov. 12, 1872	133, 026
Screw-cutting machine	E. Hazard and J. White	Philadelphia, Pa	May 15, 1812	......
Screw-cutting machine	J. Humes	Richmond, Va	Dec. 30, 1813	......
Screw-cutting machine	G. B. Jaycox and A. Webster	Hartford and Farmington, Conn.	July 15, 1873	140, 780
Screw-cutting machine	C. Jillson	Worcester, Mass	Aug. 13, 1867	67, 655
Screw-cutting machine	E. Kaylor	Pittsburgh, Pa	Aug. 23, 1870	106, 592
Screw-cutting machine	H. Kenyon	Steubenville, Ohio	Dec. 22, 1857	18, 909
Screw-cutting machine	L. W. Langdon	Northampton, Mass	Nov. 15, 1864	45, 054
Screw-cutting machine	D. McGuire	Northampton, Mass	June 24, 1873	140, 212
Screw-cutting machine	J. A. Merriman	Chicago, Ill	Aug. 1, 1865	49, 133
Screw-cutting machine	T. Newbury	Taunton, Mass	Mar. 10, 1857	16, 803
Screw-cutting machine	R. Nuttall and J. Kirkpatrick	Allegheny, Pa	May 24, 1859	24, 153
Screw-cutting machine	F. Olinger, H. S. Manning, and D. A. Greene	Jersey City, N. J., and New York, N. Y.	Apr. 23, 1872	125, 983
Screw-cutting machine	J. Peace and W. P. Cox	Merchantville and Camden, N. J.	July 29, 1873	141, 234
Screw-cutting machine	A. and A. Phillips	Cleveland, Ohio	June 24, 1873	140, 161
Screw-cutting machine	H. O. Reed	Boston, Mass	Aug. 5, 1873	141, 460
Screw-cutting machine	J. H. Richardson	Chicago, Ill	May 5, 1868	77, 530
Screw-cutting machine	J. W. Row	Lewisburgh, Pa	Feb. 25, 1873	136, 269
Screw-cutting machine	E. Rayon	Piqua, Ohio	Apr. 7, 1868	76, 331
Screw-cutting machine	A. B. Simonds	Youngstown, Ohio	May 29, 1866	55, 171
Screw-cutting machine	T. J. Sloan	New York, N. Y	July 9, 1850	7, 499
Screw-cutting machine	J. Sloat	Ramapo Cove, N. Y	May 4, 1813	......
Screw-cutting machine	V. Smith	Middlebury, Ohio	Aug. 11, 1868	80, 840
Screw-cutting machine	L. W. Stockwell	Ravenna, Ohio	Feb. 20, 1872	123, 951
Screw-cutting machine	C. C. Walworth	Boston, Mass	July 29, 1873	141, 299
Screw-cutting machine	G. H. Wells	Logansport, Ind	Apr. 9, 1867	63, 446
Screw-cutting machine	S. L. Wiegand	Philadelphia, Pa	Aug. 11, 1868	81, 049
Screw-cutting machine	D. Wilkinson		Dec. 14, 1798	......
Screw-cutting machine, Wood	F. H. Hamilton	Schenectady, N. Y	July 8, 1841	2, 161
Screw-cutting machine, Wood	J. and T. Keane	Haverstraw, N. Y	July 9, 1838	830
Screw-cutting machine, Wood	A. Stowell	Worcester, Mass	July 19, 1809	......
Screw-cutting machine, Wooden	R. Hancock, sr., and E. W. Carr	Philadelphia, Pa	Mar. 1, 1811	......
Screw-cutting machine, Wooden	A. H. Longley	Lebanon, Ind	May 17, 1853	9, 729
Screw-cutting machine, Wooden	S. Treadwell	Weston, Conn	May 22, 1828	......
Screw cutting machine, Wooden and metal	J. Andrews	Dinwiddie County, Va	Aug. 11, 1817	......
Screw-cutting machinery	T. W. Harvey	New York, N. Y	May 30, 1846	4, 548
Screw-cutting machinery	P. H. Watson	Rockford, Ill	Dec. 3, 1846	4, 868
Screw-cutting machinery, Wood	C. Whipple	Providence, R. I	July 10, 1845	4, 106
Screw-cutting machinery, Feeder and nippers for	W. Van Anden	Trenton, N. J	Mar. 27, 1849	6, 218
Screw-cutting plate	H. Gill	Mansfield, Ohio	Sept. 3, 1867	68, 478
Screw-cutting stocks, Adjusting the chasers in	M. C. Gardner	Rockport, N. Y	Aug. 3, 1852	9, 169
Screw-cutting tool	E. B. Beach	West Meriden, Conn	Jan. 21, 1868	73, 431
Screw-cutting tools, Gauge for	E. Lyman	New Haven, Conn	Sept. 11, 1866	57, 934
Screw die	A. P. Pitkin	Hartford, Conn	May 31, 1859	24, 236
Screw-die press	J. H. Clapp	Providence, R. I	Nov. 7, 1871	120, 712
Screw, Double	E. S. Pierce	Hartford, Conn	Dec. 10, 1867	71, 909
Screw-drill stock	C. Babbit	Taunton, Mass	Apr. 29, 1834	......
Screw, Drive	D. F. Fetter	New York, N. Y	Jan. 10, 1871	110, 859
Screw-driver	I. Allard	Belfast, Me	Aug. 4, 1868	80, 583
Screw-driver	J. S. Armstrong	Saint John's, Canada	Aug. 20, 1872	130, 614
Screw-driver	J. A. Ayres	Hartford, Conn	July 14, 1863	39, 206
Screw-driver	J. A. Ayres	Hartford, Conn	July 23, 1867	67, 014
Screw-driver	W. G. A. Bonwill	Dover, Del	Oct. 10, 1865	50, 328
Screw-driver	J. P. Curtiss	New Britain, Conn	June 6, 1871	115, 582
Screw-driver	J. H. Davis	Livingston County, Mo	Aug. 19, 1873	141, 857
Screw-driver	O. Dean	Richmond, Va	Dec. 24, 1867	72, 463
Screw-driver	M. W. Dillingham	Amsterdam, N. Y	Jan. 31, 1871	111, 327
Screw-driver	D. Drummond	McGregor, Iowa	Jan. 18, 1870	98, 933
Screw-driver	C. Eversol	Commerce, Mo	Aug. 14, 1866	57, 167
Screw-driver	W. S. Goss	Baltimore, Md	Aug. 4, 1868	80, 692
Screw-driver	L. Hart	Unionville, Conn	Mar. 15, 1870	100, 757
Screw-driver	H. L. Hildreth	Lockport, N. Y	Feb. 28, 1871	112, 143
Screw-driver	W. Hofer	New Haven, Conn	June 22, 1869	91, 634
Screw-driver	F. B. Hunt	Richmond, Ind	Jan. 28, 1873	135, 340
Screw-driver	J. A. King	Jamaica, N. Y	May 14, 1872	126, 716
Screw-driver	S. R. Kneeland	Charlestown, Mass	Dec. 16, 1873	145, 576
Screw-driver	C. Law	Pittston, Pa	May 20, 1873	139, 069
Screw-driver	W. D. Martyn	Boston, Mass	Feb. 15, 1870	99, 781
Screw-driver	J. S. McCurdy	Bridgeport, Conn	Sept. 19, 1865	50, 021
Screw-driver	A. Newton	Darby Creek, Ohio	Oct. 18, 1870	108, 383
Screw-driver	J. C. Pinner	Newbern, Tenn	Oct. 26, 1869	96, 261
Screw-driver	C. W. Porter	Searsport, Me	July 9, 1872	128, 751
Screw-driver	J. W. Switzer	Basil, Ohio	Dec. 7, 1852	9, 457
Screw-driver	J. Thompson	Taunton, Mass	May 20, 1862	35, 337
Screw-driver	T. D. Voorhees	Easton, Pa	Nov. 12, 1867	70, 933
Screw-driver and boring-tool	J. A. Bidwell	East Boston, Mass	Feb. 18, 1868	74, 490
Screw-driver and tweezers	D. F. Hartford	Boston, Mass	Apr. 4, 1865	47, 102
Screw-driver and wrench	E. J. Amor	New York, N. Y	Sept. 8, 1868	81, 970
Screw-driver countersink	P. N. Jacobus	Flatbrookville, N. J	Aug. 18, 1868	81, 171
Screw-driver handle	E. S. Bitner	Lockhaven, Pa	Feb. 9, 1869	86, 724
Screw-driver handle	O. Bond	Buffalo, N. Y	June 22, 1858	20, 619
Screw-drivers, Manufacturing	G. Parr	Buffalo, N. Y	Jan. 10, 1865	45, 854
Screw-drivers, Ratchet-movement for	G. H. Talbot	Boston, Mass	Jan. 19, 1858	19, 162
Screw-driving machine	A. M. Bailey and J. O. Couch	Middlefield, Conn	July 5, 1864	43, 384
Screw, Endless cutting	J. H. Shrader	Philadelphia, Pa	Oct. 25, 1832	......
Screw-engine for throwing water	E. Ormsbee		Mar. 21, 1798	......
Screw-engines, Device for releasing	A. Kieffer	Buffalo, N. Y	June 20, 1865	48, 359
Screw-eyes, Device for inserting	B. F. Harris	Brooklyn, N. Y	Dec. 11, 1866	60, 367
Screw-eyebolt-head-forming die	E. H. Plant	Plantsville, Conn	Sept. 12, 1871	118, 859
Screw-fastening	J. Loudon and O. Ahlstrom	New York, N. Y	July 3, 1855	13, 177

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Screw-feeding apparatus	E. S. Pierce	Hartford, Conn	Oct. 5, 1862	95, 693
Screw-feeding gear	C. C. Walworth	Boston, Mass	Jan. 13, 1857	16, 414
Screw for bedsteads, Right and left hand	J. P. Copent	New York	June 11, 1829	....
Screw for calipers, &c., Clamp	D. Wright, jr	Waltham, Mass	Aug. 31, 1869	94, 266
Screw for cotton and hay presses	J. P. Kintner	Harrison County, Ind	Apr. 27, 1869	89, 411
Screw for fastening railway-rails	A. Arnold	North Englewood, N. J	Mar. 14, 1865	46, 842
Screw for planking ships	S. Staples	Topsham, Me	Dec. 20, 1853	10, 343
Screw for pressing hay, &c., Wood	J. Morrison	Hardinsburgh, Ind	Mar. 12, 1831	....
Screw for raising water	I. A. Letellier	Paris, France	June 27, 1848	5, 653
Screw for ship-carpenters, Rain-staff	J. Hobbs	Hallowell, Me	Jan. 30, 1855	12, 316
Screw for stools, &c	W. A. Ingalls	Chicago, Ill	May 15, 1866	54, 733
Screw for turning in dead-eyes, Rigging	W. A. Overton	New York, N. Y	Oct. 18, 1864	44, 741
Screw-forging machinery	J. Cochrane	Wall Township, N. J	May 15, 1866	54, 687
Screw-forming machine	W. A. McCool	Ashland, Ohio	Apr. 29, 1873	138, 422
Screw-gage	J. S. Copeland	Bridgeport, Conn	Feb. 12, 1867	61, 926
Screw-gear, Combined	C. Wortham	Warren County, N. C	Apr. 24, 1826	....
Screw-grinding machine	E. and C. Chambers, jr	Philadelphia, Pa	Apr. 5, 1870	101, 431
Screw-gripe	D. M. Robertson	Manchester, N. H	Dec. 20, 1864	45, 524
Screw-guide	N. Smith	Hartford, Conn	June 30, 1868	79, 509
Screw, Hand	A. O'Dell	Toronto, Canada	Jan. 23, 1872	122, 965
Screw-handle attachment	E. Ripley	Troy, N. Y	Aug. 18, 1868	81, 111
Screw-head	H. B. Chess	Pittsburgh, Pa	Mar. 29, 1864	42, 077
Screw-head	T. C. Richards	New York, N. Y	July 6, 1869	92, 361
Screw-head-capping machine	E. J. Manville and E. M. Judd	Waterbury and Wolcottville, Conn.	Sept. 24, 1867	69, 230
Screw-head-dressing machinery	T. W. Harvey	New York	Aug. 18, 1846	4, 700
Screw-head nicking and trimming machine	N. G. Thom	Cincinnati, Ohio	Aug. 16, 1859	25, 150
Screw-head-nicking machine	I. Griggs	Utica, N. Y	Apr. 12, 1859	23, 569
Screw-head-nicking machinery	T. W. Harvey	New York	July 2, 1846	4, 613
Screw-head-slotting machine	E. S. Pierce and J. A. Ayres	Hartford and Groton, Conn	Jan. 14, 1873	134, 818
Screw-head turning and nicking machine	I. Griggs	Utica, N. Y	July 6, 1858	20, 789
Screw-head-turning machine	T. Kennedy	Hamden, Conn	June 4, 1867	65, 394
Screw heads and rivets, Cutting and punching metal.	E. Scott	Monroe County, N. Y	Dec. 26, 1833	....
Screw heads and rivets, Machine for turning	H. Crum	Clarkstown, N. Y	Nov. 16, 1839	1, 411
Screw heads, Cutting notches in wood	J. H. Pierson	Ramapo, N. Y	Nov. 2, 1836	....
Screw heads, Forming bedstead	H. N. Sherman	Birmingham, Conn	Nov. 13, 1855	13, 803
Screw heads, Machine for cutting notches in wood	J. H. Pierson	Ramapo, N. Y	Nov. 28, 1836	92
Screw heads, Machine for nicking and turning wood	T. W. Harvey	Poughkeepsie, N. Y	Mar. 25, 1837	148
Screw heads, Machine for nicking wood	T. J. Sloan	New York, N. Y	Oct. 29, 1850	7, 748
Screw heads, Machine for removing the bur from the under side of wood.	C. Whipple	Providence, R. I	Apr. 10, 1843	3, 038
Screw heads, Machine for shaving and nicking wood.	J. M. Whiting	Providence, R. I	July 15, 1862	35, 906
Screw heads, Machine for turning wood	J. Crum	Ramapo, N. Y	Sept. 26, 1848	5, 803
Screw-heads, Method of capping and nicking caps of	C. E. Thompson	New Haven, Conn	Aug. 6, 1867	67, 463
Screw heads, Method of finishing	T. J. Sloan	New York, N. Y	June 10, 1851	8, 155
Screw-heads, Mold for casting	N. S. Williams	East Hampton, Conn	May 24, 1864	42, 894
Screw-heads, Mold for casting ornamental	W. H. Nichols and H. H. Abbe	Chatham, Conn	Sept. 13, 1864	44, 214
Screw-heads, Nicking	E. B. Fish	Glen's Falls, N. Y	Apr. 23, 1867	64, 069
Screw-heads, Nicking	G. L. Morris	Taunton, Mass	June 12, 1866	55, 524
Screw heads, Shaving wood	H. A. Harvey	New York, N. Y	Oct. 18, 1864	44, 733
Screw-heading machine, Wood	A. Stowell	Worcester, Mass	Feb. 4, 1813	....
Screw-heading tool	C. E. Phillips	Abington, Mass	Feb. 17, 1863	37, 703
Screw-jack	T. C. Ball	Walpole, N. H	Feb. 27, 1855	12, 464
Screw-jack	F. Davis	Keene, N. H	May 9, 1854	10, 902
Screw-jack	F. Ellis and B. S. Buckley	Roxbury, Mass	Nov. 14, 1848	5, 913
Screw-jack	H. F. Shaw	South Boston, Mass	Jan. 29, 1856	14, 170
Screw-jack for raising buildings	F. Nicholson	Warsaw, N. Y	Nov. 29, 1853	10, 291
Screw, Jack	W. Ballard	New York	July 7, 1846	4, 627
Screw, Jack	C. H. Sawyer	Saco, Me	Aug. 27, 1867	68, 241
Screw-machine	E. A. Bagley	Worcester, Mass	Mar. 30, 1869	88, 262
Screw-machine	H. J. Harwood	Utica, N. Y	June 11, 1867	65, 567
Screw-machine	B. A. Mason	New York, N. Y	Jan. 7, 1868	73, 110
Screw-machine	J. Moore	Madison, Ind	Oct. 21, 1856	15, 932
Screw-machine	P. Dow and D. Treadwell	Boston, Mass	Aug. 8, 1817	....
Screw-machine	C. Whipple	Providence, R. I	Jan. 1, 1856	14, 041
Screw-machine feeder	S. Merrick	Springfield, Mass	Mar. 7, 1846	4, 411
Screw-machine-feeding device, Wood	A. Buckminster	Boston, Mass	June 27, 1871	116, 263
Screw-machine spindle	D. P. Glines	Manchester, N. H	June 27, 1871	116, 301
Screw machine, Wood	J. M. Alden	New York, N. Y	Dec. 27, 1870	110, 539
Screw machine, Wood	C. B. F. Tingley	Pawtucket, R. I	Jan. 30, 1872	123, 307
Screw machinery, Feeder for wood	C. D. Rodgers	Utica, N. Y	Oct. 11, 1870	108, 295
Screw-making machine	A. Burnham and T. S. Barnum	Sharon, Conn	Dec. 31, 1813	....
Screw-making machine	J. Cochrane	Wall Township, N. J	Apr. 2, 1867	63, 364
Screw-making machine	E. Croft	Waterbury, Conn	July 9, 1867	66, 568
Screw-making machine	J. Griggs	Utica, N. Y	July 31, 1860	29, 373
Screw-making machine	B. A. Mason	New York, N. Y	Feb. 5, 1867	61, 749
Screw-making machine	B. A. Mason	New York, N. Y	May 28, 1867	65, 100
Screw-making machine	T. T. Prosser	Chicago, Ill	Sept. 18, 1866	58, 134
Screw-making machine	L. Southworth, jr., and S. G. Cushing.	Stoughton, Mass	July 11, 1871	116, 880
Screw-making machine	A. Webster	Farmington, Conn	Apr. 27, 1869	89, 528
Screw-making machinery	H. A. Harvey	New York, N. Y	May 2, 1865	47, 548
Screw-making machinery	H. A. Harvey	New York, N. Y	May 2, 1865	47, 549
Screw-making machinery	L. W. Wright	London, England	Dec. 6, 1828	....
Screw, Metallic	J. Luther	Warren, R. I	June 26, 1841	2, 146
Screw-mill for breaking and grinding hard substances.	O. Evans	....	Feb. 14, 1804	....
Screw-nail	H. A. Harvey	New York, N. Y	Nov. 19, 1867	71, 166
Screw-nail	S. Pratt	Boston, Mass	Oct. 25, 1853	10, 171
Screw-nicking device	J. A. Ayres	Hartford, Conn	Sept. 10, 1867	68, 592
Screw-nicking machine	J. A. Bidwell	Boston, Mass	Jan. 17, 1865	43, 946
Screw-nicking machine	N. S. Clement	Northampton, Mass	Mar. 29, 1870	101, 228
Screw-nicking machine	D. F. Mellen	New York, N. Y	Apr. 3, 1866	53, 648
Screw-nicking machinery	N. B. Hadley	Providence, R. I	Mar. 26, 1867	63, 243
Screw-nuts, Casting seamless	J. G. Holt	Chicago, Ill	Nov. 26, 1861	33, 783
Screw-packing machine	S. Terry	Decatur, Ga	June 11, 1836	....

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Invention.	Inventor.	Residence.	Date.	No.
Screw-picket	O. Hyde	Benicia, Cal	June 29, 1858	20, 715
Screw-pile	T. W. H. Moseley	Boston, Mass	Nov. 15, 1870	109, 337
Screw-pile-sinking machine	W. S. Smith and W. Reuschel	Chicago, Ill	Jan. 17, 1871	111, 092
Screw, Piling	C. H. Parker	Boston, Mass	Mar. 29, 1870	101, 379
Screw, Planking	A. Perrin	Cleveland, Ohio	Apr. 5, 1864	42, 222
Screw, Planking	G. Savage, jr	Bangor, Me	Mar. 12, 1867	62, 894
Screw-plate	W. Ashton	Utica, N. Y	Aug. 6, 1867	67, 396
Screw-plate	W. Bond and J. Wroath	Sandy Hill, N. Y	May 18, 1869	90, 151
Screw-plate	J. S. Dutton	Jaffrey, N. H	Oct. 6, 1868	82, 697
Screw-plate	Z. L. Jacobs	Hebron, Conn	May 15, 1860	28, 279
Screw-plate	J. Jennings and G. C. Sweet	West Meriden, Conn	Mar. 7, 1865	46, 676
Screw-plate	P. D. Nichols	Hartford, Conn	Feb. 22, 1859	23, 041
Screw-plate	A. W. Owens and J. Barnes	East Canton, Pa	Aug. 10, 1869	93, 552
Screw-plate	J. Smith	New Haven, Conn	Dec. 13, 1864	45, 459
Screw-plate	G. C. Sweet	Norwich, Conn	July 16, 1867	66, 908
Screw-plate	T. L. Von Dorn	Omaha, Nebr	Dec. 16, 1873	145, 701
Screw-plate	C. C. Walworth	Boston, Mass	Jan. 5, 1864	41, 110
Screw-plate	N. Zillier	New Castle, Del	July 24, 1866	56, 663
Screw-power	J. Haege	Shiloh, Ill	Jan. 19, 1864	41, 296
Screw-press	H. Blundell and J. McWilliams	Providence, R. I	June 22, 1869	91, 511
Screw-press	H. C. Bowen	New York, N. Y	Aug. 3, 1869	93, 167
Screw-press	J. S. and W. B. Buell	Buffalo and Pompey, N. Y	Nov. 24, 1868	84, 408
Screw-press	J. J. Crawford	Lowell, Mass	May 14, 1872	126, 679
Screw-press	T. Cohoon	Cazenovia, N. Y	Apr. 14, 1808	....
Screw-press	T. Gilpin	Wilmington, Del	Apr. 3, 1835	....
Screw-press	T. R. Hopkins	Petersburgh, Va	Aug. 23, 1859	25, 195
Screw-press	L. J. Knowles	Worcester, Mass	Dec. 26, 1871	122, 259
Screw-press	M. Safford	Melrose, Mass	July 25, 1871	117, 468
Screw-press	F. H. Laforge and G. E. Somers	Waterbury, Conn	July 27, 1869	93, 067
Screw-press	T. B. Webster	New York, N. Y	July 25, 1865	49, 047
Screw-press, Double	E. Winter	New Orleans, La	Sept. 4, 1810	....
Screw-press for packing cotton, wool, &c., Wooden	J. Pierson	Knoxville, Tenn	Oct. 17, 1811	....
Screw-press for packing boxes	G. W. Wight	New York, N. Y	June 7, 1853	9, 773
Screw-press for pressing elaine from tallow	R. Jones	Circleville, Ohio	Oct. 9, 1841	2, 280
Screw press, Jack	J. W. Bocage	Pine Bluff, Ark	Feb. 2, 1858	19, 232
Screw-press, Portable	C. D. Brand	Oak Hill, N. Y	June 14, 1864	43, 086
Screw-press, Portable	A. Hallam	New Orleans, La	Sept. 14, 1843	3, 270
Screw-press, Portable revolving	R. M. Brooks	Pike County, Ga	Nov. 6, 1866	59, 352
Screw pressing and shaping machine	T. Welham	Washington, D. C	Apr. 11, 1865	47, 236
Screw-propeller	H. K. Stevens and S. Miller	Waterloo, N. Y	Sept. 16, 1873	142, 820
Screw, Rigging	J. R. Anderson	New York, N. Y	Feb. 27, 1872	124, 108
Screw-ring, Sheet-metal	L. F. Betts	Philadelphia, Pa	Mar. 5, 1872	124, 320
Screw-rings, Manufacture of sheet-metal	L. F. Betts	Philadelphia, Pa	Apr. 2, 1872	125, 257
Screw-rod	S. J. Peet	Boston, Mass	Apr. 29, 1873	138, 278
Screw-setting bit	G. Page	Keene, N. H	Nov. 17, 1836	82
Screw-shanks, Machine for making	J. Perkins	Newburyport, Mass	Mar. 23, 1813	....
Screw shaving and nicking machine, Wood	D. M. Robertson and J. A. Bidwell.	East Boston and Boston, Mass.	May 23, 1865	47, 861
Screw shaving and slotting machinery	E. S. Pierce	Hartford, Conn	Dec. 10, 1867	71, 908
Screw-shaving machine	J. Burns	New York, N. Y	June 2, 1868	78, 512
Screw-shaving machine, Wood	D. F. Mellen	New York, N. Y	Apr. 3, 1866	53, 647
Screw shaving, picking, and reshaving machinery, Wood.	T. J. Sloan	New York, N. Y	Oct. 21, 1851	8, 456
Screw-slotting die	H. Hammond	Hartford, Conn	Jan. 28, 1868	73, 888
Screw-spike, Railway	A. C. and I. L. Dunn	New York, N. Y	Nov. 8, 1870	108, 986
Screw-stock	S. Goodfellow	Troy, N. Y	July 26, 1859	24, 906
Screw-swedging machine	E. Cope and J. R. Maxwell	Cincinnati, Ohio	May 7, 1867	64, 495
Screw-tap	B. F. Bee	Harwich, Mass	Apr. 24, 1866	54, 096
Screw-tap	C. L. Fehrensen	New York, N. Y	Jan. 18, 1870	98, 943
Screw-tap	J. Flower	Detroit, Mich	June 24, 1873	140, 128
Screw-tap	W. K. Foster	Cambridgeport, Mass	Oct. 27, 1868	83, 371
Screw-tap	W. and R. Foster	New York, N. Y	Dec. 20, 1859	26, 487
Screw-tap	G. H. Fox	Boston, Mass	May 16, 1871	114, 935
Screw-tap	J. Howell and D. Birdsall	Jersey City, N. J	Feb. 9, 1864	41, 509
Screw-tap	J. F. C. Rider and G. B. Wiggin	South New Market, N. H	July 9, 1867	66, 629
Screw-tap	W. Tucker	Fiskedale, Mass	July 16, 1872	129, 366
Screw-tap, Expanding	W. J. Stevens	Jersey City, N. J	May 12, 1863	38, 512
Screw-tap-threading machine	A. and A. E. Goddard	Essex, Conn	Dec. 3, 1872	133, 527
Screw-taps, Apparatus for reversing the motion of	L. Yale, jr	Shelburne Falls, Mass	June 27, 1865	48, 476
Screw-taps, Construction of	B. Hotchkiss	New Haven, Conn	June 12, 1866	55, 493
Screw-taps, Machine for cutting	W. and J. Holroyd	Waterford, N. Y	May 7, 1867	64, 420
Screw-thread cutter and metal-drill	J. W. Mahlon	Brooklyn, N. Y	Nov. 29, 1870	109, 746
Screw-thread drilling and cutting machine	J. J. Grant	Greenfield, Mass	Sept. 20, 1870	107, 610
Screw-thread-swaging machine	T. T. Prosser	Chicago, Ill	Dec. 7, 1869	97, 691
Screw-threads on rollers, Machine for serrating the edge of.	W. H. Howard	Philadelphia, Pa	Feb. 14, 1860	27, 129
Screw-threads on sheet-metal caps, Machine for forming.	T. Houghton	Philadelphia, Pa	Sept. 21, 1869	95, 113
Screw-threads on sheet-metal, Machine for forming	C. F. Neuber and F. W. Perry	New Brunswick and Camden, N. J.	Dec. 23, 1873	145, 893
Screw-threads, Tap for cutting	W. Mantey	New Orleans, La	May 19, 1868	77, 994
Screw-threads, Tap for cutting	C. C. Walworth	Boston, Mass	Oct. 6, 1863	40, 203
Screw-threading device	Z. S. Ogden	Glen's Falls, N. Y	Nov. 1, 1870	108, 933
Screw-threading device	F. G. Robinson	Pittsfield, Mass	June 18, 1872	128, 071
Screw-threading die	G. B. Brayton	Providence, R. I	Nov. 26, 1867	71, 360
Screw-threading die	J. J. Grant	Greenfield, Mass	Oct. 24, 1871	120, 266
Screw-threading die	J. J. Grant	Greenfield, Mass	June 24, 1873	140, 133
Screw-threading die	B. S. Hill	New York, N. Y	May 2, 1865	47, 543
Screw-threading machine	J. A. Bidwell	East Boston, Mass	Mar. 10, 1868	75, 356
Screw-threading machine	J. A. Cleaveland	Logansport, Ind	Mar. 9, 1869	87, 546
Screw-threading machine	E. Croft	Waterbury, Conn	Sept. 9, 1873	142, 560
Screw-threading machine	J. Crum	New York	Sept. 19, 1848	5, 794
Screw-threading machine	E. Gould	Newark, N. J	July 14, 1868	79, 971
Screw-threading machine	I. Griggs	Utica, N. Y	Apr. 12, 1859	23, 568
Screw-threading machine	N. B. Hadley	Providence, R. I	June 8, 1869	91, 117
Screw-threading machine	H. A. Harvey	New York, N. Y	Nov. 28, 1865	51, 179
Screw-threading machine	H. J. Harwood and W. H. Mickle.	Utica, N. Y	Dec. 24, 1867	72, 490
Screw-threading machine	E. Horton	Windsor Locks, Conn	Oct. 28, 1873	144, 100

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Screw-threading machine	W. J. Lewis	Pittsburgh, Pa	Apr. 13, 1869	88, 882
Screw-threading machine	W. F. Parker	Meriden, Conn	May 12, 1868	77, 910
Screw-threading machine	T. T. Prosser	Chicago, Ill	June 29, 1869	91, 965
Screw-threading machine	T. T. Prosser	Chicago, Ill	May 31, 1870	103, 776
Screw-threading machine	D. Poulot	Paris, France	Sept. 22, 1868	82, 346
Screw-threading machine	D. M. Robertson and J. A. Bidwell.	Boston, Mass	Feb. 7, 1871	111, 572
Screw-threading machine	T. J. Sloan	New York, N. Y	Nov. 26, 1850	7, 801
Screw-threading machine	G. F. Wilson and J. F. Whiting	Providence and North Providence, R. I.	July 18, 1854	11, 344
Screw-threading machine, Sheet-metal	E. C. Blakeslee	Waterbury, Conn	July 11, 1871	116, 922
Screw-threading machine, Wood	J. M. Carpenter	Pawtucket, R. I	Apr. 2, 1872	125, 2[illegible]9
Screw-threading machine, Wood	J. M. Carpenter	Pawtucket, R. I	Dec. 31, 1872	134, 360
Screw-threading machine, Wood	H. A. Harvey	New York, N. Y	May 17, 1864	42, 766
Screw-threading machine, Wood	B. A. Mason	Newport, R. I	May 27, 1862	35, 423
Screw-threading machine, Wood	E. Savage	Berlin, Conn	Apr. 5, 1853	9, 652
Screw-threading machine, Wood	E. Savage	Meriden, Conn	Aug. 12, 1862	36, 196
Screw-threading machine, Wood	J. Sloat and T. Springsteen	Ramapo and Poughkeepsie, N. Y.	Mar. 30, 1837	154
Screw-threading machine, Wood	C. Whipple	Providence, R. I	Aug. 18, 1842	2, 754
Screw-threading machine, Wood	J. M. Whiting	Providence, R. I	May 27, 1862	35, 406
Screw-threading machine, Wood, &c	H. Crum	Clarkstown, N. Y	Nov. 14, 1836	79
Screw-threading machinery	C. Whipple	Providence, R. I	July 6, 1852	9, 110
Screw-threading machinery, Pointed	T. J. Sloan	New York	Nov. 24, 1846	4, 864
Screw-threading machinery, Wood	C. Whipple	Providence, R. I	Aug. 10, 1852	9, 191
Screw-threading tool	C. Dreher	Detroit, Mich	Nov. 7, 1865	50, 808
Screw-threading tool	E. S. Pierce	Hartford, Conn	Feb. 23, 1869	87, 198
Screw-threading tool	S. W. Young and J. W. Hoard	Providence, R. I	July 16, 1867	66, 931
Screw, Water-gage	C. Tivnan	Holyoke, Mass	June 6, 1871	115, 658
Screw, Wedge	R. Whitney	Baltimore, Md	Apr. 10, 1830	....
Screw, Wood	J. S. Armstrong	Saint John's, Canada	Nov. 12, 1872	132, 946
Screw, Wood	O. D. Barrett	Washington, D. C	Sept. 30, 1873	143, 217
Screw, Wood	J. A. Bidwell	East Boston, Mass	Feb. 18, 1868	74, 489
Screw, Wood	J. A. Bidwell	East Boston, Mass	Mar. 28, 1871	113, 006
Screw, Wood	J. A. Bidwell	Boston, Mass	May 24, 1864	42, 905
Screw, Wood	J. A. Bidwell and W. Chisholm	Cleveland, Ohio	Jan. 14, 1873	134, 783
Screw, Wood	W. Bourne	Geneva, N. Y	May 13, 1873	138, 784
Screw, Wood	S. P. Burdick	New York, N. Y	Apr. 1, 1872	137, 414
Screw, Wood	G. C. Davies	Dayton, Ohio	June 11, 1867	65, 651
Screw, Wood	G. Freeman	New York, N. Y	Sept. 11, 1860	29, 963
Screw, Wood	H. A. Harvey	New York, N. Y	Apr. 26, 1864	42, 475
Screw, Wood	H. A. Harvey	Orange, N. J	Dec. 24, 1867	72, 633
Screw, Wood	H. J. Harwood	Utica, N. Y	June 11, 1867	65, 668
Screw, Wood	H. L. Kendall	Providence, R. I	June 14, 1859	24, 393
Screw, Wood	H. Knowles	Colchester, Conn	Apr. 1, 1831	....
Screw, Wood	A. S. Ladd and C. N. Corning	Concord, N. H	Aug. 26, 1873	142, 112
Screw, Wood	A. B. Lipsey	West Hoboken, N. J	Mar. 21, 1871	112, 935
Screw, Wood	W. N. Matthews	Richmond, Ind	July 30, 1872	129, 898
Screw, Wood	C. Miller	Utica, N. Y	Dec. 20, 1859	26, 509
Screw, Wood	R. J. Nunn	Savannah, Ga	Sept. 3, 1867	68, 381
Screw, Wood	I. S. Russell	Market, Md	Dec. 30, 1873	146, 023
Screw, Wood	T. J. Sloan	New York	Aug. 20, 1846	4, 704
Screw, Wood	J. K. Stockton	New York, N. Y	May 6, 1873	138, 592
Screw, Wood	J. M. Whiting and G. F. Wilson.	New Bedford, Mass., and Providence, R. I.	Mar. 30, 1858	19, 805
Screw, Wood	E. S. Wills	Philadelphia, Pa	Apr. 30, 1872	126, 366
Screw, Wood	S. W. Young	Providence, R. I	July 16, 1867	66, 766
Screw, Wooden	T. Bowers	Zanesville, Ohio	Aug. 21, 1866	57, 282
Screw-wrench	J. Brett	Newburgh, N. Y	July 10, 1841	2, 165
Screw-wrench	A. D. Briggs	Springfield, Mass	Mar. 26, 1859	23, 751
Screw-wrench	D. H. Chamberlain	Boston, Mass	Mar. 21, 1854	10, 666
Screw-wrench	F. S. Coburn	Ipswich, Mass	May 23, 1855	12, 935
Screw-wrench	A. G. Coes	Worcester, Mass	Aug. 16, 1853	9, 945
Screw-wrench	A. G. Coes	Worcester, Mass	July 4, 1854	11, 208
Screw-wrench	J. L. Crist	Harrisburgh, Pa	May 29, 1866	55, 066
Screw-wrench	T. H. Dodge	Washington, D. C	Sept. 15, 1863	39, 900
Screw-wrench	D. Frank	Allentown, Pa	Apr. 15, 1873	137, 908
Screw-wrench	S. D. Gilman	Troy, N. Y	Mar. 27, 1855	12, 590
Screw-wrench	C. Hall	New York, N. Y	Feb. 2, 1869	86, 534
Screw-wrench	J. Hegarty	Jersey City, N. J	May 29, 1866	55, 100
Screw-wrench	H. W. Hewett	Troy, N. Y	Aug. 24, 1839	1, 301
Screw-wrench	H. W. Hewett	New York	June 27, 1840	1, 659
Screw-wrench	H. W. Hewett	New York, N. Y	Mar. 22, 1864	41, 995
Screw-wrench	F. Hollen and A. H. Pierce	Blairsville, Pa	Feb. 25, 1862	34, 498
Screw-wrench	H. A. House	Bridgeport, Conn	July 27, 1869	92, 969
Screw-wrench	J. Hyde	New York, N. Y	Mar. 13, 1855	12, 510
Screw-wrench	J. Hyde	New York, N. Y	Oct. 2, 1855	13, 617
Screw-wrench	J. Hyde	Troy, N. Y	Nov. 23, 1858	22, 122
Screw-wrench	J. C. Jackson	Rochester, N. Y	May 29, 1866	55, 109
Screw-wrench	B. F. Joslyn	Worcester, Mass	Mar. 3, 1857	16, 733
Screw-wrench	B. F. Joslyn	Worcester, Mass	Mar. 17, 1857	16, 844
Screw-wrench	S. Kane and T. and J. Keane	New York	Aug. 12, 1840	1, 7[illegible]0
Screw-wrench	W. Kuhlenschmidt	New York, N. Y	Sept. 27, 1859	25, 571
Screw-wrench	H. W. Love	Brooklyn, N. Y	Aug. 1, 1865	49, 128
Screw-wrench	H. W. Love	Brooklyn, N. Y	Mar. 6, 1866	53, 016
Screw-wrench	A. Y. McDonald	Dubuque, Iowa	Apr. 23, 1861	34, 316
Screw-wrench	S. Merrick	Springfield, Mass	Aug. 17, 1835	....
Screw-wrench	S. Merrick	Springfield, Mass	Aug. 15, 1848	5, 707
Screw-wrench	C. Neil	Sheffield, England	Feb. 13, 1872	123, 638
Screw-wrench	S. H. Noble	Westfield, Mass	Feb. 20, 1855	12, 410
Screw-wrench	G. B. Read	New York, N. Y	Feb. 1, 1853	9, 567
Screw-wrench	A. Stover	New York, N. Y	July 17, 1866	56, 460
Screw-wrench	G. C. Taft	Worcester, Mass	June 16, 1857	17, 609
Screw-wrench	G. C. Taft	Worcester, Mass	Oct. 16, 1860	30, 431
Screw-wrench	G. C. Taft	Worcester, Mass	Feb. 23, 1864	47, 747
Screw-wrench	G. C. Taft	Worcester, Mass	June 19, 1866	55, 739
Screw-wrench	J. C. Terry	Springfield, Mass	July 11, 1854	11, 308
Screw-wrench	J. Williams	Salem, N. Y	Mar. 4, 1843	2, 991

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Screw-wrench and hammer	L. S. and E. G. Hoyt	Croton Falls, N. Y	May 29, 1866	55, 107
Screw-wrench for grasping cylindrical forms	F. H. Bartholemew and S. Merrick.	New York, N. Y., and Springfield, Mass.	Jan. 2, 1849	6, 002
Screw-wrench-heading machine	L. and A. G. Coes	Worcester, Mass	July 31, 1860	29, 360
Screw-wrenches, Constructing	L. Coes	Springfield, Mass	Apr. 16, 1841	2, 054
Screw-wrenches, Machine for grinding heads for	L. and A. G. Coes	Worcester, Mass	Jan. 8, 1861	31, 075
Screw-wrenches, Rolling the shank and bar of	L. and A. G. Coes	Worcester, Mass	May 8, 1860	28, 157
Screws and feed-apparatus therefor, Machinery for threading.	T. J. Sloan	New York, N. Y	Sept. 23, 1851	8, 379
Screws and gimlets, Cutting	W. W. Southworth	Saybrook, Conn	Mar. 30, 1830	....
Screws and nuts, Cutting the flutes and threads of.	A. Patton	Columbus, Ohio	Mar. 21, 1833	....
Screws and pins, Machine for counting	T. J. Sloan	New York, N. Y	Dec. 23, 1851	8, 615
Screws and rivets, Machine for cutting and heading wire for.	J. H. Pierson	Ramapo, N. Y	Nov. 26, 1836	86
Screws and rivets, Manufacture of wooden	J. H. Pierson	Ramapo, N. Y	Nov. 26, 1836	....
Screws, bolts, &c., Machine for making	L. D. and J. Walter	Fort Plain and Springfield, N. Y.	Feb. 7, 1842	2, 453
Screws by circular cutter, Threading	J. Witherle	Boston, Mass	Feb. 9, 1815	....
Screws, Cap for coffin	A. B. Bailey	Middle Haddam, Conn	Oct. 14, 1862	36, 635
Screws, Cap for coffin	G. H. Howard	South Braintree, Mass	Feb. 19, 1867	62, 135
Screws, Capping	J. W. Bishop	New Haven, Conn	Nov. 6, 1866	59, 344
Screws, Capping	J. Gardner	New Haven, Conn	Oct. 29, 1867	70, 193
Screws, Capping	J. Gardner	New Haven, Conn	Dec. 10, 1867	72, 013
Screws, Capping	C. T. Grilley	New Haven, Conn	Apr. 20, 1852	8, 888
Screws, Capping pad	C. T. Grilley	New Haven, Conn	July 2, 1867	66, 234
Screws, Capping wood	J. Gardner	New Haven, Conn	June 19, 1866	55, 767
Screws, Capping wood	C. T. Grilley	New Haven, Conn	June 5, 1866	55, 284
Screws, Capping wood	C. T. Grilley	New Haven, Conn	Nov. 13, 1866	59, 591
Screws, Casting centers for cast-iron	T. M. Tucker	Newark, N. J	Jan. 28, 1873	135, 388
Screws, Casting female	W. D. Alford	Cuyahoga Falls, Ohio	Nov. 28, 1871	121, 266
Screws, Casting metal	J. Nicholson	Herkimer, N. Y	Apr. 28, 1810	....
Screws, Clamp-nut for	R. White	Rockville Centre, N. Y	July 19, 1870	105, 614
Screws, &c., Combination of cutters for threading wood.	T. J. Sloan	New York, N. Y	July 6, 1852	9, 105
Screws, Cutting	P. Hoffner	Rising Sun, Ind	Aug. 4, 1857	17, 932
Screws, Cutting wooden	J. Peavy	Levant, Me	Jan. 6, 1836	....
Screws, Divided-nut device for feed	F. A. Huntington	San Francisco, Cal	Oct. 14, 1873	143, 626
Screws for bedsteads and chairs, Machinery for cutting.	H. P. Nuckols	Glasgow, Ky	Apr. 4, 1846	4, 434
Screws for knobs, Machine for making double-pointed.	C. H. Thurston	Marlborough, N. H	Dec. 2, 1873	145, 136
Screws for wood-work, Machine for finishing the heads of wood and iron.	A. Stowell	Worcester, Mass	July 15, 1813	....
Screws, Heading	D. T. Munger	Waterbury, Conn	Dec. 21, 1869	98, 180
Screws in lathes, Arrangement for cutting	J. Nason	New York, N. Y	Jan. 3, 1854	10, 383
Screws in raising water, Applying archimedean	P. Harris	Preble County, Ohio	Mar. 25, 1828	....
Screws in the necks of bottles, Tool for forming	J. Focer	Glassborough, N. J	Sept. 18, 1860	30, 106
Screws in wood, Machine for cutting	S. H. Wills	Abingdon, Va	June 18, 1839	1, 172
Screws, Lifting and pressing	R. H. Gray	Greenville, Ala	Sept. 25, 1866	58, 342
Screws, Machine for cutting and heading wire for manufacture of wood.	T. W. Harvey	Poughkeepsie, N. Y	Mar. 25, 1837	149
Screws, Machine for cutting and turning steel, iron, &c.	J. Eastman and C. Abbot	Bath, N. H	Dec. 23, 1830	....
Screws, Machine for cutting square thread of wooden.	J. A. Montgomery	Columbus, Ohio	Mar. 3, 1863	37, 821
Screws, Machine for making machine	J. Braun	Philadelphia, Pa	Apr. 22, 1873	138, 067
Screws, Machine for making machine	F. Curtis	Brattleborough, Vt	Oct. 17, 1871	120, 044
Screws, Machine for making metal	N. C. Hubbell	Hartford, Conn	Oct. 7, 1873	143, 412
Screws, Machine for making metal	C. M. Spencer	Hartford, Conn	Sept. 30, 1873	143, 306
Screws, Machine for making wood	C. A. Rodney	Wilmington, Del	Nov. 23, 1869	97, 230
Screws, Machine for manufacturing wood	C. O. Read	Providence, R. I	Dec. 15, 1837	516
Screws, Machine for molding wood	E. H. Keith	Bridgewater, Mass	May 26, 1868	78, 212
Screws, Machine for pointing and threading wood	N. G. Thom	Cincinnati, Ohio	Aug. 2, 1859	24, 964
Screws, &c., Machinery for making wood	C. Whipple	Providence, R. I	Dec. 7, 1852	9, 460
Screws, Making	J. Gleason	Philadelphia, Pa	Mar. 7, 1814	....
Screws, Making	W. Keane	Monroe, N. Y	Feb. 13, 1836	....
Screws, Making	C. Whipple	Providence, R. I	June 3, 1856	15, 052
Screws, Making wooden	J. Lynch	Pulaski, Tenn	Dec. 12, 1825	....
Screws, Manufacture of wood	S. Brooks and W. N. Clark	Chester, Conn	Jan. 23, 1845	3, 893
Screws, Manufacture of wood	N. G. Thom	Cincinnati, Ohio	Mar. 29, 1859	23, 409
Screws, Manufacturing	G. V. Sheffield	Worcester, Mass	July 14, 1868	80, 022
Screws, Manufacturing wood	H. Knowles	Colchester, Conn	Mar. 1, 1833	....
Screws, Manufacturing wood	R. C. and C. O. Read	Worcester, Mass	June 27, 1834	....
Screws, Method of burning the threads on wooden	T. B. Smith	New York, N. Y	Feb. 15, 1859	22, 985
Screws, &c., Method of making molds for casting iron.	E. Lester	Herkimer, N. Y	May 10, 1805	....
Screws, Mode of forming	C. H. Chandler	Foxcroft, Me	Sept. 6, 1864	44, 074
Screws, Molding	W. Potts	Handsworth, England	Nov. 3, 1868	83, 791
Screws, Molding female	E. L. Lamb and S. Wood	Keokuk, Iowa	Mar. 8, 1859	23, 176
Screws of rolls, Device for adjusting the elevating and depressing.	R. H. Thomas	Newport, Ky	Apr. 29, 1873	138, 452
Screws of thin metal, Manufacturing	J. L. Mason	New York, N. Y	June 2, 1857	17, 437
Screws on bedstead-rails, Machine for cutting	H. Gross	Tiffin, Ohio	May 22, 1855	12, 905
Screws on bolts, Machine for cutting	D. McGuire	Northampton, Mass	July 23, 1872	129, 847
Screws, Ornamenting coffin	P. Bradford	New Haven, Conn	Feb. 5, 1867	61, 707
Screws or other hoisting-apparatus, Self-adjusting brace for jack.	E. W. Cady	Tomah, Wis	Sept. 11, 1860	29, 951
Screws, Pointing and threading	D. M. Robertson	Manchester, N. H	Mar. 3, 1857	16, 778
Screws, ramrods, knives and forks, &c., Manufacturing.	A. Broad	Litchfield, Conn	June 6, 1814	....
Screws, Swivel for temper	T. Graham	Shamburgh, Pa	Apr. 12, 1870	101, 726
Screws, tacks, &c., Mold for casting heads upon	D. McArthur	New Haven, Conn	Feb. 20, 1866	52, 790
Screws, Tap and die for cutting	I. A. Richards	East Brookfield, Mass	June 23, 1857	17, 655
Screws, Tap for cutting wooden	W. O. Hickok	Harrisburgh, Pa	Nov. 2, 1858	21, 960
Screws, Threading wood	H. L. Kendall and H. P. Hunt	Providence, R. I	Sept. 28, 1858	21, 641
Screws, Threading pointed wood	T. J. Sloan	New York, N. Y	Aug. 24, 1852	9, 223
Screws, Threading wood or other	H. Crane	Clarkstown, N. Y	Nov. 14, 1836	....
Screws to iron pipe, Brazing brass	W. B. Scaife	Pittsburgh, Pa	Feb. 14, 1865	46, 395

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Screws, Tool for making	J. W. Clark	Springfield, Mass	Jan. 28, 1862	34, 240
Screws, Trimming and plating iron	D. and H. E. Fowler	Wallingford, Conn	Aug. 22, 1865	49, 586
Scribe-hook	J. Nester	Portland, Oreg	Dec. 14, 1869	97, 795
Scroll-bending device	E. Gibbs	Painesville, Ohio	Nov. 17, 1868	84, 181
Scrubber	M. C. Burr	New Albany, Ind	Sept. 13, 1864	44, 100
Scrubber	C. E. Clum	Troy, N. Y	Sept. 21, 1869	94, 946
Scrubber	J. Edson	Boston, Mass	Apr. 14, 1868	76, 610
Scrubber	I. J. Emory, jr	Webster, Ohio	Apr. 29, 1873	138, 322
Scrubber	V. A. Hacker	Knoxville, Tenn	Apr. 21, 1868	77, 035
Scrubber and cleaner	W. G. Rhodehamel	Piqua, Ohio	June 28, 1870	104, 886
Scrubber and fender	A. H. Allison	Charlottesville, Ind	May 8, 1866	54, 482
Scrubber and mop	W. S. Bullen	Indianapolis, Ind	Oct. 25, 1864	44, 832
Scrubber and mop	W. P. Walker and E. H. Lesc-man.	Toledo, Ohio	Dec. 20, 1870	110, 409
Scrubber and mop, Combined	L. B. and I. A. Wilson	Zanesville, Ohio	Mar. 5, 1872	124, 410
Scrubber and mop-head	W. H. Earnest	Parkersburgh, W. Va	Aug. 15, 1871	117, 997
Scrubber and mop-holder	J. J. Harlan	Cincinnati, Ohio	July 16, 1867	66, 834
Scrubber and polisher	W. M. Pegram	Baltimore, Md	Nov. 5, 1872	132, 773
Scrubber and scraper	J. A. Little	Cartersburgh, Ind	Aug. 27, 1872	130, 925
Scrubber, Gum	J. Old	Reading, Pa	Jan. 19, 1869	86, 097
Scrubber-holder	H. B. Grebinger	Millersville, Pa	Mar. 3, 1868	75, 154
Scrubber, Self-watering	A. D. Granger	Talbotton, Ga	Aug. 31, 1869	94, 305
Scrubbing and mopping machine	W. Zierath and C. J. Smith	Sheboygan, Wis	June 29, 1869	91, 895
Scrubbing knuckle-shield	C. A. Moore	Westbrook, Conn	Aug. 8, 1865	49, 291
Scrubbing-machine	S. M. Barnett	New Orleans, La	Oct. 26, 1858	21, 868
Scrubbing-machine	S. H. Bush	Boistford, Wash	Apr. 22, 1873	138, 129
Scrubbing-machine	W. J. Gard	Winona, Minn	Dec. 23, 1873	145, 796
Scrubbing-machine	A. Irion	Femme Osage, Mo	Jan. 29, 1867	61, 664
Scrubbing-machine	T. Rickey	Greenfield, Ohio	Dec. 26, 1833	....
Scrubbing-machine	W. T. Smyth	Philadelphia, Pa	Jan. 23, 1866	52, 220
Scrubbing-machine	W. E. Stoddard	Fort Edward, N. Y	Nov. 17, 1868	84, 146
Scrubbing-machine, Rotary	C. E. Wareham	Port Washington, Wis	May 5, 1868	77, 554
Scrubbing-tool	J. Frey and W. Ederle	Battle Creek, Mich	June 29, 1869	92, 034
Scrubbing-utensil	B. I. Lane	Framingham, Mass	July 16, 1867	66, 856
Sculptor's apparatus for copying busts, &c	H. Dexter	Boston, Mass	Mar. 28, 1842	2, 519
Scumming-apparatus	T. Molinier	New Orleans, La	Oct. 9, 1860	30, 339
Scuttle-cover and ladder	J. Steger	New York, N. Y	May 19, 1868	78, 152
Scuttle-door for buildings, dry-docks, and vessels	J. Ryan	Saint Louis, Mo	June 11, 1867	65, 611
Scuttle-fastening	T. J. Gifford	Salem, Mass	Apr. 18, 1871	113, 759
Scythe	E. Barnett	Warner, N. H	June 16, 1836	....
Scythe	J. F. Bartlett	Winchester, Conn	Aug. 24, 1869	93, 949
Scythe	H. C. Brown	Barkhamsted, Conn	Aug. 23, 1870	106, 541
Scythe	C. E. Griffin	Roseville, Ill	Dec. 29, 1868	85, 380
Scythe	C. M. Hodge	Mansfield, Mass	Aug. 21, 1866	57, 440
Scythe	C. M. Hodges	Mansfield, Mass	Dec. 24, 1867	72, 638
Scythe	S. Lamson	Cummington, Mass	Oct. 29, 1836	72
Scythe	W. Lowden	Thornapple, Mich	May 4, 1869	89, 778
Scythe	E. L. Wheeler	Scytherville, N. H	Jan. 14, 1873	134, 779
Scythe and nib to snath, Securing	S. Lamson	Shelburne Falls, Mass	July 1, 1841	2, 155
Scythe-blade	S. D. Nelson	Pittsburgh, Pa	Sept. 7, 1858	21, 438
Scythe-blades, Manufacture of	N. P. H. Willis	Chelsea, Mass	Feb. 20, 1872	123, 964
Scythe-blank	H. Waters	Northbridge, Mass	May 2, 1865	47, 589
Scythe, Circular	J. and A. Rhodes	Union Township, N. Y	Dec. 6, 1814	....
Scythe-factory machine	B. and J. Tyler	Claremont, N. H	Feb. 1, 1817	....
Scythe-fagot	H. Waters	Boston, Mass	July 23, 1867	67, 105
Scythe, Farmer's carriage	T. Eaton	Albany, N. Y	Dec. 2, 1814	....
Scythe-fastening	T. C. Ball	Shelburne, N. H	Nov. 21, 1854	11, 983
Scythe-fastening	T. C. Ball	Walpole, N. H	Mar. 25, 1856	14, 543
Scythe-fastening	W. C. Barker	Providence, N. Y	Sept. 5, 1865	49, 822
Scythe-fastening	C. L. Barritt	New York, N. Y	Aug. 21, 1860	29, 661
Scythe-fastening	S. B. Batchelor	Lowville, N. Y	Feb. 28, 1854	10, 562
Scythe-fastening	A. Boydon	East Foxborough, Mass	Oct. 25, 1864	44, 780
Scythe-fastening	C. Clapp	Montague, Mass	Oct. 23, 1855	13, 697
Scythe-fastening	O. Clark	Brunswick, Ohio	Nov. 21, 1848	5, 930
Scythe-fastening	O. Clark	Medina, Ohio	Mar. 18, 1851	7, 985
Scythe-fastening	M. R. Flanders	Ilion, N. Y	Feb. 21, 1865	46, 458
Scythe-fastening	P. Frost	Springfield, Vt	Jan. 11, 1853	9, 531
Scythe-fastening	P. Frost	Springfield, Vt	Mar. 29, 1864	42, 081
Scythe-fastening	D. W. Green	Bernardstown, Mass	May 6, 1856	14, 842
Scythe-fastening	C. Hamler	Newton, N. J	Aug. 1, 1871	117, 623
Scythe-fastening	B. F. Joslyn	Worcester, Mass	Aug. 28, 1855	13, 496
Scythe-fastening	A. Kimball	Fitchburgh, Mass	Aug. 3, 1852	9, 174
Scythe-fastening	A. Kimball	Fitchburgh, Msss	Feb. 22, 1853	9, 593
Scythe-fastening	S. U. King	Windsor, Vt	Oct. 8, 1867	69, 681
Scythe-fastening	S. U. King	Windsor, Vt	Dec. 27, 1870	110, 474
Scythe-fastening	E. G. Lamson	Shelburne, Mass	Mar. 18, 1851	7, 989
Scythe-fastening	N. Lamson	Shelburne Falls, Mass	Mar. 25, 1851	8, 000
Scythe-fastening	N. Lamson	Shelburne Falls, Mass	Mar. 25, 1851	8, 003
Scythe-fastening	S. Lamson	Sterling, Mass	Nov. 25, 1834	....
Scythe-fastenings, Construction of	D. Anthony, sr	Springport, N. Y	Nov. 11, 1851	8, 502
Scythe-handles, &c., Machine for making	J. Embree	Marshallton, Pa	Aug. 7, 1844	3, 695
Scythe-hardening machine	A. Holman and O. Kelley	Slaterville, R. I	Sept. 11, 1860	29, 973
Scythe-heating furnace	L. C. Palmer	East Winsted, Conn	Mar. 4, 1862	34, 589
Scythe, Horse	J. A. Wadsworth	Portsmouth, R. I	July 3, 1824	....
Scythe-nib	D. Sawyer	Cornish, N. H	May 22, 1849	6, 474
Scythe-nib fastening	T. W. Harvey	New York	Apr. 6, 1842	2, 537
Scythe-rifle	T. J. Mayall	Roxbury, Mass	Nov. 22, 1859	26, 197
Scythe rods or bars, Manufacture of	L. C. Palmer	Winchester, Conn	Apr. 12, 1864	42, 305
Scythe-rolling machine	H. Waters	Northbridge, Mass	Apr. 8, 1873	137, 741
Scythe-rolling machine	H. Waters	Boston, Mass	Apr. 22, 1873	138, 216
Scythe-snath	S. B. Batchelor	Lowville, N. Y	Mar. 22, 1859	23, 288
Scythe-snath	S. B. Batchelor	Lowville, N. Y	Nov. 14, 1865	50, 891
Scythe-snath	A., C., and C. N. Clow	Port Bryan, N. Y	Dec. 14, 1852	9, 469
Scythe-snath	T. S. Coflin	Harrington, Me	Feb. 2, 1869	86, 367
Scythe-snath	L. Cole	La Fayette, N. Y	Nov. 20, 1849	6, 879
Scythe-snath	G. Farquhar	Easton, Pa	July 12, 1843	3, 175
Scythe-snath	P. Frost	Springfield, Vt	Apr. 8, 1862	34, 903
Scythe-snath	P. Frost	Springfield, Vt	Feb. 23, 1869	87, 251

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Scythe-snath	S. Lamson	Sterling, Mass	Dec. 20, 1828	....
Scythe-snath	D. Pierce	Montague, Mass	Mar. 11, 1837	144
Scythe-snath	A. H. Pinney	Columbus, Ohio	Sept. 8, 1859	18, 158
Scythe-snath	S. Puffer, jr	Sunderland, Mass	Apr. 7, 1838	680
Scythe snath and rifle	J. Knight	Woodbury, N. J	Apr. 7, 1831	....
Scythe-snath-handle fastening	S. W. Fox and A. Ferry	Bernardstown, Mass	Aug. 4, 1841	2, 208
Scythe-snath nib	P. Frost	Springfield, Vt	Mar. 22, 1864	41, 988
Scythe-snath nib	A. J. White	East Foxborough, Mass	July 1, 1862	35, 798
Scythe-snaths, Machine for bending	A. S. Philbrook	Claremont, N. H	Oct. 3, 1865	50, 272
Scythe-snaths, Mold for bending	S. Lamson	Sterling, Mass	Nov. 25, 1834	....
Scythe-stone holder	J. L. Morrison and T. H. Fletcher.	North Hollis, Me	Apr. 8, 1873	137, 560
Scythe-stones, Manufacture of	A. G. Squire	Pelham, Mass	Sept. 4, 1866	57, 790
Scythe-tempering furnace	J. E. Layton	Pittsburgh, Pa	Dec. 22, 1857	18, 914
Scythe-tempering machine	C. P. Crossman	Warren, Mass	July 28, 1857	17, 872
Scythes to snaths, Fastening	E. S. Clapp	Montague, Mass	Mar. 18, 1851	7, 984
Scythes to snaths, Fastening	O. Clark	Henrietta, Ohio	Sept. 1, 1857	18, 119
Scythes to snaths, Fastening	W. T. Clements	Shelburne Falls, Mass	Oct. 6, 1857	18, 326
Scythes to snaths, Fastening	D. A. Goodnow	Baldwinville, Mass	Oct. 7, 1856	15, 849
Scythes to snaths, Fastening	W. P. Greenleaf	Washington, N. H	June 12, 1855	13, 033
Scythes to snaths, Fastening	E. G. Lamson	Shelburne, Mass	July 2, 1839	1, 213
Scythes to snaths, Fastening	D. W. Marston	Lebanon, N. H	Mar. 5, 1867	62, 552
Scythes, Finishing	C. McNamara	Northbridge, Mass	Jan. 30, 1822	....
Scythes, Finishing	C. McNamara	Northbridge, Mass	Jan. 31, 1823	....
Scythes for transportation, Wrapping	L. Stimson	New Hartford, Conn	Mar. 15, 1870	100, 949
Scythes, Form of	J. W. Robinson	Kirkland, N. Y	Mar. 14, 1854	10, 6?8
Scythes, Machine for turning or bending heel of	A. Simonds and A. G. Page	Fitchburgh, Mass	Dec. 10, 1841	2, 379
Scythes, Manufacture of	H. Waters	Northbridge, Mass	Mar. 2, 1858	19, 524
Scythes, Manufacturing	L. Dudley	Sutton, Mass	May 27, 1814	....
Scythes, Manufacturing	E. Kimball, jr	Fitchburgh, Mass	Jan. 17, 1822	....
Scythes, Manufacturing	A. W. Searle	Indianapolis, Ind	Dec. 17, 1834	....
Scythes, Manufacturing	A. Simonds	Fitchburgh, Mass	Jan. 23, 1834	....
Scythes, Manufacturing grain and grass	H. Narramore	Caledonia, N. Y	Nov. 24, 1834	....
Scythes, Mode of hanging	J. and E. S. Clapp	Montague, Mass	July 16, 1838	839
Scythes, Shape of	W. P. Greenleaf	Washington, N. Y	Sept. 13, 1853	10, 011
Sea-sitting-chair	A. Du Buc Marentille		Mar. 18, 1803	....
Sea-table	W. H. Richardson	Baltimore, Md	June 9, 1809	....
Seal and stamping press	E. Morris	Trenton, N. J	Sept. 18, 1855	13, 579
Seal-bolt	F. C. Hamilton	New York, N. Y	Oct. 17, 1871	120, 060
Seal-bolt	F. C. Hamilton	New York, N. Y	Oct. 17, 1871	120, 061
Seal-bolt	J. E. Thomson	Buffalo, N. Y	Nov. 4, 1873	144, 370
Seal fastener, Metallic	R. S. Jennings	New York, N. Y	Dec. 4, 1866	60, 193
Seal for jars and cans	H. S. Fisher	Oakville, Pa	Oct. 23, 1866	58, 998
Seal for letters, &c., Metallic	C. A. McEvoy	Richmond, Va	Oct. 18, 1859	25, 842
Seal for metal straps on boxes	J. P. Herron	Atlanta, Ga	Sept. 13, 1870	107, 370
Seal-lock	W. Bohannan	Brooklyn, N. Y	Feb. 21, 1871	112, 011
Seal-lock	B. Briscoe	Detroit, Mich	Dec. 20, 1870	110, 195
Seal-lock	F. W. Brooks	New York, N. Y	Jan. 18, 1870	98, 917
Seal-lock	F. W. Brooks	New York, N. Y	Feb. 15, 1870	99, 831
Seal-lock	F. W. Brooks and G. A. Everett	New York, N. Y	Dec. 19, 1871	121, 987
Seal-lock	F. W. Brooks and E. Whitney	New York, N. Y, and New Haven, Conn.	Nov. 12, 1872	133, 011
Seal-lock	E. Clemons	Catawissa, Pa	Aug. 9, 1870	106, 255
Seal-lock	G. M. Cooper	Port Huron, Mich	Apr. 6, 1869	88, 550
Seal-lock	J. Corbett and F. W. Brooks	New York, N. Y	Nov. 29, 1870	109, 718
Seal-lock	H. W. Dopp	Buffalo, N. Y	Dec. 12, 1865	51, 434
Seal lock	G. R. Dunn	Newark, N. J	July 1, 1873	140, 486
Seal-lock	H. W. Earl	Baltimore, Md	Aug. 6, 1872	130, 202
Seal-lock	F. C. Hamilton	New York, N. Y	Jan. 2, 1872	122, 459
Seal-lock	F. C. Hamilton	New York, N. Y	Dec. 31, 1872	134, 473
Seal-lock	F. C. Hamilton	New York, N. Y	Dec. 31, 1872	134, 474
Seal-lock	F. C. Hamilton	New York, N. Y	June 10, 1873	139, 786
Seal-lock	J. Kinzer	Pittsburgh, Pa	May 6, 1873	138, 566
Seal-lock	G. L. Kitson and J. Bennor	Philadelphia, Pa	Feb. 11, 1873	135, 818
Seal-lock	G. L. Kitson, J. F. Laning, and J. Bennor.	Philadelphia, Pa	June 7, 1870	104, 038
Seal-lock	W. McLean	New York, N. Y	Aug. 28, 1866	57, 539
Seal-lock	D. A. McNair	Washington, D. C	May 3, 1870	102, 696
Seal-lock	D. K. Miller	Philadelphia, Pa	Oct. 21, 1873	143, 831
Seal-lock	J. H. Oliver	Baltimore, Md	Mar. 5, 1872	124, 217
Seal-lock	O. S. Pease	Xenia, Ohio	Aug. 18, 1868	81, 203
Seal-lock	O. S. Pease	Xenia, Ohio	Aug. 18, 1868	81, 204
Seal-lock	T. Slaight	Newark, N. J	Aug. 5, 1873	141, 519
Seal-lock	J. E. Thomson	Buffalo, N. Y	Sept. 23, 1873	143, 201
Seal-lock	J. E. Thomson	Buffalo, N. Y	Oct. 7, 1873	143, 544
Seal-lock	J. E. Thomson and J. Tillinghast.	Buffalo, N. Y	Aug. 3, 1869	93, 371
Seal, Lock	A. Man	Brooklyn, N. Y	Mar. 12, 1867	62, 863
Seal-lock for bags	J. Dewe	Toronto, Canada	Sept. 28, 1869	95, 204
Seal-lock for boxes	H. C. Marston	Washington, D. C	May 6, 1873	138, 670
Seal-lock for mail-bags	J. R. Boubilla	Paris, France	July 15, 1862	35, 868
Seal-lock for railway-cars	J. Clark	Baltimore, Md	Mar. 20, 1860	27, 524
Seal-lock for railway-cars	J. H. Lyon	New York, N. Y	July 17, 1860	29, 181
Seal-locking bolt	G. R. Dunn	Newark, N. J	Sept. 26, 1871	119, 333
Seal, Metallic	C. A. McEvoy	Richmond, Va	May 17, 1859	24, 041
Seal, Metallic	A. B. Small	New Orleans, La	Aug. 23, 1870	106, 734
Seal, Metallic	J. Wappenstein	Philadelphia, Pa	Mar. 17, 1857	16, 856
Seal, Metallic	J. Wappenstein	Cincinnati, Ohio	Feb. 16, 1869	87, 017
Seal, Notarial	J. Frasier	New York	June 9, 1843	3, 127
Seal-press	A. R. Chase	Cincinnati, Ohio	Apr. 19, 1841	2, 059
Seal-press	J. Foster, jr	Cincinnati, Ohio	Feb. 21, 1854	10, 554
Seal-press	J. Saxton	Washington, D. C	Feb. 22, 1859	23, 046
Seal-skin, Preparing	L. Falkenau	San Francisco, Cal	July 4, 1871	116, 578
Seals, Machinery for cutting key	D. Flynn	Hartford, Conn	Aug. 6, 1867	67, 520
Sealed can	W. H. I. Howe	New York, N. Y	Mar. 18, 1873	136, 920
Sealed-can stopper, Puncturing and tubular	A. Campbell	Charlestown, Mass	Feb. 8, 1870	99, 530
Sealed cans, Opening	S. D. Lecompte	Leavenworth City, Kans	Sept. 19, 1865	50, 011
Sealing boxes, &c	H. D. Mears	New York, N. Y	Sept. 28, 1869	95, 368

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Invention.	Inventor.	Residence.	Date.	No.
Sealing cans	E. Bennett	Baltimore, Md	Sept. 1, 1857	18,078
Sealing cans	W. Burnet	Cincinnati, Ohio	Aug. 21, 1855	13,452
Sealing cans and jars, Stopper for	J. B. Wilson	Williamstown, N. J	Mar. 26, 1861	31,856
Sealing cans for preserving fruit	H. M. Anthony	Providence, R. I	Sept. 5, 1871	118,670
Sealing cans, &c., for preserving fruits and meats	N. H. Shipley	Baltimore, Md	Mar. 14, 1871	112,642
Sealing, Hermetical	J. Spratt	Cincinnati, Ohio	July 18, 1854	11,332
Sealing purposes, Earthen vessel for hermetically	E. Bennett	Baltimore, Md	Dec. 2, 1856	16,139
Sealing-wax, Mold for	I. L. Baker	Dayton, Ohio	Oct. 21, 1873	143,806
Sealing-wax package	W. J. Lumb	Zanesville, Ohio	Oct. 21, 1873	143,771
Seam finishing or reducing machine, Welted	J. H. Cole	North Bridgewater, Mass	Mar. 30, 1869	88,276
Seam for sheet-metal ware	P. H. Niles	Boston, Mass	May 22, 1866	55,015
Seam-joints for cans, &c	E. A. Thomas	Philadelphia, Pa	Oct. 13, 1868	83,107
Seam-puttying machine	A. Stevens	Georgetown, Me	Aug. 3, 1869	93,365
Seam-rubber, Oscillating	L. D. Wheeler	Fitchburgh, Mass	Jan. 29, 1867	61,589
Seam-trimming machine, Welted	W. H. Rounds	North Bridgewater, Mass	Dec. 15, 1868	85,028
Seams, Mode of forming turned	S. W. Shorey	Boston, Mass	Apr. 15, 1873	137,966
Seams, Mode of pressing leather	W. May	Binghamton, N. Y	Mar. 5, 1867	62,659
Seams of boots and shoes, Rolling	J. C. White	Auburn, N. Y	Aug. 11, 1863	39,515
Seams of boots and shoes, Rubbing	W. H. Kimball	Lynn, Mass	Oct. 11, 1864	44,636
Seams of metallic vessels, Machine for closing	E. T. Covell	Brooklyn, N. Y	Sept. 21, 1869	94,947
Seams, Process of and mechanism for forming stitched.	T. R. Reed	East Bridgewater, Mass	Feb. 2, 1869	86,592
Seams to sheet-metal, Forming	F. Roys	East Berlin, Conn	May 31, 1864	42,966
Seamer for tin-work, Double	C. F. Spaulding	Saint Johnsbury, Vt	May 12, 1868	77,999
Seaming and rag-cutting machine	J. Collins, jr., and N. R. Nixon	Richmond, Ind	Jan. 14, 1868	73,299
Seaming cans, Machine for double	E. Savage and N. C. Smith	East Berlin, Conn	Oct. 9 1855	13,667
Seaming cylindrical tin boxes, Machine for	J. R. Cole	New York, N. Y	July 11, 1871	116,931
Seaming, Head for double	S. H. Drennon	New York, N. Y	Oct. 8, 1861	33,463
Seaming-machine	C. E. Bancroft	Montpelier, Vt	Nov. 16, 1869	96,867
Seaming machine	W. Haslam	New Britain, Conn	May 5, 1868	77,611
Seaming-machine	A. S. Munger	Brooklyn, N. Y	Nov. 18, 1873	144,691
Seaming-machine	O. W. Stow	Plantsville, Conn	Apr. 18, 1871	113,944
Seaming machine, Double	W. Burton	Cazenovia, N. Y	June 21, 1859	24,441
Seaming machine, Double	W. Hamilton	Elmira, N. Y	Oct. 12, 1852	9,322
Seaming machine, Double	L. T. Hulbert	Painesville, Ohio	Jan. 3, 1860	26,679
Seaming machine, Double	W. H. McGann	Hartford, Vt	June 18, 1872	128,158
Seaming machine, Double	L. E. Porter	Lake Mills, Wis	Jan. 19, 1858	19,152
Seaming machine, Double	J. Rupp	New York, N. Y	June 18, 1867	65,950
Seaming machine, Double	J. Wilson, C. Green, and W. Wilson, jr.	Wilmington, Del	Apr. 19, 1859	23,735
Seaming machine, Sheet-metal	C. Brombacher	Tarrytown, N. Y	June 17, 1873	139,863
Seaming machine, Sheet-metal	G. D. Brooks	Baltimore, Md	July 8, 1873	140,678
Seaming machine, Sheet-metal	J. M. Veasey	Denver, Colo	Mar. 22, 1870	101,065
Seaming machine, Sheet-metal	J. Ways and E. W. Bliss	Brooklyn, N. Y	Mar. 9, 1869	87,692
Seaming machine, Sheet-metal-can	W. A. Wicks	Baltimore, Md	July 12, 1870	105,398
Seaming machine, Sheet-metal cross	L. Fay	Cincinnati, Ohio	Oct. 12, 1858	21,749
Seaming machine, Sheet-metal double	J. Glober	Omaha City, Nebr	Aug. 17, 1869	93,704
Seaming machine, Sheet-metal double	F. Kenney	Hartford, Conn	Sept. 24, 1872	131,517
Seaming machine, Sheet-metal double	A. Trolan	Norwich, Conn	June 8, 1869	91,055
Seaming machine, Tinsmith's	A. Buckham and J. Evans	Newark, N. J	Feb. 5, 1867	61,710
Seaming machine, Tin-ware	H. J. Noyes	Ashtabula, Ohio	Jan. 21, 1868	73,636
Seaming machine, Tin-ware	S. Redheffer	Bridgeton, N. J	Mar. 6, 1835	....
Seaming machine, Tin-ware double	M. Cohen and R. M. Edmonds	Charleston, S. C	Sept. 19, 1871	119,123
Seaming machine, Tin-ware, &c., double	D. Newton	Louisville, Ky	Dec. 20, 1845	4,323
Seaming machines, Gage for double	G. R. Moore	Pittsburgh, Pa	Aug. 28, 1860	29,808
Seaming, Machinery for double	G. R. Moore	Philadelphia, Pa	Sept. 19, 1846	4,768
Seaming metal roofing	J. Siddons	Rochester, N. Y	Jan. 13, 1863	37,410
Seaming sheet-metal, Double	S. Sweeney and S. Parks	Rome, N. Y	July 9, 1861	32,799
Seaming tin cans, Double	H. A. Meriam	Titusville, Pa	Mar. 22, 1864	42,010
Seaming tin-ware of flexible metals, Machine for double.	H. Van Pelt and B. Armstrong	Troy, N. Y	Sept. 30, 1839	1,350
Seaming-tool	P. Week	Brooklyn, N. Y	Apr. 16, 1867	63,971
Seamless cans, Machine for forming	M. Van Culin	Philadelphia, Pa	Oct. 14, 1873	143,735
Seamless tubes, Forming	C. E. L. Holmes	Waterbury, Conn	July 24, 1860	29,276
Seamless tubes, Making	W. S. Platt	Waterbury, Conn	Feb. 10, 1857	16,630
Seat:				
See Adjustable seat. Bed-seat. Bracket-seat. Cane-seat. Car-seat. Carriage-seat. Carriage and wagon seat. Chair-seat. Church-seat. Counter-seat. Desk-seat. Folding seat. Hall and church seat. Harness-saddle seat. Harvester-seat. Heel-seat. Jump-seat. Lawn-seat. Life-preserver seat. Milking-seat. Pendant-seat. Picnic or excursion seat. Privy-seat. Reversible-seat. Revolving seat. Row-boat seat. Rustic seat. School-seat. School-desk seat. Sewing-machine seat. Show-seat. Spherical seat. Spring-seat. Stone-seat. Stool-seat. Store-seat. Tailor's seat. Tie and sill plate seat. Valve-seat. Vehicle-seat. Wagon-seat. Water-closet seat.				
Seat	S. Peard	New York, N. Y	Apr. 22, 1873	138,183
Seat and back	M. L. Smith	Detroit, Mich	Apr. 23, 1867	64,044
Seat and cane	C. H. Dascomb	Cleveland, Ohio	Dec. 8, 1863	40,823
Seat and cane, Combined	J. K. Andrews	Antrim, Ohio	Jan. 3, 1860	26,643
Seat and desk	A. H. Brown	May's Landing, N. J	Dec. 10, 1867	71,970
Seat and desk	D. I. Stagg	New York, N. Y	Oct. 16, 1866	58,908
Seat and desk, School	D. I. Stagg	New York, N. Y	Oct. 13, 1863	40,289
Seat-back	W. H. Paige	Springfield, Mass	Oct. 27, 1868	83,536
Seat clasp or fastener	E. C. Lewis	Auburn, N. Y	Feb. 4, 1868	74,100
Seat-cushion	R. A. Kendall	Mineral Point, Wis	Jan. 11, 1870	98,778

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Invention.	Inventor.	Residence.	Date.	No.
Seat-cushion, Gage for the construction of	J. H. Williams	Pleasant Hill, Ohio	Feb. 14, 1871	111, 892
Seat-fastener	L. Brown	Odessa, N. Y	Feb. 22, 1870	100, 010
Seat for schools and public buildings	D. I. Stagg	New York, N. Y	Nov. 15, 1864	45, 001
Seat-holder	J. Jackson	Columbus, Wis	May 31, 1870	103, 620
Seat-hook attachment	J. A. Dixon	New York, N. Y	Nov. 29, 1870	109, 598
Seat or chair bottoms, &c., Making			Oct. 29, 1816	
Seat or shelf	F. C. Brownell	East Orange, N. J	Apr. 2, 1867	63, 464
Seat-spring	Z. Cobb	Chicago, Ill	July 4, 1871	116, 557
Seat and desks, Joint for	J. Peard	New York, N. Y	Feb. 20, 1872	123, 928
Seats, Attachment for backs of	H. M. Beidler	Philadelphia, Pa	Apr. 9, 1872	125, 521
Seats, Attachment for the backs of	H. M. Beidler	Philadelphia, Pa	Apr. 23, 1872	126, 069
Seats, Flexible divisions for	T. J. D. Beck	Washington, D. C	June 18, 1872	128, 098
Seats, Means for stuffing	W. E. Michael	New Holland, Pa	Jan. 21, 1868	73, 543
Seats, Standard for	J. Irwin	Philadelphia, Pa	Dec. 1, 1857	18, 748
Section roller and marker, Combined	E. Evans	Denver City, Colo	Sept. 14, 1869	94, 879
Sectional boat	E. Heath	Rochester, N. Y	Nov. 15, 1864	45, 039
Sectional boat	W. H. Philip	Brooklyn, N. Y	Aug. 6, 1872	130, 240
Sectional boiler	B. F. Bee	Harwick, Mass	June 27, 1871	116, 259
Sectional folding-boat	J. H. Laning and V. Fletcher	Philadelphia, Pa	June 20, 1865	48, 342
Secretary	E. Ale	Clearfield, Pa	Aug. 11, 1868	80, 893
Secretary-table	F. I. Henkel	New York, N. Y	Feb. 14, 1860	27, 126
Secretary, wardrobe, and bedstead, Combined	A. Weeks	Washington, D. C	Dec. 16, 1873	145, 703
Sector-press	S. Rust	New York, N. Y	Apr. 5, 1853	9, 651
Sectors, &c., Sliding	G. H. Thompson	Boston, Mass	Dec. 4, 1821	
Security-hook	J. K. Macdonald	Newark, N. J	Jan. 28, 1873	135, 228
See-saw	S. E. Saul	Brooklyn, N. Y	June 27, 1871	116, 502
See-saw or tilting apparatus	A. F. Sherman	Roxbury, Mass	Apr. 14, 1868	76, 665
Seed and fertilizer dropper	E. P. Harnish	Felton, Del	Sept. 5, 1871	118, 716
Seed and grain drill	D. W. Hamaker	Union Star, Mo	Jan. 19, 1869	86, 068
Seed and grain drill	W. P. Penn	Belleville, Ill	June 28, 1864	43, 335
Seed and grain separator	J. F. Pool	Monroe, Wis	Dec. 28, 1869	98, 407
Seed and guano distributer	E. Blacklidge	Abbeville, Ala	Sept. 20, 1870	107, 436
Seed and guano distributer	W. J. West	Greenville, S. C	Aug. 13, 1872	130, 533
Seed and guano drill	A. Iverson, jr	Macon, Ga	Mar. 15, 1870	100, 898
Seed and manure dropper	J. G. Ham	Newnan, Ga	Aug. 10, 1869	93, 434
Seed-cleaner, Universal	D. S. Buck	Hurley, N. Y	Feb. 10, 1823	
Seed-coverer	E. D. Cramer	Hackettstown, N. J	Sept. 15, 1868	82, 092
Seed-distributer	M. D., E. C., and A. Wells	Morgantown, W. Va	Aug. 28, 1866	57, 604
Seed-drill	G. S. Ball	Dayton, Ohio	Mar. 30, 1858	19, 808
Seed-drill	G. S. Ball and W. H. Nanman	Dayton, Ohio	Sept. 25, 1860	30, 114
Seed-drill	J. H. Bean	Forreston, Ill	Jan. 15, 1861	31, 105
Seed-drill	M. Boyer	Germantown, Ohio	Feb. 8, 1859	22, 915
Seed-drill	C. B. Brown	Alton, Ill	Mar. 16, 1858	19, 617
Seed-drill	O. H. S. Brumfield	Centreville, Ind	Aug. 31, 1858	21, 316
Seed-drill	S. Barrows	Lima, Wis	Sept. 13, 1859	25, 382
Seed-drill	J. Chambers	Greensburgh, Ind	Mar. 19, 1867	63, 018
Seed-drill	J. B. Clemans	Kansas, Ill	Feb. 18, 1870	99, 536
Seed-drill	D. Custer	Southampton Township, Pa	Nov. 13, 1849	6, 866
Seed-drill	H. F. Davis	Amherst, N. H	Aug. 27, 1867	68, 173
Seed-drill	H. V. Davis and G. W. Peabody	Amherst, N. H	Oct. 23, 1866	59, 123
Seed-drill	E. Emmert	Franklin Grove, Ill	Apr. 28, 1857	17, 144
Seed-drill	J. and S. Fahrney	Washington County, Ind	June 18, 1861	32, 598
Seed-drill	J. P. Fulghum	Milton, Ind	July 9, 1867	66, 578
Seed-drill	O. C. Green	Worcester, Ill	Feb. 3, 1857	16, 540
Seed-drill	P. M. Gundlach	Belleville, Ill	Nov. 24, 1857	18, 690
Seed-drill	R. Hamilton	Franklin, Ind	Mar. 16, 1858	19, 633
Seed-drill	W. D. Harrah, B. J. Baldwin, and H. P. Jones	Davenport, Iowa	Aug. 27, 1861	33, 145
Seed-drill	J. Harris	Shippensburgh, Pa	Apr. 13, 1858	19, 924
Seed-drill	S. Keeler and J. Barthel	Lancaster, Pa	Sept. 30, 1862	36, 567
Seed-drill	J. F. Keller	Greencastle, Pa	Sept. 6, 1864	44, 098
Seed-drill	J. F. Keller	Greencastle, Pa	Jan. 29, 1867	61, 543
Seed-drill	J. W. Kirk	Rising Sun, Md	July 20, 1858	20, 946
Seed-drill	C. Learned	Indianapolis, Ind	May 10, 1859	23, 981
Seed-drill	J. S. Marsh	Lewisburgh, Pa	May 14, 1861	32, 302
Seed-drill	E. G. Matthews	Oakham, Mass	May 20, 1873	139, 074
Seed-drill	S. Mickley and S. Leathery	Dover Township and Warrington Township, Pa.	Aug. 3, 1869	93, 327
Seed-drill	G. W. Millner	Charlottetown, Prince Edward Island.	May 30, 1871	115, 553
Seed-drill	D. N. Minor	Chariton, Iowa	Dec. 23, 1873	145, 889
Seed-drill	H. Moore	Brandon, Wis	Nov. 20, 1860	30, 685
Seed-drill	H. Moore	Fond Du Lac, Wis	Mar. 26, 1861	31, 819
Seed-drill	R. H. D. Morrison	Winona, Minn	Dec. 9, 1873	145, 443
Seed-drill	J. Mumma	Hummelstown, Pa	Nov. 20, 1849	6, 885
Seed-drill	J. Mumma	Harrisburgh, Pa	Dec. 29, 1857	18, 982
Seed-drill	G. M. Murphy	Lewisburgh, Pa	Apr. 4, 1865	47, 153
Seed-drill	W. H. Nauman	Dayton, Ohio	Dec. 6, 1864	45, 335
Seed-drill	W. H. Nauman	Dayton, Ohio	May 11, 1869	89, 882
Seed-drill	G. W. Nevill	Bath, Ill	Apr. 16, 1861	32, 078
Seed-drill	W. P. Penn	Belleville, Ill	Dec. 27, 1859	26, 612
Seed-drill	W. B. Porter	Farmer City, Mo	June 27, 1865	48, 433
Seed-drill	T. D. Price	Carrollton, Ill	Oct. 30, 1866	59, 263
Seed-drill	E. F. Rate	Woodbridge, Iowa	June 9, 1863	38, 840
Seed-drill	B. Regan	Miamisburgh, Ohio	Mar. 24, 1863	37, 978
Seed-drill	A. Rutenfranz	Hammondstown, Ill	Jan. 19, 1869	85, 966
Seed-drill	J. Selby	Lancaster, Ohio	June 19, 1855	13, 105
Seed-drill	J. Selby	Peoria, Ill	Mar. 6, 1860	27, 320
Seed-drill	R. B. Sheldon	Canastota, N. Y	Sept. 12, 1871	118, 821
Seed-drill	H. Shepherd	Lee's Summit, Mo	May 18, 1869	90, 209
Seed-drill	J. Sims	Boston Corners, N. Y	July 9, 1861	32, 792
Seed-drill	A. Smith	Girard, Ill	Nov. 27, 1860	30, 768
Seed-drill	J. Smith	Tiffin, Ohio	Feb. 14, 1860	27, 162
Seed-drill	J. C. Stevens	Lee, Mass	May 27, 1858	20, 377
Seed-drill	S. Stow	East Enterprise, Ind	Oct. 5, 1869	95, 535
Seed-drill	J. Strayer	Miamisburgh, Ohio	May 14, 1861	32, 319
Seed-drill	J. H. Thomas	Springfield, Ohio	Apr. 25, 1871	114, 236
Seed-drill	J. H. Thomas and P. P. Mast	Springfield, Ohio	June 17, 1862	35, 636

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Seed-drill	A. Turner	Franklin, Ind	Sept. 28, 1858	21, 649
Seed-drill	A. H. Wagner	Chicago, Ill	June 6, 1865	48, 117
Seed-drill	O. H. Wheeler	Doniphan, Kans	Dec. 21, 1869	98, 213
Seed-drill	W. I. Willits	Milton, Ind	Oct. 5, 1858	21, 715
Seed-drill	E. Young	Fayetteville, Mo	May 22, 1866	54, 995
Seed-drill	M. C. Younglove	Cleveland, Ohio	June 15, 1858	20, 603
Seed-drill and cockle-separator, Combined	J. E. Fletcher	Rectortown, Va	Jan. 17, 1871	111, 058
Seed-drill and corn-coverer	W. A. Donnell	Greensburgh, Ind	Jan. 26, 1869	86, 288
Seed-drill and cultivator	A. B. Travis	Brandon, Mich	Apr. 8, 1862	34, 918
Seed-drill and cultivator, Combined	A. Armstrong	Gillespie, Ill	Sept. 18, 1866	58, 045
Seed-drill and cultivator, Combined	J. P. Zeller	Bourbon, Ind	Jan. 22, 1867	61, 375
Seed-drill and cultivator, Combined hand	S. D. Lucas	Winterpock, Va	Dec. 6, 1870	109, 916
Seed-drill and fertilizer, Combined	J. F. Keller	Hagerstown, Md	May 25, 1869	90, 556
Seed drill and planter	W. F. West	Haverstraw, N. Y	Sept. 9, 1873	142, 599
Seed drill and roller	S. Shirley	Guilford, Ill	Jan. 14, 1868	73, 393
Seed-drill, Combined	J. Tedford	Hartford, Iowa	Jan. 23, 1866	52, 225
Seed-drill guano-attachment	J. F. Fisher	Greencastle, Pa	June 1, 1869	90, 653
Seed-drill, Hand	W. Leddie and G. L. Gray	Jefferson, Ill	Oct. 20, 1868	83, 180
Seed-drill, manurer, and potato-digger, Combined	E. C. Hopping and E. A. Ely	Madison, N. J	Jan. 17, 1871	111, 072
Seed-drill or corn-planter	C. Olds	Marlborough, Vt	Jan. 20, 1841	1, 933
Seed-drill teeth	S. Keeler	Lancaster, Pa	Mar. 19, 1867	63, 056
Seed-drill, Forced feed-gearing in	J. P. Zeller	South Bend, Ind	Sept. 7, 1869	94, 626
Seed-drills, Measuring-apparatus for	O. C. Green	Dublin, Ind	Nov. 24, 1857	18, 688
Seed-drilling machine	O. Hyde	Oakland, Cal	Apr. 4, 1871	113, 522
Seed-dropper	J. C. Barlow	Quincy, Ill	Oct. 24, 1871	120, 230
Seed-dropper	L. H. Converse and J. K. Welter	Springfield, Ill	Sept. 26, 1871	119, 325
Seed-dropper	J. M. Forden	Springfield, Ill	June 3, 1873	139, 565
Seed-dropper	J. M. Forden	Springfield, Ill	Nov. 4, 1873	144, 327
Seed-dropper	E. L. Gross	Springfield, Ill	May 20, 1873	139, 143
Seed-dropper	J. F. Hanson and J. E. Callaway	Burnsville, Ga	May 24, 1870	103, 454
Seed-dropper	C. A. Harper and J. A. Partridge	Rahway, N. J	Sept. 24, 1867	69, 207
Seed-dropper	J. Morton and J. P. Spaulding	Des Moines, Iowa	Apr. 9, 1872	125, 476
Seed-dropper	F. Sleight	Warren County, N. J	Oct. 17, 1871	120, 112
Seed-dropper	H. M. Smith	Richmond, Va	Jan. 3, 1871	110, 688
Seed-dropper	W. C. Willey	Limerick, Ill	Apr. 23, 1872	126, 001
Seed-dropper	F. W. Young	Holden, Mo	Feb. 11, 1873	135, 743
Seed-dropper	F. W. Young	Holden, Mo	Aug. 26, 1873	142, 320
Seed-dropping device, Hand	S. Fretz	Buckeye, Ohio	Oct. 14, 1862	36, 646
Seed for planting, Mode of preparing	H. Lassing	New York, N. Y	Jan. 25, 1870	99, 094
Seed or grain in the field, Machine for gathering	T. E. Marable	Petersburgh, Va	Apr. 1, 1856	14, 570
Seed-separator	F. W. Mase	Oshkosh, Wis	Dec. 16, 1873	145, 668
Seed-separator	F. C. Miller	Blue Earth City, Minn	Aug. 26, 1873	142, 170
Seed-separator	W. J. Walker	Dorset, Ill	Jan. 26, 1869	86, 332
Seed separator and drill, Combined	P. D. Shepherd	Telfair, Ga	Apr. 15, 1873	137, 965
Seed-separator, Automatic	M. M. Rowell	Brandon, Wis	Apr. 20, 1869	89, 081
Seed-sower	G. H. Crocker	Maysville, Cal	May 4, 1869	89, 739
Seed-sower	C. McIntosh	Utica, N. Y	Jan. 29, 1867	61, 551
Seed-sower and cultivator, Combined	J. W. Dodd	Ward's Corners, Iowa	Oct. 12, 1869	95, 669
Seed-sower and cultivator, Combined	C. M. Hyer and J. C. Hudson	Iowa Falls, Iowa	Jan. 26, 1869	86, 307
Seed-sower and field-roller	D. Wilbur	Collins Centre, N. Y	Feb. 8, 1868	74, 651
Seed-sower and harrow, Combined	M. Vandeusen	Oxford, Mich	May 4, 1869	89, 710
Seed-stripper	J. W. Stivers	North Middletown, Ky	June 21, 1870	104, 508
Seed-wrapper	R. G. Kinner	Penn Yan, N. Y	Mar. 29, 1870	101, 275
Seeds in the earth, Implement for rolling	A. Thompson	Glen's Falls, N. Y	Dec. 9, 1856	16, 195
Seeder	W. J. Keeney	Florence, Ind	Aug. 13, 1872	130, 507
Seeder	J. L. Linderman	Rockford, Ill	Sept. 8, 1868	81, 914
Seeder	C. E. Miller	Amelia, Ohio	Jan. 6, 1863	37, 354
Seeder	T. L. and G. Peirce	New Providence, Iowa	Dec. 12, 1871	121, 809
Seeder	J. S. Rowell	Beaver Dam, Wis	Nov. 30, 1869	97, 317
Seeder	R. B. Tunstall	Norfolk, Va	June 15, 1869	91, 386
Seeder	M. L. Uttler	Rockford, Ill	July 6, 1869	92, 234
Seeder	T. Vreeland	Oneida, Ill	Feb. 21, 1871	111, 992
Seeder, Adjustable	C. Rundquist	Mankato, Minn	Feb. 23, 1869	87, 115
Seeder and cultivator	E. W. Hewitt and G. Gorham	Pecatonica, Ill	Apr. 13, 1869	88, 787
Seeder and cultivator	F. B. Johnson	De Witt, Iowa	Apr. 20, 1867	67, 986
Seeder and cultivator	H. S. Matteson	Stockton, Cal	Jan. 7, 1868	73, 030
Seeder and cultivator	J. T. Mott	Postville, Iowa	Jan. 31, 1871	111, 372
Seeder and cultivator	J. S. and I. Rowell	Beaver Dam, Wis	June 9, 1868	78, 833
Seeder and cultivator	M. D. Smith	Independence, Iowa	May 19, 1868	78, 146
Seeder and cultivator	W. and J. Whait	Independence, Iowa	July 23, 1867	67, 008
Seeder and cultivator, Broadcast	G. Esterly	Whitewater, Wis	June 30, 1868	79, 332
Seeder and cultivator, Combined	N. E. Alley, I. B. Record, J. Rood, and J. Hayden.	Trenton and Beaver Dam, Wis.	Mar. 29, 1870	101, 342
Seeder and cultivator, Combined	C. Alvord	Westford, Wis	Jan. 4, 1870	98, 542
Seeder and cultivator, Combined	E. F. Crawford	Canaan, Ind	May 19, 1868	78, 006
Seeder and cultivator, Combined	J. L. Fountain	New Milford, Ill	Apr. 24, 1866	54, 139
Seeder and cultivator, Combined	W. J. Freeman	Spring Fork, Mo	Sept. 25, 1866	58, 243
Seeder and cultivator, Combined	H. Haines	Cedarville, Ill	Aug. 2, 1870	106, 055
Seeder and cultivator, Combined	J. A. Hall	Raleigh, Ind	Jan. 18, 1870	98, 956
Seeder and cultivator, Combined	A. Ingalls	Independence, Iowa	Jan. 14, 1868	73, 336
Seeder and cultivator, Combined	W. Ironside	Jennersville, Pa	Aug. 30, 1864	43, 995
Seeder and cultivator, Combined	S. Keller	Elizabethtown, Pa	July 18, 1865	48, 871
Seeder and cultivator, Combined	S. Martin	Knobnoster, Mo	Nov. 5, 1872	132, 845
Seeder and cultivator, Combined	J. Miller	Russellville, Ky	May 29, 1866	55, 142
Seeder and cultivator, Combined	O. M. Pond	Independence, Iowa	June 8, 1869	91, 161
Seeder and cultivator, Combined	T. J. Price	Auburn, Ky	Aug. 14, 1866	57, 185
Seeder and cultivator, Combined	B. W. Remy	Brookville, Ind	July 9, 1867	66, 627
Seeder and cultivator, Combined	S. C. Schofield	Freeport, Ill	July 17, 1866	56, 454
Seeder and cultivator, Combined	L. Stadler	Bowen, Ill	Oct. 20, 1868	83, 334
Seeder and cultivator, Combined	W. D. Stroud	Oshkosh, Wis	Mar. 22, 1870	101, 178
Seeder and cultivator, Combined	W. D. Stroud	Oshkosh, Wis	Sept. 26, 1871	119, 285
Seeder and cultivator, Combined	T. Thomas	Plattsmouth, Nebr	Aug. 2, 1864	43, 721
Seeder and cultivator, Combined	F. W. Tilton	Bristol Station, Ill	May 14, 1867	64, 723
Seeder and cultivator, Combined	J. T. Trowbridge	Akron, Ohio	June 21, 1870	104, 515
Seeder and cultivator, Combined	J. T. Trowbridge	Akron, Ohio	Apr. 25, 1871	114, 232
Seeder and cultivator, Combined	J. W. Webb	New Athens, Ohio	Oct. 24, 1871	120, 354
Seeder and cultivator, Combined broadcast	J. E. Fargo	Lake Mills, Wis	Dec. 27, 1870	110, 447
Seeder and cultivator, Combined broadcast	L. Wight	Whitewater, Wis	Mar. 14, 1871	112, 663

Index of patents issued from the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Seeder and fertilizer	J. J. Naylor	Brighton, Mich	June 8, 1869	90, 953
Seeder and fertilizer, Combined	H. Bourn	Mendon, Mich	June 25, 1867	66, 123
Seeder and fertilizer, Combined	S. M. Firey	Clear Spring, Md	Aug. 31, 1869	94, 406
Seeder and fertilizer, Combined	S. Guild	Milford, N. H	Feb. 13, 1866	52, 563
Seeder and fertilizer, Combined	W. B. Myers	Hampton, Pa	Aug. 16, 1870	106, 500
Seeder and grain-drill, Combined	H. A. Gaston	Stockton, Cal	Oct. 12, 1869	95, 789
Seeder and harrow, Combined	A. Fairchild	Independence, Iowa	Nov. 20, 1866	59, 827
Seeder and harrow, Combined	J. E. and C. C. Halsted	Blossvale, N. Y	May 24, 1870	103, 452
Seeder and harrow, Combined	W. E. Phelps	Elmwood, Ill	Nov. 3, 1869	83, 727
Seeder and hay-rake, Combined	A. P. Routt	Liberty Mills, Va	Aug. 17, 1869	93, 838
Seeder and hay-tedder, Combined	J. House	Howard, N. Y	Mar. 29, 1870	101, 266
Seeder and sower, Combined	O. Stone	Ionia, Mich	June 8, 1869	91, 177
Seeder, Broadcast	W. S. Archer	Dayton, Ohio	Feb. 22, 1870	100, 100
Seeder, Broadcast	J. Davis	Allegheny City, Pa	Nov. 14, 1865	50, 916
Seeder, Broadcast	J. D. Huffman	London, Ohio	Apr. 29, 1873	138, 403
Seeder, Broadcast	C. F. Kneisly	Dayton, Ohio	Dec. 24, 1872	134, 2[illegible]3
Seeder, Broadcast	J. C. Kurtz	Wooster, Ohio	Mar. 22, 1870	101, 136
Seeder, Broadcast	J. S. Lewis	Elkport, Iowa	Dec. 7, 1869	97, 530
Seeder, Broadcast	H. Ogborn and A. W. Kendrick	Richmond, Ind., Brooklyn, N. Y.	Feb. 25, 1873	136, 174
Seeder, Broadcast	G. Race	Norwich, N. Y	Jan. 30, 1866	52, 319
Seeder, Broadcast	M. Sackett	Monticello, Iowa	Mar. 30, 1869	88, 416
Seeder, Broadcast	J. R. Scarborough	Milburn, Ky	Nov. 25, 1873	145, 018
Seeder, Broadcast	J. Slauder	Osborn, Ohio	July 23, 1867	67, 141
Seeder, cultivator, and harrow, Combined	D. Kint	Hazelton, Iowa	Apr. 21, 1868	77, 052
Seeder, cultivator, and roller, Combined	J. P. Long	Osage, Iowa	Feb. 21, 1865	46, 480
Seeder, cultivator, and roller, Combined broadcast	J. P. Long	Osage, Iowa	Mar. 24, 1868	75, 936
Seeder, drill, and roller	L. R. Wallace	Adrian, Mich	June 9, 1868	78, 846
Seeder, Hand	T. Bradley	Preble, N. Y	Sept. 24, 1867	69, 170
Seeder, Hand	J. E. Garside	Hennepin, Ill	Jan. 21, 1873	134, 986
Seeder, Hand	B. W. Harris	Williamsport, Ohio	July 16, 1872	129, 279
Seeder, harrow, and roller, Combined	J. Anderson	Springfield, Ill	Apr. 27, 1869	89, 376
Seeder, planter, and cultivator, Combined	J. Bowman and W. G. Selby	Princeville, Ill	June 6, 1871	115, 688
Seeder, planter, cultivator, and harrow, Combined	J. K. McClure	Cornersville, Miss	July 12, 1870	105, 229
Seeder, Raisin	H. G. Fiske	Springfield, Mass	Aug. 16, 1870	106, 350
Seeder, Raisin	J. Harrington	New London, Conn	Oct. 10, 1871	119, 704
Seeder, roller, and cultivator, Combined	W. S. Grover	Oconomowoc, Wis	July 6, 1869	92, 186
Seeder, roller, and drag, Combined	J. V. B. France	Boscobel, Wis	Nov. 30, 1869	97, 390
Seeder-shovel	D. Slaughter	Mountville, Pa	Sept. 20, 1870	107, 554
Seeding and manuring, System of	A. F. Eckhardt	Hamburg, Germany	Sept. 29, 1868	82, 503
Seeding-apparatus, Gearing and ungearing	D. Eberly	Strasburgh, Pa	Jan. 22, 1850	7, 034
Seeding-cultivator	M. Hayden	Detroit, Mich	Feb. 4, 1868	73, 972
Seeding-cylinder, Oscillating	D. E. Rohr	Charlestown, Va	Dec. 17, 1850	7, 845
Seeding-machine	H. R. Allen	Nelsonville, Ohio	Oct. 27, 1857	18, 492
Seeding-machine	N. E. Allen	Fox Lake, Wis	May 12, 1863	38, 528
Seeding-machine	J. Alsop	Clinton, Ill	Aug. 28, 1860	29, 752
Seeding-machine	D. C. Alvord and C. D. Hollis	Austinburgh and Ashtabula, Ohio.	Jan. 3, 1871	110, 720
Seeding-machine	C. F. Anderson	Charlestown, N. H	Apr. 13, 1858	19, 902
Seeding-machine	J. Andrews	Clinton, Mass	Aug. 9, 1859	24, 979
Seeding-machine	J. Andrews	Clinton, Mass	Aug. 9, 1859	24, 980
Seeding-machine	J. Armstrong, jr	Elmira, Ill	July 16, 1872	129, 386
Seeding-machine	A. S. Babbit	Keeseville, N. Y	Jan. 3, 1871	110, 620
Seeding-machine	A. G. Babcock	Galesburgh, Ill	Oct. 19, 1858	21, 807
Seeding-machine	F. M. Bacon and J. Fowler	Ripon and Hartland, Wis	Apr. 16, 1861	32, 040
Seeding-machine	J. M. Bacon	Ripon, Wis	Feb. 19, 1861	31, 433
Seeding-machine	J. Badger	Baileyville, Ill	Dec. 21, 1858	22, 339
Seeding-machine	E. Badlam	Ogdenburgh, N. Y	Aug. 28, 1860	29, 754
Seeding-machine	W. J. Baker	Dimock, Pa	May 8, 1860	28, 142
Seeding-machine	C. A. Baldwin and C. Aborn	Independence, Iowa	Oct. 4, 1864	44, 502
Seeding-machine	B. Barnard	Farmington, Ohio	Sept. 25, 1860	30, 115
Seeding-machine	H. Barsalow	Saint Anne, Ill	Jan. 8, 1867	61, 041
Seeding-machine	W. N. Bates	Chester Point, Iowa	Mar. 7, 1865	46, 626
Seeding-machine	C. Barton	Savoy, Mass	Feb. 16, 1858	19, 333
Seeding-machine	D. C. Baughman	Fort Seneca, Ohio	Jan. 1, 1867	60, 846
Seeding-machine	E. O. Baxter	Foreston, Ill	Mar. 8, 1859	23, 213
Seeding-machine	E. O. Baxter	Foreston, Ill	May 17, 1859	24, 001
Seeding-machine	R. Baxter	French Camp, Cal	Nov. 12, 1867	70, 781
Seeding-machine	D. and W. W. Beal	Lester, Iowa	Dec. 11, 1860	30, 865
Seeding-machine	H. Bean	Schuylkill, Pa	May 4, 1869	89, 728
Seeding-machine	J. C. Bean	Grayville, Ill	June 28, 1859	24, 530
Seeding-machine	S. Beckwith	Oshkosh, Wis	June 23, 1868	79, 189
Seeding-machine	H. Bell	Clinton, Ill	Dec. 11, 1860	30, 866
Seeding-machine	E. Bellinger	Hickory Corners, Mich	Sept. 10, 1861	33, 233
Seeding-machine	S. N. Bigelow	Cuba, N. Y	July 31, 1855	13, 373
Seeding-machine	G. I. Bitter	Lancaster, Ohio	Apr. 22, 1856	14, 707
Seeding-machine	T. J. Bottoms	Thomasville, Ga	Aug. 31, 1858	21, 314
Seeding-machine	J. Bouton	Macon City, Mo	Dec. 27, 1859	26, 559
Seeding-machine	W. G. Bulgin	West Jersey, Ill	Jan. 18, 1859	22, 622
Seeding-machine	H. Bundel	Dayton, Ohio	Jan. 23, 1866	52, 135
Seeding-machine	G. C. Bunsen and C. Roberts	Belleville, Ill	Sept. 28, 1858	21, 595
Seeding-machine	K. Burns	New York, N. Y	July 11, 1865	48, 655
Seeding-machine	S. Burnside	Reading, Ohio	June 15, 1858	20, 547
Seeding-machine	A. Button	Dunkirk, N. Y	Aug. 23, 1870	106, 546
Seeding-machine	J. E. Buxton	Owatonna, Minn	Mar. 14, 1871	112, 541
Seeding-machine	M. S. and J. R. Caldwell	Dexter, Mich	Mar. 21, 1865	46, 877
Seeding-machine	C. W. Cahoon	Brooklyn, N. Y	Sept. 1, 1857	18, 083
Seeding-machine	C. W. Cahoon	Portland, Me	Apr. 9, 1861	31, 952
Seeding-machine	D. Caine	Battle Creek, Mich	Mar. 25, 1873	137, 051
Seeding-machine	J. M. Carr	Omaha City, Nebr	Sept. 25, 1866	58, 214
Seeding-machine	C. C. Carter	Exeter, Ill	May 2, 1865	47, 518
Seeding-machine	J. Case	Springfield, Ill	Dec. 1, 1857	18, 730
Seeding-machine	F. Chamberlin	Berlin, Wis	Apr. 10, 1860	27, 774
Seeding-machine	C. Churchill	New Hartford, Iowa	Aug. 5, 1862	36, 072
Seeding-machine	G. W. Clark	Mount Washington, Ohio	July 10, 1860	29, 057
Seeding-machine	M. Clark	Castalia, Iowa	Sept. 5, 1865	49, 720
Seeding-machine	N. A. and J. S. Clopton	Fauquier County, Va	Oct. 27, 1868	83, 364
Seeding-machine	J. D. Cochran	Milford, N. H	May 8, 1866	54, 506

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Invention.	Inventor.	Residence.	Date.	No.
Seeding-machine	W. Coggeshall and B. B. Warner.	Massillon and Wadsworth, Ohio.	Dec. 29, 1857	18, 959
Seeding-machine	I. H. Conklin	Rockford, Ill	Jan. 5, 1858	19, 029
Seeding-machine	S. Conklin and G. Newton	Sterling, Ill	Aug. 31, 1858	21, 323
Seeding-machine	B. D. Cook	Clarendon, Mich	June 12, 1866	55, 470
Seeding-machine	S. D. Cook and H. J. Webb	Lind and Dexter, Mich	Feb. 28, 1865	46, 544
Seeding-machine	G. Copeland	Gray, Me	Feb. 28, 1860	27, 273
Seeding-machine	T. M. Corbett	Milwaukee, Wis	Aug. 24, 1869	93, 969
Seeding-machine	C. H. Cowles	Nebraska City, Nebr	May 17, 1870	103, 022
Seeding-machine	J. Cozad	Corydon, Iowa	Jan. 3, 1871	110, 634
Seeding-machine	J. Critcherson	Boston, Mass	Dec. 15, 1857	18, 881
Seeding-machine	W. H. Crichton	La Porte, Ind	Jan. 10, 1865	45, 817
Seeding-machine	H. Crofoot	Tarborough, N. C	Dec. 11, 1860	30, 871
Seeding-machine	J. M. Culley	Jefferson, Iowa	Sept. 10, 1872	131, 253
Seeding-machine	E. D. Curtis	Mount Morris, N. Y	Nov. 13, 1855	13, 781
Seeding-machine	H. N. Dalton	Jacksonville, Cal	Aug. 20, 1861	33, 072
Seeding-machine	H. D. Dann	Waupun, Wis	Sept. 5, 1865	49, 730
Seeding-machine	H. D. Dann	Waupun, Wis	Dec. 4, 1866	60, 147
Seeding-machine	F. M. Davis	Footville, Wis	Mar. 29, 1859	23, 357
Seeding-machine	H. V. Davis and G. E. Smith	Amherst and Blakesville, N. H.	July 30, 1867	67, 168
Seeding-machine	N. C. Dawson	Steele's Post Office, Ind	Sept. 7, 1869	94, 478
Seeding-machine	C. Deis	Canal Dover, Ohio	Apr. 21, 1868	77, 009
Seeding-machine	O. H. Dennis	Altona, Ill	Dec. 13, 1859	26, 420
Seeding-machine	S. D. Deyo	Strawberry Point, Iowa	Sept. 27, 1864	44, 406
Seeding-machine	A. E. Doty	North Henderson, Ill	May 22, 1860	28, 355
Seeding-machine	P. A. Donner and A. P. Stuart	Monmouth Township, Iowa	Jan. 14, 1868	73, 307
Seeding-machine	W. Drummond	Woodbridge, N. J	Nov. 30, 1858	22, 171
Seeding-machine	J. B. Duane	Schenectady, N. Y	Apr. 12, 1859	23, 558
Seeding-machine	J. B. Duane	Schenectady, N. Y	Oct. 2, 1860	30, 212
Seeding-machine	J. Early and J. B. Parvin	Hightstown, N. J	Dec. 10, 1861	33, 881
Seeding-machine	A. R. Eggleston and C. F. Swain.	Ripon, Wis	Feb. 19, 1867	62, 259
Seeding-machine	A. R. Eggleston and C. F. Swain.	Milwaukee, Wis	Mar. 3, 1868	75, 005
Seeding-machine	C. Eggleston	Beloit, Wis	Jan. 1, 1861	31, 014
Seeding-machine	C. and D. E. Eggleston	Beloit, Wis	Mar. 1, 1859	23, 083
Seeding-machine	C. H. Eggleston	Marshall, Mich	Mar. 21, 1865	46, 869
Seeding-machine	D. Eldred	Monmouth, Ill	May 22, 1860	28, 357
Seeding-machine	D. Eldred	Monmouth, Ill	Sept. 25, 1860	30, 129
Seeding-machine	E. Emmert	Franklin Grove, Ill	July 10, 1870	29, 067
Seeding-machine	J. J. Esler	Belleville, Ill	Mar. 30, 1869	88, 465
Seeding-machine	G. Esterly	Whitewater, Wis	Dec. 22, 1868	85, 221
Seeding-machine	G. Fetter	Philadelphia, Pa	Dec. 1, 1857	18, 793
Seeding-machine	B. F. Field	Sheboygan Falls, Wis	June 3, 1862	35, 438
Seeding-machine	B. F. Field	Sheboygan Falls, Wis	Sept. 26, 1865	50, 201
Seeding-machine	J. D. Field	Keokuk, Iowa	Nov. 20, 1866	59, 829
Seeding-machine	J. R. Finch and T. W. Henderson.	Dayton, Ohio	Mar. 25, 1862	34, 747
Seeding-machine	J. Finlayson	Albany, Oreg	Dec. 14, 1869	97, 878
Seeding-machine	W. Finley	Schoolcraft, Mich	Jan. 6, 1863	37, 286
Seeding-machine	S. M. Firey	Clear Spring, Md	Nov. 22, 1870	109, 504
Seeding-machine	J. M. Follett	Atkinson, Ill	Jan. 3, 1865	45, 7[illegible]7
Seeding-machine	N. Ford	Cambridge, Wis	Feb. 26, 1861	31, 536
Seeding-machine	D. Foreman	Navarre, Ohio	June 28, 1859	24, 601
Seeding-machine	C. W. Fossler	Freeport, Ill	Feb. 12, 1861	31, 426
Seeding-machine	C. Foster	Prairie City, Ill	Feb. 14, 1865	46, 344
Seeding-machine	J. Fowler and F. M. Bacon	Ripon, Wis	Aug. 24, 1858	21, 252
Seeding-machine	J. Fowler and F. M. Bacon	Ripon, Wis	Dec. 28, 1858	22, 418
Seeding-machine	J. Fowler and F. M. Bacon	Watertown, Wis	Mar. 28, 1865	47, 009
Seeding-machine	A. Franklin	Genoa Cross Roads, Ohio	Nov. 10, 1857	18, 579
Seeding-machine	J. Frey	Battle Creek, Mich	Apr. 6, 1858	19, 839
Seeding-machine	O. Frey, jr	Albany, Oreg	Feb. 4, 1868	74, 073
Seeding-machine	J. S. Gage	Dowagiac, Mich	July 10, 1860	29, 071
Seeding-machine	J. S. Gage and P. D. Beckwith	Dowagiac, Mich	Apr. 15, 1862	34, 955
Seeding-machine	W. M. Gazee	Cox, Ohio	Oct. 9, 1860	30, 308
Seeding-machine	H. A. Gaston	Stockton, Cal	Nov. 3, 1868	83, 624
Seeding-machine	J. Geiss and J. Brosius	Belleville, Ill	Dec. 1, 1857	18, 735
Seeding-machine	J. German and C. B. Hoyt	Oriskany Falls, N. Y	Mar. 18, 1856	14, 450
Seeding-machine	M. T. Glimsdal	Madison, Wis	Apr. 1, 1862	34, 830
Seeding-machine	E. H. and E. B. Goelet	Goldsborough, N. C	Nov. 26, 1867	71, 295
Seeding-machine	M. L. Gorham	Winnebago Station, Ill	Aug. 6, 1861	32, 992
Seeding-machine	M. L. Gorham	Rockford, Ill	Aug. 10, 1869	93, 529
Seeding-machine	M. L. Gorham	Rockford, Ill	May 3, 1870	102, 535
Seeding-machine	S. Gorsuch	Altoona, Pa	Feb. 19, 1856	14, 284
Seeding-machine	H. P. Gregg	Roscoe, Ohio	Jan. 29, 1867	61, 534
Seeding-machine	M. Grout and C. Lawton	Oak Grove, Wis	June 4, 1861	32, 476
Seeding-machine	P. M. Gundlach	Belleville, Ill	Mar. 7, 1871	112, 336
Seeding-machine	J. F. Gyles	Gilmer Township, Ill	Apr. 3, 1860	27, 713
Seeding-machine	J. Haas	El Paso, Ill	Sept. 1, 1868	81, 627
Seeding-machine	G. Harlan	Brownsville, Ind	Apr. 30, 1861	32, 227
Seeding-machine	J. D. Harrison	Middletown, Ohio	Aug. 24, 1869	93, 989
Seeding-machine	J. D. Harrison	Middletown, Ohio	July 12, 1870	105, 2[illegible]0
Seeding-machine	A. Hatfield	Petersburgh, Ill	Nov. 2, 1858	21, 958
Seeding-machine	W. H. Hartman	Fostoria, Ohio	Nov. 28, 1865	51, 178
Seeding-machine	G. D. Haworth	Decatur, Ill	Feb. 24, 1863	37, 753
Seeding-machine	M. Hayden	Detroit, Mich	Feb. 4, 1868	73, 973
Seeding-machine	S. Henry	Chenoa, Ill	May 10, 1859	23, 9[illegible]0
Seeding-machine	W. Y. Henry	Monmouth, Ill	Nov. 2, 1858	21, 959
Seeding-machine	G. W. Hildreth	Lockport, N. Y	Feb. 23, 1858	19, 423
Seeding-machine	P. Hildreth	Beloit, Wis	Aug. 24, 1858	21, 257
Seeding-machine	F. A. Hill	Marysville, Cal	Dec. 4, 1866	60, 189
Seeding-machine	F. A. Hill	Marysville, Cal	Oct. 20, 1868	83, 158
Seeding-machine	S. T. Holly	Rockford, Ill	May 29, 1860	28, 423
Seeding-machine	B. F. Horton	Ithaca, N. Y	Jan. 15, 1867	61, 201
Seeding-machine	H. K. Horton	Campton, Ill	Oct. 25, 1864	44, 801
Seeding-machine	J. W. Hudson	La Fayette, Ind	Jan. 10, 1860	26, 770
Seeding-machine	R. W. Hunt and M. Kennedy	Galesburgh, Ill	Nov. 30, 1858	22, 180

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Seeding-machine	S. R. Hunter	Cortland, N. Y	Apr. 26, 1859	23, 769
Seeding-machine	R. Hurd	Spring Hill, Ill	Dec. 25, 1855	13, 986
Seeding-machine	J. Huston	Ottawa, Ill	Jan. 19, 1858	19, 144
Seeding-machine	A. B. Hutchins	Quincy, Fla	Mar. 27, 1860	27, 635
Seeding-machine	A. Ingalls	Independence, Iowa	Sept. 23, 1862	36, 521
Seeding-machine	J. Ingels	Milton, Ind	May 18, 1869	90, 268
Seeding-machine	J. Ingels	Milton, Ind	Apr. 26, 1870	102, 405
Seeding-machine	P. C. Ingersoll	Green Point, N. Y	June 25, 1867	66, 088
Seeding-machine	C. C. James	Dayton, Ohio	Dec. 15, 1857	18, 852
Seeding-machine	G. Jessup	Chapinville, N. Y	June 25, 1861	32, 627
Seeding-machine	W. F. Jessup	Shortsville, N. Y	Feb. 2, 1869	86, 408
Seeding-machine	W. D. Johnson	Raleigh, N. C	Sept. 13, 1859	25, 417
Seeding-machine	J. H. Jones	Rockford, Ill	Sept. 6, 1870	107, 056
Seeding-machine	S. F. Jones	Saint Paul, Ind	June 22, 1858	20, 643
Seeding-machine	T. B. Jones	Earlville, Ill	Feb. 12, 1861	31, 392
Seeding-machine	W. M. Jones and S. E. Tyler	Horicon, Wis	Aug. 12, 1862	36, 159
Seeding-machine	H. Kaller	Perry, Ill	Nov. 2, 1858	21, 969
Seeding-machine	H. Kaller	Perry, Ill	July 17, 1860	29, 176
Seeding-machine	S. Keeler and J. Barthel	Lancaster, Pa	May 20, 1862	35, 317
Seeding-machine	D. B. Keiper and A. C. Fox	Texana, Tex	Aug. 24, 1858	21, 273
Seeding-machine	J. W. Kelley	Ypsilanti, Mich	July 1, 1862	35, 764
Seeding-machine	H. Kellogg	McHenry, Ill	Dec. 15, 1857	18, 853
Seeding-machine	J. M. Kern	Morgantown, Va	Dec. 9, 1856	16, 209
Seeding-machine	J. F. Kierstead	La Porte, Ind	May 4, 1858	20, 162
Seeding-machine	G. King and L. T. Shope	Frederick City, Md	Sept. 1, 1868	81, 790
Seeding-machine	A. Kirlin	New Boston, Ill	May 22, 1860	28, 379
Seeding-machine	H. Koeller	Adams County, Ill	May 3, 1870	102, 684
Seeding-machine	C. Krogh	Kroghville, Wis	July 4, 1865	48, 566
Seeding-machine	J. Lawson	Lawrence, Mass	Dec. 29, 1857	18, 978
Seeding-machine	W. S. Lawyer	Gratiot, Ohio	Aug. 7, 1860	29, 497
Seeding-machine	G. W. Lee and A. R. Reese	Phillipsburgh, N. J	Jan. 15, 1861	31, 123
Seeding-machine	T. Lindsey	Lincoln, Ill	Apr. 10, 1860	27, 865
Seeding-machine	D. W. M. Lower	Albia, Iowa	June 26, 1860	28, 879
Seeding-machine	M. F. Lowth and T. J. Howe	Owatonna, Minn	Dec. 14, 1869	97, 938
Seeding-machine	C. O. Luce	Freeport, Ill	June 10, 1856	15, 104
Seeding-machine	I. B. Lutz	La Fayette, Ind	Apr. 6, 1858	19, 859
Seeding-machine	J. Lyle	Clarksville, Iowa	Sept. 20, 1864	44, 328
Seeding-machine	E. L. Lyon	East Randolph, N. Y	Aug. 31, 1858	21, 350
Seeding-machine	J. Maize	Wooster, Ohio	Sept. 13, 1859	25, 430
Seeding-machine	M. H. Mansfield	Ashland, Ohio	Aug. 28, 1860	29, 801
Seeding-machine	D. and A. S. Markham	Monmouth, Ill	Oct. 6, 1857	18, 346
Seeding-machine	D. and A. S. Markham and D. Eldred.	Monmouth, Ill	Nov. 30, 1858	22, 184
Seeding-machine	D. and A. S. Markham and D. Eldred.	Monmouth, Ill	Mar. 8, 1859	23, 183
Seeding-machine	G. B. Markham	Mead's Mills, Mich	Jan. 3, 1860	26, 690
Seeding-machine	P. P. Mast and C. O. Gardiner	Springfield, Ohio	Sept. 3, 1872	131, 014
Seeding-machine	S. O. Masters	Corning, N. Y	Oct. 17, 1871	120, 081
Seeding-machine	J. McCammon	Dayton, Ohio	May 25, 1858	20, 357
Seeding-machine	J. B. McCormick and W. R. Baker.	Versailles, Ky., and Boston, Mass.	Aug. 31, 1858	21, 349
Seeding-machine	A. and R. B. McElroy	Waupun, Wis	Apr. 3, 1860	27, 759
Seeding-machine	A. McElroy and J. H. Kimble	Fox Lake, Wis	Aug. 7, 1860	29, 505
Seeding-machine	P. McGlew	Des Moines, Iowa	Jan. 6, 1863	37, 353
Seeding-machine	J. G. McGrew	Caledonia, Minn	Feb. 5, 1867	61, 847
Seeding-machine	E. McKinney	Montgomery, Ohio	Aug. 9, 1859	25, 025
Seeding-machine	G. M. L. McMillen	Dayton, Ohio	May 25, 1858	20, 358
Seeding-machine	D. E. McSherry	Indianapolis, Ind	Dec. 13, 1864	45, 423
Seeding-machine	D. E. McSherry	Dayton, Ohio	Dec. 13, 1864	45, 424
Seeding-machine	D. E. McSherry	Dayton, Ohio	Jan. 19, 1869	86, 026
Seeding-machine	D. E. McSherry	Dayton, Ohio	Aug. 23, 1870	106, 602
Seeding-machine	O. H. Melendy	Delhi, Iowa	Apr. 5, 1859	23, 481
Seeding-machine	A. N. Merrill	Batavia, Ill	Nov. 8, 1859	26, 041
Seeding-machine	C. Messenger	Warren, Ohio	May 17, 1859	24, 042
Seeding-machine	S. B. Miller	Stanwood, Iowa	Apr. 8, 1873	137, 708
Seeding-machine	S. Mills	New Castle, Ohio	Dec. 15, 1857	18, 856
Seeding-machine	T. S. Mills	Iberia, Ohio	Apr. 23, 1861	32, 140
Seeding-machine	M. Mitchell	Altona, Ill	June 5, 1860	28, 593
Seeding-machine	L. Mood	Ithaca, N. Y	Nov. 24, 1868	84, 296
Seeding-machine	L. Moore	Ypsilanti, Mich	Aug. 31, 1858	21, 354
Seeding-machine	W. Morehouse	Davenport, Iowa	June 22, 1858	20, 656
Seeding-machine	J. Morrison	Clinton, Me	Nov. 27, 1860	30, 749
Seeding-machine	A. W. Morse	Eaton, N. Y	Dec. 21, 1858	22, 374
Seeding-machine	L. B. and H. A. Myers	Massillon, Ohio	Mar. 3, 1857	16, 772
Seeding-machine	F. H. Nay and A. Ward	Niles Township, Ind	Dec. 4, 1860	30, 832
Seeding-machine	D. B. Neal	Mount Gilead, Ohio	June 15, 1858	20, 575
Seeding-machine	E. I. Nellis	Fort Plain, N. Y	Sept. 3, 1872	131, 113
Seeding-machine	D. Nichols	Onargo, Ill	June 14, 1859	24, 431
Seeding-machine	A. S. Notestein	Salem, Iowa	Mar. 27, 1860	27, 647
Seeding-machine	L. M. Olden	Pana, Ill	Sept. 8, 1868	81, 935
Seeding-machine	G. Paddington	Springville, Iowa	Mar. 2, 1869	87, 426
Seeding-machine	D. O. Paige and J. Clary	Dayton, Ohio	Dec. 1, 1857	18, 765
Seeding-machine	D. Pardee	Carlyle, Ill	Jan. 8, 1861	31, 086
Seeding-machine	A. R. Park	Columbia, Tex	Sept. 4, 1860	29, 907
Seeding-machine	W. P. Penn	Belleville, Ill	Dec. 27, 1859	26, 611
Seeding-machine	W. P. Penn	Belleville, Ill	Mar. 6, 1860	27, 379
Seeding-machine	W. P. Penn	Belleville, Ill	July 17, 1860	29, 191
Seeding-machine	W. P. Penn	Belleville, Ill	Jan. 8, 1861	31, 088
Seeding-machine	W. P. Penn	Belleville, Ill	Nov. 13, 1866	59, 6.9
Seeding-machine	A. M. Penister	Wellington, Mo	Jan. 14, 1862	34, 163
Seeding-machine	S. and M. Pennock	Kennett's Square, Pa	July 8, 1851	8, 209
Seeding-machine	A. Phillip	Appleton, Wis	May 17, 1864	42, 791
Seeding-machine	J. B. Pitts	Salem, Ind	Feb. 6, 1866	52, 445
Seeding-machine	A. M. Pratt	Lowell, N. Y	May 25, 1858	20, 366
Seeding-machine	S. M. Prentice	Southington, Ohio	May 23, 1865	47, 855
Seeding-machine	J. W. Prentiss	Pultney, N. Y	Dec. 27, 1859	26, 615
Seeding-machine	A. Putnam	Owego, N. Y	Apr. 20, 1869	89, 072
Seeding-machine	W. B. Quarton	Carlinville, Ill	Jan. 8, 1861	31, 089

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Seeding-machine	S. G. Randall	New Braintree, Mass	Sept. 13, 1859	25,443
Seeding-machine	S. G. Randall	Providence, R. I	Mar. 18, 1873	137,026
Seeding-machine	E. D. and O. B. Reynolds	North Bridgewater, Mass	Aug. 8, 1865	49,302
Seeding-machine	J. W. Richards	Newark, N. J	Dec. 6, 1864	45,344
Seeding-machine	G. W. Richardson	Grayville, Ill	Apr. 26, 1859	23,812
Seeding-machine	T. R. Richmond	Massillon, Ohio	Aug. 10, 1858	21,152
Seeding-machine	T. R. Richmond	Massillon, Ohio	Nov. 5, 1861	33,664
Seeding-machine	A. Ring	Westbrook, Me	Mar. 2, 1858	19,514
Seeding-machine	A. Ring	Westbrook, Me	Feb. 14, 1860	27,157
Seeding-machine	T. A. Risher	Lancaster, Ohio	Apr. 15, 1856	14,703
Seeding-machine	T. A. Risher	Circleville, Ohio	Apr. 6, 1858	19,871
Seeding-machine	T. A. Risher	Circleville, Ohio	Apr. 6, 1858	19,872
Seeding-machine	E. Ritson	Sanbornton Bridge, N. H	July 10, 1860	29,102
Seeding-machine	E. Ritson	Maltaville, N. Y	Oct. 1, 1867	69,484
Seeding-machine	L. Robinson	Melrose, Mass	May 18, 1858	20,301
Seeding-machine	A. R. Root	Keokuk, Iowa	Mar. 29, 1859	23,430
Seeding-machine	A. R. Root	Canton, Mo	Feb. 28, 1860	27,312
Seeding-machine	A. R. Root	Canton, Miss	Apr. 3, 1860	27,740
Seeding-machine	M. S. Root	Medina, Ohio	Oct. 19, 1858	21,850
Seeding-machine	J. S. Rowell and M. F. Lowth	Beaver Dam, Wis	Oct. 14, 1862	36,672
Seeding-machine	J. H. Rude	Liberty, Ind	Apr. 27, 1869	89,350
Seeding-machine	M. B. Rupp	McVeytown, Pa	June 19, 1860	28,778
Seeding-machine	E. Russell	Coatesville, Pa	Nov. 10, 1857	18,603
Seeding-machine	A. V. Ryder	Germano, Ohio	Oct. 8, 1867	69,710
Seeding-machine	W. Saxton	Venice, Mich	Feb. 7, 1865	46,271
Seeding-machine	J. F. Seaman	Clyde, N. Y	Jan. 18, 1859	22,676
Seeding-machine	J. V. H. Secor	New York, N. Y	Dec. 11, 1860	30,890
Seeding-machine	P. Seymour	East Bloomfield, N. Y	June 17, 1862	35,633
Seeding-machine	M. Schnapp	Pleasant Park, Mo	Nov. 25, 1873	145,019
Seeding-machine	J. Shafer	Sparta, N. Y	Aug. 22, 1865	49,557
Seeding-machine	J. Shannon	Freeport, Ill	Sept. 23, 1862	36,535
Seeding-machine	B. A. Shearer	Crown Point Centre, N. Y	Oct. 15, 1867	69,848
Seeding-machine	U. H. Shockley	Litchfield, Ill	Feb. 24, 1863	37,776
Seeding-machine	T. Short	Danville, Ill	May 17, 1859	24,059
Seeding-machine	A. Simmons	Nora, Ill	Oct. 12, 1858	21,780
Seeding-machine	A. Simmons	Nora, Ill	June 14, 1859	24,410
Seeding-machine	M. Simmons	Ira, Ill	Mar. 29, 1859	23,403
Seeding-machine	H. Sloan	Franklin, Ind	Sept. 13, 1859	25,447
Seeding-machine	F. F. Smith and A. Thurston	Four Corners, Ohio	Feb. 12, 1867	62,080
Seeding-machine	H. R. Smith	Massena, N. Y	Oct. 9, 1855	13,664
Seeding-machine	J. D. Smith	Lancaster, Ohio	Aug. 31, 1858	21,375
Seeding-machine	J. D. Smith	Peoria, Ill	Oct. 30, 1866	59,283
Seeding-machine	J. G. Snyder	Wheatfield, Pa	Jan. 8, 1856	14,073
Seeding-machine	I. A. Stafford	Essex, N. Y	Mar. 19, 1861	31,752
Seeding-machine	S. Stanbro	Salem, Mich	Sept. 7, 1858	21,452
Seeding-machine	J. Stark	Thomasville, Ga	Aug. 17, 1869	93,762
Seeding-machine	J. M. Stebbins	Appleton, Wis	Dec. 20, 1864	45,533
Seeding-machine	C. E. Steller	Genesee, Wis	Jan. 20, 1863	37,465
Seeding-machine	H. C. Stephens	Glenville, Ohio	Aug. 5, 1873	141,472
Seeding-machine	C. and G. Stephenson	Plainfield, Mass	Sept. 4, 1855	13,520
Seeding-machine	H. Sternberg	Nettle Lake, Ohio	Dec. 29, 1868	85,343
Seeding-machine	A. C. Stiles	Bunker Hill, Wis	July 9, 1861	32,812
Seeding-machine	E. Stimson	Plainfield, Vt	June 14, 1859	24,413
Seeding-machine	H. F. Stinde	Saint Louis, Mo	July 15, 1873	140,961
Seeding-machine	H. R. Stoner	Lancaster, Pa	May 14, 1861	32,318
Seeding-machine	J. H. Stringfellow	Richmond, Va	May 4, 1869	89,609
Seeding-machine	G. F. Stroud	Oshkosh, Wis	July 22, 1873	141,143
Seeding-machine	J. Sutter	New York, N. Y	June 26, 1860	28,914
Seeding-machine	T. H. Tatlow, jr	Palmyra, Mo	May 31, 1859	24,248
Seeding-machine	J. H. Thomas and P. P. Mast	Springfield, Ohio	Feb. 17, 1863	37,712
Seeding-machine	J. H. Thomas and P. P. Mast	Springfield, Ohio	July 12, 1870	105,386
Seeding-machine	H. Thomason	La Fayette, Ind	Jan. 6, 1863	37,311
Seeding-machine	H. Thomason	La Fayette, Ind	Nov. 13, 1866	59,681
Seeding-machine	G. A. Titus	Mantonville, Minn	Sept. 13, 1864	44,236
Seeding-machine	M. Todd	Quasqueton, Iowa	Dec. 16, 1862	37,184
Seeding-machine	M. L. Tourtelett	Neshonoc, Wis	Sept. 13, 1859	25,456
Seeding-machine	J. Tristam	Cleveland, Ohio	Aug. 20, 1872	130,607
Seeding-machine	D. C. Turner	Madison, Wis	July 12, 1870	105,389
Seeding-machine	J. B. Turner	Jacksonville, Ill	May 8, 1860	28,217
Seeding-machine	A. Turner, R. Bess, and H. Sloan.	Franklin, Ind	Aug. 31, 1858	21,389
Seeding-machine	G. W. Van Brunt	Rolling Prairie, Wis	Nov. 12, 1861	33,720
Seeding-machine	G. W. Van Brunt	Horicon, Wis	July 22, 1862	35,960
Seeding-machine	W. A. Van Brunt	Horicon, Wis	Aug. 31, 1869	94,258
Seeding-machine	W. A. Van Brunt	Horicon, Wis	Nov. 23, 1869	97,137
Seeding-machine	D. C. and G. W. Van Brunt and H. Barber.	Horicon, Wis	Sept. 7, 1869	94,674
Seeding-machine	D. J. Vail	Industry, Ill	July 31, 1860	29,420
Seeding-machine	J. W. Vandiver	Shelbyville, Mo	Nov. 30, 1858	22,208
Seeding-machine	C. G. Vanstrum and P. G. Lindberg.	Red Wing, Minn	Sept. 13, 1864	44,241
Seeding-machine	F. Veal	Hallettsville, Tex	Jan. 14, 1859	24,419
Seeding-machine	J. Walton	Delavan, Wis	Nov. 2, 1858	21,995
Seeding-machine	S. B. Ward	Auburn, Ind	Nov. 26, 1867	71,557
Seeding-machine	S. R. Warner	London, Ohio	Nov. 27, 1860	30,779
Seeding-machine	Z. D. Waters	Brookville, Md	Apr. 10, 1866	53,909
Seeding-machine	C. H. Watson	Washington, D. C	July 9, 1872	128,769
Seeding-machine	E. B. Weakley	Pana, Ill	Mar. 27, 1860	27,661
Seeding-machine	S. R. Weldon	Winnebago Station, Ill	Aug. 10, 1858	21,162
Seeding-machine	M. D. Wells	Morgantown, Va	Jan. 26, 1855	12,135
Seeding-machine	M. D. Wells	Morgantown, Va	Dec. 9, 1856	16,219
Seeding-machine	M. D. Wells	Morgantown, Va	Apr. 12, 1859	23,630
Seeding-machine	J. B. Whiting	Ripon, Wis	Dec. 26, 1865	51,768
Seeding-machine	B. Wieland	Orangeville, Ill	Aug. 15, 1865	49,460
Seeding-machine	L. Wight and O. G. Ewings	Whitewater and La Grange, Wis.	Dec. 26, 1871	122,300
Seeding-machine	H. Willard	Vergennes, Vt	May 13, 1856	14,894
Seeding-machine	H. Williams	Kenosha, Wis	Sept. 5, 1865	49,818

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Seeding-machine	T. Wilson	Winterset, Iowa	June 26, 1860	28,931
Seeding-machine	E. Witzigman	Buffalo, N. Y	Nov. 25, 1873	144,879
Seeding-machine	E. D. Wooding	Dixon, Ill	Jan. 27, 1857	16,511
Seeding-machine	W. Workman	Ripon, Wis	June 26, 1860	28,934
Seeding-machine and cultivator	T. A. Galt	Sterling, Ill	June 20, 1865	48,269
Seeding-machine and cultivator	D. Stouder	Clarinda, Iowa	Nov. 1, 1864	44,896
Seeding-machine and cultivator, Combined	L. Bartlett	Cardington, Ohio	Aug. 24, 1869	94,065
Seeding-machine and cultivator, Combined	S. S. Hogle	Berea, Ohio	Nov. 17, 1868	84,121
Seeding-machine and cultivator, Combined	O. M. Pond	Independence, Iowa	July 4, 1865	48,590
Seeding-machine and cultivator, Combined	O. M. Pond	Independence, Iowa	Mar. 17, 1868	75,575
Seeding-machine and cultivator, Combined	M. D. Smith	Independence, Iowa	Feb. 16, 1869	86,930
Seeding-machine and fertilizer	A. P. Routt	Liberty Mills, Va	June 11, 1867	65,610
Seeding-machine arm, Broadcast	H. J. Hale	Indianapolis, Ind	Feb. 8, 1859	22,870
Seeding-machine attachment	G. B. St. John	Kalamazoo, Mich	Apr. 5, 1870	101,537
Seeding machine, Broadcast	J. Barnes	Lima, N. Y	Apr. 24, 1860	27,958
Seeding machine, Broadcast	W. S. Coffman	Cold Water, Mich	Sept. 18, 1866	58,219
Seeding machine, Broadcast	E. S. Jewett	Lima, Mich	July 25, 1865	48,949
Seeding machine, Broadcast	S. Thomson	Oceola, Wis	Feb. 4, 1868	74,171
Seeding machine, Broadcast	G. W. Warren	Ossian, N. Y	Jan. 3, 1865	45,775
Seeding machine, Broadcast	A. Weitman	West Union, Iowa	Nov. 19, 1867	71,096
Seeding machine, Broadcast	W. Workman	Ripon, Wis	Nov. 11, 1862	36,929
Seeding-machine coupling, Elastic	A. P. Green	Steuben, Ohio	Jan. 14, 1868	73,320
Seeding-machine, Hand	M. D. Cone and A. N. Douglass	Port Gibson and Avon, N. Y.	Apr. 16, 1867	63,854
Seeding-machine, Hand	S. G. Randall	Rockford, Ill	June 24, 1856	15,194
Seeding-machine, roller, and drag, Combined	W. H. Hartman	Fostoria, Ohio	June 6, 1865	48,[illegible]63
Seeding-machine, roller, and drag, Combined	W. H. Hartman and S. Sheller	Fostoria, Ohio	Jan. 10, 1865	45,825
Seeding-machine, roller, and harrow, Combined	W. W. Wiley	Edina, Mo	Mar. 6, 1866	53,072
Seeding-machine seed-wheel	W. Weustboff and C. Schmidt	Dayton, Ohio	July 13, 1869	92,681
Seeding-machines, Attaching drill-teeth to	J. H. Thomas and P. P. Mast	Springfield, Ohio	Mar. 7, 1865	46,732
Seeding-machines, Device for regulating the feed in	H. B. Quick	Horicon, Wis	Aug. 10, 1869	93,554
Seeding-machines, Dropping-device for	D. E. McSherry	Dayton, Ohio	Nov. 30, 1869	97,425
Seeding-machines, Fertilizer-attachment to	J. F. Keller	Hagerstown, Md	July 26, 1870	105,811
Seidlitz-powders box	C. A. and I. S. Browne	North Adams, Mass	Jan. 9, 1872	122,558
Seidlitz powders, Machine for folding	W. A. Martin	Brooklyn, N. Y	Dec. 20, 1853	10,357
Seidlitz water	J. Boston	New York	May 5, 1832	....
Seine, Fishing	J. Collins	Ecorse, Mich	July 28, 1868	80,274
Seine, Fishing	P. Groff	Little York, Pa	Dec. 16, 1809	....
Seine, Fishing	R. Jeffery	Gloucester, Mass	Nov. 14, 1871	120,974
Seine, Fishing	H. Smith	Salem, Mass	Mar. 12, 1872	124,635
Seine-float, Fishing	T. Brown and T. Jarvis, jr	Wellfleet and Boston, Mass	May 28, 1872	127,218
Seine for deep water, Fishing	R. Evarts	Madison, Conn	Mar. 21, 1838	647
Seine-needles, Machinery for filling	H. M. Glines	Manchester, N. H	Oct. 2, 1855	13,629
Seine-needles, Machinery for filling	S. F. Stanton	Manchester, N. H	Aug. 26, 1856	15,623
Seines and other net-work, Machinery for knitting fishing.	J. D. Cornelius and J. Mott, jr.	Westbury, N. Y	May 10, 1845	4,039
Seines, Mode of constructing and using fishing	C. Tracy	Savannah, Ga	Sept. 19, 1838	932
Self-acting battery for scaring crows, &c	T. ipsbuts and D. C. Jones	Balston Spa, N. Y	Aug. 9, 1859	25,021
Self-acting bolt	T. Rattenbury	Detroit, Mich	Feb. 25, 1868	74,846
Self-acting brake	W. Glaze	Rochester, Ind	Apr. 26, 1864	42,468
Self-acting brake	C. A. Smyth	Charleston, Ill	Nov. 28, 1865	51,232
Self-acting brake, Disengagement of	W. A. Gibson	New York, N. Y	Feb. 7, 1860	27,045
Self-acting brake for inclined planes	N. Smith	Waterloo, N. J	Nov. 28, 1842	2,866
Self-acting brake for wheeled vehicles	D. Sager	Albany, N. Y	Feb. 25, 1862	34,527
Self-acting gate	J. Lee	Massillon, Ohio	July 11, 1865	48,698
Self-acting gate	J. B. Mishler	Breathedsville, Md	Feb. 6, 1872	123,411
Self-acting gate	A. C. Smith	Fort Madison, Iowa	Mar. 26, 1867	63,318
Self-acting gate	F. Whitaker	Bel Air, Md	Sept. 26, 1871	119,438
Self-acting gate	J. A. Wood	Crosswicks, N. J	Nov. 28, 1871	121,442
Self-acting hook	W. Bisbee and F. G. Hearne	Yreka, Cal	Nov. 10, 1868	83,906
Self-acting lubricator	W. B. Howe	Troy, N. Y	May 31, 1870	103,617
Self-acting mule	W. Rouse	Taunton, Mass	Oct. 3, 1854	11,755
Self-acting press	L. L. Bond	Chicago, Ill	May 31, 1859	24,258
Self-acting press	S. R. Holt	Worthington, Ohio	Nov. 22, 1853	10,268
Self-acting press	A. McKenney and D. Tyler	Clarksfield, Ohio	Feb. 13, 1849	6,108
Self-acting press	W. Moore	Belleville, Ohio	Sept. 30, 1851	8,392
Self-acting switch	L. W. Harris	Oriskany Falls, N. Y	June 17, 1873	139,956
Self-acting switch	A. S. Littlefield	Portland, Me	Oct. 4, 1853	10,086
Self-acting switch	D. Rowe	Jacksonville, Ill	Oct. 15, 1872	132,218
Self-adjusting press	S. W. Bullock	Williamsburgh, N. Y	July 10, 1845	4,110
Self-adjusting wrench	A. M. Olds	New York, N. Y	June 11, 1867	65,588
Self-detaching brake	J. Lahaye	Reading, Pa	Apr. 10, 1847	5,054
Self-elevator, Portable	H. L. Hall	Buffalo, N. Y	June 14, 1870	104,141
Self-fastening pin	E. Martin	New York, N. Y	Nov. 12, 1861	33,711
Self-feeding boiler and evaporator	M. M. Smith	Saint Louis, Mo	Oct. 26, 1869	96,281
Self-feeding drill	J. H. Hanes	Cape May, N. J	Apr. 5, 1870	101,614
Self-feeding drill	G. C. Taft	Worcester, Mass	Aug. 4, 1857	17,944
Self-feeding drill	W. Wakeley	Homer, N. Y	Nov. 17, 1857	18,659
Self-feeding fountain	E. Amende	Paris, Ky	July 5, 1870	104,921
Self-guarding hook	H. Fisher	Aurora, Ind	Dec. 22, 1868	85,169
Self-heading bolt	B. B. G. Stone	Catskill, N. Y	June 11, 1872	127,934
Self-lubricator	J. Bachelder	Norwich, Conn	June 4, 1867	65,328
Self-mousing hook	J. R. Henshaw	Middletown, Conn	Oct. 26, 1858	21,879
Self-mousing hook	J. R. Henshaw	Middletown, Conn	June 12, 1860	28,669
Self-operating gate	N. Comstock	Westfield, Ill	Feb. 20, 1866	52,682
Self-operating gate	A. N. Holmes	Tyrone, Mich	Dec. 5, 1871	121,619
Self-operating gate	W. H. Phillips	Staunton, Ind	Oct. 24, 1871	120,322
Self-operating switch	A. Bouchard	New Orleans, La	Aug. 5, 1873	141,537
Self-operating switch	J. E. Rea	Philadelphia, Pa	Dec. 31, 1872	134,478
Self-protector	D. P. Cook	Hartford, Conn	June 14, 1870	104,117
Self-regulating ventilator	N. Hammond	Tioga, Pa	Mar. 21, 1865	46,898
Self-releasing hook	J. L. Cathcart	Washington, D. C	Jan. 30, 1872	123,236
Self-sealing can	J. F. Griffen	New York, N. Y	Dec. 27, 1864	45,601
Self-waiting table	W. B. and J. H. Farrar	Evans's Mills, N. C	Aug. 25, 1857	18,049
Self-waiting table	G. W. Hagey	Smithland, Ky	Mar. 30, 1858	19,773
Self-waiting table	W. W. Hawley	Mount Morris, N. Y	Mar. 8, 1870	100,622
Self-waiting table	J. Lamb	New London, Ind	Jan. 29, 1850	7,055

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Self-waiting table	W. W. Patteson	Crawford Springs, Va	May 6, 1873	138, 687
Self-waiting table	J. F. Schultz	Chicago, Ill	May 27, 1873	139, 267
Self-waiting table	M. Stone	Vermillion, Ohio	Jan. 28, 1873	135, 382
Self-waiting table	J. A. Strong	Hyde Park, Vt	Nov. 26, 1861	33, 804
Self-waiting table	A. Watson	Falmouth, Ky	Sept. 2, 1856	15, 675
Selvage, Double-stitched	J. A. and E. Wadsworth	Portsmouth, R. I	Oct. 5, 1824	....
Semolino and flour, Machinery for manufacturing	G. A. Buchholz	Shepherd's Bush, England	Nov. 23, 1869	97, 038
Semolino and flour, Manufacture and means of assorting.	G. A. Buchholz	Shepherd's Bush, England	Nov. 23, 1869	97, 037
Semolino, Manufacture of	G. A. Buchholz	Shepherd's Bush, England	Nov. 23, 1869	97, 036
Semaphoric signal, Mechanism for operating	W. Boyd	Washington, D. C	June 1, 1858	20, 402
Separator: *See* Bee-separator. Clover-separator. Coal-separator. Coal and ore separator. Cranberry-separator. Electro-magnetic separator. Flour-separator. Garlic-separator. Gold-separator. Grain-separator. Grain and seed separator. Grain and straw separator. Grass-seed separator. Liquid-separator. Liquid-still separator. Meal-separator. Metal-separator. Middlings-separator. Milk-separator. Oat-separator. Ore-separator. Ore and grain separator. Ore and mineral separator. Rice-separator. Sand and gravel separator. Seed-separator. Sheet-separator. Starch-separator. Steam and water separator. Thrashing-machine separator.				
Separator	J. T. Pool	Monroe, Wis	Jan. 14, 1868	73, 382
Separator	B. H. Snavely	Penn Township, Pa	Apr. 5, 1870	101, 530
Separator and smut-machine	D. M. Donehoo	Hookstown, Pa	Mar. 16, 1858	19, 629
Separator and smut-machine	J. H. Jones	Dayton, Ohio	Oct. 28, 1862	36, 784
Separator-shoe	M. Laufenburge	Two Rocks, Cal	June 2, 1868	78, 597
Separators, grain-mills, &c., Extension-hopper for	J. Bean	Hudson, Mich	Feb. 10, 1857	16, 578
Separators, Tailing-elevator for	A. B. Farquhar	York, Pa	June 7, 1870	104, 004
Seraphine	J. A. Bazin	Canton, Mass	June 22, 1842	2, 682
Seraphine	R. H. Green	Poultney, Vt	Feb. 19, 1850	7, 113
Seraphine	L. Tracy	Concord, N. H	July 5, 1848	5, 657
Service-heater, Portable	W. H. Scanlan	Memphis, Tenn	Dec. 22, 1868	85, 136
Serving-reel	J. H. Westcott	Medford, Mass	Jan. 24, 1871	111, 160
Serving-table	W. L. Lance	Plymouth, Pa	June 19, 1866	55, 677
Settee	W. M. Brooke	Eaton, Ohio	July 30, 1872	130, 011
Settee	W. Chase	Buffalo, N. Y	May 18, 1869	90, 078
Settee	T. J. Close	Philadelphia, Pa	July 28, 1868	80, 528
Settee	S. Hill	Spencer, Mass	June 15, 1869	91, 232
Settee	J. and E. R. Holzer	Philadelphia, Pa	May 27, 1873	139, 389
Settee and desk, School	J. Peard	New York, N. Y	July 2, 1867	66, 384
Settee and table	E. Fowler	New York, N. Y	Apr. 24, 1866	54, 140
Settee, Bed and table	C. F. Kramer	Mondovia, Wis	Feb. 18, 1868	74, 551
Settee, Bed and table	C. F. Kramer	Mondovia, Wis	July 5, 1870	105, 094
Settee, Extension	C. Beatty	Elizabeth, N. J	May 13, 1873	138, 842
Settee, Folding	W. C. Adams and W. B. Mayhew.	West Tisbury, Mass	May 23, 1871	115, 010
Settee, Folding	H. T. Morse	Athol, Mass	Jan. 31, 1871	111, 371
Settee, Folding	H. T. Morse	Athol, Mass	July 25, 1871	117, 315
Settee for school-rooms	J. Peard	New York, N. Y	July 2, 1867	66, 383
Settee-frame	T. J. Close	Philadelphia, Pa	Feb. 9, 1869	86, 644
Settee or chair	G. F. Buckley	West Barnstable, Mass	Nov. 20, 1860	30, 665
Settee, Reversible	R. H. Paton	New York, N. Y	Mar. 22, 1871	113, 087
Settee, Rustic	W. P. Uhlinger	Philadelphia, Pa	Sept. 14, 1869	94, 928
Settees, Double-acting catch for reversible backs of	B. F. McCreary	New York, N. Y	Apr. 15, 1856	14, 672
Settees, &c., Sliding joint for the backs of	I. Jennings	New York, N. Y	June 25, 1824	....
Sewage and the manufacture of fertilizers, Treatment of.	D. Forbes and A. P. Price	London, England	Apr. 4, 1871	113, 416
Sewage, &c., Mode of purifying and deodorizing	W. C. and R. G. Sillar and G. W. Wigner.	Camberwell, Great Britain	June 15, 1869	91, 373
Sewage, Treating	R. Weare	Newcastle-under-Lyme, England.	June 27, 1871	116, 515
Sewage, Treatment of	F. Hillé	Brentford, England	Apr. 29, 1873	138, 250
Sewage, Utilizing	G. W. Wigner	London, England	Oct. 25, 1870	108, 664
Sewer	J. Browu	San Francisco, Cal	June 23, 1868	79, 199
Sewer	T. Dark	Buffalo, N. Y	June 29, 1869	91, 828
Sewer	C. F. Liernur	Frankfort-on-the-Main, Germany.	Feb. 5, 1867	61, 842
Sewer	T. F. Randolph	Cincinnati, Ohio	May 8, 1866	54, 598
Sewer	J. Silsby	New York, N. Y	Nov. 30, 1869	97, 447
Sewer-basin	E. L. Dyer	Portland, Me	Nov. 5, 1872	132, 757
Sewer-basin cover and trap	W. H. Chase and G. White	Washington, D. C	Apr. 2, 1872	125, 118
Sewer-basin for street-corners	J. H. Boschen	New York, N. Y	Sept. 9, 1873	142, 671
Sewer-basin trap	L. A. Gouch	Yonkers, N. Y	June 18, 1872	128, 138
Sewer-basin trap, Self-acting	M. B. Couzens	Yonkers, N. Y	Jan. 10, 1871	110, 829
Sewer-bottom, Cement	M. Day	Charlestown, Mass	Nov. 25, 1873	144, 961
Sewer catch-basin	J. J. Lyon	Cincinnati, Ohio	Oct. 19, 1869	96, 019
Sewer-catch-basin cover	H. Smith, jr	Milwaukee, Wis	Nov. 8, 1870	109, 067
Sewer-cleaner	W. H. Chase	Washington, D. C	Apr. 1, 1873	137, 290
Sewer-cleaner	J. H. Jennings	Oquawka, Ill	Aug. 26, 1873	142, 238
Sewer-cleaner	C. Williams	New York, N. Y	July 28, 1868	80, 526
Sewer, gas, and water pipes, Exterior casing for	J. Silsby	New York, N. Y	Nov. 30, 1869	97, 448
Sewer-gas-trap	G. C. Anthon	New York, N. Y	Aug. 5, 1873	141, 412
Sewer-grate	Z. L. Bragdon	Bangor, Me	Apr. 5, 1870	101, 575
Sewer, Hydraulic-cement	O. Parker	New York, N. Y	July 2, 1836	......
Sewer-inlet	S. Kneass	Philadelphia, Pa	May 21, 1861	32, 401
Sewer-inlet	W. H. Short	Brooklyn, N. Y	Apr. 9, 1861	32, 008

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Invention.	Inventor.	Residence.	Date.	No.
Sewer-inlet grating	H. W. Clapp	Concord, N. H	Jan. 21, 1873	134, 978
Sewer-inlet trap	J. Hitchcock	Springfield, Mass	Apr. 1, 1873	137, 447
Sewer-inlet trap	G. R. Moore	Philadelphia, Pa	Oct. 21, 1873	143, 774
Sewer-machine	F. T. Grant	Gardiner, Me	May 29, 1860	28, 470
Sewer-mouth	A. Ramsey	Philadelphia, Pa	Oct. 3, 1820	
Sewer oil-trap	W. H. Anderson	Green Point, N. Y	Feb. 13, 1872	123, 663
Sewer-pipe	C. Birkinshaw	Chicago, Ill	Sept. 8, 1868	81, 977
Sewer-pipe	P. Meyercordt	Chicago, Ill	Sept. 8, 1868	82, 020
Sewer-pipe	G. S. Tiffany	Palmyra, Mich	Dec. 20, 1864	45, 539
Sewer-pipe machine	W. K. Black	Philadelphia, Pa	June 23, 1867	67, 099
Sewer-pipe machine	J. Blank	Cuyahoga Falls, Ohio	Dec. 31, 1867	72, 787
Sewer-pipe mold	T. Madely	Rochester, N. Y	Apr. 25, 1871	114, 164
Sewer-pipe mold	W. H. Story	Flatbush, N. Y	Dec. 19, 1871	122, 076
Sewer-pipes, Manufacture of	J. Lyth	Buffalo, N. Y	Oct. 19, 1869	96, 021
Sewer-trap	S. Sowle	New York, N. Y	July 4, 1871	116, 645
Sewer-trap	C. Stubenbord	New York, N. Y	May 14, 1872	126, 759
Sewer trap and catch-basin	A. B. Ashman and A. H. Newell	Cincinnati, Ohio	Dec. 26, 1871	122, 209
Sewer, Street	W. Day	Brooklyn, N. Y	Feb. 3, 1852	8, 703
Sewer, Street	J. Myers and G. Elbreg	Cincinnati, Ohio	Oct. 22, 1861	33, 538
Sewer-vault	L. D. Tredway	Saint Louis, Mo	Nov. 21, 1871	121, 219
Sewer, Ventilating	E. Thorn	Philadelphia, Pa	June 27, 1854	11, 184
Sewer, water, and gas pipes, House-connection for.	J. Silsby	New York, N. Y	Oct. 12, 1869	95, 844
Sewers and drains, Construction of	D. H. Fernald	Bangor, Me	June 4, 1867	65, 363
Sewers, Arrangement of drains for	P. J. Coogan	Charleston, S. C	June 5, 1855	12, 994
Sewers, Cleaning	B. Latham	Westminster, England	Dec. 2, 1873	145, 111
Sewers, Receiver and stench-trap for street	T. Dark	Buffalo, N. Y	May 2, 1871	114, 270
Sewerage	W. S. West	Washington, D. C	June 4, 1872	127, 533
Sewerage, &c., Apparatus for	W. Atkinson	Brooklyn, N. Y	May 19, 1863	38, 544
Sewerage-matter, Utilizing	J. B. Hyde	New York, N. Y	Dec. 20, 1870	110, 366
Sewing boots and shoes	M. J. Stein	New York, N. Y	Apr. 4, 1871	113, 593
Sewing buttons on shoes, &c., Machine for	J. Keith	Charlton, Mass	Aug. 20, 1872	130, 581
Sewing and knitting machine table	E. Chesterman	Tremont, N. Y	Apr. 18, 1871	113, 741
Sewing and other machinery, Brake for preventing retrograde movement in.	D. T. Peek	New York, N. Y	July 22, 1873	141, 166
Sewing and other machinery, Treadle for	G. B. Kirkham	New York, N. Y	Oct. 4, 1870	107, 921
Sewing and other machines, Expansion-pivot for wheels of.	E. Motez	Woodward, Pa	Feb. 13, 1872	123, 637
Sewing and other machines, Mechanical movement for.	J. Hanley	New York, N. Y	Dec. 15, 1857	18, 845
Sewing and other machines, Mode of operating	S. C. Foster	New York, N. Y	Aug. 2, 1870	105, 932
Sewing and other machines, Motive-power for	J. Zuckermann	San Francisco, Cal	Feb. 16, 1869	87, 020
Sewing and other machines, Treadle for	G. Lowden	Brooklyn, N. Y	Sept. 17, 1872	131, 359
Sewing and other machines, Treadle for	B. C. Pole	Washington, D. C	Sept. 27, 1870	107, 717
Sewing-bird	J. E. Merriman	Meriden, Conn	Feb. 7, 1854	10, 509
Sewing carpet-lining, Machine for	J. F. Fales	Walpole, Mass	Feb. 11, 1868	74, 328
Sewing-case	F. Benkendorff	Brooklyn, N. Y	Sept. 16, 1873	142, 762
Sewing-case and pocket-book, Combined	P. W. Lambert	New York, N. Y	May 18, 1869	90, 276
Sewing-clamp	J. H. Pitezel	Three Rivers, Mich	Nov. 6, 1866	59, 448
Sewing-guide	S. P. Chapin	New York, N. Y	Feb. 19, 1856	14, 283
Sewing-guide	P. H. Niles	Boston, Mass	Dec. 31, 1867	72, 751
Sewing, Guide for creasing tucks and plaits preparatory to.	W. L. Fish	Newark, N. J	Feb. 11, 1862	34, 357
Sewing, Hemmer and fringer shield for hand	A. H. Downer	New York, N. Y	Apr. 2, 1861	31, 878
Sewing, Hemmer for hand	J. O. Whitcomb	New York, N. Y	Apr. 9, 1861	32, 035
Sewing hat-tips to linings, Machine for	J. L. Coles	Newark, N. J	Aug. 8, 1871	117, 867
Sewing-horse	M. B. Mills	De Witt, Iowa	June 16, 1868	78, 884
Sewing-horse	J. A. Smith	Connellsville, Pa	Mar. 5, 1867	62, 570
Sewing, Leather clamp used in	J. Burrington	Burke, Vt	May 1, 1834	
Sewing leather, Wire thread for	C. Rowland and N. F. English	Washington, D. C., and Hartland, Vt.	Apr. 25, 1871	114, 204
Sewing-machine	W. W. Abbott	Boston, Mass	July 9, 1867	66, 440
Sewing-machine	J. Q. Adams	North Brookfield, Mass	July 6, 1869	92, 138
Sewing-machine	W. H. Akins and J. D. Felthousen.	Ithaca, N. Y	Aug. 5, 1851	8, 282
Sewing-machine	W. W. Allen and J. Molyneux	Bordentown, N. J	Apr. 17, 1860	27, 944
Sewing-machine	D. S. Alling	Albany, N. Y	Feb. 4, 1873	135, 461
Sewing-machine	O. St. Amant	Quebec, Canada	Nov. 25, 1873	145, 025
Sewing-machine	D. C. Ambler	New York, N. Y	Nov. 7, 1854	11, 884
Sewing-machine	J. F. Andrews	New Providence, Pa	Oct. 2, 1866	58, 366
Sewing-machine	J. F. Andrews	Lancaster, Pa	Aug. 10, 1869	93, 511
Sewing-machine	S. Andrews	Perth Amboy, N. J	Aug. 31, 1858	21, 310
Sewing-machine	C. H. Andrus	Goshen, N. Y	Nov. 3, 1857	18, 566
Sewing-machine	B. J. Angell	Attleborough, Mass	Feb. 9, 1858	19, 285
Sewing-machine	J. Auger and J. Prestele	New York, N. Y	Aug. 23, 1864	43, 890
Sewing-machine	F. Armstrong	Waterbury, Conn	Mar. 26, 1867	63, 132
Sewing-machine	G. B. Arnold	New York, N. Y	May 8, 1860	28, 139
Sewing-machine	G. B. and A. Arnold	New York, N. Y	Sept. 25, 1860	30, 112
Sewing-machine	B. Atwater	Berlin, Conn	May 5, 1857	17, 186
Sewing-machine	B. Atwater	Berlin, Conn	Sept. 7, 1858	21, 402
Sewing-machine	B. Atwater	Berlin, Conn	Sept. 6, 1864	44, 063
Sewing-machine	J. E. Atwood	Mansfield Centre, Conn	Dec. 14, 1858	22, 273
Sewing-machine	J. E., J. C., and O. Atwood	Mansfield Centre, Conn	Apr. 13, 1858	19, 903
Sewing-machine	O. Avery	Honesdale, Pa	Oct. 19, 1852	9, 338
Sewing-machine	O. Avery	Honesdale, Pa	May 9, 1854	10, 880
Sewing-machine	O. and Z. W. Avery	Bethany, Pa	Nov. 9, 1858	22, 007
Sewing-machine	J. Bachelder	Boston, Mass	May 8, 1849	6, 439
Sewing-machine	J. Bachelder	Boston, Mass	Sept. 24, 1850	7, 659
Sewing-machine	G. W. Baker	Hinsdale, N. H	Oct. 29, 1867	70, 152
Sewing-machine	G. W. Baker	Wilmington, Del	June 13, 1871	115, 925
Sewing-machine	G. W. Baker	Wilmington, Del	Apr. 9, 1872	125, 374
Sewing-machine	G. W. Baker	Cleveland, Ohio	July 30, 1872	130, 005
Sewing-machine	C. W. Baldwin	Boston, Mass	Apr. 28, 1863	38, 276
Sewing-machine	C. W. Baldwin	Boston, Mass	July 14, 1863	39, 207
Sewing-machine	L. Ballman	Boston, Mass	Feb. 19, 1861	31, 434
Sewing-machine	F. D. Ballou	Abington, Mass	Jan. 22, 1861	31, 203
Sewing-machine	F. D. Ballou	Abington, Mass	Oct. 3, 1865	50, 297

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Sewing-machine	H. Barber and D. C. and G. W. Van Blunt.	Horicon, Wis	Oct. 8, 1867	69,532
Sewing-machine	R. Barclay	Buffalo, N. Y	May 21, 1867	64,830
Sewing-machine	R. Barclay	Buffalo, N. Y	Aug. 25, 1868	81,328
Sewing-machine	M. M. Barnes	North Adams, Mass	Jan. 5, 1859	85,633
Sewing-machine	M. M. Barnes	North Adams, Mass	Aug. 16, 1870	106,307
Sewing-machine	W. T. Barnes	Buffalo, N. Y	June 29, 1858	20,688
Sewing-machine	W. T. Barnes	Buffalo, N. Y	Aug. 16, 1859	25,084
Sewing-machine	W. T. Barnes	Buffalo, N. Y	Oct. 25, 1859	25,876
Sewing-machine	O. D. Barrett	Cleveland, Ohio	Oct. 11, 1859	25,785
Sewing-machine	A. and N. Barth	Saint Louis, Mo	Nov. 7, 1871	120,614
Sewing-machine	A. Bartholf	New York, N. Y	Apr. 6, 1858	19,823
Sewing-machine	A. Bartholf	New York, N. Y	May 17, 1859	24,000
Sewing-machine	J. W. Bartlett	New York, N. Y	Jan. 31, 1865	46,064
Sewing-machine	J. W. Bartlett	New York, N. Y	Apr. 7, 1868	76,385
Sewing-machine	K. C. Barton	Philadelphia, Pa	Sept. 17, 1872	131,324
Sewing-machine	W. B. Bartram	Danbury, Conn	Jan. 1, 1867	60,669
Sewing-machine	W. B. Bartram	Danbury, Conn	June 14, 1870	104,247
Sewing-machine	W. B. Bartram	Danbury, Conn	Aug. 20, 1872	130,557
Sewing-machine	A. B. Bates	Baltimore, Md	May 23, 1871	115,151
Sewing-machine	E. E. Bean	Boston, Mass	May 8, 1860	28,144
Sewing-machine	E. E. Bean	Abington, Mass	Jan. 2, 1866	51,890
Sewing-machine	W. G. Beckwith	Newark, N. J	Apr. 18, 1871	113,724
Sewing-machine	W. G. Beckwith	Newark, N. J	May 21, 1872	126,921
Sewing-machine	W. G. Beckwith	Newark, N. J	Nov. 26, 1872	133,351
Sewing-machine	E. W. Beebe	Evansville, Wis	May 20, 1873	139,040
Sewing-machine	A. Beekman	New York, N. Y	Mar. 21, 1865	46,966
Sewing-machine	H. Behn	New York, N. Y	Aug. 25, 1857	18,071
Sewing-machine	H. Behn	New York, N. Y	Dec. 15, 1857	18,880
Sewing-machine	C. D. Belcher	Charleston, S. C	Mar. 3, 1857	16,710
Sewing-machine	T. Beltcher	London, England	July 26, 1870	105,631
Sewing-machine	C. P. Benedict	Hoboken, N. J	Nov. 3, 1868	83,596
Sewing-machine	E. Benjamin	Chicago, Ill	Apr. 1, 1873	137,284
Sewing-machine	J. Bennor	Philadelphia, Pa	Jan. 25, 1870	99,138
Sewing-machine	J. Bennor	Philadelphia, Pa	Aug. 9, 1870	106,249
Sewing-machine	J. Bennor	Philadelphia, Pa	Mar. 14, 1871	112,678
Sewing-machine	R. M. Berry	New York, N. Y	July 6, 1858	20,773
Sewing-machine	R. M. Berry	New York, N. Y	Dec. 7, 1858	22,225
Sewing-machine	C. E. Billings	Hartford, Conn	Apr. 6, 1869	88,603
Sewing-machine	A. Bingham	Newtonville, Mass	Jan. 28, 1873	135,194
Sewing-machine	H. H. Bishop	Bristol, Conn	Dec. 7, 1858	22,226
Sewing-machine	W. Black	Hagerstown, Ind	Feb. 1, 1870	99,283
Sewing-machine	L. R. Blake	South Abington, Mass	July 6, 1858	20,775
Sewing-machine	L. R. Blake	Boston, Mass	Feb. 11, 1868	74,289
Sewing-machine	H. A. Blanchard	Boston, Mass	Aug. 19, 1873	141,987
Sewing-machine	S. C. Blodgett	Georgetown, Mass	Dec. 20, 1853	10,354
Sewing-machine	S. C. Blodgett	Philadelphia, Pa	Aug. 5, 1856	15,469
Sewing-machine	S. C. Blodgett	Philadelphia, Pa	Sept. 7, 1858	21,465
Sewing-machine	S. C. Blodgett and J. A. Lerow	Georgetown and Boston, Mass.	Oct. 2, 1849	6,766
Sewing-machine	L. Bollman	Boston, Mass	Oct. 1, 1861	33,414
Sewing-machine	L. Bollman	Boston, Mass	Oct. 1, 1861	33,415
Sewing-machine	L. Bollman	Vienna, Austria	Nov. 17, 1863	40,657
Sewing-machine	J. Bond, jr	Philadelphia, Pa	May 22, 1855	12,939
Sewing-machine	J. Bond, jr	Philadelphia, Pa	Aug. 5, 1856	15,470
Sewing-machine	J. Bond, jr	Newark, N. J	Aug. 10, 1869	93,588
Sewing-machine	E. Booth	Troy, N. Y	Aug. 16, 1859	25,087
Sewing-machine	E. Booth	Troy, N. Y	July 3, 1860	28,959
Sewing-machine	C. F. Bosworth	Petersham, Mass	Apr. 20, 1858	19,979
Sewing-machine	C. F. Bosworth	New Haven, Conn	June 9, 1863	38,807
Sewing-machine	C. F. Bosworth	Milford, Conn	Sept. 17, 1867	68,835
Sewing-machine	C. F. Bosworth	Milford, Conn	Jan. 9, 1872	122,555
Sewing-machine	E. Bouscay, jr	Norwalk, Ohio	May 28, 1872	127,145
Sewing-machine	A. H. Boyd	Saco, Me	Jan. 19, 1858	19,171
Sewing-machine	A. H. Boyd	Saco, Me	Dec. 14, 1858	22,275
Sewing-machine	A. H. Boyd	Saco, Me	May 17, 1859	24,003
Sewing-machine	A. H. Boyd	Rockville, Mass	Apr. 2, 1861	31,864
Sewing-machine	A. H. Boyd	Medway, Mass	Jan. 30, 1866	52,374
Sewing-machine	E. S. Boynton	New York, N. Y	Mar. 15, 1859	23,285
Sewing-machine	T. W. Bracker	New York, N. Y	Apr. 4, 1871	113,391
Sewing-machine	J. G. Bradeen	Boston, Mass	Nov. 2, 1852	9,380
Sewing-machine	E. F. Bradford and L. L. Barber	Boston, Mass	July 4, 1865	48,511
Sewing-machine	N. P. Bradish	Jerseyville, Ill	Sept. 7, 1869	94,467
Sewing-machine	T. M. Bradley	Chesnut Level, Pa	Feb. 18, 1868	74,492
Sewing-machine	J. A. Bradshaw	Lowell, Mass	Nov. 28, 1848	5,942
Sewing-machine	E. Braundbeck	Hamburgh, Germany	June 11, 1872	127,675
Sewing-machine	C. E. Brown	East Randolph, Mass	Apr. 21, 1868	76,986
Sewing-machine	F. H. Brown	Chicago, Ill	June 28, 1864	43,285
Sewing-machine	F. H. Brown	Chicago, Ill	Apr. 26, 1870	102,366
Sewing-machine	F. H. Brown	Chicago, Ill	Oct. 1, 1872	131,735
Sewing-machine	J. H. Brown	New York, N. Y	Aug. 13, 1872	130,357
Sewing-machine	J. T. Bruen	Brooklyn, N. Y	Jan. 22, 1861	31,208
Sewing-machine	L. B. Bruen	New York, N. Y	Jan. 1, 1867	60,682
Sewing-machine	L. B. Bruen	New York, N. Y	Sept. 17, 1867	68,839
Sewing-machine	W. G. Budlong	Hartford, Conn	Nov. 1, 1859	25,946
Sewing-machine	J. S. Buell	Buffalo, N. Y	Sept. 13, 1859	25,381
Sewing-machine	J. S. Buell and W. T. Barnes	Buffalo, N. Y	Aug. 17, 1858	21,230
Sewing-machine	W. H. Buker	Johnstown, N. Y	Jan. 3, 1871	110,735
Sewing-machine	W. H. Buker	Johnstown, N. Y	July 25, 1871	117,380
Sewing-machine	J. W. Burnham	Hartford, Conn	Mar. 3, 1857	16,713
Sewing-machine	S. S. Burnet and W. Broderick	Chicago, Ill	Nov. 30, 1858	22,160
Sewing-machine	T. Burr	Battle Creek, Mich	Apr. 9, 1861	32,023
Sewing-machine	J. H. Butterworth	Dover, N. J	Aug. 24, 1869	93,962
Sewing-machine	W. Butterfield	Boston, Mass	July 4, 1864	11,240
Sewing-machine	W. Butterfield	Boston, Mass	July 9, 1872	128,830
Sewing-machine	A. R. and C. S. Byrkit	Fairfield, Iowa	Aug. 11, 1868	80,907
Sewing-machine	C. Cadwell	Waukegan, Ill	Jan. 24, 1865	45,972

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine	C. Cadwell	Waukegan, Ill	Nov. 19, 1867	71, 131
Sewing-machine	A. Capron	Attleborough, Mass	May 29, 1855	12, 984
Sewing-machine	P. S. Carhart	Collamer, N. Y	May 24, 1859	24, 098
Sewing-machine	L. Carpenter	Oswego, N. Y	July 27, 1858	20, 990
Sewing-machine	M. P. Carpenter	New York, N. Y	Oct. 1, 1872	131, 739
Sewing-machine	G. F. Case	New York, N. Y	Aug. 13, 1861	33, 029
Sewing-machine	C. Chabot	Philadelphia, Pa	May 12, 1868	77, 715
Sewing-machine	J. N. Chamberlin	Troy, N. Y	May 29, 1860	28, 452
Sewing-machine	R. Chandler	New York, N. Y	Dec. 10, 1872	133, 757
Sewing-machine	R. Chandler	New York, N. Y	May 27, 1873	139, 368
Sewing-machine	J. Chase	New York, N. Y	Dec. 1, 1857	18, 732
Sewing-machine	M. Chase	Haverhill, Mass	Apr. 4, 1871	113, 498
Sewing-machine	W. Chicker	Chelsea, Mass	Jan. 7, 1868	72, 974
Sewing-machine	J. Chilcott	Brooklyn, N. Y	Oct. 17, 1865	50, 451
Sewing-machine	J. Chilcott and J. Scrimgeour	Brooklyn, N. Y	May 15, 1855	12, 856
Sewing-machine	D. W. Clark	Bridgeport, Conn	Jan. 5, 1858	19, 015
Sewing-machine	D. W. Clark	Bridgeport, Conn	Jan. 12, 1858	19, 072
Sewing-machine	D. W. Clark	Bridgeport, Conn	Jan. 19, 1858	19, 129
Sewing-machine	D. W. Clark	Bridgeport, Conn	Feb. 23, 1858	19, 409
Sewing-machine	D. W. Clark	Bridgeport, Conn	Mar. 23, 1858	19, 732
Sewing-machine	D. W. Clark	Bridgeport, Conn	June 8, 1858	20, 481
Sewing-machine	D. W. Clark	Bridgeport, Conn	Aug. 31, 1858	21, 322
Sewing-machine	D. W. Clark	Bridgeport, Conn	May 3, 1859	23, 823
Sewing-machine	E. Clark	Windsor, Vt	Dec. 6, 1859	26, 336
Sewing-machine	E. E. Clark	Ann Arbor, Mich	Feb. 25, 1868	74, 751
Sewing-machine	P. J. Clever	Goliad, Tex	Nov. 16, 1869	96, 886
Sewing-machine	M. L. Clinton	Ithaca, N. Y	Sept. 7, 1858	21, 406
Sewing-machine	F. S. Coates	New York, N. Y	Mar. 23, 1858	19, 684
Sewing-machine	J. J. Cobb	Boston, Mass	June 7, 1870	103, 984
Sewing-machine	D. H. Coles	New York, N. Y	Apr. 29, 1873	138, 381
Sewing-machine	J. L. and D. H. Coles	New York, N. Y	Dec. 31, 1872	134, 463
Sewing-machine	S. Comfort, jr	Morrisville, Pa	June 29, 1858	20, 699
Sewing-machine	S. Comfort, jr	Morrisville, Pa	Nov. 9, 1858	22, 050
Sewing-machine	S. Comfort, jr	Morrisville, Pa	May 7, 1861	32, 239
Sewing-machine	J. S. Conant	Dracut, Mass	May 8, 1849	6, 437
Sewing-machine	J. S. Conant	New York, N. Y	Jan. 16, 1855	12, 233
Sewing-machine	W. G. Cook	New York, N. Y	June 16, 1863	38, 927
Sewing-machine	J. V. Coon	Elyria, Ohio	Aug. 2, 1870	106, 032
Sewing-machine	S. Coon	Ithaca, N. Y	May 9, 1854	10, 875
Sewing-machine	W. Cooney	Bridgeport, Conn	Apr. 26, 1870	102, 226
Sewing-machine	J. H. Cooper	Philadelphia, Pa	Mar. 8, 1859	23, 157
Sewing-machine	L. Cooper	Philadelphia, Pa	May 28, 1861	32, 415
Sewing-machine	G. H. Corliss	Greenwich, N. Y	Dec. 27, 1843	3, 389
Sewing-machine	E. Cornely	Washington, D. C	Jan. 28, 1868	73, 696
Sewing-machine	J. J. Couch	Brooklyn, N. Y	Mar. 20, 1860	27, 593
Sewing-machine	C. J. Cowperthwaite	Philadelphia, Pa	Oct. 9, 1855	13, 630
Sewing-machine	T. Crane	Fort Atkinson, Wis	July 25, 1871	117, 262
Sewing-machine	W. H. Crittendon	Grafton, Ohio	Mar. 29, 1859	23, 355
Sewing-machine	C. O. Crosby	New Haven, Conn	Oct. 12, 1858	21, 745
Sewing-machine	C. O. Crosby	New Haven, Conn	Oct. 25, 1859	25, 885
Sewing-machine	H. Crosby, jr	Watertown, Conn	May 9, 1854	10, 878
Sewing-machine	C. S. Cushman	Philadelphia, Pa	July 29, 1873	141, 332
Sewing-machine	C. S. Cushman	Philadelphia, Pa	Sept. 2, 1873	142, 442
Sewing-machine	J. D. Dale	Rochester, N. Y	May 26, 1863	38, 658
Sewing-machine	G. S. Darling and E. Howe, jr	Bridgeport and Fairfield, Conn.	Apr. 2, 1867	63, 483
Sewing-machine	H. R. David	New York, N. Y	Mar. 11, 1856	14, 393
Sewing-machine	J. A. Davis	New York, N. Y	Feb. 21, 1860	27, 208
Sewing-machine	J. A. Davis	Watertown, N. Y	July 27, 1869	93, 065
Sewing-machine	J. A. Davis	Watertown, N. Y	Aug. 31, 1869	94, 187
Sewing-machine	J. A. Davis	Watertown, N. Y	Jan. 25, 1870	99, 067
Sewing-machine	J. A. Davis	Brattleborough, Vt	May 20, 1873	138, 996
Sewing-machine	J. C. Day	Jersey City, N. J	Sept. 15, 1863	39, 892
Sewing-machine	F. E. Decker	Newark, N. J	Sept. 12, 1871	118, 913
Sewing-machine	A. C. F. Derocquigny, D. Gance, and L. Hanzo.	New York, N. Y	Mar. 25, 1862	34, 748
Sewing-machine	J. Dick	New York, N. Y	Jan. 10, 1860	26, 816
Sewing-machine	A. Destony	New York, N. Y	Feb. 18, 1862	34, 413
Sewing-machine	C. W. Dickinson	Newark, N. J	Dec. 6, 1859	26, 346
Sewing-machine	M. Dimock	Mansfield, Conn	June 1, 1858	20, 413
Sewing-machine	M. Dimock and N. Rixford	Mansfield Centre, Conn	Jan. 19, 1858	19, 135
Sewing-machine	A. S. Dinsmore	Boston, Mass	Apr. 4, 1871	113, 407
Sewing-machine	A. S. Dinsmore	Boston, Mass	Mar. 18, 1873	136, 976
Sewing-machine	C. Donovan	Abington, Mass	July 27, 1858	20, 994
Sewing-machine	H. W. Dopp	Buffalo, N. Y	Feb. 28, 1860	27, 279
Sewing-machine	A. Douglass	New York, N. Y	Jan. 12, 1858	19, 080
Sewing-machine	R. W. Drew	Abington, Mass	Nov. 5, 1861	33, 677
Sewing-machine	R. W. Drew	Abington, Mass	June 30, 1863	39, 092
Sewing-machine	J. C. Driggs	New York, N. Y	Jan. 15, 1867	61, 176
Sewing-machine	J. W. Dufour	Stratford, Conn	Mar. 7, 1871	112, 327
Sewing-machine	T. A. Dugdale	Richmond, Ind	June 29, 1858	20, 761
Sewing-machine	G. L. Dulaney	Mount Jackson, Va	Feb. 10, 1863	37, 617
Sewing-machine	G. L. Dulaney	Mechanicsburgh, Pa	July 3, 1866	56, 020
Sewing-machine	G. L. Dulaney	New York, N. Y	May 2, 1871	114, 424
Sewing-machine	C. F. Dunbar	Erie, Pa	Mar. 30, 1869	88, 282
Sewing-machine	H. Dunham, jr	Abington, Mass	Nov. 28, 1865	51, 157
Sewing-machine	C. A. Durgin	New York, N. Y	May 22, 1855	12, 902
Sewing-machine	J. E. Earle	Brooklyn, N. Y	Mar. 5, 1861	31, 642
Sewing-machine	T. Earle	Worcester, Mass	Jan. 22, 1861	31, 156
Sewing-machine	R. Eickemeyer	Yonkers, N. Y	Aug. 9, 1859	25, 078
Sewing-machine	J. V. D. Eldredge	Detroit, Mich	Aug. 1, 1871	117, 526
Sewing-machine	J. V. D. Eldredge	Detroit, Mich	Mar. 18, 1873	136, 823
Sewing-machine	W. St. G. Elliott	Morristown, N. J	Mar. 24, 1868	75, 884
Sewing-machine	S. B. Ellithorp	New York, N. Y	May 26, 1857	17, 366
Sewing-machine	G. Elmes	Chestertown, N. Y	Aug. 20, 1867	67, 965
Sewing-machine	J. P. Emswiler	Knightstown, Ind	Aug. 9, 1859	25, 002
Sewing-machine	A. Evans and C. Marsh	Bridgeport, Conn	Feb. 9, 1864	41, 572
Sewing-machine	G. A. Fairfield	Hartford, Conn	June 9, 1868	78, 729

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Sewing-machine	G. A. Fairfield	Hartford, Conn	Aug. 6, 1872	130, 288
Sewing-machine	G. A. Fairfield and J. B. Price	Hartford, Conn	Aug. 6, 1872	130, 116
Sewing-machine	J. Fanning	Brooklyn, N. Y	Dec. 31, 1867	72, 829
Sewing-machine	J. Fanning	Brooklyn, N. Y	July 16, 1872	129, 013
Sewing-machine	J. Fanning and E. Nugent	Brooklyn, N. Y	Dec. 26, 1871	122, 113
Sewing-machine	J. Fanning and E. Nugent	Brooklyn, N. Y	Dec. 9, 1873	145, 287
Sewing-machine	C. N. Farr	Philadelphia, Pa	Aug. 9, 1859	25, 004
Sewing-machine	O. Farrar	Chicago, Ill	Feb. 25, 1873	136, 314
Sewing-machine	M. J. Ferren	Stoneham, Mass	June 15, 1869	91, 318
Sewing-machine	G. Fetter	Philadelphia, Pa	Jan. 5, 1858	19, 059
Sewing-machine	G. Fetter	Philadelphia, Pa	Oct. 23, 1860	30, 518
Sewing-machine	M. Finkle	New York, N. Y	Jan. 13, 1857	16, 382
Sewing-machine	M. Finkle	New York, N. Y	Nov. 11, 1862	36, 899
Sewing-machine	J. First	New York, N. Y	Dec. 7, 1858	22, 264
Sewing-machine	J. First	New York, N. Y	July 3, 1860	29, 035
Sewing-machine	W. Fiske	Lowell, Mass	Dec. 17, 1867	72, 180
Sewing-machine	R. B. Fitts and M. D. Whipple	Charlestown, Mass	Aug. 24, 1858	21, 250
Sewing-machine	J. L. Follett	Troy, N. Y	Feb. 4, 1873	135, 536
Sewing-machine	J. G. Folsom	Winchendon, Mass	Nov. 29, 1864	45, 236
Sewing-machine	E. A. Forbush	Ashland, Mass	Feb. 20, 1855	12, 402
Sewing-machine	D. Forrest	Eastport, Me	Jan. 6, 1868	73, 178
Sewing-machine	W. A. Fosket and E. Savage	Meriden, Conn	Feb. 25, 1859	22, 719
Sewing-machine	W. A. Fosket and E. Savage	Meriden, Conn	Nov. 1, 1859	25, 963
Sewing-machine	G. H. Fox and J. Hubbard	Boston, Mass	Aug. 11, 1868	80, 861
Sewing-machine	E. W. French	South Scituate, Mass	Jan. 28, 1868	73, 709
Sewing-machine	S. French	Orange, Mass	July 28, 1868	80, 345
Sewing-machine	J. L. Frey	New York, N. Y	Sept. 5, 1865	49, 745
Sewing-machine	H. W. Fuller	Brooklyn, N. Y	Sept. 25, 1866	58, 245
Sewing-machine	W. M. Fuller	Chicago, Ill	June 4, 1861	32, 496
Sewing-machine	C. R. Gardner	Detroit, Mich	Sept. 9, 1856	15, 695
Sewing-machine	T. Garrick	Providence, R. I	Jan. 31, 1871	111, 447
Sewing-machine	J. A. Geer	Hadlyme, Conn	Jan. 16, 1866	52, 039
Sewing-machine	J. Geiermann	Albany, N. Y	June 19, 1860	28, 746
Sewing-machine	M. F. Geraghty	Jersey City, N. J	May 24, 1870	103, 444
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Dec. 16, 1856	16, 234
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Jan. 20, 1857	16, 434
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Mar. 31, 1857	16, 914
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	June 2, 1857	17, 427
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Aug. 10, 1858	21, 129
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Oct. 12, 1858	21, 751
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	Feb. 21, 1860	27, 214
Sewing-machine	J. E. A. Gibbs	Mill Point, Va	June 26, 1860	26, 851
Sewing-machine	C. W. Godown	Lambertville, N. J	Sept. 27, 1870	107, 677
Sewing-machine	E. A. Goodes	Philadelphia, Pa	Mar. 11, 1873	136, 718
Sewing-machine	E. A. Goodes	Philadelphia, Pa	Aug. 19, 1873	142, 013
Sewing-machine	E. A. Goodes and E. L. Miller	Philadelphia, Pa	July 26, 1859	24, 863
Sewing-machine	H. H. Goodwyn	New Orleans, La	June 21, 1859	24, 455
Sewing-machine	J. Gordon and W. E. Kinert	Bluffton, Ind	Apr. 16, 1872	125, 807
Sewing-machine	J. Gray	Boston, Mass	Feb. 3, 1857	16, 566
Sewing-machine	J. Gray	Medford, Mass	Mar. 2, 1858	19, 532
Sewing-machine	J. Gray	Boston, Mass	Mar. 16, 1858	19, 665
Sewing-machine	J. Gray	Medford, Mass	May 17, 1859	24, 022
Sewing-machine	J. Gray	New York, N. Y	Oct. 5, 1869	95, 581
Sewing-machine	J. J. Greenough	Washington, D. C	Feb. 21, 1842	2, 466
Sewing-machine	L. Griswold	Brooklyn, N. Y	May 11, 1869	89, 987
Sewing-machine	M. C. Gritzner	Washington, D. C	Sept. 20, 1864	44, 301
Sewing-machine	M. C. Gritzner	Washington, D. C	Oct. 18, 1864	44, 720
Sewing-machine	F. W. Grote	New York, N. Y	May 5, 1863	38, 447
Sewing-machine	W. Grout	Worcester, Mass	July 5, 1859	24, 629
Sewing-machine	W. O. Grover	Boston, Mass	Oct. 5, 1858	21, 669
Sewing-machine	W. O. Grover	Boston, Mass	Oct. 5, 1858	21, 670
Sewing-machine	W. O. Grover	Boston, Mass	Oct. 5, 1858	21, 671
Sewing-machine	W. O. Grover	Boston, Mass	Oct. 12, 1858	21, 752
Sewing-machine	W. O. Grover	Boston, Mass	Nov. 26, 1861	33, 778
Sewing-machine	W. O. Grover	Boston, Mass	Dec. 17, 1861	33, 940
Sewing-machine	W. O. Grover	West Roxbury, Mass	Sept. 9, 1862	36, 405
Sewing-machine	W. O. Grover	Boston, Mass	Jan. 27, 1863	37, 502
Sewing-machine	W. O. Grover	West Roxbury, Mass	Apr. 12, 1864	42, 284
Sewing-machine	W. O. Grover	West Roxbury, Mass	Apr. 12, 1864	42, 285
Sewing-machine	W. O. Grover	West Roxbury, Mass	May 3, 1864	42, 576
Sewing-machine	W. O. Grover	Boston, Mass	Feb. 22, 1870	100, 139
Sewing-machine	W. O. Grover	Boston, Mass	Aug. 29, 1871	118, 450
Sewing-machine	W. O. Grover and W. E. Baker	Boston and Roxbury, Mass	Feb. 11, 1851	7, 931
Sewing-machine	W. O. Grover and W. E. Baker	Boston and Roxbury, Mass	June 22, 1852	9, 053
Sewing-machine	W. O. Grover, W. E. Baker, and O. B. Potter.	Boston, Mass., and New York, N. Y.	Oct. 11, 1859	25, 730
Sewing-machine	W. S. Guinness	Mount Vernon, N. Y	Mar. 15, 1864	41, 916
Sewing-machine	W. S. Guinness	London, England	Apr. 20, 1869	89, 040
Sewing-machine	C. Gullmann	Paterson, N. J	June 11, 1872	127, 867
Sewing-machine	C. Gullmann	Paterson, N. J	Feb. 18, 1873	136, 057
Sewing-machine	J. Gutmann	Berlin, Prussia	May 25, 1869	90, 528
Sewing-machine	H. W. Hadley	Winchendon, Mass	Aug. 13, 1867	67, 752
Sewing-machine	A. H. Hagner	Chicago, Ill	Aug. 20, 1872	130, 773
Sewing-machine	F. E. Hahn	Philadelphia, Pa	Sept. 12, 1871	118, 928
Sewing-machine	A. W. Halbert	Taylor, N. Y	Mar. 31, 1868	76, 076
Sewing-machine	C. Hale	Bangor, Me	Sept. 26, 1865	50, 111
Sewing-machine	L. Hall	Boston, Mass	July 5, 1864	43, 404
Sewing-machine	T. Hall	Bergen, N. J	Nov. 27, 1866	59, 907
Sewing-machine	T. Hall	Florence, Mass	Feb. 20, 1872	123, 898
Sewing-machine	T. Hall	Northampton, Mass	July 16, 1872	129, 406
Sewing-machine	W. Hall	North Adams, Mass	July 26, 1859	24, 870
Sewing-machine	W. S. Hall	Milton, Mass	Aug. 5, 1862	36, 084
Sewing-machine	T. J. Halligan	New York, N. Y	June 2, 1863	38, 746
Sewing-machine	T. J. Halligan	New York, N. Y	Aug. 8, 1865	49, 262
Sewing-machine	W. H. Halsey and M. Fitzgibbons.	Hoboken, N. J., and New York, N. Y.	Aug. 28, 1866	57, 500
Sewing-machine	A. Hancock	New York, N. Y	Aug. 10, 1869	93, 615
Sewing-machine	H. J. Hancock	New York, N. Y	Aug. 6, 1867	67, 535

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Sewing-machine	H. J. Hancock	New York, N. Y	Oct. 27, 1868	83, 492
Sewing-machine	J. Hanlon	Newark, N. J	Feb. 27, 1866	52, 847
Sewing-machine	W. H. Hanna	Petaluma, Cal	July 23, 1872	129, 818
Sewing-machine	J. W. Hardie	New York, N. Y	Sept. 6, 1859	25, 331
Sewing-machine	J. W. Hardie	New York, N. Y	Dec. 4, 1860	30, 854
Sewing-machine	H. W. Harkness	Bristol, Conn	Nov. 23, 1858	22, 143
Sewing-machine	C. F. Harlow	Boston, Mass	Sept. 6, 1870	107, 041
Sewing-machine	T. J. Harper	Atlanta, Ga	Oct. 4, 1870	108, 020
Sewing-machine	T. J. Harper	Atlanta, Ga	Nov. 14, 1871	120, 815
Sewing-machine	N. W. Harrington	Jamestown, N. Y	Nov. 17, 1857	18, 639
Sewing-machine	D. Harris	Boston, Mass	Nov. 14, 1854	11, 934
Sewing-machine	D. Harris	Boston, Mass	June 9, 1857	17, 508
Sewing-machine	D. Harris	Boston, Mass	June 16, 1857	17, 571
Sewing-machine	D. Harris	Boston, Mass	Jan. 19, 1858	19, 141
Sewing-machine	D. Harris	Boston, Mass	Oct. 5, 1858	21, 672
Sewing-machine	J. Harrison, jr	Milwaukee, Wis	Apr. 11, 1854	10, 763
Sewing-machine	J. Harrison, jr	Milwaukee, Wis	July 31, 1855	13, 353
Sewing-machine	J. Harrison, jr	Milwaukee, Wis	Oct. 2, 1855	13, 616
Sewing-machine	J. Harrison, jr	New York, N. Y	Aug. 9, 1859	25, 013
Sewing-machine	J. Harrison, jr	New York, N. Y	Aug. 30, 1859	25, 262
Sewing-machine	J. Harrison, jr	New York, N. Y	Dec. 27, 1859	26, 586
Sewing-machine	W. Hart	Sand Lake, N. Y	Oct. 17, 1865	50, 469
Sewing-machine	D. Haskell	Georgetown, Mass	Aug. 28, 1860	29, 785
Sewing-machine	M. C. Hawkins	Edinborough, Pa	Mar. 23, 1869	88, 039
Sewing machine	M. C. Hawkins	Edinborough, Pa	Sept. 21, 1869	95, 019
Sewing-machine	H. W. Hayden	Waterbury, Conn	Aug. 2, 1859	24, 937
Sewing-machine	J. Hayes	London, England	May 22, 1866	55, 029
Sewing-machine	H. C. Heckendorn	Reading, Pa	Aug. 17, 1869	93, 881
Sewing-machine	L. Heery	Hinsdale, Mass	Sept. 14, 1869	94, 740
Sewing-machine	W. Heidenthal	Port Jervis, N. Y	June 11, 1872	127, 765
Sewing-machine	A. Helwig	London, England	Jan. 17, 1871	111, 059
Sewing-machine	T. Henderson and W. G. Wright.	Hamilton, Canada	May 27, 1873	139, 245
Sewing-machine	J. E. Hendrick	Brooklyn, N. Y	Mar. 16, 1858	19, 660
Sewing-machine	J. E. Hendrick	Bristol, Conn	Oct. 5, 1858	21, 722
Sewing-machine	E. M. Hendrickson	Brooklyn, N. Y	Feb. 4, 1862	34, 330
Sewing-machine	H. P. Henricsen	Cophenhagen, Denmark	June 21, 1870	104, 590
Sewing-machine	G. Hensel	New York, N. Y	July 12, 1859	24, 737
Sewing-machine	A. C. Herron	Remsen, N. Y	Aug. 4, 1857	17, 930
Sewing-machine	A. C. Herron	Remsen, N. Y	June 15, 1858	20, 557
Sewing-machine	F. Heyer	Richmond, Va	Nov. 27, 1860	30, 731
Sewing-machine	W. D. Heyer	New Orleans, La	Nov. 17, 1863	40, 622
Sewing-machine	W. C. Hicks	Boston, Mass	Apr. 12, 1859	23, 577
Sewing-machine	W. C. Hicks	Boston, Mass	Nov. 8, 1859	26, 035
Sewing-machine	W. C. Hicks	Boston, Mass	July 24, 1860	29, 268
Sewing-machine	W. C. Hicks	Boston, Mass	Mar. 26, 1861	31, 805
Sewing-machine	W. C. Hicks	Boston, Mass	Apr. 16, 1861	32, 064
Sewing-machine	W. S. Hill	Manchester, N. H	Aug. 27, 1867	68, 196
Sewing-machine	J. L. Hinds	Watertown, N. Y	Sept. 10, 1872	131, 166
Sewing-machine	J. Hinkley	Huron, Ohio	Sept. 21, 1858	21, 592
Sewing-machine	J. Hinkley	Clarksfield, Ohio	Aug. 23, 1859	25, 231
Sewing-machine	W. Hirons and J. D. Moore	Grinnell, Iowa	Aug. 12, 1873	141, 791
Sewing-machine	J. I. Hirschbühl	Louisville, Ky	Mar. 29, 1870	101, 265
Sewing-machine	A. C. Hobbs	Bridgeport, Conn	Aug. 6, 1867	67, 544
Sewing-machine	C. Hodgkins	Boston, Mass	Nov. 2, 1852	9, 365
Sewing-machine	C. Hodgkins	Boston, Mass	Mar. 7, 1854	10, 622
Sewing-machine	C. Hodgkins	Boston, Mass	May 9, 1854	10, 879
Sewing-machine	C. Hodgkins	Marlborough, N. H	Aug. 20, 1861	33, 185
Sewing-machine	C. Hodgkins	Marlborough, N. H	Oct. 8, 1867	69, 666
Sewing-machine	G. W. Hoffman	Hick's Mills, Ill	Aug. 24, 1869	94, 112
Sewing-machine	L. and S. B. Holden	Woburn, Mass	Oct. 6, 1863	40, 212
Sewing-machine	J. G. Hollowell	Canandaigua, N. Y	Feb. 10, 1863	37, 624
Sewing-machine	B. Holly	Rockport, N. Y	May 8, 1860	28, 176
Sewing-machine	A. H. Hook	New York, N. Y	July 27, 1858	21, 049
Sewing-machine	A. H. Hook	New York, N. Y	Nov. 30, 1858	22, 179
Sewing-machine	A. H. Hook	New York, N. Y	May 17, 1859	24, 027
Sewing-machine	A. H. Hook	New York, N. Y	Feb. 5, 1861	31, 351
Sewing-machine	A. D. Hopkins	San Francisco, Cal	Oct. 8, 1872	132, 081
Sewing-machine	G. H. and B. H. Horn	Brooklyn, N. Y	Feb. 13, 1855	12, 389
Sewing-machine	W. M. Horne	Boston, Mass	May 17, 1864	42, 770
Sewing-machine	H. A. House	Bridgeport, Conn	Jan. 11, 1870	98, 771
Sewing-machine	J. A. House	Bridgeport, Conn	Mar. 5, 1872	124, 360
Sewing-machine	J. A. House	Bridgeport, Conn	Dec. 17, 1872	133, 939
Sewing-machine	J. A. House	Bridgeport, Conn	Dec 16, 1873	145, 570
Sewing-machine	J. A. and H. A. House	Brooklyn, N. Y	Nov. 11, 1862	36, 932
Sewing-machine	J. A. and H. A. House	Brooklyn, N. Y	Aug. 4, 1863	39, 442
Sewing-machine	J. A. and H. A. House	Brooklyn, N. Y	Aug. 4, 1863	39, 443
Sewing-machine	J. A. and H. A. House	Brooklyn, N. Y	Aug. 4, 1863	39, 444
Sewing-machine	J. A. and H. A. House	Brooklyn, N. Y	Aug. 4, 1863	39, 445
Sewing-machine	J. A. and H. A. House	Bridgeport, Conn	May 2, 1871	114, 294
Sewing-machine	C. W. Howard	Philadelphia, Pa	Apr. 23, 1872	126, 056
Sewing machine	C. W. Howard	Philadelphia, Pa	Apr. 23, 1872	126, 057
Sewing-machine	A. B. Howe	New York, N. Y	Mar. 17, 1863	37, 913
Sewing-machine	E. Howe, jr	Cambridge, Mass	Sept. 10, 1864	4, 750
Sewing-machine	E. Howe, jr	Brooklyn, N. Y	Jan. 20, 1857	16, 436
Sewing-machine	E. Howe, jr	Brooklyn, N. Y	Aug. 24, 1858	21, 258
Sewing-machine	E. Howe, jr., and W. R. Bliss	Cambridge and Boston, Mass.	June 30, 1857	17, 679
Sewing-machine	E. Howell	Ashtabula, Ohio	June 11, 1861	32, 517
Sewing-machine	J. W. Hewlett	Greensborough, N. C	Mar. 5, 1861	31, 601
Sewing-machine	G. W. Hubbard	West Meriden, Conn	Dec. 22, 1857	18, 904
Sewing-machine	G. W. Hubbard	Meriden, Conn	Sept. 14, 1858	21, 537
Sewing-machine	G. W. Hubbard	West Meriden, Conn	Oct. 19, 1858	21, 833
Sewing-machine	H. Hudson	Three Springs, Pa	Nov. 1, 1859	25, 968
Sewing-machine	S. Huffman	Richmond, Va	May 22, 1860	28, 371
Sewing-machine	D. W. G. Humphrey	Chelsea, Mass	Oct. 7, 1862	36, 617
Sewing-machine	W. Hunt	New York, N. Y	June 27, 1854	11, 161
Sewing-machine	G. W. Hunter	Washington, D. C	Sept. 3, 1872	131, 061

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Sewing-machine	G. W. Hunter	Washington, D. C	Sept. 3, 1872	131,062
Sewing-machine	G. W. Hunter	Washington, D. C	Oct. 21, 1873	143,766
Sewing-machine	A. J. Hurtu and V. J. Hautin	Paris, France	Dec. 21, 1869	98,064
Sewing-machine	J. L. Hyde	New York, N. Y	Mar. 5, 1861	31,604
Sewing-machine	A. B. Irving	Terre Haute, Ind	May 31, 1859	24,216
Sewing-machine	C. Irwin	Buffalo, N. Y	Jan. 22, 1861	31,171
Sewing-machine	T. D. Jackson	New York, N. Y	Aug. 17, 1858	21,234
Sewing-machine	T. D. Jackson	New York, N. Y	Aug. 24, 1858	21,299
Sewing-machine	E. A. Jenks and J. Underwood	Lowell, Mass	Sept. 29, 1857	18,285
Sewing-machine	G. L. Jencks	Providence, R. I	Aug. 2, 1859	24,973
Sewing-machine	G. L. Jencks	Florence, Mass	Feb. 18, 1868	74,694
Sewing-machine	L. Jennings	New York, N. Y	Dec. 16, 1856	16,237
Sewing-machine	A. F. Johnson	Boston, Mass	Aug. 26, 1856	15,635
Sewing-machine	A. F. Johnson	Boston, Mass	Jan. 13, 1857	16,387
Sewing-machine	A. F. Johnson	Boston, Mass	June 22, 1858	20,686
Sewing-machine	A. F. Johnson	Boston, Mass	Jan. 24, 1860	26,648
Sewing-machine	A. F. Johnson	Boston, Mass	Oct. 23, 1860	30,478
Sewing-machine	A. F. Johnson	Boston, Mass	Apr. 12, 1864	42,292
Sewing-machine	W. H. Johnson	Granville, Mass	Feb. 22, 1853	9,592
Sewing-machine	W. H. Johnson	Granville, Mass	Mar. 7, 1854	10,597
Sewing-machine	A. F. Johnson and I. E. Bartlett	Boston and Stoneham, Mass	Jan. 22, 1861	31,209
Sewing-machine	A. F. Johnson and F. A. Houghton.	Boston, Mass	Dec. 23, 1856	16,315
Sewing-machine	A. H. Jones	Fallsington, Pa	Mar. 20, 1860	27,546
Sewing-machine	J. T. Jones	New York, N. Y	Jan. 26, 1869	86,163
Sewing-machine	J. T. Jones	New York, N. Y	Jan. 26, 1869	86,164
Sewing-machine	J. T. Jones	New York, N. Y	May 25, 1869	90,552
Sewing-machine	J. T. Jones	Ilion, N. Y	Aug. 1, 1871	117,640
Sewing-machine	J. T. Jones	Ilion, N. Y	Feb. 25, 1873	136,324
Sewing-machine	N. Jones	La Porte, Ind	Feb. 3, 1863	37,580
Sewing-machine	W. Jones and P. Haughian	Brooklyn and New York, N. Y.	May 14, 1861	32,297
Sewing-machine	G. Juengst	New York, N. Y	Feb. 14, 1860	27,132
Sewing-machine	G. Juengst	New York, N. Y	Mar. 12, 1861	31,691
Sewing-machine	J. Keats and W. S. Clark	Street, England	Nov. 14, 1865	50,993
Sewing-machine	T. K. Keith	Haverhill, Mass	June 17, 1873	139,962
Sewing-machine	D. Kelsey	Harper's Ferry, Va	Aug. 2, 1859	24,939
Sewing-machine	G. F. Kendall	Fitchburgh, Mass	Apr. 12, 1870	101,887
Sewing-machine	M. H. Kernaul	Berlin, Prussia	Dec. 5, 1871	121,460
Sewing-machine	M. H. Kernaul	Berlin, Prussia	Apr. 22, 1873	138,163
Sewing-machine	O. C. Kerr	Philadelphia, Pa	May 12, 1868	77,889
Sewing-machine	E. A. Kimball	Abington, Mass	Feb. 14, 1871	111,752
Sewing-machine	F. Koch and R. Brass	Brooklyn, N. Y	May 13, 1873	138,898
Sewing-machine	F. Koch and R. Brass	Brooklyn, N. Y	Dec. 2, 1873	145,215
Sewing-machine	A. Komp	New York, N. Y	Oct. 4, 1870	108,033
Sewing-machine	J. L. Lake	Brooklyn, N. Y	Aug. 30, 1870	106,943
Sewing-machine	I. W. Lamb	Northville, Mich	Nov. 29, 1870	109,632
Sewing-machine	J. Lamb	Jeffersonville, N. Y	July 2, 1872	128,640
Sewing-machine	T. Lamb	Philadelphia, Pa	Dec. 28, 1869	98,390
Sewing-machine	T. Lamb	Philadelphia, Pa	Mar. 22, 1870	101,137
Sewing-machine	T. Lamb	Philadelphia, Pa	Sept. 5, 1871	118,728
Sewing-machine	T. Lamb and J. Allen	Philadelphia, Pa	Aug. 15, 1865	49,421
Sewing-machine	H. P. Lamson	Lowell, Mass	July 7, 1868	79,579
Sewing-machine	W. R. Landfear	Manchester, Conn	Dec. 23, 1856	16,281
Sewing-machine	W. R. Landfear	Hartford, Conn	Nov. 22, 1870	109,427
Sewing-machine	L. W. Langdon	Rochester, N. Y	Oct. 30, 1855	13,727
Sewing-machine	L. W. Langdon	Northampton, Mass	Mar. 20, 1860	27,594
Sewing-machine	L. W. Langdon	Northampton, Mass	Jan. 22, 1861	31,211
Sewing-machine	L. W. Langdon	Northampton, Mass	July 14, 1863	39,256
Sewing-machine	C. E. Langmaid	Stoneham, Mass	Nov. 12, 1872	132,968
Sewing-machine	S. Larkin	Bridgeport, Conn	Aug. 25, 1857	18,072
Sewing-machine	E. T. Lathbury	Buffalo, N. Y	July 7, 1857	17,744
Sewing-machine	L. W. Lathrop	Philadelphia, Pa	Aug. 30, 1864	44,003
Sewing-machine	L. W. Lathrop	Nyack, N. Y	Dec. 14, 1869	97,935
Sewing-machine	L. W. Lathrop	Poughkeepsie, N. Y	Dec. 20, 1870	110,250
Sewing-machine	L. W. Lathrop	Philadelphia, Pa	May 20, 1873	139,067
Sewing-machine	L. W. Lathrop and W. P. De Sanno.	Philadelphia, Pa	Oct. 27, 1863	40,446
Sewing-machine	L. W. Lathrop and L. B. Justice	Philadelphia, Pa	Mar. 5, 1861	31,644
Sewing-machine	J. D. Lawlor	Montreal, Canada	Dec. 24, 1872	134,209
Sewing-machine	R. Sawyer and J. C. Gasten	Pittsburgh, Pa	Mar. 22, 1870	101,140
Sewing-machine	W. H. Lazelle	New York, N. Y	Dec. 8, 1857	18,817
Sewing-machine	W. H. Lazelle	New York, N. Y	Dec 22, 1857	18,915
Sewing-machine	W. M. Leavens	Philadelphia, Pa	May 22, 1866	54,926
Sewing-machine	R. Leavitt	Melrose, Mass	Nov. 13, 1860	30,634
Sewing-machine	G. A. Leighton	Boston, Mass	July 11, 1854	11,284
Sewing-machine	J. H. Lester	Brooklyn, N. Y	June 13, 1871	115,872
Sewing-machine	C. Lewis and J. Soothill	Howard, Ill	May 13, 1873	138,902
Sewing-machine	A. Leyden	Atlanta, Ga	Jan. 3, 1860	26,6[illegible]7
Sewing-machine	A. Leyden	Atlanta, Ga	June 26, 1860	28,877
Sewing-machine	A. Leyden	Atlanta, Ga	Aug. 14, 1866	57,157
Sewing-machine	J. B. Lincoln and C. F. Clough	Providence, R. I	July 8, 1873	140,584
Sewing-machine	W. S. Lincoln and W. A. Rayer	Boston, Mass	Mar. 18, 1873	137,007
Sewing-machine	G. Little	New York, N. Y	May 15, 1860	28,287
Sewing-machine	H. W. Little	Muncie, Ind	May 9, 1871	114,573
Sewing-machine	L. Lyon	New York, N. Y	Apr. 27, 1869	89,489
Sewing-machine	L. Lyon	New York, N. Y	Nov. 9, 1869	96,713
Sewing-machine	W. Lyon	Newark, N. J	Dec. 12, 1854	12,066
Sewing-machine	T. A. Macaulay	Florence, Mass	Feb. 9, 1869	86,848
Sewing-machine	T. A. Macaulay	Northampton, Mass	Dec. 6, 1870	109,828
Sewing-machine	T. A. Macaulay	New York, N. Y	Jan. 24, 1871	111,129
Sewing-machine	W. A. Mack	Seville, Ohio	May 19, 1863	38,592
Sewing-machine	W. A. Mack	Cleveland, Ohio	Nov. 15, 1864	45,059
Sewing-machine	W. A. Mack	Norwalk, Ohio	Jan. 31, 1871	111,359
Sewing-machine	W. A. Mack	Norwalk, Ohio	Feb. 6, 1872	123,493
Sewing-machine	J. Mackenzie	Cleveland, Ohio	Dec. 7, 1858	22,255
Sewing-machine	D. Macpherson	Edinburgh, North Britain	June 29, 1869	92,068
Sewing-machine	G. H. Mallary	New York, N. Y	Apr. 2, 1861	31,897

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Sewing-machine	C. G. Mann	Walpole, Mass	Oct. 22, 1861	33,556
Sewing-machine	I. Manning	Philadelphia, Pa	July 30, 1872	129,974
Sewing-machine	I. Manning	Philadelphia, Pa	Dec. 16, 1873	145,515
Sewing-machine	F. E. Marble	New York, N. Y	Oct. 8, 1861	33,439
Sewing-machine	C. Marsh	New Milford, Conn	Feb. 15, 1859	22,961
Sewing-machine	J. W. Marsh	Oxford, Mass	Oct. 27, 1857	18,511
Sewing-machine	T. J. McArthur	New York, N. Y	Apr. 27, 1869	89,417
Sewing-machine	J. McCloskey	New York, N. Y	June 20, 1865	48,343
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	June 14, 1859	24,[illegible]95
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	Nov. 22, 1859	26,234
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	May 1, 1860	28,097
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	July 3, 1860	28,993
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	Aug. 19, 1862	36,256
Sewing-machine	J. S. McCurdy	Brooklyn, N. Y	June 16, 1863	38,931
Sewing-machine	J. S. McCurdy	Bridgeport, Conn	Jan. 5, 1864	41,164
Sewing-machine	J. S. McCurdy	Bridgeport, Conn	Feb. 7, 1865	46,303
Sewing-machine	J. S. McCurdy	Bridgeport, Conn	Apr. 3, 1866	53,743
Sewing-machine	J. S. McCurdy	New York, N. Y	Feb. 12, 1867	62,050
Sewing-machine	G. McKay and L. R. Blake	Boston and Quincy, Mass	Dec. 13, 1864	45,429
Sewing-machine	G. McKay and R. H. Mathies	Boston, Mass	Aug. 12, 1862	36,163
Sewing-machine	J. N. McLean	Philadelphia, Pa	Mar. 30, 1869	88,499
Sewing-machine	J. N. McLean	Philadelphia, Pa	Aug. 2, 1870	105,961
Sewing-machine	J. N. McLean and J. Bennor	Philadelphia, Pa	Jan. 21, 1873	135,000
Sewing-machine	W. S. Mead	New York, N. Y	Mar. 29, 1870	101,292
Sewing-machine	T. L. Melone	Granville, Ohio	Sept. 20, 1864	44,332
Sewing-machine	T. L. Melone	Granville, Ohio	May 8, 1866	54,577
Sewing-machine	T. L. Melone	Mount Gilead, Ohio	Oct. 5, 1869	95,499
Sewing-machine	T. L. Melone	Mount Gilead, Ohio	June 28, 1870	104,871
Sewing-machine	T. L. Melone	Mount Gilead, Ohio	July 15, 1873	140,787
Sewing-machine	L. A. Merriam	Middletown, N. Y	Nov. 21, 1871	121,186
Sewing-machine	N. Meyers	Buffalo, N. Y	Aug. 18, 1868	81,191
Sewing-machine	N. Meyers	Buffalo, N. Y	Oct. 27, 1868	83,398
Sewing-machine	N. Meyers	Buffalo, N. Y	Dec. 15, 1868	84,939
Sewing-machine	N. Meyers	Buffalo, N. Y	Feb. 15, 1870	99,783
Sewing-machine	N. Meyers	Buffalo, N. Y	Aug. 8, 1871	117,797
Sewing-machine	W. Millar	Chicago, Ill	Oct. 12, 1858	21,800
Sewing-machine	W. Millar	Chicago, Ill	May 17, 1859	24,081
Sewing-machine	W. Millar	Chicago, Ill	Apr. 10, 1860	27,867
Sewing-machine	W. Millar	Chicago, Ill	Feb. 9, 1864	41,327
Sewing-machine	C. Miller	Saint Louis, Mo	July 20, 1852	9,139
Sewing-machine	C. Miller	Saint Louis, Mo	Mar. 7, 1854	10,609
Sewing-machine	C. Miller	New York, N. Y	Dec. 13, 1859	26,462
Sewing-machine	S. W. Miller	Dundee, N. Y	June 8, 1869	91,149
Sewing-machine	W. Miller	Cambridge, N. Y	June 29, 1858	20,763
Sewing-machine	W. H. Miller	Bridgeport, Conn	July 16, 1872	129,487
Sewing-machine	D. Mills	New York, N. Y	Aug. 17, 1869	93,731
Sewing-machine	G. W. Mitchell	Jackson, Tenn	Dec. 6, 1859	26,366
Sewing-machine	J. P. Molliere	Lyons, Mass	July 3, 1855	13,178
Sewing-machine	A. Moltz	New York, N. Y	May 17, 1870	103,070
Sewing-machine	A. Moltz	New York, N. Y	Aug. 29, 1871	118,631
Sewing-machine	J. S. Moody	Cincinnati, Ohio	June 7, 1859	24,324
Sewing-machine	J. H. Mooney	San Francisco, Cal	Dec. 24, 1872	134,154
Sewing-machine	C. Moore	Buffalo, N. Y	July 27, 1858	21,015
Sewing-machine	C. Moore	Buffalo, N. Y	Dec. 8, 1857	18,823
Sewing-machine	J. C. Moore	Madison, Ind	Feb. 18, 1873	135,930
Sewing-machine	C. Morey and J. B. Johnson	Boston, Mass	Feb. 6, 1849	6,099
Sewing-machine	J. W. Morton	Plainfield, N. J	July 26, 1859	24,881
Sewing-machine	J. Moulson	Philadelphia, Pa	Mar. 5, 1861	31,646
Sewing-machine	H. Mueller	New York, N. Y	July 3, 1860	28,996
Sewing-machine	W. Muir	Montreal, Canada	Apr. 20, 1869	89,004
Sewing-machine	J. Neale and P. Beck	Bridgeport, Conn	June 8, 1869	90,934
Sewing-machine	C. Necker	Berlin, Prussia	July 18, 1871	117,131
Sewing-machine	W. H. Nettleton and C. Raymond.	Bristol, Conn	Apr. 14, 1857	17,049
Sewing-machine	W. H. Nettleton and C. Raymond.	Bristol, Conn	Oct. 6, 1857	18,350
Sewing-machine	T. Newlove	Chicago, Ill	Apr. 3, 1860	27,761
Sewing-machine	A. N. Newton	Richmond, Ind	Feb. 23, 1858	19,439
Sewing-machine	J. O'Neil	Xenia, Ohio	Jan. 22, 1856	14,141
Sewing-machine	J. O'Neil	New York, N. Y	Apr. 8, 1873	137,618
Sewing-machine	J. B. Nichols	Lynn, Mass	Jan. 30, 1855	12,322
Sewing-machine	F. Niville	Paris, France	Feb. 5, 1861	31,325
Sewing-machine	B. F. Norton	Manchester, N. H	July 9, 1861	32,782
Sewing-machine	J. P. Noyes	Binghamton, N. Y	Sept. 23, 1873	143,027
Sewing-machine	T. C. Page	Chicopee, Mass	Feb. 18, 1868	74,581
Sewing-machine	A. R. Paine	New York, N. Y	Mar. 6, 1860	27,412
Sewing-machine	A. Palmer	Brockport, N. Y	May 13, 1863	38,252
Sewing-machine	A. Palmer	Brockport, N. Y	June 9, 1863	38,837
Sewing-machine	C. H. Palmer	New York, N. Y	May 5, 1863	38,450
Sewing-machine	C. H. Palmer	New York, N. Y	Dec. 23, 1873	145,814
Sewing-machine	J. Palmer	Randolph, Mass	Nov. 29, 1870	109,655
Sewing-machine	C. Parham	Philadelphia, Pa	Nov. 21, 1854	11,971
Sewing-machine	C. Parham	Philadelphia, Pa	Apr. 26, 1864	42,502
Sewing-machine	C. Parham	Philadelphia, Pa	Sept. 13, 1864	44,217
Sewing-machine	C. Parham	Philadelphia, Pa	June 9, 1868	78,817
Sewing-machine	C. Parham	Philadelphia, Pa	June 9, 1868	78,818
Sewing-machine	C. Parham	Philadelphia, Pa	Nov. 22, 1870	109,443
Sewing-machine	S. Parker	New York, N. Y	Mar. 16, 1858	19,662
Sewing-machine	S. Parker	New York, N. Y	July 12, 1859	24,780
Sewing-machine	S. J. Parker	Ithaca, N. Y	Apr. 11, 1854	10,757
Sewing-machine	V. Parks	Fort Wayne, Ind	July 30, 1872	129,981
Sewing-machine	C. O. Parmenter	Amherst, Mass	Mar. 28, 1871	113,201
Sewing-machine	R. S. Payne	Chicago, Ill	Nov. 13, 1860	30,641
Sewing-machine	R. H. Peabody	Chelsea, Mass	May 3, 1870	102,586
Sewing-machine	W. Pearson	Windsor Locks, Conn	Nov. 22, 1859	26,201
Sewing-machine	T. J. Penny and W. B. Botsford	Wooster, Ohio	July 3, 1860	28,939
Sewing-machine	T. W. Pepper	New York, N. Y	Apr. 14, 1868	76,807
Sewing-machine	T. W. Pepper	New York, N. Y	July 5, 1870	105,193

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine	T. W. Pepper, L. Planer, and J. Kayser.	New York, N. Y	Dec. 27, 1864	45, 628
Sewing-machine	J. Perry	New York, N. Y	Nov. 23, 1858	22, 148
Sewing-machine	S. Perry	Newport, N. Y	Nov. 13, 1866	59, 641
Sewing-machine	O. C. Phelps	Rochester, N. Y	Sept. 1, 1857	18, 109
Sewing-machine	B. Pickering	West Milton, Ohio	May 10, 1864	42, 687
Sewing-machine	W. C. Pickersgill	Providence, R. I	Mar. 11, 1873	136, 616
Sewing-machine	D. B. Piper	Winchendon, Mass	Aug. 7, 1866	56, 900
Sewing-machine	J., J. E., and W. Pitt	Cleckheaton, Great Britain	July 18, 1871	117, 293
Sewing-machine	L. Planer	New York, N. Y	July 19, 1859	24, 847
Sewing-machine	L. Planer	New York, N. Y	Aug. 23, 1864	43, 927
Sewing-machine	L. Planer	New York, N. Y	June 13, 1865	48, 204
Sewing-machine	L. Planer	New York, N. Y	Sept. 26, 1865	50, 157
Sewing-machine	H. Plummer	Brooklyn, N. Y	July 14, 1868	79, 856
Sewing-machine	H. Plummer	Brooklyn, N. Y	Aug. 10, 1869	93, 553
Sewing-machine	H. Pollack and E. Schmidt	Hamburg, Germany	Feb. 2, 1864	41, 444
Sewing-machine	H. Pollack and E. Schmidt	Hamburg, Germany	Apr. 13, 1869	88, [illegible]
Sewing-machine	A. Porter	Rochester, N. Y	Feb. 8, 1870	99, 704
Sewing-machine	D. Porter	Cleveland, Ohio	Nov. 25, 1873	144, 864
Sewing-machine	R. J. Poston	Mainville, Ohio	Nov. 15, 1870	109, 343
Sewing-machine	F. A. Pratt	Hartford, Conn	Dec. 11, 1866	60, 418
Sewing-machine	S. F. Pratt	Roxbury, Mass	Feb. 3, 1857	16, 554
Sewing-machine	S. F. Pratt	Roxbury, Mass	Mar. 3, 1857	16, 745
Sewing-machine	S. F. Pratt	Roxbury, Mass	Dec. 7, 1858	22, 240
Sewing-machine	W. F. Pratt	Bristol, Pa	Aug. 9, 1859	25, 043
Sewing-machine	W. S. Pratt	New York, N. Y	Dec. 8, 1863	40, 853
Sewing-machine	W. Preiss	New York, N. Y	Nov. 1, 1864	44, 889
Sewing-machine	J. B. Price and C. E. Billings	Hartford, Conn	Mar. 19, 1872	124, 854
Sewing-machine	J. Ramsay, jr	Middletown, Conn	July 25, 1871	117, 459
Sewing-machine	W. A. Rayer and W. S. Lincoln.	Boston, Mass	Nov. 1, 1870	108, 827
Sewing-machine	W. A. Rayer and W. S. Lincoln.	Boston, Mass	Aug. 19, 1873	142, 042
Sewing-machine	T. S. Reeve, C. D. Smith, and H. L. Swartwout.	Chicago, Ill	Sept. 21, 1869	94, 976
Sewing-machine	C. Raymond	Bristol, Conn	Mar. 9, 1858	19, 619
Sewing-machine	C. Raymond	Brattleborough, Vt	Nov. 30, 1858	22, 320
Sewing-machine	C. Raymond	Brattleborough, Vt	July 9, 1861	32, 785
Sewing-machine	C. Raymond	Brattleborough, Vt	July 30, 1861	32, 925
Sewing-machine	O. Redmond	Rochester, N. Y	Mar. 29, 1864	42, 110
Sewing-machine	J. Reece	Stanstead, Canada	June 4, 1872	127, 430
Sewing-machine	T. K. Reed	East Bridgewater, Mass	Jan. 30, 1866	52, 368
Sewing-machine	T. K. Reed	East Bridgewater, Mass	Aug. 7, 1866	57, 047
Sewing-machine	T. K. Reed	East Bridgewater, Mass	Dec. 4, 1866	60, 241
Sewing-machine	T. K. Reed	East Bridgewater, Mass	Feb. 19, 1867	62, 287
Sewing-machine	T. K. Reed	East Bridgewater, Mass	Aug. 20, 1867	67, 906
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Oct. 13, 1863	40, 311
Sewing-machine	G. Rehfuss	Philadelphia, Pa	May 23, 1865	47, 905
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Nov. 21, 1865	51, 086
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Jan. 8, 1867	61, 101
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Jan. 8, 1867	61, 102
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Jan. 8, 1867	61, 103
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Jan. 7, 1868	73, 119
Sewing-machine	G. Rehfuss	Philadelphia, Pa	May 3, 1870	102, 710
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Apr. 25, 1871	114, 197
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Dec. 19, 1871	121, 896
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Mar. 18, 1873	137, 028
Sewing-machine	O. L. Reynolds	Dover, N. H	May 14, 1850	7, 360
Sewing-machine	O. L. Reynolds	Dover, N. H	Mar. 30, 1858	19, 793
Sewing-machine	D. E. Rice	Philadelphia, Pa	Dec. 17, 1872	134, 101
Sewing-machine	L. Rice	Nevada, Cal	Jan. 22, 1861	31, 214
Sewing-machine	L. Rice	West Winsted, Conn	Feb. 12, 1861	31, 429
Sewing-machine	C. B. Richards	Brooklyn, N. Y	Mar. 5, 1861	31, 625
Sewing-machine	E. F. Richardson	Reading, Mass	Dec. 16, 1873	145, 687
Sewing-machine	E. P. Richardson	Lawrence, Mass	Oct. 30, 1866	59, 265
Sewing-machine	G. A. Richardson	Reading, Mass	June 18, 1872	128, 172
Sewing-machine	T. J. W. Robertson	New York, N. Y	Nov. 28, 1854	12, 015
Sewing-machine	T. J. W. Robertson	New York, N. Y	Mar. 20, 1855	12, 577
Sewing-machine	T. J. W. Robertson	New York, N. Y	May 22, 1855	12, 923
Sewing-machine	T. J. W. Robertson	New York, N. Y	June 12, 1855	13, 064
Sewing-machine	T. J. W. Robertson	New York, N. Y	Feb. 26, 1856	14, 324
Sewing-machine	T. J. W. Robertson	New York, N. Y	Feb. 10, 1857	16, 609
Sewing-machine	T. J. W. Robertson	New York, N. Y	Mar. 17, 1857	16, 850
Sewing-machine	T. J. W. Robertson	New York, N. Y	Oct. 20, 1857	18, 470
Sewing-machine	T. J. W. Robertson	New York, N. Y	Oct. 25, 1859	25, 913
Sewing-machine	T. J. W. Robertson	New York, N. Y	Nov. 22, 1859	26, 205
Sewing-machine	F. R. Robinson	Boston, Mass	Dec. 10, 1850	7, 824
Sewing-machine	D. H. Rogan	Hudson, Wis	Mar. 9, 1869	87, 505
Sewing-machine	D. H. Rogan	Newton, Iowa	Apr. 1, 1873	137, 321
Sewing-machine	S. H. Roper	Worcester, Mass	Aug. 15, 1854	11, 531
Sewing-machine	S. H. Roper	Roxbury, Mass	Nov. 4, 1856	16, 026
Sewing-machine	S. H. Roper	Roxbury, Mass	Oct. 27, 1857	18, 542
Sewing-machine	I. M. Rose	New York, N. Y	Nov. 8, 1859	26, 057
Sewing-machine	I. M. Rose	New York, N. Y	June 19, 1860	28, 814
Sewing-machine	I. M. Rose	New York, N. Y	Mar. 5, 1861	31, 628
Sewing-machine	N. G. Ross	Cincinnati, Ohio	Mar 26, 1861	31, 829
Sewing-machine	J. Rowe	Cincinnati, Ohio	Feb. 21, 1860	27, 080
Sewing-machine	J. Rowe	Cincinnati, Ohio	Dec. 27, 1859	27, 638
Sewing-machine	A. S. Rowley	Hudson, N. Y	Sept. 1, 1868	81, 821
Sewing-machine	H. Ruddick	Boston, Mass	May 29, 1860	28, 539
Sewing-machine	J. Rupertus and T. R. Wright	Philadelphia, Pa	Nov. 23, 1869	97, 233
Sewing-machine	W. Sage	Durham Center, Conn	June 30, 1857	17, 717
Sewing-machine	A. W. Sangster	Buffalo, N. Y	Mar. 2, 1858	19, 535
Sewing-machine	A. W. Sangster	Buffalo, N. Y	June 8, 1858	20, 531
Sewing-machine	A. W. Sangster	Buffalo, N. Y	Oct. 26, 1858	21, 929
Sewing-machine	J. and A. W. Sangster	Buffalo, N. Y	Jan. 19, 1858	19, 155
Sewing-machine	J. and A. W. Sangster	Buffalo, N. Y	Mar. 23, 1858	19, 723
Sewing-machine	E. Savage	Berlin, Conn	Apr. 6, 1858	19, 870

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Sewing-machine	I. B. Sawyer and T. Alsop	Springfield, Ill	Oct. 25, 1859	25, 918
Sewing-machine	F. M. Schaeffer	Blooming Grove, Kans	Oct. 20, 1868	83, 324
Sewing-machine	M. Schwalbach	Milwaukee, Wis	July 31, 1866	56, 805
Sewing-machine	C. Scofield	Adams, N. Y	Nov. 8, 1859	26, 059
Sewing-machine	C. Scofield and C. Rice	Adams and Watertown, N. Y.	June 5, 1860	28, 610
Sewing-machine	J. B. Socor	Chicago, Ill	Dec. 19, 1871	121, 965
Sewing-machine	A Shattuck	Buffalo, N. Y	Feb. 27, 1872	124, 167
Sewing-machine	A. B. Shaw	Worcester, Mass	Dec. 16, 1862	37, 202
Sewing-machine	C. A. Shaw and J. R. Clark	Biddeford, Me	Apr. 21, 1863	38, 246
Sewing-machine	C. A. Shaw, J. Clark, and D. T. Giveen.	Biddeford and Saco, Me	June 1, 1858	20, 471
Sewing-machine	E. Shaw	East Abington, Vt	Aug. 22, 1854	11, 571
Sewing-machine	E. Shaw	Milwaukee, Wis	Oct. 15, 1872	132, 326
Sewing-machine	H. L. Shaw	Milan, Ohio	Apr. 9, 1861	32, 007
Sewing-machine	P. Shaw	Abington, Mass	Sept. 12, 1854	11, 680
Sewing-machine	T. Shaw	Philadelphia, Pa	Apr. 26, 1859	23, 789
Sewing-machine	A. H. Sherwood	Southport, Conn	Apr. 21, 1868	76, 950
Sewing-machine	J. P. Sherwood	Fort Edward, N. Y	May 14, 1861	32, 315
Sewing-machine	J. P. Sherwood	Fort Edward, N. Y	July 11, 1871	117, 002
Sewing-machine	J. J. Sibley	New York, N. Y	Mar. 29, 1864	42, 117
Sewing-machine	J. J. Sibley	New York, N. Y	June 13, 1865	48, 248
Sewing-machine	W. Sidenberg	New York, N. Y	Mar. 14, 1871	112, 745
Sewing-machine	W. Sidenberg	New York, N. Y	May 23, 1871	115, 117
Sewing-machine	J. C. Silvy	New Orleans, La	Sept. 13, 1859	25, 471
Sewing-machine	A. G. Simmons and C. Scofield	Utica, N. Y	Mar. 1, 1864	41, 790
Sewing-machine	E. C. Singer	Port Lavaca, Tex	Nov. 15, 1859	26, 130
Sewing-machine	I. M. Singer	New York, N. Y	Aug. 12, 1851	8, 294
Sewing-machine	I. M. Singer	New York, N. Y	Apr. 13, 1852	8, 876
Sewing-machine	I. M. Singer	New York, N. Y	May 2, 1854	10, 842
Sewing-machine	I. M. Singer	New York, N. Y	May 30, 1854	10, 974
Sewing-machine	I. M. Singer	New York, N. Y	May 30, 1854	10, 975
Sewing-machine	I. M. Singer	New York, N. Y	Feb. 6, 1855	12, 364
Sewing-machine	I. M. Singer	New York, N. Y	May 29, 1855	12, 969
Sewing-machine	I. M. Singer	New York, N. Y	June 12, 1855	13, 065
Sewing-machine	I. M. Singer	New York, N. Y	July 31, 1855	13, 362
Sewing-machine	I. M. Singer	New York, N. Y	Oct. 9, 1855	13, 661
Sewing-machine	I. M. Singer	New York, N. Y	Oct. 9, 1855	13, 662
Sewing-machine	I. M. Singer	New York, N. Y	Oct. 16, 1855	13, 687
Sewing-machine	I. M. Singer	New York, N. Y	Nov. 6, 1855	13, 768
Sewing-machine	I. M. Singer	New York, N. Y	Dec. 18, 1855	13, 966
Sewing-machine	I. M. Singer	New York, N. Y	Mar. 18, 1856	14, 475
Sewing-machine	I. M. Singer	New York, N. Y	Nov. 4, 1856	16, 030
Sewing-machine	I. M. Singer	New York, N. Y	Jan. 4, 1859	22, 517
Sewing-machine	I. M. Singer	New York, N. Y	July 26, 1859	24, 892
Sewing-machine	I. M. Singer	New York, N. Y	Apr. 8, 1862	34, 906
Sewing-machine	I. M. Singer	Yonkers, N. Y	Dec. 11, 1866	60, 433
Sewing-machine	I. M. Singer	Yonkers, N. Y	Jan. 15, 1867	61, 270
Sewing-machine	G. Slater	London, England	May 5, 1868	77, 665
Sewing-machine	P. L. Slayton	Madison, Ind	Jan. 1, 1856	14, 022
Sewing-machine	S. P. Sleppy	Wilkesbarre, Pa	May 18, 1869	90, 139
Sewing-machine	J. Smalley	Bound Brook, N. Y	Mar. 20, 1860	27, 577
Sewing-machine	D. C. Smith	Cincinnati, Ohio	Dec. 20, 1864	45, 528
Sewing-machine	D. M. Smith	Springfield, Conn	Apr. 16, 1850	7, 296
Sewing-machine	D. M. Smith	Lynn, Mass	July 22, 1873	141, 088
Sewing-machine	E. D. Smith	New York, N. Y	July 1, 1873	140, 448
Sewing-machine	E. H. Smith	New York, N. Y	Apr. 17, 1855	12, 754
Sewing-machine	E. H. Smith	New York, N. Y	Oct. 6, 1857	18, 359
Sewing-machine	E. H. Smith	New York, N. Y	Nov. 10, 1857	18, 605
Sewing-machine	E. H. Smith	New York, N. Y	Aug. 3, 1858	21, 089
Sewing-machine	E. H. Smith	New York, N. Y	May 4, 1858	20, 175
Sewing-machine	E. H. Smith	New York, N. Y	June 29, 1858	20, 779
Sewing-machine	E. H. Smith	Sherwood, N. J	Mar. 20, 1866	53, 553
Sewing-machine	E. H. Smith	Bergen, N. J	Oct. 26, 1869	96, 160
Sewing-machine	E. H. Smith and D. C. Chapman	Hudson, N. J., and New York, N. Y.	Nov. 8, 1864	44, 982
Sewing-machine	G. A. Smith and E. L. Miller	Philadelphia, Pa	Apr. 19, 1870	102, 170
Sewing-machine	H. B. Smith	Lowell, Mass	Jan. 16, 1855	12, 247
Sewing-machine	J. A. Smith	Columbus, Ohio	July 8, 1873	140, 654
Sewing-machine	J. C. Smith	Troy, N. Y	Jan. 29, 1861	31, 263
Sewing-machine	J. C. Smith	Troy, N. Y	Apr. 15, 1862	34, 988
Sewing-machine	J. M. Smith	Somers, N. Y	Feb. 7, 1860	27, 079
Sewing-machine	J. M. Smith	Somers, N. Y	Feb. 5, 1861	31, 334
Sewing-machine	L. H. Smith	Salem, N. J	Feb. 12, 1861	31, 411
Sewing-machine	L. H. Smith	Salem, N. J	May 21, 1861	32, 385
Sewing-machine	M. R. Smith	Armonk, N. Y	Mar. 24, 1863	37, 985
Sewing-machine	M. R. Smith	Armonk, N. Y	Nov. 24, 1868	84, 389
Sewing-machine	W. H. Smith	Birmingham, Conn	June 19, 1860	28, 785
Sewing-machine	W. T. Smith	West Zanesville, Ohio	Feb. 8, 1870	99, 743
Sewing-machine	W. T. Smith	West Zanesville, Ohio	Feb. 28, 1871	112, 189
Sewing-machine	D. M. Smyth	Orange, N. J	Jan. 9, 1872	122, 673
Sewing-machine	H. S. Snow	Meriden, Conn	June 22, 1858	20, 684
Sewing-machine	W. Snyder	Newark, N. J	Feb. 15, 1859	22, 987
Sewing-machine	J. Speirs	New York, N. Y	May 21, 1872	127, 114
Sewing-machine	J. C. Spencer	Phelps, N. Y	May 17, 1859	24, 061
Sewing-machine	J. H. Spencer and T. Lamb	Philadelphia, Pa	Nov. 23, 1858	22, 137
Sewing-machine	J. Sprague and A. T. Hill	Ann Arbor and Pontiac, Mich.	Dec. 1, 1868	84, 589
Sewing-machine	W. A. Springer	Marlborough, Mass	July 9, 1872	128, 919
Sewing-machine	G. Stackpole, jr	Ellsworth, Me	Nov. 29, 1864	45, 278
Sewing-machine	G. Stackpole	Elizabeth, N. J	Mar. 14, 1871	112, 747
Sewing-machine	H. T. Stains	Scottsville, Pa	Mar. 29, 1864	42, 149
Sewing-machine	M. Stannard	Hartford, Conn	Apr. 23, 1867	64, 184
Sewing-machine	C. Stebbins	Pike, N. Y	Mar. 25, 1862	34, 789
Sewing-machine	C. Stebbins	Pike, N. Y	Aug. 20, 1867	68, 009
Sewing-machine	C. Stebbins	Pike, N. Y	Aug. 15, 1871	118, 067
Sewing-machine	C. Stebbins	Pike, N. Y	May 14, 1872	126, 755
Sewing-machine	G. W. Stedman	Vienna, N. J	Dec. 12, 1854	12, 074

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Sewing-machine	G. W. Stedman	Vienna, N. J	Mar. 20, 1855	12, 573
Sewing-machine	G. W. Stedman	Vienna, N. J	May 1, 1855	12, 798
Sewing-machine	G. W. Stedman	Vienna, N. J	July 3, 1855	13, 201
Sewing-machine	G. W. Stedman	Vienna, N. J	Nov. 27, 1855	13, 856
Sewing-machine	M. J. Stein	New York, N. Y	May 9, 1865	47, 666
Sewing-machine	J. S. Steiner	Saint Louis, Mo	June 19, 1860	28, 788
Sewing-machine	N. W. Stevens and E. G. Kingsley.	Stoughton, Mass	May 30, 1854	10, 994
Sewing-machine	A. Steward	Dubuque, Iowa	Apr. 9, 1872	125, 498
Sewing-machine	R. H. St. John	Bellefontaine, Ohio	Oct. 15, 1872	132, 332
Sewing-machine	J. W. Steakes	Milan, Ohio	May 28, 1861	32, 456
Sewing-machine	A. Stocker	Watertown, N. Y	May 21, 1872	126, 911
Sewing-machine	L. W. Stockwell	Akron, Ohio	May 17, 1870	103, 254
Sewing-machine	O. N Stoddard	Oxford, Ohio	Aug. 16, 1859	25, 223
Sewing-machine	N. D. Stoops and J. J. Sibley	Philadelphia, Pa., and New York, N. Y.	Aug. 17, 1869	93, 921
Sewing-machine	A. M. Stow	Milan, Ohio	July 8, 1873	140, 657
Sewing-machine	J. W. Strowbridge	Cortland, N. Y	Feb. 18, 1873	136, 107
Sewing-machine	H. G. Suplee and J. H. Mooney	San Francisco, Cal	June 6, 1871	115, 656
Sewing-machine	W. A. Sutton	New York, N. Y	July 17, 1860	29, 202
Sewing-machine	H. L. Swartwout	Chicago, Ill	Apr. 27, 1869	89, 357
Sewing-machine	A. Swingle	Boston, Mass	Aug. 8, 1854	11, 507
Sewing-machine	A. Swingle	Boston, Mass	Feb. 5, 1856	14, 207
Sewing-machine	A. Swingle	Boston, Mass	July 22, 1856	15, 396
Sewing-machine	G. S. Tapley	Bristol, Conn	Aug. 9, 1859	25, 059
Sewing-machine	J. N. Tarbox	Buffalo, N. Y	Sept. 5, 1865	49, 8[illegible]3
Sewing-machine	B. Thimonnier, sr	Amplepius, France	Sept. 3, 1850	7, 622
Sewing-machine	R. Thompson	Boston, Mass	Apr. 8, 1862	34, 926
Sewing-machine	R. Thompson	Boston, Mass	Apr. 19, 1864	42, 449
Sewing-machine	T. C. Thompson	Ithaca, N. Y	Mar. 29, 1853	9, 641
Sewing-machine	J. Thomson	Worcester, Mass	June 29, 1858	20, 742
Sewing-machine	J. Thomson	Worcester, Mass	Feb. 7, 1860	27, 082
Sewing-machine	J. Thorne	New York, N. Y	Dec. 20, 1859	26, 536
Sewing-machine	A. Tittman	Indianapolis, Ind	Apr. 20, 1869	89, 093
Sewing-machine	J. T. Tobey	Haverhill, Mass	June 10, 1873	139, 745
Sewing-machine	F. Toggenburger	Chicago, Ill	June 26, 1860	28, 920
Sewing-machine	E. Townsend	Boston, Mass	Apr. 8, 1862	34, 915
Sewing-machine	D. Tracy	Worcester, Mass	Sept. 11, 1860	30, 012
Sewing-machine	D. Tracy and G. Hobbs	Worcester, Mass	Sept. 15, 1863	40, 000
Sewing-machine	C. B. True	Boston, Mass	July 26, 1870	105, 741
Sewing-machine	J. C. Tucker	San Francisco, Cal	July 24, 1866	56, 641
Sewing-machine	S. S. Turner	Westborough, Mass	Aug. 22, 1854	11, 588
Sewing-machine	S. S. Turner	Westborough, Mass	Aug. 29, 1854	11, 631
Sewing-machine	S. S. Turner	Westborough, Mass	Aug. 24, 1869	94, 046
Sewing-machine	S. S. Turner	Westborough, Mass	Dec. 3, 1872	133, 553
Sewing-machine	S. S. Turner and I. S. Craig	Westborough and Boston, Mass.	July 11, 1871	116, 893
Sewing-machine	S. G. Tyler	Quincy, Ill	Dec. 7, 1858	22, 269
Sewing-machine	S. M. Tyler	Brooklyn, N. Y	Sept. 18, 1866	58, 181
Sewing-machine	W. P. Uhlinger	Philadelphia, Pa	Aug. 17, 1858	21, 224
Sewing-machine	J. D. Vanduzer	Tyrone, N. Y	Sept. 15, 1868	82, 183
Sewing-machine	O. Venner	Belfast, Me	Dec. 10, 1872	133, 814
Sewing-machine	K. Vogel	Chelsea, Mass	Oct. 4, 1859	25, 692
Sewing-machine	W. W. Wade	Longmeadow, Mass	Feb. 1, 1859	22, 833
Sewing-machine	J. A. Wagener	Pultney, N. Y	Oct. 13, 1863	40, 296
Sewing-machine	J. A. Wagener	New York, N. Y	Sept. 22, 1868	82, 366
Sewing-machine	A. H. Wagner	Chicago, Ill	Jan. 16, 1872	122, 747
Sewing-machine	A. H. Wagner	Chicago, Ill	Oct. 8, 1872	132, 124
Sewing-machine	E. L. Wales	East Randolph, Mass	May 31, 1864	42, 976
Sewing-machine	G. C. Walters	Philadelphia, Pa	Apr. 8, 1873	137, 649
Sewing-machine	D. T. Ward	Newark, N. J	Jan. 2, 1855	12, 146
Sewing-machine	S. W. Wardwell, jr	Saint Louis, Mo	July 2, 1872	128, 684
Sewing-machine	S. W. Wardwell, jr	Saint Louis, Mo	July 29, 1873	141, 245
Sewing-machine	A. Warth	Stapleton, N. Y	May 29, 1866	55, 182
Sewing-machine	A. Warth	Stapleton, N. Y	July 24, 1866	56, 646
Sewing-machine	A. Warth	Stapleton, N. Y	Oct. 16, 1866	58, 925
Sewing-machine	A. Warth	Stapleton, N. Y	Jan. 7, 1868	73, 063
Sewing-machine	A. Warth	Stapleton, N. Y	Jan. 7, 1868	73, 064
Sewing-machine	A. Warth	Stapleton, N. Y	Sept. 7, 1869	94, 677
Sewing-machine	T. S. Washburne	Rochester, N. Y	Sept. 11, 1860	30, 031
Sewing-machine	E. Waterbury	Stamford, Conn	June 16, 1868	79, 037
Sewing-machine	E. Waterbury	Stamford, Conn	Apr. 16, 1872	125, 708
Sewing-machine	W. C. Watson	New York, N. Y	Mar. 11, 1856	14, 433
Sewing-machine	W. C. Watson	New York, N. Y	Nov. 25, 1856	16, 1[illegible]6
Sewing-machine	W. C. Watson	New York, N. Y	Aug. 11, 1857	18, 060
Sewing-machine	W. C. Watson	New York, N. Y	Oct. 6, 1857	18, 371
Sewing-machine	W. C. Watson	New York, N. Y	Dec. 8, 1857	18, 834
Sewing-machine	D. Weaver	Guilderland, N. Y	Aug. 4, 1868	80, 789
Sewing-machine	L. D. Webber	Deep River, Conn	July 12, 1870	105, 281
Sewing-machine	T. A. Weber	New York, N. Y	June 4, 1872	127, 532
Sewing-machine	T. A. Weber	Philadelphia, Pa	Dec. 23, 1873	145, 823
Sewing-machine	G. Webster, jr., and J. F. Webster.	Hamilton City, Canada	May 27, 1873	139, 444
Sewing-machine	T. E. Weed	Williamsburgh, N. Y	Nov. 28, 1854	12, 011
Sewing-machine	E. A. Weeks	Cincinnati, Ohio	Apr. 16, 1872	125, 774
Sewing-machine	W. Weitling	New York, N. Y	Oct. 29, 1861	33, 619
Sewing-machine	W. Weitling	New York, N. Y	Mar. 17, 1863	37, 931
Sewing-machine	W. Weitling	New York, N. Y	Jan. 3, 1865	45, 777
Sewing-machine	W. Weitling	New York, N. Y	Dec. 24, 1867	72, 574
Sewing-machine	R. Welch	Frankford, Pa	Jan. 7, 1862	34, 081
Sewing-machine	T. S. Wells	Utica, N. Y	May 26, 1857	17, 400
Sewing-machine	E. P. West	Jersey City, N. J	Aug. 1, 1871	117, 708
Sewing-machine	E. P. West	Jersey City, N. J	July 9, 1872	128, 770
Sewing-machine	E. P. West	Jersey City, N. J	Aug. 20, 1872	130, 674
Sewing-machine	E. P. West	Jersey City, N. J	Aug. 20, 1872	130, 675
Sewing-machine	H. B. West and H. F. Wilson	Elyria, Ohio	June 29, 1858	20, 753
Sewing-machine	C. D. Wheeler	New York, N. Y	Nov. 9, 1858	22, 045
Sewing-machine	D. Wheeler and L. Carpenter	Oswego, N. Y	Aug. 3, 1858	21, 100

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine	J. White	Troy, N. Y	Oct. 5, 1858	21, 713
Sewing-machine	O. A. White and J. W. Bostwick	Norwalk, Ohio	Apr. 5, 1864	42, 246
Sewing-machine	R. Whitehill	New York, N. Y	Dec. 17, 1872	134, 119
Sewing-machine	W. M. Whiting	Brooklyn, N. Y	July 29, 1873	141, 303
Sewing-machine	J. H. Whitney	Rochester, Minn	Jan. 14, 1873	134, 961
Sewing-machine	W. Wickersham	Lowell, Mass	Apr. 19, 1853	9, 679
Sewing-machine	W. Wickersham	Boston, Mass	Mar. 7, 1854	10, 615
Sewing-machine	W. Wickersham	Boston, Mass	Aug. 25, 1857	18, 068
Sewing-machine	W. Wickersham	Boston, Mass	Aug. 25, 1857	18, 069
Sewing-machine	W. Wickersham	Boston, Mass	June 14, 1864	43, 146
Sewing-machine	C. H. Willcox	New York, N. Y	July 31, 1860	29, 448
Sewing-machine	C. H. Willcox	New York, N. Y	Mar. 22, 1864	42, 036
Sewing-machine	C. H. Willcox	New York, N. Y	Aug. 9, 1864	43, 819
Sewing-machine	C. H. Willcox	New York, N. Y	Sept. 27, 1864	44, 490
Sewing-machine	C. H. Willcox	New York, N. Y	Sept. 27, 1864	44, 491
Sewing-machine	C. H. Willcox and C. Carleton	New York and Brooklyn, N. Y.	June 27, 1871	116, 520
Sewing-machine	C. H. Willcox and C. Carleton	New York and Brooklyn, N. Y.	June 27, 1871	116, 521
Sewing-machine	C. H. Willcox and C. Carleton	New York and Brooklyn, N. Y.	June 27, 1871	116, 522
Sewing-machine	C. H. Willcox and C. Carleton	New York and Brooklyn, N. Y.	June 27, 1871	116, 523
Sewing-machine	C. H. Willcox and C. Carleton	New York and Brooklyn, N. Y.	July 4, 1871	116, 783
Sewing-machine	M. G. Wilder	Meriden, Conn	May 14, 1861	32, 323
Sewing-machine	J. A. Wilkins	Chicago, Ill	Mar. 31, 1863	38, 076
Sewing-machine	J. N. Wilkins	Chicago, Ill	Sept. 30, 1862	36, 591
Sewing-machine	J. N. Wilkins	Chicago, Ill	Dec. 5, 1871	121, 477
Sewing-machine	C. W. Williams	Boston, Mass	Feb. 12, 1861	31, 423
Sewing-machine	C. W. Williams	Boston, Mass	Apr. 8, 1862	34, 932
Sewing-machine	W. C. Willmarth	Philadelphia, Pa	Aug. 11, 1868	80, 889
Sewing-machine	W. C. Willmarth and C. N. Farr	Philadelphia, Pa	Nov. 3, 1868	83, 750
Sewing-machine	H. T. Willson	Fort Wayne, Ind	Mar. 19, 1867	62, 986
Sewing-machine	A. B. Wilson	Pittsfield, Mass	Nov. 12, 1850	7, 776
Sewing-machine	A. B. Wilson	Watertown, Conn	Aug. 12, 1851	8, 296
Sewing-machine	A. B. Wilson	Watertown, Conn	June 15, 1852	9, 041
Sewing-machine	A. B. Wilson	Watertown, Conn	Dec. 19, 1854	12, 116
Sewing-machine	J. B. Winchell	Chicago, Ill	May 6, 1862	35, 191
Sewing-machine	W. Winter	Leeds, England	Apr. 13, 1869	88, 936
Sewing-machine	W. C. Winters	Rochester, N. Y	Feb. 28, 1871	112, 308
Sewing-machine	A. Wittneben	New York, N. Y	May 30, 1865	48, 007
Sewing-machine	J. B. Woodruff	Washington, D. C	July 3, 1855	13, 195
Sewing-machine	J. B. Woodruff	Washington, D. C	July 10, 1855	13, 242
Sewing-machine	J. B. Woodruff	Washington, D. C	Dec. 23, 1856	16, 321
Sewing-machine	J. B. Woodruff	Washington, D. C	Sept. 7, 1858	21, 461
Sewing-machine	F. G. Woodward	Worcester, Mass	Oct. 11, 1859	25, 782
Sewing-machine	E. S. Yentzer	Middletown, Pa	June 19, 1860	28, 804
Sewing-machine	J. L. Young	San Francisco, Cal	Nov. 29, 1870	109, 705
Sewing-machine	Q. M. Youngs	Utica, N. Y	Feb. 20, 1872	123, 832
Sewing-machine	J. Zuckerman	New York, N. Y	July 25, 1865	49, 023
Sewing-machine, Adjustable treadle for	J. McEvoy	Brooklyn, N. Y	Aug. 12, 1873	141, 722
Sewing-machine and its supporting-table	M. Chase	Haverhill, Mass	July 19, 1870	105, 548
Sewing-machine attachment	E. Alexander	New York, N. Y	Feb. 3, 1857	16, 518
Sewing-machine attachment	E. H. Alexander	New York, N. Y	June 24, 1873	140, 233
Sewing-machine attachment	J. S. Alter	Leavenworth, Kans	Aug. 8, 1871	117, 716
Sewing-machine attachment	M. E. Antrim	Philadelphia, Pa	Sept. 5, 1871	118, 671
Sewing-machine attachment	C. H. Buck, 2d	West Arlington, Vt	Mar. 31, 1868	76, 047
Sewing-machine attachment	A. H. Bartlett	Spuyten Duyvil, N. Y	Oct. 3, 1871	119, 496
Sewing-machine attachment	A. H. Bartlett	Spuyten Duyvil, N. Y	Oct. 3, 1871	119, 555
Sewing-machine attachment	G. A. Colton and S. P. Babcock	Adrian, Mich	Aug. 15, 1871	118, 109
Sewing-machine attachment	G. A. Colton and S. P. Babcock	Adrian, Mich	Aug. 15, 1871	118, 110
Sewing-machine attachment	A. F. Comings	Chicago, Ill	July 30, 1872	130, 021
Sewing-machine attachment	G. E. Dalton	Monee, Ill	May 28, 1872	127, 157
Sewing-machine attachment	H. C. Goodrich and F. Henry	Chicago, Ill	Mar. 5, 1872	124, 206
Sewing-machine attachment	J. M. Griest	Plainfield, Ind	Mar. 11, 1873	136, 651
Sewing-machine attachment	F. T. Grimes	Liberty, Mo	Nov. 29, 1870	109, 612
Sewing-machine attachment	P. Grosfeld	New York, N. Y	Aug. 27, 1872	130, 914
Sewing-machine attachment	H. M. Hall	Danby, Vt	Apr. 6, 1869	88, 630
Sewing-machine attachment	A. H. Hewitt	Batavia, N. Y	Nov. 28, 1871	121, 366
Sewing-machine attachment	J. C. Jensen	Chicago, Ill	Mar. 12, 1872	124, 493
Sewing-machine attachment	G. G. Lawrence and A. A. Wood	Fitchburgh, Mass	May 7, 1872	126, 467
Sewing-machine attachment	W. H. Lewitt	Saint Louis, Mo	Nov. 14, 1871	120, 887
Sewing-machine attachment	S. O. Matteson	Chicago, Ill	Nov. 28, 1871	121, 293
Sewing-machine attachment	J. E. Mellen, E. Van Sandt, and M. J. Palmer.	Adrian, Mich., and Syracuse, N. Y.	Apr. 26, 1870	102, 294
Sewing-machine attachment	S. M. Moschoowitz	New York, N. Y	July 26, 1870	105, 715
Sewing-machine attachment	S. M. Moschcowitz	New York, N. Y	Feb. 14, 1871	111, 867
Sewing-machine attachment	H. Moschcowitz	New York, N. Y	Aug. 1, 1871	117, 557
Sewing-machine attachment	T. J. Peaslee	Boston, Mass	Mar. 18, 1873	136, 859
Sewing-machine attachment	P. S. Shepler	Whitehouse, Ohio	June 18, 1872	128, 181
Sewing-machine attachment	F. N. Violet	Fond du Lac, Wis	Jan. 14, 1873	134, 826
Sewing-machine attachment	W. A. Wells	Adrian, Mich	Aug. 22, 1871	118, 412
Sewing-machine attachment	W. H. White	Baltimore, Md	Jan. 3, 1871	110, 810
Sewing-machine attachment	E. S. Yentzer	Ottawa, Ill	Oct. 26, 1869	96, 180
Sewing-machine attachment	E. S. Yentzer	Ottawa, Ill	Apr. 4, 1871	113, 610
Sewing-machine attachments, Clamp for	J. G. Powell	Philadelphia, Pa	Sept. 16, 1873	142, 812
Sewing-machine attachments, Mechanism for operating.	J. W. Lyon	Chicago, Ill	Dec. 26, 1871	122, 268
Sewing-machine attachments, Set-screw for	E. Wilder	Springfield, Mass	July 25, 1871	117, 357
Sewing-machine attachments, Support for	P. Grosfeld	New York, N. Y	Apr. 16, 1872	125, 674
Sewing-machine balance-wheel	D. G. Williams	York, Pa	July 15, 1873	140, 982
Sewing-machine baster-guide	F. T. Grimes	Liberty, Mo	Jan. 24, 1871	111, 199
Sewing-machine baster-guide	J. L. Jones	New York, N. Y	Aug. 10, 1869	93, 540
Sewing-machine basting-gage	L. T. Conant	New Lisbon, Ohio	Dec. 20, 1864	45, 477
Sewing-machine binder	W. Allebaugh and J. M. Cuffell	Norristown, Pa	May 2, 1871	114, 387
Sewing-machine binder	J. L. Coles	Newark, N. J	Jan. 3, 1871	110, 740

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Sewing-machine binder	J. L. Coles	Newark, N. J	Feb. 21, 1871	112, 019
Sewing-machine binder	J. L. Coles	Newark, N. J	Feb. 28, 1871	112, 223
Sewing-machine binder	G. A. Colton and S. P. Babcock	Adrian, Mich	Aug. 15, 1871	118, 111
Sewing-machine binder	G. L. Du Laney	Brooklyn, N. Y	June 25, 1872	128, 216
Sewing-machine binder	B. Goldsmith	Newark, N. J	Nov. 28, 1871	131, 356
Sewing-machine binder	H. M. Hall	New York, N. Y	Oct. 31, 1871	120, 513
Sewing-machine binder	F. S. Judd and J. G. Powell	Philadelphia, Pa	June 20, 1871	116, 195
Sewing-machine binder	W. N. Martin	Boston, Mass	Apr. 9, 1872	125, 590
Sewing-machine binder	W. M. Stoddard	San Francisco, Cal	Nov. 3, 1868	83, 742
Sewing-machine binder	M. J. Stoll	Middletown, Conn	Jan. 28, 1873	135, 381
Sewing-machine binder	G. Vincent	Stockton, Cal	Nov. 20, 1866	59, 879
Sewing-machine-binder attachment	G. Wissler and C. H. Peters	Cincinnati, Ohio	May 3, 1864	42, 615
Sewing-machine-binder guide	C. Marsh	Bridgeport, Conn	July 25, 1865	49, 036
Sewing-machine-binder guide	J. D. Alvord	Bridgeport, Conn	Apr. 16, 1861	32, 037
Sewing-machine-binder guide	T. Rogers	Liverpool, England	Mar. 13, 1866	53, 243
Sewing-machine binding and hemming attachment	A. C. Kasson	Milwaukee, Wis	July 19, 1870	105, 577
Sewing-machine binding-attachment	L. Anderson	Chicago, Ill	May 31, 1870	103, 538
Sewing-machine binding-attachment	G. E. Dolton	Monee, Ill	July 4, 1871	116, 570
Sewing-machine binding-attachment	A. C. Kasson	Milwaukee, Wis	Mar. 15, 1870	100, 904
Sewing-machine binding-attachment	W. N. Martin	Boston, Mass	Nov. 15, 1870	109, 366
Sewing-machine binding-attachment	J. W. Sawyer	Boston, Mass	Aug. 23, 1870	106, 730
Sewing-machine binding-attachment	J. S. Steiner	Saint Louis, Mo	Mar. 7, 1865	46, 722
Sewing-machine binding-attachment	W. Wendell	Milwaukee, Wis	July 27, 1869	93, 147
Sewing-machine binding-guide	E. F. Angell	Chicago, Ill	Oct. 5, 1869	95, 409
Sewing-machine binding-guide	O. G. Beynton	Haverhill, Mass	Nov. 28, 1854	12, 014
Sewing-machine binding-guide	W. J. Chaplin	Dowagiac, Mich	Feb. 6, 1866	52, 387
Sewing-machine binding-guide	S. B. Cochran	Clapham, England	May 31, 1864	42, 989
Sewing-machine binding-guide	W. S. Hotchkiss	Bridgeport, Conn	Aug. 3, 1869	93, 202
Sewing-machine binding-guide	J. F. Kellogg	North Bridgewater, Mass	Apr. 26, 1870	102, 273
Sewing-machine binding-guide	W. Price	New York, N. Y	June 19, 1860	28, 774
Sewing-machine binding-guide	J. B. Secor	Chicago, Ill	July 4, 1871	116, 761
Sewing-machine binding-guide	L. C. Session	Neenah, Wis	Feb. 18, 1868	74, 727
Sewing-machine binding-guide	G. R. Smith	Dowagiac, Mich	Sept. 29, 1863	40, 127
Sewing-machine binding-guide	W. T. Smith	West Zanesville, Ohio	Nov. 14, 1871	121, 014
Sewing-machine bobbin	C. F. Ingraham	Indianapolis, Ind	Aug. 28, 1866	57, 514
Sewing-machine-bobbin holder	W. F. and J. Barnes and P. Mesick.	Rockford, Ill	Aug. 19, 1873	141, 981
Sewing-machine-bobbin winder	A. B. Bary	Detroit, Mich	Mar. 25, 1873	137, 048
Sewing-machine-bobbin winder	G. A. Brady	Chicago, Ill	May 21, 1872	126, 925
Sewing-machine-bobbin winder	F. H. Drake	Middletown, Conn	Aug. 16, 1864	43, 839
Sewing-machine-bobbin winder	T. Hall	Brooklyn, N. Y	Nov. 9, 1869	96, 692
Sewing-machine-bobbin winder	T. M. Jenks	New York, N. Y	May 2, 1871	114, 442
Sewing-machine-bobbin winder	A. C. Kasson	Milwaukee, Wis	June 21, 1864	41, 210
Sewing-machine-bobbin winder	W. H. Newton	Newport, R. I	May 14, 1872	126, 829
Sewing-machine-bobbin winder	C. H. Palmer	New York, N. Y	July 12, 1870	105, 363
Sewing-machine-bobbin winder	J. E. Patch	Charlestown, Mass	Dec. 13, 1870	110, 067
Sewing-machine-bobbin winder	T. Pedden	Middletown, Conn	Aug. 12, 1873	141, 663
Sewing-machine-bobbin winder	T. Shanks	Baltimore, Md	Jan. 18, 1870	99, 011
Sewing-machine-bobbin winder	T. Shanks	Baltimore, Md	Apr. 19, 1870	102, 164
Sewing-machine-bobbin winder	R. H. Smith	Baltimore, Md	May 23, 1871	115, 124
Sewing-machine-bobbin winder and needle-sharpener.	R. R. Moffatt	Brooklyn, N. Y	Dec. 20, 1870	110, 267
Sewing-machine bobbins, Machine for winding	A. W. Todd	Chicago, Ill	Mar. 21, 1865	46, 955
Sewing machine, Book	L. Hall	Boston, Mass	July 12, 1870	105, 329
Sewing machine, Book	A. Holbrook, jr	Lynn, Mass	Feb. 23, 1869	87, 258
Sewing machine, Book	F. W. Howe	Providence, R. I	Mar. 1, 1870	100, 407
Sewing machine, Book	C. H. Palmer	New York, N. Y	Feb. 11, 1873	135, 662
Sewing machine, Book	F. Sims	Galveston, Tex	July 16, 1867	66, 899
Sewing machine, Book	D. M. Smyth	Orange, N. J	Feb. 25, 1868	74, 948
Sewing machine, Book	D. M. Smyth	Orange, N. J	June 8, 1869	91, 175
Sewing machine, Boot and shoe	L. R. Blake	Fort Wayne, Ind	Aug. 1, 1871	117, 596
Sewing machine, Boot and shoe	J. H. Brown	Watertown, Mass	Aug. 31, 1869	94, 389
Sewing machine, Boot and shoe	C. O. Crosby	New Haven, Conn	May 25, 1869	90, 507
Sewing machine, Boot and shoe	C. O. Crosby	New Haven, Conn	Dec. 21, 1869	98, 151
Sewing machine, Boot and shoe	C. O. Crosby	Milford, Conn	Mar. 5, 1872	124, 337
Sewing machine, Boot and shoe	C. O. Crosby	Milford, Conn	Mar. 5, 1872	124, 338
Sewing machine, Boot and shoe	A. Destouy	New York, N. Y	July 31, 1866	56, 729
Sewing machine, Boot and shoe	A. Destouy	New York, N. Y	Oct. 5, 1869	95, 571
Sewing machine, Boot and shoe	A. Destouy	London, England	Sept. 3, 1872	131, 084
Sewing machine, Boot and shoe	W. Duchemin	Boston, Mass	Nov. 28, 1871	112, 237
Sewing machine, Boot and shoe	W. Duchemin	Boston, Mass	Jan. 2[illegible], 1873	135, 03[illegible]
Sewing machine, Boot and shoe	W. Duchemin	Boston, Mass	Feb. 11, 1873	135, 787
Sewing machine, Boot and shoe	C. Goodyear, jr	New Rochelle, N. Y	Jan. 24, 1871	111, 197
Sewing machine, Boot and shoe	C. Goodyear, jr	New Rochelle, N. Y	Mar. 21, 1871	112, 802
Sewing machine, Boot and shoe	C. Goodyear, jr	New Rochelle, N. Y	July 11, 1871	116, 947
Sewing machine, Boot and shoe	J. J. Jordan	Philadelphia, Pa	June 25, 1872	128, 313
Sewing machine, Boot and shoe	D. Mills	New York, N. Y	Nov. 16, 1869	96, 944
Sewing machine, Boot and shoe	D. Mills	Brooklyn, N. Y	Dec. 14, 1869	97, 951
Sewing machine, Boot and shoe	D. Mills	New York, N. Y	Apr. 5, 1870	101, 644
Sewing machine, Boot and shoe	D. Mills	Brooklyn, N. Y	June 4, 1872	127, 423
Sewing machine, Boot and shoe	W. J. B. Mills	Philadelphia, Pa	Sept. 10, 1872	131, 291
Sewing machine, Boot and shoe	E. P. Richardson	Lawrence, Mass	Aug. 24, 1869	94, 134
Sewing machine, Boot and shoe	E. P. Richardson	Lawrence, Mass	July 18, 1871	117, 207
Sewing machine, Boot and shoe	N. M. Rosinsky	New York, N. Y	May 16, 1871	114, 862
Sewing machine, Boot and shoe	N. M. Rosinsky	New York, N. Y	July 16, 1872	129, 059
Sewing machine, Boot and shoe	G. V. Sheffield	Boston, Mass	Jan. 21, 1873	135, 047
Sewing machine, Boot and shoe	M. J. Stein	New York, N. Y	Mar. 5, 1872	124, 393
Sewing machine, Boot and shoe	M. J. Stein	New York, N. Y	Apr. 30, 1872	126, 238
Sewing machine, Boot and shoe	H. S. Trooman	Boston, Mass	June 4, 1872	127, 062
Sewing machine, Boot and shoe	W. Wickersham	Boston, Mass	Aug. 1, 871	117, 709
Sewing-machine box-plaiting attachment	O. M. Chamberlain	New York, N. Y	Apr. 1, 1873	137, 343
Sewing-machine box-plaiting attachment	A. Hecht	New York, N. Y	Oct. 17, 1865	50, 473
Sewing-machine braid-guide	J. W. Gillam	Newton, N. J	Aug. 3, 1869	93, 193
Sewing-machine braid-guide	J. B. Price	Thompsonville, Conn	Apr. 23, 1872	125, 986
Sewing-machine braid-guide	T. Robjohn	New York, N. Y	May 8, 1866	54, 609
Sewing-machine braid-guide	E. T. Thomas	Boston, Mass	July 9, 1872	128, 825
Sewing-machine braid-guide	J. A. Wagener	New York, N. Y	June 28, 1864	43, 355
Sewing-machine braid-guiding attachment	E. C. Sproul	Green Point, N. Y	July 25, 1871	117, 344

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Sewing-machine braider	E. H. Alexander	New York, N. Y	Mar. 4, 1873	136, 354
Sewing-machine braider	E. Bouscay, jr	Norwalk, Ohio	Jan. 25, 1870	99, 054
Sewing-machine braider	J. P. Chaffee	Washington, D. C	June 17, 1873	140, 012
Sewing-machine braider	E. B. Ellicott and W. Prince	Washington, D. C	May 7, 1872	126, 382
Sewing-machine braiding-attachment	E. H. Alexander	New York, N. Y	Mar. 4, 1873	136, 355
Sewing-machine braiding-attachment	A. H. Boyd	Rockville, Mass	June 22, 1869	91, 708
Sewing-machine braiding-attachment	W. Carpenter	Fairbury, Ill	Aug. 18, 1868	81, 138
Sewing-machine braiding-attachment	H. H. Chittenden	New Haven, Conn	June 28, 1864	43, 289
Sewing-machine braiding-attachment	H. C. Goodrich	Chicago, Ill	Jan. 30, 1872	123, 167
Sewing-machine braiding-attachment	J. M. Lyon	Watertown, N. Y	Jan. 18, 1870	98, 985
Sewing-machine braiding-attachment	J. Thomas	New York, N. Y	Mar. 19, 1867	63, 117
Sewing-machine braiding-foot	D. C. Chester	Ogdensburgh, N. Y	May 11, 1869	89, 915
Sewing-machine braiding-guide	A. Komp	New York, N. Y	Dec. 20, 1870	110, 374
Sewing-machine braiding-guide	S. J. Maddock	Cincinnati, Ohio	Oct. 28, 1862	36, 847
Sewing-machine braiding-guide	L. Planer	New York, N. Y	Apr. 4, 1865	47, 171
Sewing-machine braiding-guide	J. Ramsey	Pittsburgh, Pa	Sept. 20, 1864	44, 339
Sewing-machine brake	J. S. Fowler	Racine, Wis	Oct. 6, 1868	82, 701
Sewing-machine brake	R. Gladney	Buena Vista, Miss	May 13, 1873	138, 881
Sewing-machine brake	J. W. Jacob	Jeffersonville, Ind	Dec. 13, 1870	110, 140
Sewing-machine brake	C. E. Kimball	New York, N. Y	May 13, 1873	138, 897
Sewing-machine brake	L. W. Kingry and T. J. Abel	Decatur, Ill	Sept. 17, 1872	131, 402
Sewing-machine brake	E. D. McIntosh	Washington, D. C	Apr. 5, 1870	101, 639
Sewing-machine brake	N. F. Palmer	Brooklyn, N. Y	Jan. 23, 1872	123, 043
Sewing-machine brake	D. Ruggles	Barre, Mass	Feb. 19, 1861	31, 477
Sewing machine, Broom	G. Stackpole	New York, N. Y	June 22, 1869	91, 784
Sewing machine, Button-hole	W. B. Bartram	Redding, Conn	Nov. 7, 1865	50, 870
Sewing machine, Button-hole	W. B. Bartram	Norwalk, Conn	Mar. 5, 1867	62, 520
Sewing machine, Button-hole	E. Cajar	New York, N. Y	Oct. 3, 1865	50, 299
Sewing machine, Button-hole	E. Cajar	New York, N. Y	Feb. 5, 1867	61, 711
Sewing machine, Button-hole	W. Chicken	Chelsea, Mass	Sept. 6, 1870	107, 001
Sewing machine, Button-hole	W. Chicken	Boston, Mass	May 23, 1871	115, 163
Sewing machine, Button-hole	W. Chicken and E. S. Moulton	Chelsea, Mass	Nov. 14, 1871	120, 855
Sewing machine, Button-hole	J. M. Clements	Birmingham, England	Aug. 21, 1866	57, 451
Sewing machine, Button-hole	S. Cleminshaw	Troy, N. Y	Jan. 3, 1871	110, 739
Sewing machine, Button-hole	S. Cleminshaw	Troy, N. Y	June 25, 1872	128, 363
Sewing machine, Button-hole	S. Cleminshaw	Troy, N. Y	June 10, 1873	139, 770
Sewing machine, Button-hole	J. Emerson	Lowell, Mass	Nov. 14, 1865	50, 989
Sewing machine, Button-hole	E. A. Goodes and E. L. Miller	Philadelphia, Pa	Jan. 29, 1867	61, 533
Sewing machine, Button-hole	M. C. Gritzner	Bruchsal, Baden	Apr. 7, 1868	76, 323
Sewing machine, Button-hole	A. Harroun, jr	Onondaga, N. Y	July 27, 1869	92, 965
Sewing machine, Button-hole	J. A. and H. A. House	Bridgeport, Conn	June 26, 1866	55, 863
Sewing machine, Button-hole	J. A. and H. A. House	Bridgeport, Conn	June 26, 1866	55, 864
Sewing machine, Button-hole	J. A. and H. A. House	Bridgeport, Conn	June 26, 1866	55, 865
Sewing machine, Button-hole	J. A. and H. A. House	Bridgeport, Conn	Mar. 2, 1869	87, 338
Sewing machine, Button-hole	E. Howard and W. H. Jackson	Flushing and New York, N. Y.	Oct. 8, 1867	69, 671
Sewing machine, Button-hole	E. Howard and W. H. Jackson	Flushing and Brooklyn, N. Y.	Aug. 31, 1869	94, 212
Sewing machine, Button-hole	D. W. G. Humphrey	Chelsea, Mass	Aug. 29, 1865	49, 627
Sewing machine, Button-hole	D. W. G. Humphrey	Chelsea, Mass	Oct. 3, 1865	50, 253
Sewing machine, Button-hole	D. W. G. Humphrey	Chelsea, Mass	Apr. 9, 1872	125, 394
Sewing machine, Button-hole	G. Kallmeyer	Bremen, Germany	Apr. 8, 1873	137, 689
Sewing machine, Button-hole	J. McCloskey	New York, N. Y	June 19, 1866	55, 688
Sewing machine, Button-hole	E. Moreau	San Francisco, Cal	Jan. 3, 1871	110, 669
Sewing machine, Button-hole	I. Nasch	Berlin, Prussia	June 21, 1870	104, 630
Sewing machine, Button-hole	H. E. Reynolds	Bristol, R. I	June 30, 1868	79, 393
Sewing machine, Button-hole	C. E. Robinson	Boston, Mass	Jan. 3, 1871	110, 720
Sewing machine, Button-hole	K. Vogel	Chelsea, Mass	July 28, 1868	80, 520
Sewing machine, Button-hole	G. B. Woodruff and G. Browning.	London, England	Nov. 16, 1869	97, 014
Sewing-machine button-hole stitch	C. R. Jackson	Brooklyn, N. Y	Mar. 15, 1864	41, 923
Sewing-machine button-hole-stitching attachment	C. A. Hansen and G. Harley	Guelph, Canada	Nov. 18, 1873	144, 672
Sewing-machine button-holing and overseaming attachment.	E. Howard and W. H. Jackson	Flushing and Brooklyn, N. Y.	May 31, 1870	103, 745
Sewing-machine button-holing attachment	S. J. Baird	Staunton, Va	Dec. 14, 1869	97, 856
Sewing-machine button-holing attachment	S. J. Baird	Waynesborough, Va	July 25, 1871	117, 364
Sewing-machine button-holing attachment	S. J. Baird	Waynesborough, Va	Dec. 31, 1872	134, 345
Sewing-machine button-holing attachment	S. J. Baird	Waynesborough, Va	Dec. 31, 1872	134, 346
Sewing-machine button-holing attachment	S. J. Baird	Waynesborough, Va	Dec. 31, 1872	134, 347
Sewing-machine button-holing attachment	W. Burnam	Pana, Ill	Nov. 28, 1871	121, 328
Sewing-machine button-holing attachment	W. Carpenter	Fairbury, Ill	Sept. 28, 1869	95, 320
Sewing-machine button-holing attachment	J. F. Haskins	Fitchburgh, Mass	Dec. 30, 1873	146, 000
Sewing-machine button-holing attachment	E. Moreau	San Francisco, Cal	Jan. 7, 1873	134, 578
Sewing-machine button-holing attachment	A. H. Tait, jr	Jersey City, N. J	Feb. 13, 1872	123, 742
Sewing-machine cabinet	G. Range	New York, N. Y	Apr. 29, 1873	138, 435
Sewing-machine cabinet	F. A. Ross and W. H. Marshall	New York, N. Y	June 22, 1858	20, 664
Sewing-machine cabinet	J. E. Smith	Chicago, Ill	Dec. 27, 1870	110, 507
Sewing-machine carriage	G. H. Chinnock	New York, N. Y	June 18, 1872	128, 113
Sewing-machine carriage and caster	N. D. Stoops	Newark, N. J	July 18, 1865	48, 852
Sewing-machine case	W. O. Grover	Boston, Mass	May 27, 1856	14, 956
Sewing-machine case	G. Heckel	Belleville, Ill	May 21, 1872	126, 956
Sewing-machine case	H. O. Nauen	New York, N. Y	Jan. 4, 1870	98, 616
Sewing-machine case	O. Nauen	New York, N. Y	Oct. 17, 1871	120, 085
Sewing-machine case	A. Pilbeam	South Kensington, England	Jan. 26, 1864	41, 393
Sewing-machine case	F. A. Ross and W. H. Marshall.	New York, N. Y	Aug. 28, 1855	13, 499
Sewing-machine-case lock	H. O. Nauen	New York, N. Y	Sept. 13, 1870	107, 401
Sewing-machine cases, Mode of constructing	J. Johnson	Hartford, Conn	Dec. 31, 1867	72, 739
Sewing-machine cast-off	E. M. Comery	Hudson, Mass	Feb. 11, 1868	74, 310
Sewing-machine cast-off, Waxed-thread	C. L. Langmaid	Woburn, Mass	Oct. 2, 1866	58, 550
Sewing-machine chair	F. Chichester	Milwaukee, Wis	Feb. 4, 1873	135, 465
Seying-machine chair	S. W. Cozzens	Sheboygan, Wis	May 9, 1871	114, 532
Sewing-machine chair	S. W. Cozzens	Milwaukee, Wis	June 4, 1872	127, 578
Sewing-machine chair, Adjustable	F. Chichester	Milwaukee, Wis	Apr. 22, 1873	138, 073
Sewing-machine check-lever	J. B. Secor	Chicago, Ill	Dec. 19, 1871	121, 966
Sewing-machine circular clamp	S. G. Tyler	Quincy, Ill	May 24, 1859	24, 183
Sewing-machine clamp	J. A. and H. A. House	Bridgeport, Conn	June 26, 1866	55, 866
Sewing-machine clamp	M. Shaw	East Abington, Mass	Aug. 22, 1854	11, 581
Sewing-machine closet	N. P. Uhlinger	Philadelphia, Pa	Dec. 28, 1858	22, 464

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine cloth-cutting attachment	J. L. Coles	Newark, N. J	Jan. 30, 1872	123, 242
Sewing-machine cloth-cutting attachment	W. E. Prall and A. B. Band	Washington, D. C., and Staten Island, N. Y.	Nov. 29, 1870	109, 662
Sewing-machine cloth-gathering attachment	C. H. Wilcox and C. Carleton	New York and Brooklyn, N. Y.	Apr. 9, 1872	125, 424
Sewing-machine cloth-guide	W. Carpenter	Fairbury, Ill	Dec. 29, 1868	85, 364
Sewing-machine cloth-guide	G. F. Clemons	Springfield, Mass	June 27, 1865	48, 369
Sewing-machine cloth-guide	G. F. Clemons	Springfield, Mass	May 21, 1867	64, 840
Sewing-machine cloth-guide	A. Huston	Bristol, Me	July 25, 1865	49, 031
Sewing-machine cloth-guide	F. Zuchetti	New York, N. Y	Dec. 19, 1865	51, 645
Sewing-machine cloth-guide and binder-gage	L. J. Conant	New Lisbon, Ohio	July 31, 1866	56, 714
Sewing-machine cloth-guide, Button-hole	A. Harroun, jr	Onondaga, N. Y	Mar. 2, 1869	87, 409
Sewing-machine cloth-guiding attachment	J. Cline	Eaton, Ohio	Sept. 1, 1868	81, 604
Sewing-machine cloth-guiding attachment	S. Rogers and E. K. Sperry	Fleming, N. Y	Nov. 29, 1870	109, 668
Sewing-machine cloth-holder	L. A. Dupré	Donaldsonville, La	July 1, 1873	140, 406
Sewing-machine cloth-holder	G. Fowler	Waterbury, Conn	Apr. 5, 1864	42, 184
Sewing-machine cloth-holding guide	D. R. Lewis	Manchester, Iowa	Sept. 28, 1869	95, 362
Sewing-machine cloth-marking mechanism	H. W. Fuller	Brooklyn, N. Y	June 5, 1860	28, 633
Sewing-machine cloth-plaiting attachment	S. D. Tucker	Troy, N. Y	July 21, 1868	80, 243
Sewing-machine cloth-plate	E. H. Craige	Brooklyn, N. Y	Aug. 13, 1867	67, 635
Sewing-machine cloth-plate slide	E. P. West	Jersey City, N. J	Dec. 10, 1872	133, 733
Sewing-machine, Cop for	W. H. Akins	Ithaca, N. Y	Apr. 4, 1854	10, 728
Sewing-machine cord-guide	A. Golay	Mobile, Ala	Aug. 30, 1859	25, 255
Sewing-machine cord-guide	H. Horn	Milwaukee, Wis	Mar. 21, 1871	112, 810
Sewing-machine corder	J. W. Brady	Baltimore, Md	Sept. 19, 1865	49, 968
Sewing-machine corder	H. M. Hall	New York, N. Y	Apr. 23, 1872	126, 050
Sewing-machine corder	F. Henry	Bridgeport, Conn	May 10, 1864	42, 657
Sewing-machine corder	J. G. Powell	Philadelphia, Pa	Oct. 14, 1873	143, 589
Sewing-machine corder	A. N. Price and M. Harris	Jamestown, N. Y	May 21, 1872	127, 103
Sewing-machine corder	P. Rodier	Detroit, Mich	Sept. 3, 1872	131, 027
Sewing-machine corder	J. B. Sulgrove	Indianapolis, Ind	June 15, 1869	91, 285
Sewing-machine corder	J. F. Sullivan	Baltimore, Md	Aug. 20, 1872	130, 763
Sewing-machine cording-attachment	N. and R. S. Barnum	La Porte, Ind., and Chicago, Ill.	May 2, 1871	114, 254
Sewing-machine cording-attachment	F. B. Contessa	New York, N. Y	Mar. 31, 1868	75, 054
Sewing-machine cording-attachment	G. A. Colton and S. P. Babcock	Adrian, Mich	July 18, 1871	117, 152
Sewing-machine cording-attachment	W. H. Fowler and W. Pettingell.	Painesville, Ohio	May 23, 1871	115, 048
Sewing-machine cording-attachment	H. C. Goodrich	Chicago, Ill	Dec. 12, 1871	121, 775
Sewing-machine cording-attachment	H. C. Goodrich	Chicago, Ill	Feb. 27, 1872	123, 991
Sewing-machine cording-guide	C. P. Benedict	New York, N. Y	July 28, 1863	39, 336
Sewing-machine cording-guide	H. W. Dickinson	Hartford, Conn	May 15, 1855	12, 858
Sewing-machine cording-guide	W. Rankin	Richmond, Va	June 19, 1860	28, 776
Sewing-machine cording-guide	S. D. Tucker	Troy, N. Y	Nov. 26, 1861	33, 817
Sewing-machine cover	E. F. French	New York, N. Y	Jan. 4, 1870	98, 485
Sewing-machine cover	E. F. French	New York, N. Y	June 7, 1870	103, 863
Sewing-machine cover	G. Gardner	Glen Gardner, N. J	Dec. 10, 1872	133, 846
Sewing-machine cover	C. B. Grover	Cambridge, Mass	Mar. 4, 1873	136, 506
Sewing-machine cover	T. Hall	Brooklyn, N. Y	Mar. 29, 1870	101, 363
Sewing-machine cover	D. C. Junett	Troy, N. Y	May 28, 1872	127, 244
Sewing-machine cover	C. W. Reed	Chagrin Falls, Ohio	July 30, 1872	130, 072
Sewing-machine cover	C. W. Reed	Chagrin Falls, Ohio	Mar. 11, 1873	136, 762
Sewing-machine cover	A. J. Thompson	Malden, Mass	May 22, 1866	55, 023
Sewing-machine cover	W. P. Uhlinger and J. Doering	Philadelphia, Pa	June 14, 1870	104, 378
Sewing-machine cover	F. R. Wolfinger	Chicago, Ill	July 25, 1871	117, 358
Sewing-machine cover and table	F. R. Wolfinger	Chicago, Ill	Jan. 3, 1871	110, 711
Sewing-machine-cover hook	J. C. Egley	Philadelphia, Pa	Jan. 21, 1873	135, 100
Sewing-machine covers, Binding for	E. F. French	Detroit, Mich	Apr. 29, 1873	138, 324
Sewing-machine crate	F. Tanner	Detroit, Mich	July 16, 1872	129, 373
Sewing-machine creasing-apparatus	H. W. Fuller	New York, N. Y	May 19, 1868	77, 972
Sewing-machine creasing-attachment	C. Page	Boston, Mass	Nov. 2, 1869	96, 343
Sewing-machine creasing-device	J. A. Davis	Watertown, N. Y	Aug. 30, 1870	106, 789
Sewing-machine cutter	L. H. Allen	Farmington, N. H	May 27, 1873	139, 350
Sewing-machine cutting-attachment	A. T. Perrine	Charlestown, Mass	June 24, 1873	140, 159
Sewing-machine cutting-attachment	W. H. Sample	Albany, N. Y	Nov. 11, 1873	144, 480
Sewing-machine cutting-attachment	J. E. Wiggin	Stoneham, Mass	June 3, 1873	139, 525
Sewing-machine driving-mechanism	J. B. Ayer	Elizabeth, N. J	Dec. 7, 1869	97, 526
Sewing-machine driving-mechanism	J. A. Bradshaw, W. H. Brown, and D. Whittield.	Lowell, Mass	July 20, 1869	92, 786
Sewing-machine driving-mechanism	J. Cochrane, jr	Malden, Mass	Aug. 30, 1870	106, 781
Sewing-machine driving-mechanism	F. P. Fishburn	Cincinnati, Ohio	Nov. 12, 1872	132, 956
Sewing-machine driving-mechanism	C. Garçin and U. Adam	Colmar, France	June 15, 1869	91, 327
Sewing-machine driving-mechanism	G. W. Manson	Jersey City, N. J	Aug. 23, 1869	93, 214
Sewing-machine driving-mechanism	J. Perkins	Braintree, Mass	Apr. 17, 1860	27, 926
Sewing-machine driving-mechanism	E. Shiver	Washington, D. C	Mar. 15, 1870	100, 935
Sewing-machine driving-mechanism	T. Williams	Providence, R. I	July 12, 1864	43, 551
Sewing-machine driving-mechanism	J. H. Wilson and J. L. C. Outwater.	Philadelphia, Pa., and Newark, N. J.	Dec. 7, 1869	97, 741
Sewing-machine driving-wheel	A. W. Sawyer	Cleveland, Ohio	June 4, 1872	127, 434
Sewing-machine, Electro-magnetic	G. M. Hopkins	Albion, N. Y	Dec. 5, 1871	121, 622
Sewing-machine, Electro-magnetic	D. M. Smyth	Orange, N. J	Aug. 29, 1871	118, 651
Sewing-machine, Electro-magnetic	D. M. Smyth	Orange, N. J	Aug. 29, 1871	118, 652
Sewing-machine, Electro-magnetic	G. Stevens and J. Hendy	San Francisco, Cal	Jan. 31, 1871	111, 488
Sewing-machine, Electro-motor	S. Jones	New Orleans, La	Aug. 29, 1871	118, 537
Sewing-machine, Electro-motor	A. T. McClure	San Francisco, Cal	Aug. 13, 1872	130, 385
Sewing-machine embroidering-attachment	W. B. Bartram	Danbury, Conn	June 29, 1869	91, 898
Sewing-machine embroidering-attachment	W. Carpenter	Fairbury, Ill	Mar. 9, 1869	87, 633
Sewing-machine embroidering-attachment	W. Carpenter	Lawrence, Kans	Nov. 28, 1871	121, 332
Sewing-machine embroidering-attachment	E. J. Cubley	Chicago, Ill	May 31, 1870	103, 578
Sewing-machine embroidering-attachment	H. C. Goodrich	Chicago, Ill	June 7, 1870	104, 117
Sewing-machine embroidering-attachment	A. W. Johnson	Middletown, Conn	Oct. 11, 1870	108, 150
Sewing-machine embroidering-attachment	A. W. Johnson	Middletown, Conn	Mar. 14, 1871	112, 601
Sewing-machine embroidering-attachment	A. W. Johnson	New Haven, Conn	Sept. 2, 1873	142, 478
Sewing-machine embroidering-attachment	W. T. Johnston	Ottumwa, Iowa	July 27, 1869	93, 093
Sewing-machine embroidering-attachment	W. T. and A. Johnston	Ottumwa, Iowa	July 5, 1870	105, 087
Sewing-machine embroidering-attachment	W. A. Mack	Norwalk, Ohio	Jan. 17, 1871	111, 071
Sewing-machine embroidering-attachment	I. M. Rose	New York, N. Y	June 11, 1867	65, 768
Sewing-machine embroidering-attachment	I. M. Rose	West Hampton, N. Y	Aug. 10, 1869	93, 480
Sewing-machine embroidering-attachment	I. M. Rose	Brooklyn, N. Y	Feb. 18, 1873	136, 098

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine embroidering-attachment	I. M. Rose and R. M. Rose	Brookhaven and Brooklyn, N. Y.	Aug. 6, 1872	130, 317
Sewing-machine embroidering-attachment	M. W. Stevens	Stoughton, Mass	Nov. 28, 1865	51, 239
Sewing-machine embroidering-attachment	E. Stewart	Fort Madison, Iowa	Dec. 10, 1872	133, 901
Sewing-machine embroidering-attachment	J. Thomas	New York, N. Y	Apr. 27, 1869	89, 446
Sewing-machine embroidering-attachment	H. C. Young	Bridgeport, Conn	Aug. 3, 1869	93, 266
Sewing-machine extension-table	J. Bennor	Philadelphia, Pa	Mar. 18, 1873	136, 959
Sewing-machine extension-table	J. Bennor	Philadelphia. Pa	July 15, 1873	140, 877
Sewing-machine fan	D. W. Glassie	Nashville, Tenn	Nov. 16, 1869	96, 795
Sewing-machine fan	J. H. Stone	Washington, D. C	Aug. 25, 1868	81, 429
Sewing-machine fan-attachment	S. Burr	New York, N. Y	Sept. 25, 1866	58, 333
Sewing-machine fan-attachment	T. Green	Brooklyn, N. Y	June 27, 1871	116, 303
Sewing-machine fan-attachment	R. Jackson	Philadelphia, Pa	Sept. 23, 1873	143, 015
Sewing-machine fan-attachment	E. Kempe	Richmond, Va	June 3, 1873	139, 584
Sewing-machine fan-attachment	T. R. Lovett	Mount Airy, Pa	Mar. 13, 1866	53, 158
Sewing-machine fan-attachment	T. A. Lyle	Pittsburgh, Pa	June 22, 1869	91, 646
Sewing-machine fan-attachment	W. T. Spence	Saint Louis, Mo	Sept. 23, 1862	36, 537
Sewing-machine fan-attachment	G. Thompson	Springfield, Ill	May 23, 1871	115, 255
Sewing-machine fan-attachment	C. B. Veronee	Athens, Ga	Feb. 11, 1873	135, 868
Sewing-machine fan-attachment	J. H. Whitney	Rochester, Minn	Mar. 5, 1872	124, 406
Sewing-machine-feed-adjusting device	G. Rehfuss	Philadelphia, Pa	Feb. 27, 1866	52, 932
Sewing-machine feed-bar	S. Littlefield	Grafton, N. Y	July 9, 1867	66, 505
Sewing-machine feed-motion	A. Bartholf	New York, N. Y	July 21, 1857	17, 825
Sewing-machine feed-motion	A. L. Dewey	Westfield, Mass	July 31, 1866	56, 730
Sewing-machine feed-motion	F. Palmer	Conneaut, Ohio	Jan. 25, 1853	9, 556
Sewing-machine-feed-operating mechanism	N. F. Sawyer	Haverhill, Mass	Apr. 12, 1870	101, 926
Sewing-machine feed-regulator	G. Robinson	Detroit, Mich	Aug. 13, 1867	67, 803
Sewing-machine feed-wheel	A. Galleth	New York, N. Y	June 26, 1866	55, 847
Sewing-machine feed-wheel	A. Galleth	New York, N. Y	Aug. 14, 1866	57, 116
Sewing-machine feed-wheel	O. C. Phelps	New York, N. Y	Aug. 2, 1864	43, 705
Sewing-machine feed-wheel	L. Planer	New York, N. Y	June 13, 1865	48, 205
Sewing-machine feed-wheel	L. Planer	New York, N. Y	June 13, 1865	48, 206
Sewing-machine feed-wheel	G. M. Pratt	Middletown, Conn	Apr. 27, 1869	89, 501
Sewing-machine feed-wheels, Operating	A. Doll	Cleveland, Ohio	Sept. 3, 1867	68, 420
Sewing-machine-feeding clamp	W. H. Johnson	Granville, Mass	Apr. 12, 1853	9, 665
Sewing-machine-feeding device	J. Bolton and J. B. Secor	Chicago, Ill	Sept. 19, 1865	49, 967
Sewing-machine-feeding device	W. Chicken	Boston, Mass	Aug. 21, 1866	57, 287
Sewing-machine-feeding device	J. Hanlon	Bridgeport, Conn	Jan. 1, 1867	60, 888
Sewing-machine-feeding device	J. A. and H. A. House	Bridgeport, Conn	Aug. 13, 1867	67, 652
Sewing-machine-feeding device	W. A. Mack	Cleveland, Ohio	July 12, 1864	43, 514
Sewing-machine-feeding device	J. Williams	Troy, N. Y	Mar. 27, 1866	53, 514
Sewing-machine-feeding device and presser-foot	C. M. Stocker	Georgetown, Mass	Aug. 9, 1870	106, 228
Sewing-machine-feeding mechanism	R. M. Berry	Brooklyn, N. Y	Mar. 14, 1871	112, 531
Sewing-machine-feeding mechanism	C. Beuttel	Cincinnati, Ohio	May 23, 1871	115, 155
Sewing-machine-feeding mechanism	R. Blees	Brooklyn, N. Y	Oct. 10, 1871	119, 690
Sewing-machine-feeding mechanism	M. P. Carpenter	San Francisco, Cal	Feb. 21, 1871	112, 016
Sewing-machine-feeding mechanism	J. L. and D. H. Coles	New York, N. Y	Oct. 20, 1868	83, 133
Sewing-machine-feeding mechanism	P. Diehl and L. Oehring	Chicago, Ill	May 23, 1871	115, 036
Sewing-machine-feeding mechanism	G. A. Fairfield	Hartford, Conn	Mar. 26, 1867	63, 149
Sewing-machine-feeding mechanism	G. A. Fairfield	Hartford, Conn	Sept. 6, 1870	107, 019
Sewing-machine-feeding mechanism	G. N. Goodspeed	Winchendon, Mass	May 15, 1866	54, 816
Sewing-machine-feeding mechanism	J. E. Gowen	Stoneham, Mass	May 10, 1870	102, 808
Sewing-machine-feeding mechanism	W. B. Higgins	San Francisco, Cal	Jan. 31, 1871	111, 452
Sewing-machine-feeding mechanism	J. A. House	Bridgeport, Conn	Mar. 15, 1870	100, 764
Sewing-machine-feeding mechanism	R. Leavitt	Bridgeport, Conn	Jan. 30, 1872	123, 114
Sewing-machine-feeding mechanism	H. Lomax	Over Darwen, Great Britain	Oct. 19, 1869	96, 017
Sewing-machine-feeding mechanism	M. H. Merriam	Charlestown, Mass	Jan. 1, 1867	60, 769
Sewing-machine-feeding mechanism	J. A. Minor	Middletown, Conn	Apr. 7, 1868	76, 340
Sewing-machine-feeding mechanism	C. Parham	Philadelphia, Pa	Feb. 4, 1873	135, 579
Sewing-machine-feeding mechanism	N. S. C. Perkins	Norwalk, Ohio	Jan. 2, 1872	122, 401
Sewing-machine-feeding mechanism	G. A. Smith	Philadelphia, Pa	Feb. 15, 1870	99, 962
Sewing-machine-feeding mechanism	D. M. Smyth	Orange, N. J	Sept. 26, 1871	119, 246
Sewing-machine-feeding mechanism	D. M. Smyth	Orange, N. J	May 14, 1872	126, 844
Sewing-machine-feeding mechanism	D. M. Smyth	Orange, N. J	May 14, 1872	126, 845
Sewing-machine-feeding mechanism	D. M. Smyth	Orange, N. J	Aug. 6, 1872	130, 324
Sewing-machine-feeding mechanism	D. M. Smyth	Orange, N. J	Aug. 6, 1872	130, 325
Sewing-machine-feeding mechanism	E. P. West	Jersey City, N. J	July 4, 1871	116, 779
Sewing-machine-feeding mechanism	W. and E. Westmoreland	Nottingham, England	July 8, 1873	140, 603
Sewing-machine-feeding mechanism	J. H. Whitney	Brooklyn, N. Y	Dec. 28, 1869	98, 452
Sewing-machine-feeding mechanism	C. J. Woodward	Brooklyn, N. Y	Aug. 6, 1872	130, 264
Sewing-machine-feeding mechanism, Button-hole	W. Chicken	Chelsea, Mass	Mar. 5, 1872	124, 252
Sewing-machine feller	E. S. Yentzer and A. K. McCain	Ottawa, Ill	Jan. 7, 1868	73, 067
Sewing-machine felling-attachment	C. C. Blakemore	Zanesville, Ohio	Oct. 10, 1871	119, 814
Sewing-machine felling-guide	N. F. Ensign	Lansingburgh, N. Y	July 22, 1862	35, 972
Sewing-machine felling-guide	H. L. Paddock	Pontiac, Mich	July 2, 1861	32, 710
Sewing-machine fly-wheel	G. Roberts	Lowell, Mass	June 11, 1872	127, 799
Sewing-machine folding and plaiting device	W. Preiss	New York, N. Y	Aug. 21, 1866	57, 374
Sewing-machine folding and tuck-laying device	T. M. Farrand	Skowhegan, Me	May 23, 1871	115, 044
Sewing-machine folding and tucking gage	S. E. Blake	Worcester, Mass	June 24, 1862	35, 667
Sewing-machine folding cover	S. J. Pusey	Philadelphia, Pa	July 22, 1873	141, 169
Sewing-machine folding extension-table	J. F. Elliott	Cincinnati, Ohio	Jan. 19, 1869	85, 918
Sewing-machine folding-guide	B. C. Boyes	Philadelphia, Pa	July 22, 1856	15, 402
Sewing-machine folding-guide	J. E. Earle	New Haven, Conn	May 27, 1873	139, 378
Sewing-machine folding-guide	J. Morrison	Birmingham, England	July 7, 1863	39, 160
Sewing-machine folding-guide	S. W. Wood	Cornwall, N. Y	Apr. 29, 1873	138, 306
Sewing-machine for binding hats	I. M. Singer	New York, N. Y	June 3, 1856	15, 020
Sewing-machine for embroidering	A. Bonnaz	Paris, France	Nov. 10, 1868	83, 909
Sewing-machine for embroidering	A. Bonnaz	Paris, France	Nov. 10, 1868	83, 910
Sewing-machine for fringing	P. Casselberry	Peoria, Ill	Apr. 2, 1872	125, 270
Sewing-machine for making band-ruffling	T. Robjohn	New York, N. Y	Feb. 14, 1865	46, 494
Sewing-machine for making gloves	B. Rudolph	Berlin, Prussia	Feb. 1, 1870	99, 481
Sewing-machine for making puffing	E. D. Gird	Syracuse, N. Y	Dec. 6, 1870	109, 816
Sewing-machine for making ruffled fabrics	C. O. Crosby	New Haven, Conn	Oct. 3, 1865	50, 225
Sewing-machine for making shirt-bosoms	E. D. Gird	Cedar Lake, N. Y	Mar. 9, 1869	87, 559
Sewing-machine for parallel seams	F. P. Canfield	Cambridgeport, Mass	Jan. 19, 1869	86, 057
Sewing-machine friction-brake	D. Newton	Southington, Conn	Aug. 18, 1868	81, 195
Sewing-machine friction-brake, Power	J. Zuckerman	San Francisco, Cal	Nov. 1, 1864	44, 009
Sewing-machine for quilting	T. O. Foot	Newburgh, Ill	May 25, 1869	90, 354

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine for quilting	J. Happe and W. Newman	New York, N. Y	Mar. 25, 1873	137, 199
Sewing-machine for sewing sweat-linings to hats, &c.	R. Eickemeyer	Yonkers, N. Y	Feb. 20, 1866	52, 698
Sewing-machine for sewing sweat-linings to hats	F. S. Sanford and D. Wheeler	Bridgewater, Conn	Apr. 10, 1866	53, 927
Sewing-machine for sewing turned shoes	W. Duchemin	Boston, Mass	Jan. 8, 1869	91, 101
Sewing-machine for sewing turned shoes	F. Vetter	New York, N. Y	July 20, 1869	92, 912
Sewing-machine for soling boots and shoes	F. H. Brown	Chicago, Ill	Apr. 9, 1867	63, 607
Sewing-machine for soling boots and shoes	G. McKay and L. R. Blake	Boston and Quincy, Mass	May 24, 1864	42, 916
Sewing-machine for soling boots and shoes	M. J. Stein	New York, N. Y	Sept. 8, 1868	81, 956
Sewing-machine for soling shoes	W. Duchemin	Lynn, Mass	Nov. 13, 1866	59, 715
Sewing-machine for stitching cord to the edge of fabrics.	W. B. Bartram	Norwalk, Conn	May 15, 1866	54, 670
Sewing-machine for stitching eyelet-holes	W. B. Bartram	Norwalk, Conn	May 15, 1866	54, 671
Sewing-machine for umbrellas and parasols	W. J. Tate	Philadelphia, Pa	Apr. 4, 1871	113, 704
Sewing-machine friction band and stop	F. E. Whiteside	Oxford, Pa	Apr. 25, 1871	114, 071
Sewing-machine gage	C. C. Roberts	Perrysburgh, Ohio	Feb. 27, 1872	124, 086
Sewing-machine gage	P. Rodier	Detroit, Mich	Feb. 2, 1869	86, 594
Sewing-machine gage	T. S. Scranton	Madison, Conn	Jan. 28, 1868	73, 759
Sewing-machine gage for tucking, felling, binding, &c.	M. A. Duffy	New York, N. Y	Nov. 27, 1866	59, 983
Sewing-machine gathering and ruffling attachment	A. Johnston	Ottumwa, Iowa	Dec. 30, 1873	146, 005
Sewing-machine gathering and ruffling attachment	J. Wise	Watertown, N. Y	Sept. 23, 1873	143, 049
Sewing-machine gathering-attachment	W. B. Bartram	Danbury, Conn	Nov. 3, 1868	83, 592
Sewing-machine gathering-attachment	J. Crandell	Chicopee, Mass	Nov. 24, 1868	84, 414
Sewing-machine gathering-attachment	J. A. Davis	Watertown, N. Y	July 27, 1869	93, 063
Sewing-machine gathering-attachment	A. Everiss	New York, N. Y	Aug. 24, 1869	93, 979
Sewing-machine gathering-attachment	H. A. Fisher	Elyria, Ohio	May 24, 1870	103, 318
Sewing-machine gathering-attachment	T. S. Huntington	Baltimore, Md	Mar. 18, 1873	137, 002
Sewing-machine gathering-attachment	A. Johnston	Wapello County, Ind	Feb. 27, 1872	123, 995
Sewing-machine gathering-attachment	A. and W. T. Johnston	Ottumwa, Iowa	Jan. 31, 1871	111, 438
Sewing-machine gathering-attachment	J. W. Lyon	Chicago, Ill	Jan. 30, 1872	123, 115
Sewing-machine gathering-attachment	W. A. Mack	Norwalk, Ohio	Jan. 24, 1871	111, 130
Sewing-machine gathering-attachment	W. A. Mack	Norwalk, Ohio	Feb. 6, 1872	123, 494
Sewing-machine gathering-attachment	C. H. Miller	Dayton, Ohio	Jan. 29, 1867	61, 552
Sewing-machine gathering-attachment	C. Scharffe	Cleveland, Ohio	Apr. 20, 1869	89, 085
Sewing-machine gathering-device	J. A. Davis	Watertown, N. Y	Aug. 30, 1870	106, 788
Sewing-machine gathering-device	T. K. Reed	East Bridgewater, Mass	Aug. 6, 1867	67, 582
Sewing-machine gathering-mechanism	H. S. Brown	New York, N. Y	Mar. 22, 1864	42, 043
Sewing-machine gathering or ruffling attachment	A. Johnston	Ottumwa, Iowa	Jan. 21, 1873	135, 122
Sewing-machine gathering or ruffling attachment	A. Johnston	Ottumwa, Iowa	Jan. 21, 1873	135, 123
Sewing-machine glass presser-foot	R. E. Peterson, jr	Philadelphia, Pa	May 30, 1865	47, 978
Sewing-machine guide	J. S. Alter	Leavenworth, Kans	May 3, 1870	102, 469
Sewing-machine guide	C. Armstrong	Chicago, Ill	Sept. 19, 1871	119, 102
Sewing-machine guide	D. Barnum	Jersey City, N. J	Feb. 12, 1861	31, 366
Sewing-machine guide	C. Benedict and O. R. Tyler	Wolcottville, Conn	Aug. 25, 1868	81, 466
Sewing-machine guide	M. M. Benster	Detroit, Mich	Aug. 31, 1869	94, 175
Sewing-machine guide	W. B. Bishop	Brooklyn, N. Y	Jan. 20, 1857	16, 429
Sewing-machine guide	O. G. Brady	New York, N. Y	Dec. 27, 1859	26, 561
Sewing-machine guide	J. T. Capewell	Woodbury, Conn	July 24, 1866	56, 527
Sewing-machine guide	W. C. Dodge	Washington, D. C	May 17, 1870	103, 159
Sewing-machine guide	R. Eickemeyer	Yonkers, N. Y	Mar. 24, 1863	37, 957
Sewing-machine guide	W. L. Fish	Newark, N. J	Feb. 12, 1861	31, 379
Sewing-machine guide	W. L. Fish	Newark, N. J	Nov. 3, 1863	40, 464
Sewing-machine guide	G. D. Garvie	Hartford, Conn	May 21, 1867	64, 968
Sewing-machine guide	H. C. Goodrich	Chicago, Ill	Dec. 11, 1866	60, 360
Sewing-machine guide	W. H. Halladay	Chicago, Ill	Nov. 14, 1871	120, 966
Sewing-machine guide	G. W. Harrington	Orange, Mass	Aug. 22, 1865	49, 588
Sewing-machine guide	F. Herterich	Jersey City, N. J	Feb. 28, 1871	112, 245
Sewing-machine guide	A. Hull	Brooklyn, N. Y	Feb. 10, 1857	16, 586
Sewing-machine guide	E. H. Knight	Washington, D. C	May 1, 1866	54, 367
Sewing-machine guide	J. S. McCurdy	Bridgeport, Conn	Feb. 27, 1866	52, 870
Sewing-machine guide	F. R. Robinson	Worcester, Mass	July 17, 1855	13, 275
Sewing-machine guide	T. Robjohn	New York, N. Y	May 24, 1864	42, 876
Sewing-machine guide	T. Robjohn	New York, N. Y	May 24, 1864	42, 877
Sewing-machine guide	A. P. Rogers	Quincy, Ill	July 27, 1869	93, 010
Sewing-machine guide	A. L. Rumpff	Dansville, N. Y	Apr. 27, 1869	89, 506
Sewing-machine guide	E. Safford and O. H. Masters	Boston, Mass	Aug. 6, 1867	67, 590
Sewing-machine guide	L. W. Serrell	Brooklyn, N. Y	May 11, 1858	20, 245
Sewing-machine guide	L. W. Serrell	Brooklyn, N. Y	Nov. 22, 1859	26, 207
Sewing-machine guide	A. M. Smith	Brooklyn, N. Y	Oct. 10, 1865	50, 396
Sewing-machine guide	W. A. Springer	Marlborough, Mass	Sept. 16, 1873	142, 819
Sewing-machine guide	W. H. Van Vlear	Stockton, Ill	Feb. 2, 1869	86, 474
Sewing-machine guide	J. A. Wagener	Pultney, N. Y	May 26, 1863	38, 705
Sewing-machine guide	A. Warth	Stapleton, N. Y	Nov. 28, 1865	51, 247
Sewing-machine guide	G. W. Wells	Washington, D. C	June 15, 1869	91, 292
Sewing-machine guide and marker	E. W. Ingle	New Orleans, La	Aug. 11, 1868	80, 961
Sewing-machine guide and marker	F. H. Brown	Chicago, Ill	Dec. 19, 1865	51, 547
Sewing-machine guide for hat-linings	C. H. Lockwood	Hawleyville, Conn	Mar. 17, 1868	75, 637
Sewing-machine guide for stitching hat-tips to the side-linings.	H. E. Bodwell, jr	Paterson, N. J	May 22, 1866	54, 844
Sewing-machine guiding-attachment	J. Wensley	New Brunswick, N. J	Dec. 8, 1868	84, 783
Sewing-machine, Hand	R. W. Collier	Oxford, Miss	Apr. 9, 1867	63, 615
Sewing-machine, Hat-banding	J. Stewart, jr	Yonkers, N. Y	July 29, 1873	141, 397
Sewing-machine hem-stitch guide	J. Willson	Green Point, N. Y	Aug. 6, 1872	130, 169
Sewing-machine hemmer	W. L. Apthorp	Tallahassee, Fla	Nov. 18, 1873	144, 649
Sewing-machine hemmer	D. Barnum	Brooklyn, N. Y	June 11, 1872	127, 732
Sewing-machine hemmer	H. C. Bartleson	Toledo, Ohio	July 20, 1869	92, 692
Sewing-machine hemmer	A. H. Bartlett	Spuyten Duyvil, N. Y	Sept. 27, 1870	107, 650
Sewing-machine hemmer	A. W. Boomer and J. P. Haskins.	Poultney, Vt	Apr. 19, 1870	102, 082
Sewing-machine hemmer	E. Booth	Great Bend, Pa	Apr. 29, 1873	138, 371
Sewing-machine hemmer	S. H. and J. M. Bryant and H. L. McGaw.	Pittsburgh, Pa	Nov. 18, 1873	144, 736
Sewing-machine hemmer	C. Carleton	Brooklyn, N. Y	Jan. 3, 1871	110, 737
Sewing-machine hemmer	F. Caswell	Moline, Ill	Aug. 19, 1873	141, 993
Sewing-machine hemmer	A. F. Colby	Bath, Me	Aug. 1, 1871	117, 604
Sewing-machine hemmer	D. H. Darby	Mendon, Ill	May 30, 1871	115, 282
Sewing-machine hemmer	G. W. Darby	Hamilton, Ohio	Oct. 8, 1872	132, 062

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Sewing-machine hemmer	G. E. Dolton	Monee, Ill	Mar. 26, 1872	125,033
Sewing-machine hemmer	J. V. D. Eldredge	Detroit, Mich	Apr. 19, 1870	101,988
Sewing-machine hemmer	J. V. D. Eldredge	Detroit, Mich	Oct. 4, 1870	107,889
Sewing-machine hemmer	J. V. D. Eldredge	Detroit, Mich	Jan. 16, 1872	122,819
Sewing-machine hemmer	J. V. D. Eldredge	Detroit, Mich	Sept. 9, 1873	142,689
Sewing-machine hemmer	H. A. Ellis	Greenbush, N. Y	Oct. 17, 1871	119,921
Sewing-machine hemmer	H. A. Ellis	Albany, N. Y	Nov. 21, 1871	121,046
Sewing-machine hemmer	H. A. Ellis	Springfield, Mass	Mar. 4, 1873	136,495
Sewing-machine hemmer	T. H. Eulass	Mason City, Ill	Nov. 16, 1869	96,901
Sewing-machine hemmer	D. Forrest	Eastport, Me	Nov. 14, 1871	120,868
Sewing-machine hemmer	S. A. Gage	Rochester, N. Y	May 21, 1872	127,043
Sewing-machine hemmer	H. Goebel	New York, N. Y	May 9, 1865	47,632
Sewing-machine hemmer	H. C. Goodrich	Chicago, Ill	Mar. 19, 1872	124,809
Sewing-machine hemmer	H. C. Goodrich and R. Barnum	Chicago, Ill	May 6, 1873	138,638
Sewing-machine hemmer	J. M. Griest	Delavan, Ill	Nov. 4, 1873	144,333
Sewing-machine hemmer	J. R. Haggerty	Hillsdale, Mich	Aug. 13, 1867	67,753
Sewing-machine hemmer	M. Harris	Jamestown, N. Y	Aug. 9, 1870	106,155
Sewing-machine hemmer	M. Harris	Jamestown, N. Y	May 23, 1871	115,197
Sewing-machine hemmer	M. C. Hawkins	Edinborough, Pa	May 31, 1870	103,611
Sewing-machine hemmer	E. Howell	Ashtabula, Ohio	Nov. 16, 1869	96,809
Sewing-machine hemmer	J. F. Johnson	Cincinnati, Ohio	Sept. 23, 1873	143,160
Sewing-machine hemmer	W. Johnson	Haverhill, Mass	Dec. 19, 1871	121,944
Sewing-machine hemmer	S. B. Law ence	Scarsdale, N. Y	Dec. 26, 1871	122,180
Sewing-machine hemmer	A. McMillan	Cincinnati, Ohio	Aug. 5, 1873	141,576
Sewing-machine hemmer	C. Morehouse	Wayland, N. Y	Mar. 22, 1870	101,147
Sewing-machine hemmer	A. Morehouse	Danbury, Conn	Apr. 16, 1872	125,833
Sewing-machine hemmer	S. Morey	Binghamton, N. Y	Oct. 15, 1872	132,172
Sewing-machine hemmer	J. Morrison	Birmingham, England	Aug. 4, 1868	80,558
Sewing-machine hemmer	T. K. Ober	Philadelphia, Pa	Aug. 1, 1871	117,669
Sewing-machine hemmer	G. C. Overhiser	Ionia, Mich	Feb. 13, 1866	52,646
Sewing-machine hemmer	G. Rehfuss	Philadelphia, Pa	July 21, 1868	80,010
Sewing-machine hemmer	L. Schultz	College Point, N. Y	Sept. 2, 1873	142,519
Sewing-machine hemmer	L. Sexauer	Brooklyn, N. Y	Nov. 18, 1873	144,706
Sewing-machine hemmer	W. A. Thomas	Galveston, Ind	Mar. 3, 1868	75,079
Sewing-machine hemmer	C. H. Wilcox	New York, N. Y	July 26, 1864	43,657
Sewing-machine hemmer	E. Wilder and J. Crandell	Chicopee, Mass	Nov. 24, 1868	84,454
Sewing-machine hemmer and binder	G. E. Dolton	Monee, Ill	May 28, 1872	127,158
Sewing-machine hemmer and binder	M. Harris	Jamestown, N. Y	Dec. 5, 1871	121,516
Sewing-machine hemmer and feller	C. Carleton	Brooklyn, N. Y	Nov. 29, 1870	109,585
Sewing-machine hemmer and marker	W. D. Heyer	New Orleans, La	Feb. 18, 1868	74,533
Sewing-machine hemmer and tucker	W. N. Martin	Boston, Mass	May 21, 1872	127,080
Sewing-machine hemming and binding attachment	M. Harris	Jamestown, N. Y	Nov. 14, 1871	120,969
Sewing-machine hemming and felling device	J. Karr	Washington, D. C	Aug. 16, 1870	106,489
Sewing-machine hemming, tucking, and folding guide.	F. Henry	Bridgeport, Conn	Jan. 27, 1863	37,505
Sewing-machine hemming and tucking attachment	W. N. Martin	Boston, Mass	Apr. 18, 1871	113,903
Sewing-machine hemming-attachment	W. P. Mitchell	Baltimore, Md	June 26, 1860	28,889
Sewing-machine hemming-attachment	W. B. Snyder	Bridgeport, Conn	Aug. 30, 1870	106,968
Sewing-machine hemming-gage	W. Gaskill	Cincinnati, Ohio	Mar. 14, 1865	46,790
Sewing-machine hemming-guide	D. Barnum and S. G. Tyler	Jersey City, N. J., and Quincy, Ill.	May 24, 1859	24,088
Sewing-machine hemming-guide	S. E. Blake and T. Johnston	Louisville, Ky	Oct. 11, 1859	25,715
Sewing-machine hemming-guide	T. W. Browning and P. C. Hard	Wadsworth, Ohio	Sept. 25, 1866	58,210
Sewing-machine hemming-guide	W. Clemmons	Nicholasville, Ky	Mar. 1, 1859	23,079
Sewing-machine hemming-guide	C. J. Holcomb	Macon, Mo	Sept. 24, 1867	69,095
Sewing-machine hemming-guide	C. Marsh	Bridgeport, Conn	Mar. 5, 1861	31,645
Sewing-machine hemming-guide	H. B. Odiorne	Philadelphia, Pa	Aug. 31, 1858	21,355
Sewing-machine hemming-guide	S. D. Ogburn	Springfield, Tenn	Oct. 9, 1866	58,670
Sewing-machine hinge	R. H. St. John	Bellefontaine, Ohio	Mar. 21, 1871	112,978
Sewing-machine hinge	R. H. St. John	Bellefontaine, Ohio	Oct. 3, 1871	119,665
Sewing-machine knee-brace	F. E. Mills	New York, N. Y	Apr. 30, 1872	126,152
Sewing-machine lamp-bracket	H. Campbell	San Francisco, Cal	Feb. 14, 1871	111,813
Sewing-machine lamp-bracket	R. S. Dennison	Winsted, Conn	Nov. 21, 1871	121,089
Sewing-machine lamp-bracket	L. M. N. Wolf	Avon, Conn	May 13, 1873	138,831
Sewing machine, Leather	E. E. Bean	Boston, Mass	Feb. 9, 1869	86,632
Sewing machine, Leather	E. E. Bean	Boston, Mass	Apr. 27, 1869	89,275
Sewing machine, Leather	A. Lye	Philadelphia, Pa	Mar. 10, 1826	....
Sewing machine, Leather	W. W. Russell	Tepic, Mexico	Feb. 9, 1869	86,695
Sewing machine, Leather	G. V. Sheffield	New York, N. Y	Mar. 5, 1872	124,293
Sewing-machine lock	E. L. Gaylord	Bridgeport, Conn	Jan. 28, 1873	135,270
Sewing-machine lock key	E. L. Gaylord	Bridgeport, Conn	Nov. 21, 1871	121,096
Sewing-machine loop-catch	L. P. Collins	Sacramento, Cal	Nov. 13, 1860	30,615
Sewing-machine loop-catch	C. R. Folger	Cincinnati, Ohio	Sept. 24, 1861	33,341
Sewing-machine loop-check	P. Rodier	Springfield, Mass	Nov. 13, 1866	59,659
Sewing-machine loop-check	J. B. Secor	Chicago, Ill	Nov. 10, 1863	40,589
Sewing-machine looping-hook	M. A. Keables	Brattleborough, Vt	May 17, 1870	103,050
Sewing-machine lubricating compound	P. Held	Aurora, Ind	May 21, 1872	126,887
Sewing-machine marker	S. F. Brown	Savannah, Ga	Aug. 6, 1867	67,407
Sewing-machine marker	J. P. White	Savannah, Ga	Jan. 7, 1868	73,216
Sewing-machine marker	E. S. Yentzer	Chicago, Ill	May 28, 1872	127,287
Sewing-machine marker, hemmer, &c	J. P. White	Savannah, Ga	Sept. 24, 1867	69,289
Sewing-machine marking-attachment	S. Perrett	Yonkers, N. Y	Oct. 3, 1865	50,271
Sewing-machine marking-attachment	M. J. West	Watertown, N. Y	Feb. 27, 1866	52,918
Sewing-machine marking-attachment	R. H. St. John	Bellefontaine, Ohio	June 25, 1867	66,185
Sewing-machine marking-device	C. O. Yale	New York, N. Y	Nov. 27, 1866	60,111
Sewing-machine marking-gage	M. A. Duffy	New York, N. Y	Feb. 11, 1868	74,323
Sewing-machine marking-gage	W. M. Stoddard	San Francisco, Cal	Dec. 31, 1867	72,934
Sewing-machine marking-gage	C. D. Wheeler	New York, N. Y	Feb. 14, 1860	27,179
Sewing-machine motive-mechanism	J. W. Jordan	Lexington, Va	June 7, 1870	103,891
Sewing-machine motive-mechanism	A. Whittemore	Cambridgeport, Mass	Nov. 22, 1870	109,478
Sewing-machine motive-power	J. B. Ayer	Elizabeth, N. J	Sept. 21, 1869	95,069
Sewing-machine motive-power	S. J. Baird	Staunton, Va	Jan. 5, 1869	85,504
Sewing-machine motive-power	S. J. Baird	Staunton, Va	Jan. 5, 1869	85,505
Sewing-machine motive-power	H. S. Barnes	Augusta, Wis	Dec. 12, 1871	121,745
Sewing-machine motive-power	A. Bouchard	New Orleans, La	May 7, 1872	126,441
Sewing-machine motive-power	A. H. Enholm	Saint Louis, Mo	Aug. 11, 1868	80,815
Sewing-machine motive-power	E. J. Leyburn	Lexington, Va	June 21, 1870	104,608
Sewing-machine motive-power	G. W. Manson	Jersey City, N. J	June 21, 1870	104,610

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Sewing-machine motive-power	D. T. Pittenger	Trenton, N. J	May 30, 1871	115, 516
Sewing-machine motive-power	D. E. Stearns	Berea, Ohio	May 30, 1871	115, 379
Sewing-machine motive-power	H. Warren and C. H. Luther	Providence, R. I.	July 30, 1872	129, 998
Sewing-machine motor	R. H. Atwell	Baltimore, Md	Sept. 9, 1873	142, 551
Sewing-machine motor	B. C. Chambers	Shady Plain, Pa	Aug. 19, 1873	141, 996
Sewing-machine motor	W. Z. W. Chapman, H. C. Goodspeed, and E. Reed.	New York, N. Y., Plainfield, N. J., and Bath, Me.	Nov. 12, 1867	70, 803
Sewing-machine motor	D. A. Constable and J. F. Riggs	Saint Joseph, Mo	May 30, 1871	115, 436
Sewing-machine motor	W. R. Dunton	United States Army	Jan. 9, 1873	134, 526
Sewing-machine motor	W. A. Greenleaf	Indianapolis, Ind	July 2, 1872	128, 615
Sewing-machine motor	C. F. Greer	Georgetown, D. C	Mar. 19, 1872	124, 812
Sewing-machine motor	J. A. Macauley	Wheeling, W. Va	Dec. 5, 1871	121, 532
Sewing-machine motor	G. W. Manson	New York, N. Y	Dec. 5, 1871	121, 638
Sewing-machine motor	G. W. Manson	Auburn, Me	July 29, 1873	141, 367
Sewing-machine motor	D. H. Sherman	Waukegan, Ill	Aug. 29, 1871	118, 650
Sewing-machine motor	E. Shiver	Columbia, S. C	Aug. 18, 1868	81, 219
Sewing-machine motor	W. C. Thornton and J. D. Cooley	Hillsville, Va	Jan. 24, 1871	111, 276
Sewing-machine motor	C. L. Wilcox	West Williamsfield, Ohio	May 21, 1872	127, 129
Sewing-machine motor	W. Young	Baltimore, Md	July 8, 1873	140, 607
Sewing-machine movable cloth-plate	R. L. Leech	Winterset, Iowa	Sept. 2, 1873	142, 404
Sewing-machine needle	J. B. Blanchard	Boston, Mass	Aug. 31, 1869	94, 384
Sewing-machine needle	J. B. Blanchard	Boston, Mass	May 31, 1870	103, 549
Sewing-machine needle	J. B. Blanchard	Boston, Mass	Mar. 28, 1871	113, 010
Sewing-machine needle	J. L. Boone	San Francisco, Cal	Feb. 22, 1870	100, 112
Sewing-machine needle	F. H. Brown	Chicago, Ill	Apr. 28, 1863	38, 282
Sewing-machine needle	C. C. S. Curtis	Quincy, Ill	July 19, 1870	105, 433
Sewing-machine needle	F. H. Drake	Middletown, Conn	Aug. 14, 1860	29, 648
Sewing-machine needle	W. O. Grover	Boston, Mass	Mar. 4, 1862	34, 571
Sewing-machine needle	H. A. M. Harris	Philadelphia, Pa	Aug. 6, 1867	67, 536
Sewing-machine needle	O. L. Hopson and H. P. Brooks.	Waterbury and Wolcottville, Conn.	July 4, 1871	116, 594
Sewing-machine needle	G. M. Isbell	Torrington, Conn	July 14, 1868	79, 983
Sewing-machine needle	J. Madden	Youngstown, Ohio	Feb. 3, 1863	37, 585
Sewing-machine needle	J. J. Sibley	New York, N. Y	Mar. 14, 1871	112, 744
Sewing-machine needle	M. Stannard	New Britain, Conn	June 26, 1866	55, 927
Sewing-machine needle	E. Strain	Newton, Mass	June 21, 1870	104, 660
Sewing-machine needle	E. Strain	Newton, Mass	Mar. 21, 1871	112, 980
Sewing-machine needle	E. Strain	Newton, Mass	Aug. 2, 1870	106, 092
Sewing-machine needle	H. G. Suplee	San Francisco, Cal	Sept. 14, 1869	94, 924
Sewing-machine needle	C. H. Willcox	New York, N. Y	Mar. 19, 1861	31, 757
Sewing-machine-needle bar	G. M. Pratt	Middletown, Conn	May 7, 1872	126, 488
Sewing-machine-needle-adjusting block	T. A. Macaulay	Northampton, Mass	Mar. 15, 1870	100, 909
Sewing-machine needle and arm	M. P. Carpenter	San Francisco, Cal	Jan. 25, 1870	99, 158
Sewing-machine needle and holder	G. M. Fiary	Saint Louis, Mich	Mar. 14, 1871	112, 576
Sewing-machine needle and its carrying-arm	G. A. Lloyd	San Francisco, Cal	Dec. 27, 1870	110, 480
Sewing machine needle and its carrying-arm	C. H. Palmer	New York, N. Y	Nov. 29, 1870	109, 753
Sewing-machine needle and its carrying-bar	A. W. Mathues	Media, Pa	Feb. 13, 1872	123, 576
Sewing-machine-needle blanks, Machine for turning.	J. Brooks	North Bridgewater, Mass	Feb. 11, 1873	135, 767
Sewing-machine, Needle-feed	W. H. Cately	New York, N. Y	Aug. 7, 1866	56, 902
Sewing-machine needle-feed	J. A. Davis	Great Bend, Pa	Oct. 9, 1866	58, 614
Sewing-machine needle for embroidering	I. M. Rose	Brookhaven, N. Y	May 31, 1870	103, 664
Sewing-machine-needle gage and adjuster	J. W. Bartlett	New York, N. Y	Apr. 1, 1862	34, 807
Sewing-machine-needle holder	H. J. Hancock	New York, N. Y	Feb. 21, 1871	112, 033
Sewing-machine-needle holder	G. H. Horn	Boston, Mass	Mar. 6, 1860	27, 409
Sewing-machine-needle holder	C. Parkham and G. A. Smith	Philadelphia, Pa	Apr. 6, 1869	88, 665
Sewing-machine-needle holder and tension-device	E. L. Crumb	South West, Pa	Mar. 28, 1871	113, 027
Sewing-machine-needle-holding block	T. A. Macaulay	Northampton, Mass	Aug. 10, 1869	93, 460
Sewing-machine-needle-holding device	J. B. Secor	Chicago, Ill	Dec. 19, 1871	121, 967
Sewing-machine-needle-holding protector	T. Huckans and J. W. Carhart	New Baltimore and Troy, N. Y.	July 27, 1869	92, 972
Sewing-machine-needle setter	J. W. Field	Marysville, Ohio	May 10, 1870	102, 795
Sewing-machine-needle setter	J. M. Hoadley	Derby, Conn	July 13, 1869	92, 446
Sewing-machine-needle setter	J. Karr	Washington, D. C	Dec. 13, 1870	110, 144
Sewing-machine-needle setter	T. C. Michener	Saint Louis, Mo	Oct. 1, 1867	69, 463
Sewing-machine-needle setter	W. Raeuchle	Philadelphia, Pa	Jan. 2, 1872	122, 490
Sewing-machine-needle setter and threader	C. F. Albert	Philadelphia, Pa	June 17, 1873	139, 990
Sewing-machine-needle setter and threader	G. P. Farmer	Brooklyn, N. Y	June 24, 1873	140, 262
Sewing-machine-needle setter and threader	J. W. Hardie	New York, N. Y	June 25, 1861	32, 624
Sewing-machine-needle setter and threader	J. Karr	Washington, D. C	Jan. 10, 1871	110, 855
Sewing-machine-needle setter and tweezers	J. C. Schlarbaum	San José, Cal	June 4, 1872	127, 646
Sewing-machine-needle setter-gage and case	E. C. Hendrick	Carbondale, Pa	June 7, 1870	104, 030
Sewing-machine-needle-sharpening attachment	J. Callan	Bridgeport, Conn	Aug. 11, 1868	80, 908
Sewing-machine-needle-sharpening attachment	C. P. Clark	Lockhaven, Pa	May 2, 1871	114, 265
Sewing-machine-needle threader	C. T. Beardsley	Ansonia, Conn	Sept. 2, 1873	142, 430
Sewing-machine-needle threader	H. W. Dopp	Buffalo, N. Y	Apr. 6, 1869	88, 699
Sewing-machine-needle threader	N. B. Foote	Northampton, Mass	Dec. 11, 1866	60, 353
Sewing-machine-needle threader	T. Scholfield	Grass Valley, Cal	Sept. 23, 1873	143, 098
Sewing-machine-needle threader	W. C. A. Thielepape	San Antonia, Tex	Apr. 20, 1869	89, 256
Sewing-machine-needle threader	J. C. Vittum	Pittsburgh, Pa	June 25, 1872	128, 341
Sewing-machine-needle threader	M. A. and J. T. Williams	Chicago, Ill	July 15, 1873	140, 983
Sewing-machine needles, Cushion and sharpener for.	J. D. Nesbitt	Foxborough, Mass	Feb. 18, 1873	135, 931
Sewing-machines, Needle-grinding attachment for	J. N. Wilkins	Chicago, Ill	July 2, 1872	128, 518
Sewing-machine needles, Machine for grooving	H. Freimuth and A. Büttner	Aachen, Prussia	Mar. 4, 1873	136, 430
Sewing-machine needles, Machine for making	T. Fowler	Seymour, Conn	Sept. 3, 1867	68, 429
Sewing-machine needles, Machine for making	F. W. Mallett	New Haven, Conn	Jan. 5, 1869	85, 682
Sewing-machine needles, Machine for making	E. J. Manville	Waterbury, Conn	Feb. 11, 1868	74, 394
Sewing-machine needles, Machine for making	W. W. Shipman	New Haven, Conn	Sept. 20, 1859	25, 531
Sewing-machine needles, Machine for making blanks for.	T. Lilley	Milford, Mass	Mar. 5, 1872	124, 276
Sewing-machine needles, Machine for polishing the eyes of.	T. Fowler	Tottenville, N. Y	Oct. 4, 1870	107, 896
Sewing-machine needles, Machinery for making	J. P. Blake	Waterbury, Conn	Sept. 9, 1862	36, 392
Sewing-machine needles, Making	J. P. Blake	Waterbury, Conn	Sept. 9, 1862	36, 391
Sewing-machine needles, Mechanism for threading	J. Stevens	New York, N. Y	Apr. 3, 1860	27, 762

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Invention.	Inventor.	Residence.	Date.	No.
S wing-machine-oil-cup support	L. W. Leslie	Leominster, Mass	Feb. 25, 1873	136, 327
Sewing-machine-oiler-holder	A. Wilmot	Cleveland, Ohio	Nov. 2, 1869	96, 527
Sewing-machine-operating apparatus	A. C. Crary	Utica, N. Y	Mar. 17, 1868	75, 667
Sewing-machine-operating apparatus	V. Giroud	New York, N. Y	Nov. 1, 1870	108, 902
Sewing-machine-operating device	G. W. Manson	New York, N. Y	Nov. 7, 1871	120, 654
Sewing-machine-operating mechanism	G. Cuppers	New York, N. Y	Jan. 14, 1868	73, 303
Sewing-machine-operating mechanism	E. L. Howard	Hingham, Mass	Oct. 17, 1871	119, 930
Sewing-machine-operating mechanism	E. L. Howard	Malden, Mass	Dec. 27, 1870	110, 569
Sewing-machine-operating mechanism	E. Shiver	Washington, D. C	Mar. 15, 1870	100, 934
Sewing-machine-operating mechanism	A. Whittemore	Cambridgeport, Mass	Apr. 20, 1869	89, 104
Sewing-machine-operating mechanism	D. Whittlock	Newark, N. J	Jan. 14, 1873	134, 780
Sewing-machine-operating motor	R. Whitehill, jr	New York, N. Y	Oct. 22, 1867	70, 142
Sewing-machine operators, Support for	J. Preston	Bridgeport, Conn	Aug. 13, 1867	67, 674
Sewing-machine plaiter	H. Cawl, D. Corning, and J. W. Wheeler.	Troy, N. Y	Mar. 3, 1868	74, 990
Sewing-machine plaiter	O. M. Chamberlain	New York, N. Y	June 10, 1873	139, 657
Sewing-machine plaiting-attachment	S. C. Brown	Borough of Carlisle, Pa	Apr. 2, 1867	63, 463
Sewing-machine plaiting-attachment	O. M. Chamberlain	New York, N. Y	Aug. 6, 1872	130, 189
Sewing-machine plaiting-attachment	O. M. Chamberlain	New York, N. Y	Apr. 1, 1873	137, 342
Sewing-machine plaiting-attachment	A. Morehouse and A. R. Heath	Danbury, Conn	Sept. 7, 1869	94, 628
Sewing-machine plaiting-attachment	W. Walker	Brooklyn, N. Y	July 29, 1873	141, 407
Sewing-machine plaiting-attachment	W. Walker	Brooklyn, N. Y	Aug. 5, 1873	141, 610
Sewing-machine plaiting-device	W. Walker	Brooklyn, N. Y	Jan. 3, 1871	110, 699
Sewing-machine press and stitch-divider	A. S. Woodward	New York, N. Y	Jan. 10, 1871	110, 945
Sewing-machine presser-foot	G. W. Allerton and Z. M. Powers	Robinson, Ill	June 10, 1873	139, 700
Sewing-machine presser-foot	J. Bolton	Chicago, Ill	Oct. 6, 1863	40, 209
Sewing-machine presser-foot	C. Chabot and L. L. Cheney	Philadelphia, Pa	Nov. 19, 1872	133, 281
Sewing-machine presser-foot	J. L. and D. H. Coles	New York, N. Y	Nov. 26, 1872	133, 411
Sewing-machine presser-foot	F. B. Contessa	New York, N. Y	Sept. 14, 1869	94, 812
Sewing-machine presser-foot	C. Decker	New York, N. Y	Sept. 10, 1872	131, 256
Sewing-machine presser-foot	H. C. Goodrich	Chicago, Ill	Feb. 6, 1872	123, 393
Sewing-machine presser-foot	H. C. Goodrich	Chicago, Ill	May 6, 1873	138, 637
Sewing-machine presser-foot	T. Hudson	Troy, N. Y	May 16, 1871	114, 823
Sewing-machine presser-foot	W. W. Pettee	Foxborough, Mass	Mar. 15, 1870	100, 796
Sewing-machine presser-foot	A. J. Tewksbury	Haverhill, Mass	Aug. 7, 1866	57, 010
Sewing-machine presser-foot	S. Tutton	Tunkhannock, Pa	May 11, 1869	89, 957
Sewing-machine presser-foot	J. Wensley	Philadelphia, Pa	June 27, 1871	116, 380
Sewing-machine-presser-foot attachment	G. Vincent	Stockton, Cal	Dec. 31, 1872	134, 497
Sewing-machine-presser-foot lifter	T. W. Kennedy	New York, N. Y	Dec. 26, 1871	122, 256
Sewing-machine post	R. Ashe	Boston, Mass	Aug. 20, 1872	130, 555
Sewing-machine power	A. W. Cochran	Eufaula, Ala	Sept. 16, 1873	142, 839
Sewing-machine-power attachment	A. C. Crary	Utica, N. Y	Mar. 17, 1868	75, 666
Sewing-machine quilting-attachment	W. H. Heffley	Rochester, Ind	Apr. 29, 1873	138, 399
Sewing-machine quilting-attachment	A. Hoover and W. A. Nichols	Bethlehem and Zionsville, Ind.	Sept 17, 1872	131, 443
Sewing-machine quilting-attachment	W. H. Null	Blandinsville, Ill	Sept. 23, 1873	143, 092
Sewing-machine quilting-frame	W. H. Damron	Macomb, Ill	Aug. 20, 1872	130, 701
Sewing-machine quilting-guide	F. G. Buschmeier	Philadelphia, Pa	Dec. 23, 1873	145, 841
Sewing-machine, Regulating the tension of the thread in.	J. T. B. Rogers	New York, N. Y	Aug. 31, 1858	21, 398
Sewing-machine, Reversible feed for	R. B. Stanton	Oxford, Ohio	Aug. 13, 1867	67, 815
Sewing-machine roller	R. W. Courts	Russellville, Ky	Sept. 27, 1870	107, 666
Sewing-machine rotating-hook	A. and J. Aird	Troy, N. Y	Mar. 11, 1873	136, 635
Sewing-machine rotating-hook	J. A. and H. A. House	Bridgeport, Conn	July 10, 1866	56, 224
Sewing-machine rotating-hook	J. Husnik	Tabor, Austria	Sept. 28, 1869	95, 353
Sewing-machine ruffle-guide and band-folder	E. L. Howard	Malden, Mass	Apr. 4, 1871	113, 669
Sewing-machine ruffler	T. B. Bishop	Philadelphia, Pa	July 16, 1872	129, 087
Sewing-machine ruffler	G. E. Dolton	Monee, Ill	Oct. 1, 1872	131, 857
Sewing machine ruffler	G. E. Dolton	Monee, Ill	June 17, 1873	139, 883
Sewing-machine ruffler	C. W. Howard	Philadelphia, Pa	Nov. 1, 1870	108, 787
Sewing-machine ruffler	J. S. Hugg and J. T. Stewart	Camden, N. J., and Philadelphia, Pa.	Feb. 25, 1873	136, 162
Sewing-machine ruffler	A. M. Leslie	Chicago, Ill	Oct. 18, 1870	108, 492
Sewing-machine ruffler	A. M. Leslie	Chicago, Ill	July 16, 1872	129, 351
Sewing-machine ruffler	A. M. Leslie	Chicago, Ill	July 16, 1872	129, 352
Sewing-machine ruffler	W. H. Lewitt	Saint Louis, Mo	June 24, 1873	140, 285
Sewing-machine ruffler	J. W. Lyon	Chicago, Ill	Sept. 3, 1872	131, 012
Sewing-machine ruffler	M. T. Moody	Watertown, N. Y	Aug. 13, 1872	130, 522
Sewing-machine ruffler	T. G. Perkins	Chicago, Ill	Jan. 28, 1873	135, 359
Sewing-machine ruffler	C. Schullian	New York, N. Y	Sept. 30, 1873	143, 259
Sewing-machine ruffler	A. Steward	Plano, Ill	Oct. 15, 1867	69, 946
Sewing-machine ruffler	M. J. Stoll	Middletown, Conn	July 1, 1873	140, 557
Sewing-machine ruffler	E. J. Toof	Fort Madison, Iowa	May 21, 1872	126, 913
Sewing-machine ruffler	C. M. Woolworth	Ottumwa, Iowa	Sept. 2, 1873	142, 543
Sewing-machine ruffler and gatherer	A. Johnston	Ottumwa, Iowa	May 20, 1873	139, 064
Sewing-machine ruffler and gatherer	F. Sievers	Fort Wayne, Ind	May 20, 1873	139, 089
Sewing-machine ruffling and cording attachment	M. J. Palmer	Syracuse, N. Y	Aug. 15, 1871	118, 145
Sewing-machine ruffling and hemming attachment	W. Johnson	Haverhill, Mass	July 4, 1871	116, 715
Sewing-machine ruffling-attachment	D. C. Cary	Baltimore, Md	Oct. 2, 1866	58, 376
Sewing-machine ruffling-attachment	G. W. Darby	Cincinnati, Ohio	Nov. 7, 1871	120, 722
Sewing-machine ruffling-attachment	G. E. Dolton	Monee, Ill	Mar. 26, 1872	125, 032
Sewing-machine ruffling-attachment	J. L. Eck	Kutztown, Pa	Apr. 5, 1870	101, 446
Sewing-machine ruffling-attachment	J. O. Fairbairn	Milwaukee, Wis	Aug. 31, 1869	94, 299
Sewing-machine ruffling-attachment	M. T. Fitch	Lockport, N. Y	July 30, 1867	67, 183
Sewing-machine ruffling-attachment	H. C. Goodrich	Chicago, Ill	Jan. 30, 1872	123, 168
Sewing-machine ruffling-attachment	H. C. Goodrich	Chicago, Ill	Jan. 14, 1873	134, 744
Sewing-machine ruffling-attachment	W. L. Gray and O. T. Joy	Naletown, N. Y	Mar. 26, 1872	124, 894
Sewing-machine ruffling-attachment	L. H. Gunnerman	Pittsburgh, Pa	Oct. 5, 1869	95, 469
Sewing-machine ruffling-attachment	H. M. Hall	New York, N. Y	Aug. 16, 1870	106, 481
Sewing-machine ruffling-attachment	T. S. Huntington	Baltimore, Md	Mar. 18, 1873	137, 003
Sewing-machine ruffling-attachment	A. Johnston	Ottumwa, Iowa	Oct. 18, 1870	108, 486
Sewing-machine ruffling-attachment	A. Johnston	Ottumwa, Iowa	Jan. 9, 1872	122, 611
Sewing-machine ruffling-attachment	A. Johnston	Ottumwa, Iowa	Feb. 20, 1872	123, 910
Sewing-machine ruffling-attachment	W. T. Johnston	Ottumwa, Iowa	Sept. 10, 1872	131, 277
Sewing-machine ruffling-attachment	A. C. Kasson	Milwaukee, Wis	Dec. 28, 1869	98, 389
Sewing-machine ruffling-attachment	A. M. Leslie	Chicago, Ill	Feb. 22, 1870	100, 161
Sewing-machine ruffling-attachment	A. M. Leslie	Chicago, Ill	May 31, 1870	103, 755
Sewing-machine ruffling-attachment	W. W. Lowerce	Albany, N. Y	Apr. 27, 1869	89, 415

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Sewing-machine ruffling-attachment	J. D. Moore	Grinnell, Iowa	Apr. 9, 1872	125, 608
Sewing-machine ruffling-attachment	H. Moschcowitz	New York, N. Y	Feb. 20, 1872	123, 788
Sewing-machine ruffling-attachment	T. G. Perkins	Chicago, Ill	Aug. 20, 1872	130, 592
Sewing-machine ruffling-attachment	R. E. Peterson, jr	Philadelphia, Pa	Mar. 19, 1872	124, 853
Sewing-machine ruffling-attachment	J. G. Powell	Philadelphia, Pa	Sept. 10, 1872	131, 300
Sewing-machine ruffling-attachment	A. Steward	Plano, Ill	July 28, 1868	80, 371
Sewing-machine ruffling-attachment	E. Stewart	Fort Madison, Iowa	Mar. 11, 1873	136, 676
Sewing-machine ruffling-attachment	E. J. Toof	Fort Madison, Iowa	Oct. 24, 1871	120, 173
Sewing-machine ruffling-attachment	E. J. Toof	Fort Madison, Iowa	Apr. 2, 1872	125, 230
Sewing-machine ruffling-attachment	E. J. Toof	Fort Madison, Iowa	Apr. 2, 1872	125, 231
Sewing-machine ruffling-attachment	C. A. Vosburgh	Memphis, Tenn	Sept. 21, 1869	95, 171
Sewing-machine ruffling-attachment	F. B. Zay	Findlay, Ohio	Mar. 21, 1871	112, 882
Sewing-machine ruffling-device	R. Brooks, jr., and W. N. Manning.	Rockport, Mass	Dec. 8, 1868	84, 676
Sewing-machine ruffling-device	E. L. Howard	Malden, Mass	Nov. 14, 1871	120, 817
Sewing-machine ruffling-device	L. C. Riggs	Florence, Mass	Sept. 26, 1865	50, 164
Sewing-machine ruffling or plaiting attachment	A. Johnston	Ottumwa, Iowa	Apr. 8, 1873	137, 686
Sewing-machine ruffling or plaiting attachment	A. Rush	Chariton, Iowa	Oct. 7, 1873	143, 424
Sewing machine, Running-stitch	B. W. Bean	New York	Mar. 4, 1843	2, 982
Sewing machine, Running-stitch	J. D. Dale	Rochester, N. Y	Oct. 11, 1864	44, 686
Sewing machine, Running-stitch	J. Rodgers	New York, N. Y	July 22, 1844	3, 672
Sewing-machine seat	S. A. Sexton	New York, N. Y	Feb. 14, 1871	111, 782
Sewing-machine shield	M. W. Welty	New York, N. Y	Feb. 1, 1870	99, 3e0
Sewing machine, Shoe	G. W. Eldridge	Cambridgeport, Mass	Mar. 2, 1869	87, 331
Sewing machine, Shoe	J. Keith	Brooklyn, N. Y	Dec. 7, 1869	97, 518
Sewing machine, Shoe	W. J. B. Mills	Philadelphia, Pa	Dec. 24, 1872	134, 303
Sewing machine, Shoe	J. G. Ross and T. S. Miller	Philadelphia, Pa	May 13, 1873	138, 764
Sewing-machine shuttle	W. Bennett	Springfield, Ill	Nov. 29, 1870	109, 574
Sewing-machine shuttle	F. W. Boland	New York, N. Y	Jan. 3, 1871	110, 730
Sewing-machine shuttle	E. Booth and J. A. Davis	Watertown, N. Y	May 28, 1867	65, 052
Sewing-machine shuttle	D. M. Church	Birmingham, Conn	May 19, 1868	78, 057
Sewing-machine shuttle	F. A. Churchill	Pittsfield, Mass	June 18, 1872	128, 017
Sewing-machine shuttle	J. Coignard	Nantes, France	Dec. 1, 1863	40, 736
Sewing-machine shuttle	T. Colston	Hartford, Conn	Feb. 28, 1871	112, 125
Sewing-machine shuttle	M. and M. G. Cooke	Ashfield, Mass	July 16, 1872	129, 004
Sewing-machine shuttle	W. Cooney	Bridgeport, Conn	Apr. 22, 1873	138, 134
Sewing-machine shuttle	V. Cutter	Cincinnati, Ohio	Aug. 1, 1865	49, 092
Sewing-machine shuttle	J. A. Davis	Watertown, N. Y	May 28, 1867	65, 062
Sewing-machine shuttle	J. A. Davis	Watertown, N. Y	Sept. 29, 1868	82, 499
Sewing-machine shuttle	G. A. Edwards and G. Schieder	Syracuse, N. Y	Feb. 25, 1873	136, 311
Sewing-machine shuttle	C. W. Ells	Bridgeport, Conn	Apr. 8, 1873	137, 665
Sewing-machine shuttle	F. Etzold	Union Hill, N. J	Oct. 2, 1866	58, 399
Sewing-machine shuttle	N. B. Eveland	Hartford, Conn	June 16, 1868	78, 944
Sewing-machine shuttle	G. A. Fairfield	Hartford, Conn	Nov. 7, 1871	120, 731
Sewing-machine shuttle	H. C. Goodrich	Chicago, Ill	Feb. 27, 1872	123, 990
Sewing-machine shuttle	T. J. Halligan	New York, N. Y	Aug. 18, 1863	39, 567
Sewing-machine shuttle	N. C. Hawkins	Edinborough, Pa	May 31, 1870	103, 610
Sewing-machine shuttle	J. C. Hervey	Newport, Ky	Oct. 24, 1871	120, 277
Sewing-machine shuttle	J. B. Herreshoff	Bristol, R. I	Mar. 8, 1870	100, 627
Sewing-machine shuttle	W. H. Hockensmith	Bridgeport, Conn	Apr. 23, 1872	125, 956
Sewing-machine shuttle	W. H. Hockensmith	Bridgeport, Conn	June 17, 1873	140, 041
Sewing-machine shuttle	G. W. Hunter	Washington, D. C	Dec. 9, 1873	145, 348
Sewing-machine shuttle	A. W. Johnson	Middletown, Conn	Nov. 22, 1870	109, 414
Sewing-machine shuttle	G. Juengst	New York, N. Y	June 26, 1860	28, 869
Sewing-machine shuttle	J. Knox	Three Rivers, Mich	Nov. 11, 1873	144, 395
Sewing-machine shuttle	G. H. Lenher	Richmond, Va	Nov. 27, 1866	60, 021
Sewing-machine shuttle	G. H. Lenher	Elizabeth, N. J	June 27, 1871	116, 331
Sewing-machine shuttle	L. Lyon	New York, N. Y	July 26, 1870	105, 820
Sewing-machine shuttle	J. S. McCurdy	Bridgeport, Conn	Sept. 12, 1865	49, 904
Sewing-machine shuttle	G. W. Mitchell	Jackson, Tenn	Dec. 20, 1859	26, 511
Sewing-machine shuttle	J. D. Moore	Grinnell, Iowa	Mar. 7, 1871	112, 480
Sewing-machine shuttle	S. Moulton	Hartford, Conn	Jan. 15, 1867	61, 232
Sewing-machine shuttle	C. Patch	South Reading, Mass	July 5, 1864	43, 426
Sewing-machine shuttle	L. Planer and J. N. Siegl	New York, N. Y	July 17, 1860	29, 224
Sewing-machine shuttle	G. M. Pratt	Middletown, Conn	Feb. 7, 1871	111, 678
Sewing-machine shuttle	N. Read and G. W. Wyckoff	Syracuse, N. Y	Feb. 27, 1866	52, 881
Sewing-machine shuttle	G. Rehfuss	Philadelphia, Pa	May 27, 1873	139, 421
Sewing-machine shuttle	N. Roberts and A. E. Lake	Kendallville, Ind	Oct. 8, 1872	132, 108
Sewing-machine shuttle	W. H. Schofield	Somerville, Mass	Sept. 30, 1873	143, 303
Sewing-machine shuttle	J. B. Secob	Bridgeport, Conn	Aug. 19, 1873	141, 894
Sewing-machine shuttle	E. H. Smith	Bergen, N. J	Oct. 23, 1866	59, 088
Sewing-machine shuttle	E. C. Thaxton	Providence, R. I	Jan. 24, 1871	111, 275
Sewing-machine shuttle	W. H. Thayer	Thomaston, Conn	May 31, 1870	103, 797
Sewing-machine shuttle	W. H. Thayer	Somerville, Mass	Sept. 23, 1873	143, 104
Sewing-machine shuttle	S. M. Tyler	Brooklyn, N. Y	Sept. 18, 1866	58, 182
Sewing-machine shuttle	J. C. Wade	Boston, Mass	Aug. 17, 1869	93, 845
Sewing-machine shuttle	A. Warth	Stapleton, N. Y	Dec. 15, 1868	85, 040
Sewing-machine shuttle	W. W. Wells	Webster, Iowa	Aug. 23, 1870	106, 752
Sewing-machine-shuttle bobbin	G. Juengst	Somers, N. Y	Jan. 21, 1873	135, 125
Sewing-machine-shuttle bobbin	R. S. Mershon	Zanesville, Ohio	Aug. 10, 1869	93, 463
Sewing-machine-shuttle bobbin	T. Reeve	Brooklyn, N. Y	Apr. 30, 1872	126, 332
Sewing-machine-shuttle bobbin	W. H. Thayer	Somerville, Mass	Feb. 25, 1873	136, 282
Sewing-machine-shuttle carrier	W. Bennett	Hunt's Hollow, N. Y	Mar. 19, 1867	62, 999
Sewing-machine-shuttle carrier	J. Shellenberger	Hampshire, Ill	Aug. 28, 1866	57, 585
Sewing-machine-shuttle driver	V. Cutter	Cincinnati, Ohio	Aug. 1, 1865	49, 091
Sewing-machine-shuttle-threading device	J. L. Borsch	Philadelphia, Pa	Sept. 26, 1871	119, 217
Sewing-machine shuttles, Adjustable tension-device for.	J. P. Schenkl	Boston, Mass	Apr. 25, 1865	47, 462
Sewing-machine shuttles, Die for forming	D. W. Hale	Middletown, Conn	Jan. 7, 1873	134, 541
Sewing-machine shuttles, Spool of thread for	D. M. Church	Holyoke, Mass	July 26, 1870	105, 778
Sewing-machine shuttles, Tension-device for	W. Weitling	New York, N. Y	May 10, 1864	42, 706
Sewing-machine shuttles, Tension-mechanism of	T. K. Reed	East Bridgewater, Mass	Feb. 19, 1867	62, 288
Sewing-machine shuttles, Tension-mechanism for	J. W. Strange	Bangor, Me	June 20, 1871	116, 113
Sewing-machine soap-holding attachment	M. Dewey	New Albany, Ind	Dec. 14, 1869	97, 892
Sewing machine, Sole	L. R. Blake	Boston, Mass	Sept. 6, 1870	107, 155
Sewing machine, Sole	J. P. Greely	Boston, Mass	Oct. 11, 1870	108, 132
Sewing-machine spool-case	T. Merrick	Holyoke, Mass	June 18, 1872	127, 982
Sewing-machine spool-holder	W. Wheaton	Brooklyn, N. Y	Apr. 23, 1867	64, 051

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Sewing-machine spool-pin	G. Churchill	Hartford, Conn	July 17, 1860	29, 138
Sewing-machine-spool-thread regulator	W. H. Hawkins	Rochester, N. Y	June 5, 1866	55, 417
Sewing-machine spring-power	J. Cleveland and C. A. Todd	Williamsburgh and New York, N. Y.	Dec. 10, 1872	133, 760
Sewing-machine stand	W. H. Grove	Philadelphia, Pa	May 2, 1871	114, 435
Sewing-machine stand	H. Loth	Philadelphia, Pa	July 15, 1873	140, 929
Sewing-machine stand	R. M. Wanzer	Hamilton, Canada	Apr. 15, 1873	137, 983
Sewing-machine-starting mechanism	S. K. Bassett	Galesburgh, Ill	July 20, 1869	92, 693
Sewing-machine-starting mechanism	A. S. Smith	Lockport, N. Y	Mar. 17, 1863	37, 925
Sewing-machine stitch	C. F. Bosworth	Petersham, Mass	May 12, 1857	17, 255
Sewing-machine stitch	C. F. Bosworth	New Haven, Conn	June 9, 1863	38, 806
Sewing-machine stitch	J. Davis	Fayetteville, N. C	Mar. 13, 1860	27, 620
Sewing-machine stitch	R. H. Jewett	Versailles, Ill	Aug. 25, 1863	39, 658
Sewing-machine stitch	A. F. Johnson	Boston, Mass	Nov. 25, 1856	16, 129
Sewing-machine stitch	J. S. McCurdy	Brooklyn, N. Y	Apr. 24, 1860	27, 969
Sewing-machine stitch	C. Parham	Philadelphia, Pa	Jan. 31, 1865	46, 133
Sewing-machine stitch	J. J. Sibley	New York, N. Y	Sept. 5, 1865	49, 837
Sewing-machine stop	N. Robbins	Rockport, Mass	Sept. 10, 1872	131, 182
Sewing-machine stop-device	A. L. Dewey	Westfield, Mass	Aug. 7, 1866	56, 909
Sewing-machine table	W. H. Alrich	Philadelphia, Pa	Nov. 19, 1872	133, 075
Sewing-machine table	J. Bennor	Philadelphia, Pa	Dec. 20, 1870	110, 335
Sewing-machine table	J. Bennor	Philadelphia, Pa	July 15, 1873	140, 874
Sewing-machine table	J. Bennor	Philadelphia, Pa	July 15, 1873	140, 875
Sewing-machine table	J. Bennor	Philadelphia, Pa	July 15, 1873	140, 876
Sewing-machine table	J. Bennor	Philadelphia, Pa	Aug. 19, 1873	141, 985
Sewing-machine table	J. Bennor	Philadelphia, Pa	Oct 21, 1873	143, 742
Sewing-machine table	J. Bennor	Philadelphia, Pa	Dec. 16, 1873	145, 612
Sewing-machine table	W. H. Boyer	Baltimore, Md	Oct. 14, 1873	143, 611
Sewing-machine table	J. D. Browne	Madisonville, Ohio	Feb. 13, 1872	123, 673
Sewing-machine table	J. W. Cheney	Detroit, Mich	Mar. 11, 1873	136, 701
Sewing-machine table	J. C. Cochran	Ripley, Ohio	July 11, 1871	116, 809
Sewing-machine table	J. C. Cochran	Ripley, Ohio	Sept. 10, 1872	131, 151
Sewing-machine table	J. H. C. Cowgill	Fredonia, Del	Dec. 7, 1869	97, 481
Sewing-machine table	W. M. Cuthbert	Oil City, Pa	Mar. 18, 1873	136, 903
Sewing machine table	E. W. Hoyt	Perry, N. Y	June 4, 1872	127, 604
Sewing-machine table	R. Hughes	Boston, Mass	Sept. 3, 1872	131, 101
Sewing-machine table	T. E. Hunt	La Fayette, Ind	Aug. 10, 1869	93, 444
Sewing-machine table	E. A. Jeffrey	Jersey City, N. J	Aug. 19, 1873	142, 024
Sewing-machine table	M. J. Kerigan	Boston, Mass	May 24, 1870	103, 472
Sewing-machine table	H. Loth	Philadelphia, Pa	Jan. 14, 1873	134, 904
Sewing-machine table	H. Loth	Philadelphia, Pa	Jan. 14, 1873	134, 905
Sewing-machine table	H. Loth	Philadelphia, Pa	Feb. 11, 1873	135, 827
Sewing-machine table	J. B. McLure	Wheeling, W. Va	Jan. 14, 1873	134, 759
Sewing-machine table	E. L. Morgan	Riverville, W. Va	Nov. 1, 1870	108, 812
Sewing-machine table	T. W. Morrison	New Brunswick, N. J	June 10, 1873	139, 805
Sewing-machine table	S. J. Pusey	Philadelphia, Pa	Mar. 4, 1873	136, 543
Sewing-machine table	G. Rehfuss	Philadelphia, Pa	Nov. 26, 1872	133, 487
Sewing-machine table	N. D. Stoops	Newark, N. J	Apr. 12, 1864	42, 318
Sewing-machine table	W. P. Uhlinger	Philadelphia, Pa	July 2, 1872	128, 568
Sewing-machine table	A. H. Wagner	Chicago, Ill	Jan. 16, 1872	122, 872
Sewing-machine table	J. J. Wheat	Wheeling, W. Va	Oct. 4, 1870	108, 074
Sewing-machine table	J. J. Wheat	Wheeling, W. Va	Mar. 11, 1873	136, 798
Sewing-machine table	C. H. Wilcox	New York, N. Y	Aug. 9, 1870	106, 249
Sewing-machine table	F. R. Wolfinger	Chicago, Ill	July 25, 1871	117, 359
Sewing-machine table	F. R. Wolfinger	Chicago, Ill	July 29, 1873	141, 250
Sewing-machine table and chair, Combined	L. N. B. Gray	Boston, Mass	July 1, 1873	140, 362
Sewing-machine table and cover	J. C. Vetter	Indianapolis, Ind	Dec. 31, 1872	134, 496
Sewing-machine table and drawer attachment	D. C. Breed	Medina, N. Y	Oct. 17, 1871	119, 962
Sewing-machine-table attachment	M. A. Browne	Chicago, Ill	Mar. 4, 1873	136, 410
Sewing-machine-table cover	E. A. Jeffery	Jersey City, N. J	Jan. 21, 1873	135, 121
Sewing-machine-table cover	H. Jensen	Long Island City, N. Y	Aug. 5, 1873	141, 561
Sewing-machine-table-leaf support	J. B. Sargent	New Haven, Conn	Oct. 8, 1872	132, 027
Sewing-machine-table top	W. Wilson	Madison, Ind	Jan. 28, 1873	135, 392
Sewing-machine-table attachment	J. C. Egley	Philadelphia, Pa	Nov. 26, 1872	133, 361
Sewing-machine table, Folding	A. H. Wagner	Chicago, Ill	Aug. 29, 1871	118, 655
Sewing-machine-table hinge	M. C. Brinser	Lancaster, Pa	Nov. 26, 1872	133, 298
Sewing-machine tables, Cell-cover for	G. A. Wheeler	Worcester, Mass	July 9, 1872	128, 833
Sewing-machine tables, Drop-leaf attachment for	E. F. French	New York, N. Y	Feb 20, 1872	123, 818
Sewing-machine tables, Guard and basket for	B. S. Tower	Brooklyn, N. Y	Aug. 6, 1872	130, 339
Sewing-machine tables, &c., Lock for	J. B. Logan	Baltimore, Md	Sept. 9, 1873	142, 708
Sewing-machine tables, Swinging drawer for	W. H. Alrich	Philadelphia, Pa	May 28, 1872	127, 136
Sewing-machine take-up	J. V. D. Eldredge	Detroit, Mich	Nov. 17, 1868	84, 099
Sewing-machine take-up	W. V. Perry	Burnett, Wis	Aug. 4, 1863	39, 454
Sewing-machine-take-up mechanism	W. Bennett	Springfield, Ill	Dec. 27, 1870	110, 424
Sewing-machine tension-apparatus	C. G. Cross	Chicago, Ill	Apr. 17, 1860	27, 948
Sewing-machine tension apparatus	A. Hoagland	Jersey City, N. J	July 21, 1857	17, 835
Sewing-machine tension-apparatus, Wax-thread	J. Kimball	Boston, Mass	Aug. 1, 1871	117, 644
Sewing-machine tension-device	H. Bland	Luton, England	Jan. 19, 1864	41, 272
Sewing-machine tension-device	G. L. Dulaney	Mechanicsburgh, Pa	May 10, 1870	102, 787
Sewing-machine tension-device	G. L. Dulaney	Mechanicsburgh, Pa	Aug. 30, 1870	106, 796
Sewing-machine tension-device	H. C. Goodrich	Chicago, Ill	Aug. 18, 1868	81, 080
Sewing-machine tension-device	T. A. Macaulay	Northampton, Mass	Aug. 10, 1869	93, 459
Sewing-machine tension-device	D. Porter	Cleveland, Ohio	Oct. 27, 1868	83, 406
Sewing-machine tension-device	G. Stackpole	Elizabeth, N. J	July 23, 1872	129, 761
Sewing-machine tension-indicator	S. P. Sleppy	Wilkesbarre, Pa	May 17, 1864	42, 801
Sewing-machine tension-indicator	D. B. Tiffany	Xenia, Ohio	Mar. 11, 1873	136, 626
Sewing machine tension-mechanism	J. Bromley	Macon, Ga	Apr. 9, 1872	125, 535
Sewing-machine tension-mechanism	S. S. Spear	South Weymouth, Mass	Jan. 23, 1872	123, 054
Sewing-machine tension-mechanism	J. H. Williams	Middletown, Conn	July 16, 1872	129, 195
Sewing-machine tension-pulley	J. C. Girardin	Philadelphia, Pa	May 15, 1866	54, 715
Sewing-machine tension-regulator	E. M. Estabrook	New York, N. Y	Oct. 3, 1871	119, 589
Sewing-machine tension-regulator	P. Pryibill	New York, N. Y	June 10, 1862	35, 542
Sewing-machine tension-roller	J. McCarthy	Woburn, Mass	June 6, 1871	115, 736
Sewing-machine tension-wheel	J. H. Mooney	San Francisco, Cal	May 31, 1870	103, 643
Sewing-machine thread-controller	G. A. Fairfield	Hartford, Conn	July 30, 1867	67, 179
Sewing-machine thread-controller	G. M. Pratt and L. E. Maynard	Middletown, Conn	Dec. 28, 1869	98, 409
Sewing-machine thread-controller	W. Wendell	Milwaukee, Wis	June 7, 1870	103, 949
Sewing-machine thread-cutter	F. Collins	Portland, Me	Jan. 7, 1873	134, 518

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Sewing-machine thread-cutter	J. Crowe	Guelph, Ontario, Canada	June 21, 1870	104, 561
Sewing-machine thread-cutter	H. W. Dennis and J. Baker	Hopkinton, Mass	Feb. 6, 1866	52, 398
Sewing-machine thread-cutter	G. H. Dimond	Bridgeport, Conn	Feb. 20, 1872	123, 772
Sewing-machine thread-cutter	N. Evinger	Sandford, Ind	Nov. 4, 1873	144, 326
Sewing-machine thread-cutter	M. Harris	Jamestown, N. Y	May 21, 1872	127, 053
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	Tunkhannock, Pa., and Brewerton, N. Y.	Jan. 7, 1873	134, 669
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	Tunkhannock, Pa	Apr 22, 1873	138, 153
Sewing-machine thread-cutter	A. M. Leslie	Chicago, Ill	Apr. 29, 1873	138, 412
Sewing-machine thread-cutter	J. A. Lord	Sanford, Me	Aug. 29, 1871	118, 467
Sewing-machine thread-cutter	F. V. Oburg	Peoria, Ill	Apr. 15, 1873	137, 947
Sewing-machine thread-cutter	C. H. Wolcott	Jamestown, N. Y	May 14, 1872	126, 860
Sewing-machine thread-cutter	C. J. Wood	Brewerton, N. Y	Aug. 16, 1870	106, 526
Sewing-machine thread-cutting device	F. H. Furniss	Waterloo, N. Y	June 27, 1871	116, 424
Sewing-machine thread-cutting mechanism	A. Webber	Lynn, Mass	Sept. 23, 1873	143, 046
Sewing-machine thread-guard for spools	G. Wheelock	Washington, D. C	Mar. 16, 1869	87, 810
Sewing-machine thread-guide	H. E. Frohlich	Easton, Pa	Aug. 6, 1867	67, 524
Sewing-machine thread holder and cutter	J. A. Sawyer	Worcester, Mass	Aug. 6, 1867	67, 591
Sewing-machine thread-tension	P. Evens, jr	Cincinnati, Ohio	Mar. 27, 1866	53, 527
Sewing-machine thread-tension	E. L. Pratt	Philadelphia, Pa	Dec. 20, 1859	26, 537
Sewing-machine thread-tension	E. L. Pratt	Philadelphia, Pa	Apr. 29, 1862	35, 126
Sewing-machine thread-tension device	T. A. Chandler and H. C. Goodrich.	Rockford, Ill	Apr. 10, 1866	53, 783
Sewing-machine thread-tension device	H. R. Newcomb	Florence, Ala	Jan. 23, 1872	123, 038
Sewing-machine thread-tension device	J. L. Otis	Florence, Mass	Dec. 5, 1865	51, 346
Sewing-machine thread-tension device	J. S. Warner	Ogdensburgh, N. Y	Jan 25, 1870	99, 122
Sewing-machine thread-tension mechanism	S. Snyder	Harrisville, Pa	Mar. 17, 1868	75, 654
Sewing-machine thread-waxer	G. F. Kendall	Fitchburgh, Mass	Aug. 20, 1867	67, 881
Sewing-machine thread-waxer	G. McKay and L. R. Blake	Boston and Quincy, Mass	June 7, 1864	43, 077
Sewing-machine thread-waxer	Z. Sargent and M. Chase	Rochester, N. H., and Haverhill, Mass.	Oct. 1, 1872	131, 786
Sewing-machine thread-waxer	L. R. Wiggin	Farmington, N. H	Sept. 17, 1867	69, 056
Sewing-machine thread-waxing attachment	J. S. Dawley and J. Bleher	Buffalo, N. Y	Nov. 14, 1865	50, 917
Sewing-machine thread-waxing attachment	C. E. Lewis	York, Pa	Jan. 7, 1873	134, 606
Sewing-machine thread-waxing device	H. P. Aldrich	Spencer, Mass	May 30, 1865	47, 912
Sewing-machine thread-waxing device	I. Banister	Newark, N. J	Jan. 5, 1864	41, 050
Sewing-machine tray	G. A. Kerchner	Philadelphia, Pa	Mar. 4, 1873	136, 595
Sewing-machine treadle	R. N. Allen	Pittsford, Vt	Oct. 10, 1871	119, 686
Sewing-machine treadle	R. N. Allen	Pittsford, Vt	July 9, 1872	128, 839
Sewing-machine treadle	A. Q. Allis	Dayton, Ohio	June 30, 1868	79, 296
Sewing-machine treadle	A. Brill	Saint Louis, Mo	July 2, 1872	128, 460
Sewing-machine treadle	S. B. Bushfield	Baltimore, Md	July 8, 1873	140, 677
Sewing-machine treadle	H. J. Case	Auburn, N. Y	May 31, 1870	103, 562
Sewing-machine treadle	H. A. Clark	Boston, Mass	Dec. 26, 1871	122, 107
Sewing-machine treadle	C. F. Clough and J. B. Lincoln	Providence, R. I	Mar. 25, 1873	137, 179
Sewing-machine treadle	F. H. Coombs	Bangor, Me	Apr. 2, 1872	125, 176
Sewing-machine treadle	H. G. Davis	New York, N. Y	Mar. 16, 1869	87, 762
Sewing-machine treadle	N. B. Devol	Marshall, Ill	June 18, 1867	65, 887
Sewing-machine treadle	W. H. Elliot	New York, N. Y	Apr. 2, 1872	125, 283
Sewing-machine treadle	I. P. Fishburn	Cincinnati, Ohio	Aug. 27, 1872	130, 799
Sewing-machine treadle	A. Fontayne	Cincinnati, Ohio	June 20, 1871	116, 040
Sewing-machine treadle	C. A. Foster	Providence, R. I	Feb. 20, 1872	123, 775
Sewing-machine treadle	J. W. W. Gordon	Newport, Ky	Dec. 13, 1870	110, 132
Sewing-machine treadle	J. W. W. Gordon	Newport, Ky	July 11, 1871	116, 830
Sewing-machine treadle	T. J. Halligan	New York, N. Y	Nov. 12, 1867	70, 835
Sewing-machine treadle	J. R. Henshaw	Middletown, Conn	Aug. 6, 1872	130, 128
Sewing-machine treadle	M. H. Knapp	Fulton, N. Y	Sept. 9, 1873	142, 704
Sewing-machine treadle	C. J. F. Kraft	Cleveland, Ohio	Mar. 4, 1873	136, 377
Sewing-machine treadle	C. Kihn	New York, N. Y	Aug. 25, 1868	81, 379
Sewing-machine treadle	R. Leavitt	Bridgeport, Conn	Apr. 2, 1872	125, 291
Sewing-machine treadle	G. Lowden	Brooklyn, N. Y	May 21, 1872	126, 889
Sewing-machine treadle	A. D. Lufkin	Cleveland, Ohio	June 27, 1871	116, 464
Sewing-machine treadle	G. W. Miles	Lynn, Mass	Mar. 14, 1871	112, 616
Sewing-machine treadle	F. E. Mills	San Francisco, Cal	Feb. 28, 1871	112, 162
Sewing-machine treadle	C. H. Morgan	Cleveland, Ohio	Nov. 26, 1872	133, 331
Sewing-machine treadle	A. Nillson	Brooklyn, N. Y	Dec. 6, 1870	109, 835
Sewing-machine treadle	J. V. Pangburn and W. W. Barnett.	Galesburgh, Ill	Sept. 24, 1872	131, 557
Sewing-machine treadle	T. A. Richards	Brooklyn, N. Y	Jan. 23, 1872	122, 910
Sewing-machine treadle	T. A. Richards	Brooklyn, N. Y	Sept. 17, 1872	131, 411
Sewing-machine treadle	B. Rutter and H. Hunt	New Lexington, Ohio	Feb. 4, 1868	74, 007
Sewing-machine treadle	L. W. Sapp	Cleveland, Ohio	Feb. 28, 1871	112, 184
Sewing-machine treadle	L. W. Sapp	Cleveland, Ohio	Mar. 19, 1872	124, 857
Sewing-machine treadle	A. B. Shaw	Medford Mass	Jan. 14, 1873	134, 890
Sewing-machine treadle	F. Smiley	Batavia, N. Y	July 29, 1873	141, 240
Sewing-machine treadle	H. C. Smith	Cleveland, Ohio	Oct. 10, 1871	119, 724
Sewing-machine treadle	H. C. Smith	Cleveland, Ohio	Oct. 31, 1871	120, 401
Sewing-machine treadle	H. C. Smith	Cleveland, Ohio	Nov. 19, 1872	133, 177
Sewing-machine treadle	B. F. Sortman and E. Confare	Knightstown, Ind	Sept. 10, 1872	131, 311
Sewing-machine treadle	F. Stamler	Hamburgh, N. Y	Feb. 15, 1870	99, 967
Sewing-machine treadle	W. H. Stewart	Brooklyn, N. Y	Nov. 4, 1873	144, 366
Sewing-machine treadle	A. H. Wagner	Chicago, Ill	Mar. 26, 1872	125, 103
Sewing-machine treadle	A. Weissenborn	New York, N. Y	Feb. 16, 1869	86, 957
Sewing-machine treadle	J. H. Whitney	Rochester, Minn	Jan. 2, 1872	122, 422
Sewing-machine treadle	A. Wilmot	New Haven, Conn	July 16, 1872	129, 078
Sewing-machine treadle	A. Wilmot	Cleveland, Ohio	Dec. 3, 1872	133, 613
Sewing-machine treadle	C. H. Wilcox	New York, N. Y	Jan 25, 1870	99, 126
Sewing-machine treadle	J. B. Winslow	Charlestown, Mass	Dec. 19, 1871	121, 976
Sewing-machine treadle	W. D. Wood	Mount Sterling, Ohio	July 15, 1873	140, 865
Sewing-machine treadle and stand	G. S. Du Laney	Brooklyn, N. Y	Oct. 15, 1872	132, 261
Sewing-machine treadle and table	S. W. Wardwell, jr	Saint Louis, Mo	Dec. 12, 1871	121, 828
Sewing-machine-treadle attachment	J. Crandell	Chicopee, Mass	Aug. 25, 1868	81, 346
Sewing-machine-treadle attachment	W. Glover	New England Village, Mass	Jan. 29, 1861	31, 236
Sewing-machine-treadle attachment	H. B. Knowles	Providence, R. I	Oct. 4, 1859	25, 652
Sewing-machine treadle, Insulating	W. H. Gordon	Waltham, Mass	July 30, 1872	129, 945
Sewing-machine-treadle mechanism	W. S. Hall	Quincy, Mass	June 11, 1867	65, 665
Sewing-machine treadle-motion	M. M. Barnes	East Hampton, Mass	Dec. 19, 1865	51, 541
Sewing-machine treadles, Clutch-mechanism for	J. Tisdale	Norwood, Mass	Jan. 28, 1873	135, 297

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Sewing-machine treadles, Foot-warming attachment for.	A. R. Bush	Chicago, Ill	Mar. 11, 1873	136, 582
Sewing-machine trimming-attachment	W. A. Springer	Marlborough, Mass	Aug. 26, 1873	142, 290
Sewing-machine tuck-creaser	C. Armstrong	Chicago, Ill	Sept. 10, 1872	131, 206
Sewing-machine tuck-creaser	S. P. Babcock	Adrian, Mich	Oct. 21, 1873	143, 741
Sewing-machine tuck-creaser	I. W. Barnum	New York, N. Y	May 11, 1869	89, 842
Sewing-machine tuck-creaser	N. Barnum	La Porte, Ind	July 16, 1872	128, 942
Sewing-machine tuck-creaser	R. S. Barnum	Chicago, Ill	Jan. 21, 1873	135, 065
Sewing-machine tuck-creaser	W. E. Barnum	Chicago, Ill	Jan. 2, 1872	122, 352
Sewing-machine tuck-creaser	T. B. Bishop	Philadelphia, Pa	Aug. 27, 1872	130, 891
Sewing-machine tuck-creaser	E. Bostock	Albany, N. Y	May 7, 1867	64, 404
Sewing-machine tuck-creaser	E. Bostock	Albany, N. Y	July 28, 1868	80, 269
Sewing-machine tuck-creaser	E. Bostock	Albany, N. Y	July 28, 1868	80, 270
Sewing-machine tuck-creaser	P. Doran	Chicago, Ill	May 14, 1872	126, 684
Sewing-machine tuck-creaser	P. Doran	Chicago, Ill	Oct. 15, 1872	132, 148
Sewing-machine tuck-creaser	W. J. Faulkner	Chicago, Ill	Oct. 28, 1873	143, 975
Sewing-machine tuck-creaser	H. W. Fuller	Brooklyn, N. Y	Nov. 10, 1868	83, 950
Sewing-machine tuck-creaser	H. W. Fuller	New York, N. Y	Mar. 14, 1871	112, 578
Sewing-machine tuck-creaser	H. C. Goodrich	Chicago, Ill	Aug. 18, 1868	81, 160
Sewing-machine tuck-creaser	J. J. Graff	San Francisco, Cal	July 16, 1872	129, 128
Sewing-machine tuck-creaser	J. S. Hugg	Camden, N. J	Aug. 6, 1872	130, 132
Sewing-machine tuck-creaser	A. Johnston	Ottumwa, Iowa	Feb. 18, 1873	135, 919
Sewing-machine tuck-creaser	W. D. Kane	Chicago, Ill	May 27, 1873	139, 249
Sewing-machine tuck-creaser	J. H. Mooney	San Francisco, Cal	Dec. 7, 1869	97, 544
Sewing-machine tuck-creaser	J. C. Moore	Madison, Ind	Oct. 8, 1872	132, 018
Sewing-machine tuck-creaser	A. Morehouse and A. R. Heath	Danbury, Conn	Aug. 4, 1868	80, 653
Sewing-machine tuck-creaser	E. Powell	New York, N. Y	Dec. 30, 1873	146, 094
Sewing-machine tuck-creaser	C. E. Robinson	Boston, Mass	May 9, 1871	114, 604
Sewing-machine tuck-creaser	E. P. Smith	Chicago, Ill	June 25, 1872	128, 255
Sewing-machine tuck-creaser	J. T. Stewart	Philadelphia, Pa	Mar. 25, 1873	137, 108
Sewing-machine tuck-creaser and guide	G. F. Clemons	Springfield, Mass	May 25, 1869	90, 340
Sewing-machine tuck-creasing attachment	S. P. Babcock	Adrian, Mich	Apr. 16, 1872	125, 782
Sewing-machine tuck-creasing attachment	J. A. Davis	Watertown, N. Y	July 27, 1869	93, 064
Sewing-machine tuck-creasing attachment	H. W. Fuller	Brooklyn, N. Y	Apr. 13, 1869	88, 780
Sewing-machine tuck-creasing attachment	H. C. Goodrich	Chicago, Ill	Aug. 9, 1870	106, 151
Sewing-machine tuck-creasing attachment	J. C. Jensen	Chicago, Ill	Dec. 13, 1870	110, 045
Sewing-machine tuck-creasing attachment	J. F. Kellogg	North Bridgewater, Mass	Mar. 29, 1870	101, 272
Sewing-machine tuck-creasing attachment	W. Preiss	New York, N. Y	Aug. 17, 1869	93, 743
Sewing-machine tuck-creasing attachment	A. P. Rogers	Quincy, Ill	Jan. 12, 1869	85, 856
Sewing-machine tuck-creasing attachment	J. B. Safford	San Francisco, Cal	July 26, 1870	105, 852
Sewing-machine tuck-creasing attachment	J. J. Sibley	New York, N. Y	Sept. 6, 1870	107, 109
Sewing-machine tuck-creasing attachment	J. G. Wiggins	Lima, N. Y	Feb. 27, 1872	124, 025
Sewing-machine tuck-creasing device	J. Bolton	Chicago, Ill	Mar. 21, 1865	46, 871
Sewing-machine tuck-creasing mechanism	C. F. Martine	Boston, Mass	June 21, 1870	104, 612
Sewing-machine tuck-creasing mechanism	C. Page	Boston, Mass	Nov. 30, 1869	97, 435
Sewing-machine tuck-folder	C. H. Gardner	Rochester, N. Y	Aug. 4, 1868	80, 721
Sewing-machine tuck-folder	O. D. and E. C. Woodbury	New York, N. Y	Dec. 5, 1871	121, 699
Sewing-machine tuck-folding attachment	R. G. Bush	Jamestown, N. Y	Dec. 5, 1871	121, 488
Sewing-machine tuck-marker	R. G. Bush	Jamestown, N. Y	May 21, 1872	127, 023
Sewing-machine tuck-marker	G. L. Du Laney	New York, N. Y	May 2, 1871	114, 276
Sewing-machine tuck-marker	H. C. Goodrich	Chicago, Ill	Jan. 29, 1867	61, 618
Sewing-machine tuck-marker	H. C. Goodrich	Chicago, Ill	Aug. 20, 1867	67, 870
Sewing-machine tuck-marker	H. C. Goodrich	Chicago, Ill	Feb. 27, 1872	123, 989
Sewing-machine tuck-marker	H. C. Goodrich	Chicago, Ill	May 6, 1873	138, 635
Sewing-machine tuck-marker	H. C. Goodrich	Chicago, Ill	May 6, 1873	138, 636
Sewing-machine tuck-marker	J. S. Hugg	Camden, N. J	May 28, 1872	127, 349
Sewing-machine tuck-marker	J. F. Kellogg	North Bridgewater, Mass	May 24, 1870	103, 342
Sewing-machine tuck-marker	J. F. Kellogg	North Bridgewater, Mass	Feb. 21, 1871	112, 050
Sewing-machine tuck-marker	N. Jones	Chicago, Ill	July 12, 1870	105, 402
Sewing-machine tuck-marker	G. McFadden	Worcester, Mass	Jan. 9, 1872	122, 626
Sewing-machine tuck-marker	A. Shattuck	Buffalo, N. Y	Sept. 26, 1871	119, 284
Sewing-machine tuck marker or creaser	A. Weissenborn	New York, N. Y	May 28, 1867	65, 141
Sewing-machine tuck-marking attachment	H. W. Fuller	New York, N. Y	Mar. 19, 1867	63, 033
Sewing-machine tuck-marking attachment	A. C. Kasson	Milwaukee, Wis	Jan. 9, 1872	122, 613
Sewing-machine tucker	D. and E. B. Barnum	Brooklyn, N. Y	Mar. 25, 1873	137, 047
Sewing-machine tucker	J. H. Bean	Cincinnati, Ohio	Sept. 17, 1872	131, 418
Sewing-machine tucker	J. H. Bean	Cincinnati, Ohio	Oct. 15, 1872	132, 235
Sewing-machine tucker	J. H. Bean	Cincinnati, Ohio	Aug. 12, 1873	141, 623
Sewing-machine tucker	J. H. Bean	Cincinnati, Ohio	Dec. 16, 1873	145, 482
Sewing-machine tucker	F. W. Brown	Cincinnati, Ohio	Aug. 12, 1873	141, 626
Sewing-machine tucker	T. M. Farrand	Boston, Mass	July 2, 1872	128, 475
Sewing-machine tucker	J. S. Oakley	Passaic, N. J	Mar. 25, 1873	137, 232
Sewing-machine tucker	W. W. Russell	Malden, Mass	June 4, 1872	127, 432
Sewing-machine tucker	J. W. Wharton	Bourneville, Ohio	Feb. 6, 1872	123, 529
Sewing-machine tucking and hemming attachment	J. M. Hunter	Greene, N. Y	June 25, 1872	128, 229
Sewing-machine tucking and plaiting attachment	C. Z. Mattison	Buffalo, N. Y	Apr. 30, 1867	64, 237
Sewing-machine tucking-attachment	H. E. Bodwell, jr	South Norwalk, Conn	Oct. 19, 1869	95, 874
Sewing-machine tucking-attachment	E. Bouillon	New Orleans, La	May 13, 1873	138, 730
Sewing-machine tucking-attachment	A. S. Dinsmore	New York, N. Y	June 29, 1869	91, 922
Sewing-machine tucking-attachment	J. McNeill	New York, N. Y	Oct. 1, 1867	69, 461
Sewing-machine tucking-attachment	H. C. Schmidt	Bielefeld, Germany	July 30, 1872	129, 987
Sewing-machine tucking-device	W. H. Cole	Quincy, Mich	June 30, 1868	79, 447
Sewing-machine tucking-device	A. Morehouse	Hartford, Conn	Jan. 3, 1871	110, 670
Sewing-machine tucking-device	I. M. Rose	New York, N. Y	Sept. 22, 1863	40, 084
Sewing-machine tucking-device	R. H. St. John	Bellefontaine, Ohio	Oct. 20, 1868	83, 219
Sewing-machine tucking-gage	J. A. and H. A. House	Bridgeport, Conn	Aug. 13, 1867	67, 653
Sewing-machine water-wheel attachment	C. H. Palmer	New York, N. Y	Mar. 4, 1873	136, 452
Sewing machine, Wax-thread	R. Ashe	Boston, Mass	Aug. 20, 1872	130, 556
Sewing machine, Wax-thread	E. E. Bean	Boston, Mass	June 18, 1872	128, 008
Sewing machine, Wax-thread	E. E. Bean	Boston, Mass	Jan. 7, 1873	134, 508
Sewing machine, Wax-thread	E. E. and F. Bean	Boston and Medford, Mass	Jan. 7, 1873	134, 509
Sewing machine, Wax-thread	E. E. and F. Bean	Boston and Medford, Mass	Apr. 8, 1873	137, 528
Sewing machine, Wax-thread	W. H. Johnson	Springfield, Mass	Feb. 4, 1873	135, 431
Sewing machine, Wax-thread	A. Tittman	Evansville, Ind	Mar. 11, 1873	136, 792
Sewing machine, Wax-thread chain-stitch	E. E. Bean	Abington, Mass	Dec. 5, 1865	51, 383
Sewing machine, Waxed-thread	H. P. Aldrich	Spencer, Mass	May 30, 1865	47, 911
Sewing machine, Waxed-thread	H. P. Aldrich	Boston, Mass	Apr. 25, 1871	113, 969

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Sewing machine, Waxed-thread	T. J. Halligan	New York, N. Y	Apr. 24, 1866	54, 145
Sewing machine, Waxed-thread	T. J. Halligan	New York, N. Y	Oct. 23, 1866	59, 127
Sewing-machine welt and thread cutter	H. Folsom	Milford, Mass	May 24, 1864	42, 846
Sewing-machine welt-gage	J. H. Walker	Worcester, Mass	May 17, 1864	42, 810
Sewing-machine welt-guide	H. Folsom	Milford, Mass	Aug. 11, 1863	39, 474
Sewing-machine work-holder	H. Eddy	North Bridgewater, Mass	May 30, 1871	115, 288
Sewing-machine work-plate	G. Rehfuss	Philadelphia, Pa	June 15, 1869	91, 484
Sewing-machine work-supporting plate	E. H. Craige	Brooklyn, N. Y	Feb. 19, 1867	62, 186
Sewing-machines and other machinery, Crank for driving.	T. Williams	Providence, R. I	Nov. 12, 1861	33, 727
Sewing-machines and other machinery, Crank for driving.	T. Williams	Providence, R. I	Aug. 19, 1862	36, 263
Sewing-machines, Anti-rattling journals for the balance-wheel of.	P. S. Reese	Mount Sterling, Ky	Feb. 27, 1872	124, 160
Sewing-machines, Apparatus for transmitting motion to.	W. Wellington	Rockford, Ill	Mar. 1, 1870	100, 346
Sewing-machines, Automatic brake for	A. S. Hanson	Milan, Mich	Sept. 10, 1872	131, 269
Sewing-machines, Automatic fan for	T. R. Lovett	Mount Airy, Pa	Nov. 28, 1865	51, 202
Sewing-machines, Automatically operating	G. Cupper	New York, N. Y	Dec. 24, 1867	72, 607
Sewing-machines, Auxiliary power for	G. Stackpole	New York, N. Y	Sept. 29, 1868	82, 655
Sewing-machines Band and edging guide for	E. L. Howard	Malden, Mass	June 20, 1871	116, 056
Sewing machines, Channel-opener for boot and shoe	O. Weeman	Lynn, Mass	Nov. 30, 1869	97, 330
Sewing machines, Clamp for button-hole	W. Chicken	Boston, Mass	Mar. 11, 1873	136, 702
Sewing-machines, Clutch for feeding-mechanism of.	E. McDonald and N. H. Cole	Boston and Swampscott, Mass.	July 4, 1871	116, 618
Sewing-machines, Clutch-pulley for driving	P. Rodier	Springfield, Mass	July 18, 1865	48, 840
Sewing-machines, Device for controlling motion of.	A. Buchanan	Brooklyn, N. Y	Nov. 21, 1865	51, 012
Sewing-machines, Device for controlling the spool-thread in.	H. E. Bodwell, jr	Milburn, N. J.	Dec. 19, 1865	51, 544
Sewing-machines, Device for driving	A. W. Harris	Providence, R. I	Dec. 13, 1870	110, 034
Sewing-machines, Device for equalizing the delivery of thread from shuttle and spool of.	W. Weitling	New York, N. Y	Feb. 21, 1865	46, 513
Sewing-machines, Device for heating waxed thread in.	A. Holbrook, jr	Lynn, Mass	June 21, 1864	41, 209
Sewing-machines, Device for oiling thread in	O. R. Hyde	East Cleveland, Ohio	Nov. 3, 1863	40, 484
Sewing-machines, Device for securing cover upon	J. H. Mooney	San Francisco, Cal	Sept. 13, 1870	107, 398
Sewing-machines, Device for securing hemmers, &c., to.	H. M. Hall	New York, N. Y	Sept. 26, 1871	119, 350
Sewing-machines, Device for securing hat-lining on	J. W. Blackham	Brooklyn, N. Y	Apr. 5, 1864	42, 158
Sewing-machines, Device for starting	J. P. Herron	Washington, D. C	July 26, 1864	43, 641
Sewing-machines, Device to prevent retrograde motion in.	W. F. Lewis and J. H. Baird	Watertown and Waterbury, Conn.	July 14, 1863	39, 236
Sewing-machines, Device to prevent retrograde motion of balance-wheel on.	G. W. Cook	Chicago, Ill	Mar. 18, 1873	136, 972
Sewing-machines, Device to prevent reverse motion in belt of.	M. B. Wheaton	New York, N. Y	Sept. 3, 1872	131, 040
Sewing-machines, Fastening-slide for bed-plates of	H. F. Sahnders	Westfield, N. Y	Oct. 1, 1872	131, 907
Sewing-machines, Frame for holding work on	E. M. Turner	Allegheny City, Pa	Dec. 30, 1873	146, 110
Sewing machines, Heating top-plates for wax-thread.	W. F. Hayden	Brookfield, Mass	July 30, 1867	67, 300
Sewing-machines, Hydraulic and pneumatic motor for.	J. H. and R. W. Welch	Georgetown, D. C	Nov. 28, 1871	121, 441
Sewing-machines, Lap-seam guide for	O. W. Horr	Chicopee, Mass	Dec. 24, 1867	72, 642
Sewing-machines, Machine for making needles for	G. Karrmann	Ansonia, Conn	Oct. 19, 1869	96, 011
Sewing-machines, Manufacture of tension-wheels for.	I. Manning	Philadelphia, Pa	June 18, 1872	128, 051
Sewing-machines, Means for adjusting the driving-wheel of.	W. Wiederpruem	Buffalo, N. Y	May 2, 1865	47, 560
Sewing-machines, Means for carrying and operating the shuttle in.	J. Wensley	New Brunswick, N. J	May 9, 1865	47, 673
Sewing-machines, Means for extending the tables of.	A. Dickinson	New York, N. Y	Dec. 19, 1871	121, 998
Sewing-machines, &c., Mechanical movement for	E. Cowles	Cleveland, Ohio	June 7, 1870	103, 847
Sewing-machines, Mechanical power applied to	L. W. Sapp	Cleveland, Ohio	Aug. 27, 1867	68, 314
Sewing-machines, Mechanism for operating bobbin-winding attachment for.	W. L. Fish	Newark, N. J	Feb. 13, 1872	123, 625
Sewing-machines, Mechanism for operating the feeding-wheel in.	F. Spoehr	Philadelphia, Pa	Apr. 12, 1870	101, 779
Sewing-machines, Mechanism for starting	T. J. Alexander	Westerville, Ohio	June 12, 1860	28, 642
Sewing-machines, Mechanism for starting	A. M. Smith	Brooklyn, N. Y	Sept. 27, 1864	44, 465
Sewing-machines, Method of attaching needles in.	G. Stackpole	New York, N. Y	June 22, 1869	91, 684
Sewing-machines, Method of conducting thread over the guide-wire of bobbin-winders of.	G. G. Sheldon	Chicago, Ill	Jan. 16, 1872	122, 858
Sewing-machines, &c., Movable treadle for small lathes.	W. J. Demorest	New York, N. Y	Oct. 22, 1867	69, 975
Sewing-machines, Oiling the thread for	T. W. Pepper	New York, N. Y	Aug. 31, 1858	21, 361
Sewing-machines, Operating	S. Phimister	Galesburgh, Ill	Oct. 22, 1872	132, 409
Sewing-machines, Operating	P. J. Steer	Washington, D. C	Apr. 20, 1858	20, 006
Sewing-machines, Operating	E. Wright	Chicago, Ill	Sept. 2, 1873	142, 544
Sewing-machines, Operating feed-wheels in	G. W. Powers	Boston, Mass	Dec. 24, 1867	72, 673
Sewing-machines, Preventing reverse motion in	D. A. Dickenson	Baltimore, Md	May 31, 1870	103, 584
Sewing-machines, Process of ornamenting	C. F. Mueller	Hamilton, Canada	Aug. 15, 1871	118, 043
Sewing-machines, Scissors-grinding attachment for.	R. S. Morse	East Dixfield, Me	Dec. 5, 1871	121, 537
Sewing-machines, Scissors-sharpening attachment to.	G. T. Chattaway	Brooklyn, N. Y	July 26, 1870	105, 777
Sewing-machines, Self-regulating tension for	T. Zinck	New York, N. Y	Dec. 11, 1866	60, 456
Sewing-machines, Setting and threading needle in.	H. D. Conrad	Dayton, Ohio	Feb. 18, 1862	34, 407
Sewing-machines, Sheet-metal cover for	R. H. Chinn and J. F. Reigart	Washington, D. C	Nov. 22, 1870	109, 384
Sewing-machines, Spring for holding cloth in	T. E. King	Painesville, Ohio	June 4, 1867	65, 395
Sewing-machines, Stop for	J. B. Safford	Poughkeepsie, N. Y	Aug. 29, 1871	118, 490
Sewing-machines, Stop for preventing retrograde motion in.	W. Sherman and G. Bishop	Middletown, Conn	July 27, 1869	93, 014
Sewing-machines, Stud for suspending driving-wheels in.	R. H. McCann	Zanesville, Ohio	Aug. 29, 1871	118, 469
Sewing-machines, Take-up for thread in	J. Fanning	Brooklyn, N. Y	Sept. 22, 1868	82, 397
Sewing-machines, Tension-device for needle-thread in.	M. C. Hawkins	Edinborough, Pa	May 31, 1870	103, 609
Sewing-machines, Thread-rack for spooling attachment of.	J. L. Demarest	Elmira, N. Y	Nov. 21, 1871	121, 043

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Sewing-machines upon their tables, Means for mounting.	C. Parham	Philadelphia, Pa	Oct. 10, 1871	119, 784
Sewing-machines, Waxing thread in	S. Wilder	Lynn, Mass	Jan. 30, 1855	12, 336
Sewing, Making plaits in	F. A. Allen	Portsmouth, N. H	Feb. 7, 1860	27, 029
Sewing-needle	H. Essex	Haverstraw, N. Y	Dec. 18, 1860	31, 000
Sewing on binding, Guide for	H. L. Sweet	Foxborough, Mass	Dec. 20, 1853	10, 344
Sewing or embroidering machine	A. W. Johnson	New Haven, Conn	Apr. 2, 1872	125, 301
Sewing oval seams, Mechanism for	A. Judson	Newark, N. J	Sept. 10, 1867	68, 828
Sewing packages	M. B. Westhead and C. B. James.	Manchester and Redditch, England.	May 11, 1869	90, 059
Sewing pamphlets, Machine for	C. H. Palmer	New York, N. Y	Mar. 19, 1872	124, 694
Sewing-pin	T. Fowler	Waterbury, Conn	Oct. 10, 1854	11, 781
Sewing-pin	J. McNamee	Easton, Pa	Aug. 27, 1861	33, 169
Sewing seams of looped fabrics, Machine for	E. E. Kilbourn	New Brunswick, N. J	Nov. 20, 1866	59, 746
Sewing shoes, Guide for	H. Bond	Haverhill, Mass	Oct. 28, 1873	143, 953
Sewing shoes, Guide for	L. E. De Waru	Baltimore, Md	Oct. 28, 1873	143, 969
Sewing-silk, Manufacturing	H. Kelsea	North Branch in Antrim, N. H.	Feb. 2, 1858	19, 283
Sewing soles of boots and shoes, Process of	G. McKay	Boston, Mass	May 6, 1862	35, 165
Sewing soles to boots and shoes, Thread for	G. V. Sheffield	Boston, Mass	Nov. 12, 1872	132, 926
Sewing-stand	L. J. Fling and A. Land	Hudson and Hillsdale, Mich.	Dec. 23, 1873	145, 858
Sewing stand, Embroidery	D. Bickford	Westerly, R. I	May 1, 1860	28, 054
Sewing sweat-lining into hats	R. Eickemeyer	Yonkers, N. Y	Oct. 9, 1866	58, 622
Sewing-thread-spool holder, Portable	A. A. Freeman	Philadelphia, Pa	Apr. 15, 1862	34, 951
Sewing turned shoes, Machine for	T. L. Miller	Philadelphia, Pa	July 8, 1873	140, 586
Sewing turns	G. McKay and L. R. Blake	Boston and Quincy, Mass	May 3, 1864	42, 622
Sewing-work case, Portable	T. H. Burgess	Boston, Mass	Apr. 1, 1862	34, 813
Sewing-work holder	H. G. Scofield	North Stamford, Conn	Feb. 19, 1861	31, 481
Sewing-work holder	A. M. Smith	New York, N. Y	Sept. 15, 1863	39, 966
Sewing-work holder and scissors-sharpener, Combined.	C. E. Staples	Worcester, Mass	Aug. 28, 1866	57, 591
Sextant	L. Daser	Washington, D. C	Apr. 17, 1860	27, 891
Sextant	G. Davidson	Philadelphia, Pa	May 15, 1866	54, 698
Sextant	P. N. A. Laurent	St. Nazaire, France	May 16, 1865	47, 778
Sextant, Equatorial	W. A. Burt	Mount Vernon, Mich	Nov. 4, 1856	16, 002
Sextants, &c., Artificial horizon for	J. A. Rogers	New Haven, Conn	Apr. 12, 1870	101, 919
Shackle and supporter	W. Riley	Salem, Oreg	Dec. 29, 1868	85, 402
Shackle-bearer	J. W. Mahew	San Francisco, Cal	July 14, 1868	79, 996
Shackle-block, Messenger	G. Gilmour	Chelsea, Mass	Apr. 21, 1857	[illegible]7, 085
Shackle, Convict's	P. Runquist	Steilacoom City, Wash	Aug. 27, 1872	130, 872
Shackle, Prisoner's	J. C. Gardner	Portland, Oreg	May 22, 1866	54, 889
Shackle-jack	J. Whitlock	Birmingham, Conn	June 9, 1868	78, 848
Shackle-joint	J. F. Reiner	Columbus City, Iowa	May 12, 1868	77, 915
Shackle or hand-cuff	W. V. Adams	New York, N. Y	June 17, 1862	35, 576
Shade and awning	L. C. F. Laesch	Philadelphia, Pa	Feb. 2, 1869	86, 419
Shade and seat, Portable	D. Estes	Newton, Mass	Jan. 14, 1868	73, 313
Shade-cord retainer	W. H. Brechtel	Philadelphia, Pa	Aug. 9, 1870	106, 248
Shade-cord retainer	E. T. Higham	Philadelphia, Pa	July 19, 1870	105, 573
Shade-cord retainer	W. McConnell	Philadelphia, Pa	Apr. 18, 1871	113, 904
Shade-fixture	V. Drew	New York, N. Y	Jan. 17, 1860	26, 839
Shade-fixture	J. Gibbs	Brooklyn, N. Y	July 9, 1861	32, 765
Shade-fixture	S. Hartshorn	New York, N. Y	Sept. 3, 1867	68, 502
Shade-fixture	G. T. Pillings	Leicester, England	June 9, 1868	78, 826
Shade-fixture	F. W. Stafford	New York, N. Y	Feb. 5, 1861	31, 336
Shade-fixture, Reversible	W. B. Hazzard	Philadelphia, Pa	May 7, 1872	126, 458
Shade fixture, Window	E. T. Briggs	Salem, Mass	May 19, 1863	38, 555
Shade-holder	L. J. Atwood	Waterbury, Conn	July 29, 1873	141, 252
Shade-holder	J. H. Dimond and G. and T. B. Doolittle.	Bridgeport, Conn	Feb. 9, 1869	86, 824
Shade-holder	M. W. House	Cleveland, Ohio	Apr. 1, 1873	137, 306
Shade-holder	T. Moran	New York, N. Y	Aug. 12, 1873	141, 806
Shade-holder clasp, Paper	G. Wedekind	Philadelphia, Pa	Mar. 24, 1863	37, 990
Shade-holder for lamp and gas burners	H. Knowles	Brooklyn, N. Y	July 9, 1867	66, 504
Shade holder, Window	E. J. Robinson	Syracuse, N. Y	Mar. 8, 1870	100, 558
Shade-hook	S. White	Philadelphia, Pa	May 22, 1866	54, 985
Shade or curtain roller	L. Sawyer	Springfield, Vt	Apr. 9, 1861	32, 034
Shade-rack	H. Lull	Hoboken, N. J	Aug. 22, 1871	118, 253
Shade-rack	W. Webster	Morrisania, N. Y	Apr. 14, 1863	38, 205
Shade roller and fixture	C. D. Shrieves	Philadelphia, Pa	May 30, 1871	115, 534
Shade-roller attachment	P. J. Shirts	Highland Falls, N. Y	Apr. 26, 1870	102, 396
Shade, Spring-roller	S. Hartshorn	New York, N. Y	Apr. 18, 1871	113, 879
Shaft and coupling shield	M. L. Drake	Rockford, Ill	Oct. 26, 1869	96, 210
Shaft and pole combination	J. G. Burchfield and S. W. Brock	Niantic, Ill	Aug. 23, 1870	106, 542
Shaft and pole coupling	P. Finley	Memphis, Tenn	Feb. 18, 1868	74, 677
Shaft and pole coupling, Carriage	E. A. Harvey	Wilmington, Del	Feb. 4, 1868	74, 189
Shaft and pole coupling, Carriage	E. C. Newton	Batavia, Ill	Nov. 26, 1867	71, 404
Shaft and pole holder	J. S. Totten	Lebanon, Ohio	Aug. 31, 1869	94, 361
Shaft-attachment to carriages	J. Gorham	Bairdstown, Ga	Dec. 3, 1867	71, 741
Shaft-attachment, Wagon	W. Ward	Mount Holly, N. J	May 5, 1868	77, 687
Shaft-balancing	H. Martinson	Hawksville, Canada	Dec. 20, 1870	110, 259
Shaft-bearer	W. Platt	Baltimore, Md	Sept. 29, 1868	82, 549
Shaft-bearing	G. M. Ball	Brooklyn, N. Y	Feb. 4, 1873	135, 506
Shaft-bearing	C. Bird and W. H. Sullenberger	Lower Merion Township and Harrisburgh, Pa.	Aug. 19, 1873	141, 986
Shaft-bearing	R. Daniels	Woodstock, Vt	May 18, 1869	90, 156
Shaft-bearing	J. B. Francis	Lowell, Mass	Aug. 18, 1863	39, 562
Shaft-bearing	J. Haas	Stockton, Cal	Feb. 2, 1869	86, 392
Shaft-bearing	J. F. Laplace	Hamburgh, Conn	Jan. 28, 1868	73, 815
Shaft-bearing lubricator	J. Haas	Stockton, Cal	Dec. 24, 1872	134, 272
Shaft-bearing lubricator	P. White	Dixmont Centre, Me	Feb. 15, 1870	99, 800
Shaft-bearing or mill-stone bush	S. Kime	McVeytown, Pa	Mar. 31, 1868	76, 083
Shaft bearing, Vertical	M. Briggs	Rochester, N. Y	Aug. 1, 1871	117, 597
Shaft bearing, Vertical	E. A. Dayton	Richmond, Va	May 4, 1869	89, 637
Shaft-bending machine	A. J. Fraser	Toledo, Ohio	Aug. 5, 1873	141, 552
Shaft-bolster lubricator, Vertical	J. W. Wattles	Canton, Mass	Dec. 21, 1869	98, 133
Shaft, Carriage	J. Hansen	Saugerties, N. Y	Apr. 12, 1864	42, 288
Shaft-clips for carriages, Constructing	J. Cooper	New York, N. Y	Jan. 22, 1839	1, 073

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Invention.	Inventor.	Residence.	Date.	No.
Shaft, Convertible carriage	R. I. Calvin	Lancaster, Pa	May 10, 1859	23,901
Shaft, Convertible carriage	A. K. Hoffmeier	Lancaster, Pa	Sept. 7, 1858	21,420
Shaft, Counter	C. G. Shaw	Florence, Mass	Jan. 27, 1863	37,525
Shaft-coupling	E. L. Abbott	Boston, Mass	Jan. 26, 1869	86,266
Shaft-coupling	M. L. Andrew	Cincinnati, Ohio	Jan. 2, 1872	122,426
Shaft-coupling	D. Austin	Underhill, Vt	Feb. 11, 1868	74,275
Shaft-coupling	W. J. Bamford	Providence, R. I	Sept. 10, 1872	131,146
Shaft-coupling	M. L. Bassett	West Haven, Conn	Aug. 30, 1870	106,768
Shaft-coupling	G. L. Baum	Bethlehem, Pa	May 29, 1866	55,198
Shaft coupling	R. W. Benedict	Perry, N. Y	Dec. 3, 1872	133,620
Shaft-coupling	C. Bennitt	Bristol Station, Ill	Dec. 8, 1868	84,672
Shaft-coupling	A. Bigelow	Hamilton, Canada	Nov. 17, 1868	84,161
Shaft-coupling	J. H. Blessing	Albany, N. Y	Apr. 18, 1871	113,728
Shaft-coupling	M. C. Boyer	Norristown, Pa	Dec. 17, 1867	72,264
Shaft-coupling	J. Brayley	Buffalo, N. Y	Jan. 14, 1868	73,291
Shaft-coupling	S. Broadbent	Scranton, Pa	May 2, 1871	114,402
Shaft coupling	L. Bronson	Buffalo, N. Y	June 2, 1868	78,571
Shaft-coupling	G. A. Buchanan	Selford Station, Pa	Aug. 31, 1869	94,399
Shaft-coupling	R. S. Catchcart	Cincinnati, Ohio	Oct. 21, 1873	143,879
Shaft-coupling	J. P. Collins	Troy, N. Y	Dec. 20, 1864	45,476
Shaft-coupling	W. Crandell	Philadelphia, Pa	July 21, 1868	80,061
Shaft-coupling	W. W. Crane	Auburn, N. Y	Dec. 17, 1872	133,967
Shaft-coupling	W. H. Doane and J. Richards	Cincinnati, Ohio	May 28, 1867	65,183
Shaft-coupling	H. Dodge	Beaver Dam, Wis	Oct. 19, 1869	95,886
Shaft-coupling	W. P. Dugdale	Goshen, Ind	Nov. 2, 1869	96,406
Shaft-coupling	W. B. Dunning	Geneva, N. Y	July 6, 1869	92,289
Shaft-coupling	C. F. Du Vall	Milwaukee, Wis	Feb. 8, 1870	99,657
Shaft-coupling	J. Eisell	Philadelphia, Pa	Oct. 31, 1871	120,372
Shaft-coupling	G. H. Fox	Boston, Mass	Oct. 31, 1865	50,700
Shaft-coupling	H. C. Fritz	Philadelphia, Pa	May 7, 1867	64,516
Shaft-coupling	J. P. Gates	Lincoln, Ill	Oct. 6, 1868	82,703
Shaft-coupling	J. Gibbins	Springfield, Mass	Dec. 2, 1873	145,100
Shaft-coupling	M. Hawkins	Derby, Conn	Mar. 13, 1866	53,143
Shaft-coupling	M. Hawkins	Derby, Conn	Sept. 25, 1866	58,345
Shaft-coupling	B. B. Hill	Chicopee, Mass	Dec. 3, 1861	33,839
Shaft-coupling	G. P. and J. L. Hodson	Philadelphia, Pa	Nov. 19, 1867	71,008
Shaft-coupling	G. W. Hubbbard	Philadelphia, Pa	Jan. 7, 1868	73,100
Shaft-coupling	H. A. Hurd	Seymour, Conn	Aug. 20, 1867	67,878
Shaft-coupling	J. Keesey	Chester, Pa	Dec. 10, 1867	71,884
Shaft-coupling	M. A. Keller	Littlestown, Pa	July 26, 1870	105,696
Shaft-coupling	W. Kennedy	New London, Pa	July 6, 1869	92,319
Shaft-coupling	D. and S. Knickerbocker	Allegan, Mich	Mar. 21, 1871	112,817
Shaft-coupling	J. Lamb	Aurora, Ind	May 5, 1868	77,626
Shaft-coupling	A. J. Langworthy	Milwaukee, Wis	June 1, 1869	90,757
Shaft-coupling	J. F. Light	Worcester, Mass	Jan. 1, 1867	60,912
Shaft-coupling	J. F. Light	Worcester, Mass	June 2, 1868	78,529
Shaft-coupling	W. E. London	Cincinnati, Ohio	Nov. 12, 1867	70,869
Shaft-coupling	W. E. London and J. Richards	Cincinnati, Ohio	June 18, 1867	65,821
Shaft-coupling	H. F. Mann	Pittsburgh, Pa	Mar. 1, 1870	100,303
Shaft-coupling	W. S. McKinney	Cincinnati, Ohio	Sept. 10, 1867	68,768
Shaft-coupling	W. S. McKinney	Cincinnati, Ohio	Dec. 29, 1868	85,465
Shaft-coupling	W. S. McKinney	Cincinnati, Ohio	July 20, 1869	92,860
Shaft-coupling	M. Mead	Augusta, Mich	Jan. 30, 1866	52,307
Shaft-coupling	F. Nevergold and D. Brosey	Pittsburgh, Pa	Sept. 10, 1867	68,778
Shaft-coupling	J. Ochsner	New Brighton, Pa	Aug. 29, 1871	118,474
Shaft-coupling	E. E. and C. T. Packer	Philadelphia, Pa	Feb. 2, 1869	86,581
Shaft-coupling	P. Peffer	Milroy, Pa	Sept. 8, 1868	81,940
Shaft-coupling	A. V. Pitts	Chicago, Ill	Sept. 5, 1871	118,742
Shaft-coupling	T. W. Porter	Boston, Mass	June 9, 1868	78,827
Shaft-coupling	W. M. Pratt	Chicago, Ill	Nov. 15, 1870	109,344
Shaft-coupling	P. W. Reinshagen	Cincinnati, Ohio	June 28, 1870	104,884
Shaft-coupling	P. W. Reinshagen	Cincinnati, Ohio	Dec. 27, 1870	110,520
Shaft-coupling	B. Roach	Melrose, Mass	Sept. 4, 1866	57,771
Shaft-coupling	P. G. Ross	Davenport, Iowa	Apr. 14, 1868	76,819
Shaft-coupling	T. Rowell	Beaver Dam, Wis	Mar. 22, 1870	101,047
Shaft-coupling	S. P. Ruggles	Boston, Mass	Apr. 24, 1866	54,212
Shaft-coupling	C. Russell	Massillon, Ohio	July 13, 1869	92,649
Shaft-coupling	S. C. Schofield	Chicago, Ill	Mar. 26, 1867	63,189
Shaft-coupling	A. Searls	New York, N. Y	Apr. 7, 1868	76,531
Shaft-coupling	F. G. Shephard	Battle Creek, Mich	Mar. 14, 1871	112,641
Shaft-coupling	J. Sherry	Watertown, N. Y	Mar. 21, 1871	112,979
Shaft-coupling	E. F. Shoenberger	Germantown, Pa	July 7, 1857	17,751
Shaft-coupling	E. G. Shortt	Carthage, N. Y	Sept. 28, 1869	95,277
Shaft-coupling	E. G. Shortt	Carthage, N. Y	Aug. 8, 1871	117,823
Shaft-coupling	W. J. Silver	Salt Lake City, Utah	Aug. 26, 1873	142,288
Shaft-coupling	W. Smead	Rochester, N. Y	Dec. 6, 1870	109,846
Shaft-coupling	H. K. Smith	Norwich, Conn	Feb. 12, 1867	62,081
Shaft-coupling	J. Stephen	Womelsdorf, Pa	May 28, 1867	65,293
Shaft-coupling	J. M. Stone	North Andover, Mass	July 29, 1873	141,296
Shaft-coupling	E. Swain	Chelmsford, Mass	July 8, 1873	140,600
Shaft-coupling	T. F. Taft	Worcester, Mass	Oct. 4, 1870	107 978
Shaft-coupling	J. W. Taylor	Oshkosh, Wis	Sept. 17, 1867	69,044
Shaft-coupling	G. N. Trowbridge	Rollinsford, N. H	Aug. 12, 1862	36,181
Shaft-coupling	J. S. Upton	Battle Creek, Mich	Sept. 22, 1868	82,455
Shaft-coupling	T. A. Weston	Ridgewood, N. J	Nov. 7, 1871	120 686
Shaft-coupling	S. Wheeler	Albany, N. Y	June 23, 1868	79,168
Shaft-coupling	S. Wheeler	Albany, N. Y	Dec. 7, 1869	97,575
Shaft-coupling	S. H. Whitmore	Decatur, Ill	Aug. 23, 1870	106,755
Shaft-coupling	S. H. Whitmore	Decatur, Ill	Aug. 23, 1870	106,756
Shaft-coupling	J. L. Winslow	Portland, Me	Sept. 25, 1866	58,330
Shaft-coupling	C. S. Hall	Rochester, N. Y	June 27, 1871	116,305
Shaft-coupling, Adjustable shield for	J. M. Case	Athens, Ohio	Mar. 10, 1868	75,364
Shaft coupling, Angular	J. M. Case	Worthington, Ohio	Sept. 15, 1868	82,084
Shaft coupling, Angular	J. P. Barrick	Massillon, Ohio	Oct. 1, 1867	69,393
Shaft coupling, Carriage	A. Betteley	Boston, Mass	Oct. 5, 1869	95,417
Shaft coupling, Carriage	F. B. Morse	New Haven, Conn	Feb. 9, 1864	41,529
Shaft coupling, Carriage	F. B. Morse	New Haven, Conn	Apr. 4, 1865	47,154
Shaft coupling, Carriage	T. Pendergast	New Haven, Conn	Dec. 20, 1864	45,519
Shaft coupling, Carriage				

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Invention.	Inventor.	Residence.	Date.	No.
Shaft coupling, Carriage	A. R. Reynolds	Auburn, N. Y	Feb. 5, 1867	61, 759
Shaft coupling, Carriage	J. D. Sarven	Columbia, Tenn	May 20, 1856	14, 931
Shaft coupling, Carriage	A. Searls	New York, N. Y	May 12, 1868	77, 769
Shaft coupling, Carriage	C. A. Willard	Bellevue, Ohio	July 9, 1867	66, 544
Shaft coupling, Carriage	T. H. Wood	Monroeville, Ohio	Aug. 27, 1867	68, 274
Shaft-coupling, Covering for	S. E. Chase	Mendon, Mich	Mar. 17, 1868	75, 525
Shaft coupling, Detachable	P. Teal	Philadelphia, Pa	July 15, 1856	15, 351
Shaft coupling, Earth-auger	T. Uric	Corning, Iowa	May 20, 1873	139, 092
Shaft coupling, Hollow	P. W. Reinshagen	Cincinnati, Ohio	Nov. 16, 1869	96, 962
Shaft-coupling jack	A. J. Settle	Schoharie Court-House, N. Y.	July 25, 1865	48, 984
Shaft-coupling or clutch-pulley	E. O. Potter	Pawtucket, R. I	Dec. 19, 1865	51, 619
Shaft-coupling, Safety	J. Valleley and F. A. Wise	Canton, Ohio	Aug. 1, 1871	117, 700
Shaft coupling, Tumbling	W. Click	Clarke County, Ohio	Apr. 23, 1872	126, 021
Shaft coupling, Tumbling	S. C. Schofield	Chicago, Ill	July 12, 1870	105, 259
Shaft-coupling, Universal	W. P. Dugdale	Goshen, Ind	Feb. 6, 1872	123, 464
Shaft-coupling, Universal joint for	G. V. Black	Jacksonville, Ill	Aug. 8, 1871	117, 733
Shaft-coupling, Universal joint for	J. F. Emmert	Waynesborough, Pa	July 11, 1871	116, 939
Shaft coupling, Vehicle	J. Steele	Sheldon, Ill	Oct. 4, 1870	108, 062
Shaft coupling, Wagon	S. Barnum	Whitestown, N. Y	Oct. 3, 1871	119, 494
Shaft coupling, Wagon	I. H. Mulford	Orange, N. J	Aug. 4, 1868	80, 759
Shaft coupling, Manufacture of carriage	H. M. Beecher	Plantsville, Conn	July 28, 1868	80, 267
Shaft-drilling machines, Bridge for supporting	J. P. Griscom and J. Fritz	Port Carbon and Mahonoy Plane, Pa.	Feb. 7, 1871	111, 641
Shaft eyes, Tool for milling carriage	W. S. Ward	Plantsville, Conn	Feb. 18, 1873	136, 112
Shaft, Flexible	J. B. Morrison	Saint Louis, Mo	Aug. 16, 1870	106, 498
Shaft, Flexible	N. Stow	Binghamton, N. Y	Aug. 6, 1872	130, 253
Shaft for connecting power with machinery, Tumbling.	D. Snell	Springfield, Ohio	Sept. 22, 1868	82, 447
Shaft for drilling	J. H. Clapham	New York, N. Y	Apr. 24, 1866	54, 112
Shaft for rubber rolls	J. B. Forsyth	Boston, Mass	Oct. 29, 1872	132, 653
Shaft for vehicles, Safety	J. S. Tibbetts	Brazil, Ind	July 11, 1871	116, 889
Shaft-furnaces, Ore-feeder for	E. V. Standish	Belmont, Nev	Dec. 31, 1872	134, 494
Shaft-hanger	W. Bellis	Indianapolis, Ind	Apr. 22, 1873	138, 119
Shaft-hanger	W. W. Crane	Auburn, N. Y	Nov. 26, 1872	133, 415
Shaft-hanger	J. S. Mitchell	South Boston, Mass	Sept. 6, 1864	44, 105
Shaft-banger	B. E. Orton and W. Cavert	Sterling, Ill	Nov. 4, 1873	144, 353
Shaft-hanging	W. J. Kennedy	Victory Mills, N. Y	June 4, 1872	127, 488
Shaft-iron for carriages	F. B. Morse	Plantsville, Conn	Nov. 1, 1870	108, 928
Shaft-irons for carriages, Method of forming	F. B. Morse	Plantsville, Conn	Dec. 20, 1870	110, 385
Shaft-jack for wagons	M. Schon	Englishtown, N. J	May 24, 1870	103, 508
Shaft-protector	A. S. Porter	North Bridgewater, Mass	June 27, 1871	116, 486
Shaft shackle, Wagon	F. Dickenson, jr	Hartford, Conn	Nov. 14, 1865	50, 918
Shaft shackle, Wagon	J. P. Thorp	Plantsville, Conn	May 1, 1860	28, 114
Shaft-sinking apparatus	H. Sontag	Saint Louis, Mo	Aug. 13, 1872	130, 543
Shaft-sinking machine	J. D. Brunton	Kentish Town, England	July 21, 1868	80, 056
Shaft-socket	F. Kern	Saint Louis, Mo	Feb. 20, 1872	123, 915
Shaft step and bearing, Vertical	G. Richardson	Lowell, Mass	Jan. 8, 1869	90, 958
Shaft step, Upright	A. G. Hamaker	Eberly's Mills, Pa	Nov. 13, 1866	59, 594
Shaft step, Upright	C. R. Tompkins	Rochester, N. Y	May 14, 1867	64, 724
Shaft stirrup, Cart and dray	W. B. McClure	Alexandria, Va	Dec. 5, 1871	121, 644
Shaft-support	R. O. and D. W. Brackett	Vineland, N. J	Apr. 20, 1869	89, 120
Shaft-supporting device, Vehicle	R. Fink and R. Daveler	Lancaster, Pa	Oct. 5, 1869	95, 452
Shaft, Tool for removing the roller from, and replacing it upon, the balance.	J. Ingram	Troy, N. Y	Apr. 16, 1872	125, 737
Shaft traveler, Cart and dray	W. B. McClure	Alexandria, Va	Nov. 21, 1871	121, 184
Shaft-tug	D. R. Brown and A. C. Babcock	New Haven, Conn	Oct. 23, 1860	30, 459
Shaft-tug	W. H. Correll	Nashville, Ohio	May 17, 1870	103, 020
Shaft-tug	W. H. Duval	Utica, N. Y	Nov. 5, 1872	132, 756
Shaft-tug	K. Frazer	Syracuse, N. Y	May 28, 1867	65, 068
Shaft-tug	K. Frazer	Syracuse, N. Y	Jan. 10, 1871	110, 911
Shaft-tug	J. E. Stuber	Turin, N. Y	Jan. 12, 1869	85, 771
Shaft-tug	S. Taylor	Georgetown, N. J	Oct. 12, 1869	95, 748
Shaft-tug	W. Wentz	Geneva, N. Y	Oct. 28, 1856	15, 991
Shaft tug, Harness	C. C. Lee	Falls Church, Va	Nov. 21, 1871	121, 177
Shaft, Tumbling	D. Snell	Clarke County, Ohio	May 9, 1871	114, 616
Shaft, Tumbling	D. Snell	Springfield, Ohio	Sept. 23, 1873	143, 191
Shaft-turning apparatus	J. F. Bogardus	Brooklyn, N. Y	Aug. 28, 1866	57, 620
Shaft-turning jack	A. Sims	Brooklyn, N. Y	Oct. 27, 1868	83, 558
Shaft, Vehicle	A. Bean	Fairview Village, Pa	Sept. 1, 1868	81, 737
Shaft, Vehicle	W. L. Blaisdell	Port Byron, N. Y	May 12, 1868	77, 797
Shaft, Vehicle	S. P. Connor and P. D. Pfisterer	Conshohocken and Philadelphia, Pa.	May 20, 1873	139, 117
Shaft, Vehicle	J. J. Dewey	Quechee, Vt	Dec. 2, 1873	145, 055
Shaft, Vehicle	B. Schröder	Newark, N. J	Apr. 29, 1873	138, 442
Shaft, Wrought-iron	J. Montgomery	Baltimore, Md	July 24, 1855	13, 339
Shafts and axles, Method of oiling horizontal	H. M. Smith	Richmond, Va	Apr. 15, 1840	1, 552
Shafts and pipes and for cutting screw-threads, Machine for cutting off.	G. Blake	Whitby, Canada	Aug. 16, 1870	106, 458
Shafts and poles of carriages, Mode of attaching and detaching.	L. Marmaduke and S. T. Bruce	Arrow Rock and Marshall, Mo.	Oct. 6, 1868	82, 857
Shafts and poles to carriages, Attaching	V. N. Mitchell	Concord, N. C	Jan. 12, 1858	19, 113
Shafts and pulleys at an angle, Arranging	A. Whiteley	Springfield, Ohio	May 1, 1855	12, 809
Shafts and spindles, Mode of preventing friction and adhesion in the steps of vertical.	S. Parsons	Edgecomb, Me	June 7, 1839	1, 170
Shafts and well-tubes, Apparatus for lowering and sinking.	J. Chaudron	Brussels, Belgium	Feb. 18, 1873	136, 031
Shafts, Anti-friction bearing for	J. Switzer	Lynn, Mass	Aug. 22, 1871	118, 297
Shafts, Anti-friction bearing for vertical	P. P. Barnett, C. P. Purinton, and N. Seibert.	Nevada, Cal	Dec. 1, 1868	84, 470
Shafts, Arrangement of counter	G. W. Davis	Brooklyn, N. Y	May 22, 1860	28, 353
Shafts, Attaching and detaching breeching-straps from carriage.	E. Calderwood	Portland, Me	Jan. 2, 1866	51, 800
Shafts, Attaching breeching to carriage	G. F. Holland	Leominster, Mass	Dec. 24, 1861	34, 036
Shafts, Attaching carriage	T. D. Davis	Syracuse, N. Y	Dec. 3, 1861	33, 897
Shafts, Attaching hammer-heads to	C. Hammond	Philadelphia, Pa	Jan. 8, 1856	14, 058
Shafts, Automatically-operating	F. B. Mills	Philadelphia, Pa	Sept. 2, 1873	142, 494
Shafts, axles, &c., Material for lining the bearings of	R. Burley	London, England	Oct. 4, 1864	44, 583

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Invention.	Inventor.	Residence.	Date.	No.
Shafts, Bell for sleigh	A. E. Taylor	New Britain, Conn	Aug. 12, 1873	141, 674
Shafts, Coupling line	E. M. Rice	Worcester, Mass	Aug. 14, 1847	5, 241
Shafts, Device for increasing and decreasing the speed of driven.	L. Wright	Newark, N. J	July 9, 1872	128, 773
Shafts, Device for stop-motion for revolving	E. J. Manville	Waterbury, Conn	June 30, 1868	79, 368
Shafts, Fastening wheels and pulleys to	Z. Wheeler	San Francisco, Cal	Oct. 31, 1865	50, 761
Shafts for steamships, Bearing for	G. K. Gluyas	San Francisco, Cal	Jan. 8, 1867	61, 005
Shafts, Gudgeon for	W. W. Eastman and W. H. H. Morris.	Meadville and Fairfield, Pa	Sept. 19, 1871	119, 017
Shafts, Hanger-box for crank	T. Welch	Churchville, N. Y	Jan. 22, 1867	61, 370
Shafts, Hanging crank	J. M. Bengler	Williamsport, Pa	Feb. 22, 1870	100, 004
Shafts in mills, Hanging	E. Bancroft	Philadelphia, Pa	Oct. 9, 1849	6, 780
Shafts into poles, Converting wagon	G. M. Darley and J. K. McLellan.	Nebraska City, Nebr	Nov. 5, 1872	132, 811
Shafts, Keying wheels to	C. B. Cole	Chester, Ill	Mar. 14, 1871	112, 551
Shafts, Lubricating vertical	J. F. Schuffenecker	Saint Louis, Mo	Feb. 6, 1866	52, 454
Shafts, Making crank	J. Convers	Paris, France	Oct. 6, 1868	82, 805
Shafts, Making wrought-iron	O. Tufts	Boston, Mass	Feb. 5, 1856	14, 210
Shafts, Manufacture of tubular wrought-iron	W. A. Stephens and R. Jenkins	Covington, Ky	Mar. 30, 1858	19, 799
Shafts, Means for oiling bodies rotating around	O. Tufts	Boston, Mass	Dec. 11, 1866	60, 444
Shafts of boring-instruments, Connecting cutters to.	L. W. Miller	Mesopotamia, Ohio	Jan. 8, 1850	7, 004
Shafts, &c., of sheet-iron, Method of making	C. F. Fisher	New Orleans, La	June 4, 1850	7, 412
Shafts of water-wheels, Adjustable bearing for	C. Joly	New York	Feb. 7, 1842	2, 446
Shafts of water-wheels, &c., Hanging	U. A. Boyden	Boston, Mass	Oct. 17, 1846	5, 068
Shafts or poles to carriages, Attaching	J. Northrup, Z. Loomis, and G. W. Clark.	Homer, N. Y	Feb. 10, 1863	37, 636
Shafts or thills to sleighs, Connecting	J. C. Walter	Leonardsville, N. Y	Feb. 10, 1863	37, 651
Shafts, Thrust-bearing for rotating	G. A. Stone	Roxbury, Mass	Oct. 25, 1859	25, 921
Shafts to axles, Applying	C. S. Pitman	Swampscott, Mass	Feb. 19, 1856	14, 291
Shafts to axles, Attaching	T. Chope	Detroit, Mich	Nov. 13, 1855	13, 778
Shafts to axles, Attaching vehicle	S. E. Sturtevant	Hartford, Vt	Nov. 8, 1853	10, 214
Shafts to axles, Coupling	E. B. Benedict	Clinton, N. Y	Nov. 29, 1853	10, 279
Shafts to axles, Securing	W. Cox	Doylestown, Pa	June 24, 1856	15, 169
Shafts to axles, Securing	A. E. Smith	Bronxville, N. Y	Nov. 13, 1855	13, 804
Shafts to poles of carriages, Mode of fastening	T. Miller	Worcester Township, Pa	Oct. 13, 1857	18, 403
Shafts to sleighs and carriages, Attaching	G. Coffin	Boston, Mass	Nov. 27, 1866	59, 970
Shafts to sleighs, Attaching	G. Kenny	Milford, N. H	Sept. 16, 1856	15, 737
Shafts to two-wheeled vehicles, Connecting	H. M. Walker	Watertown, Conn	June 19, 1860	28, 796
Shafts to vehicles, Adjusting	J. L. Swesserott	Chambersburgh, Pa	Feb. 13, 1866	52, 619
Shafts to vehicles, Attaching	J. A. Boyce	Monroe, N. Y	Apr. 27, 1858	20, 033
Shafts to vehicles, Attaching	F. J. Flowers	Brooklyn, N. Y	July 8, 1856	15, 288
Shafts to vehicles, Attaching	S. Thompson	Montgomery County, Md	Apr. 7, 1868	76, 357
Shafts to wagons, Attaching	D. Haight, jr	Clinton, N. Y	Jan. 24, 1854	10, 457
Shafts, Tracking-attachment for vehicle	J. B. Negley	Fairview, Ill	Apr. 30, 1872	126, 225
Shafts with axle-trees, Connecting	A. E. Smith	Bronxville, N. Y	Dec. 23, 1856	16, 294
Shafts without using a crank, Rotating	S. Ingersoll	Greenwich, Conn	July 6, 1858	20, 800
Shafting	F. P. Peregoy	Indian Valley, Cal	May 23, 1865	47, 854
Shafting	L. B. Pitcher	Salina, N. Y	July 21, 1868	80, 212
Shafting, Adjustable hanger for	W. Johnson	Lambertville, N. J	June 15, 1858	20, 566
Shafting and rod coupling	N. W. Northrup	Greene, N. Y	Mar. 25, 1862	34, 769
Shafting, Bearing for	P. J. Hardy	New York, N. Y	Dec. 16, 1873	145, 565
Shafting, Bearing for vertical	J. Platt	Utica, N. Y	Sept. 8, 1863	39, 830
Shafting, &c., box	J. Sparrow	Portland, Me	Oct. 31, 1865	50, 745
Shafting-box, Self-lubricating	W. W. Crane	Auburn, N. Y	Apr. 28, 1868	77, 261
Shafting, Connecting and disconnecting	W. Mason	Providence, R. I	Feb. 25, 1862	34, 512
Shafting, Counter	H. C. Weihe	Philadelphia, Pa	June 2, 1868	78, 627
Shafting-coupling	C. Bean	Providence, R. I	Dec. 27, 1870	110, 422
Shafting-coupling	R. Briggs	Philadelphia, Pa	Apr. 25, 1865	47, 388
Shafting-coupling	J. Charlton	Philadelphia, Pa	Apr. 30, 1872	126, 183
Shafting-coupling	L. Gray	Pittsburgh, Pa	Jan. 23, 1866	52, 162
Shafting-coupling	S. Hall	New York, N. Y	May 29, 1860	28, 474
Shafting-coupling	S. Hall	New York, N. Y	June 5, 1860	28, 573
Shafting-coupling	H. L. Haynes	Keene, N. H	June 26, 1860	28, 860
Shafting-coupling	W. and C. Sellers	Philadelphia, Pa	May 5, 1857	17, 236
Shafting-coupling	S. A. Smith	Philadelphia, Pa	Jan. 24, 1871	111, 152
Shafting-coupling	F. B. Williams	Sterling, Ill	Aug. 6, 1872	130, 347
Shafting-coupling, Mode of sustaining and protecting.	J. L. Race	Port Washington, Wis	Apr. 15, 1862	34, 982
Shafting, Device for centering	F. B. Williams	Sterling, Ill	Aug. 18, 1863	39, 608
Shafting, Elastic	R. Brown	Detroit, Mich	Oct. 18, 1870	108, 323
Shafting for endless-chain horse-power	T. Sharp	Bloomington, Ill	May 10, 1859	23, 954
Shafting for machinery, Boxing for covering the	M. R. Jones	Darien, Wis	July 26, 1870	105, 695
Shafting for mills, &c., Tubular	Z. Allen	Providence, R. I	Aug. 18, 1857	18, 006
Shafting-hanger	J. E. Atwood	Mansfield, Conn	May 1, 1866	54, 275
Shafting-hanger	W. B. Bement	Philadelphia, Pa	Feb. 16, 1858	19, 340
Shafting-hanger	W. W. Carey	Lowell, Mass	Apr. 8, 1873	137, 593
Shafting-hanger	W. W. Carey and G. W. Harris	Lowell, Mass	Jan. 25, 1870	99, 156
Shafting-hanger	J. P. Collins	Troy, N. Y	Oct. 2, 1860	30, 206
Shafting-hanger	J. Duff	Peoria, Ill	June 8, 1869	90, 937
Shafting-hanger	J. Greenwood	Rochester, N. Y	Aug. 26, 1873	142, 100
Shafting-hanger	G. W. Hubbard and S. A. Smith	Philadelphia, Pa	Aug. 4, 1868	80, 546
Shafting-hanger	J. W. Loraine	Harrisburgh, Pa	Aug. 4, 1868	80, 752
Shafting-hanger	M. H. Mansfield	Ashland, Ohio	May 14, 1861	32, 301
Shafting-hanger	E. M. Mayo	Cincinnati, Ohio	July 20, 1869	92, 858
Shafting-hanger	G. V. Orton	Cincinnati, Ohio	June 16, 1868	78, 992
Shafting-hanger	J. Richards	Cincinnati, Ohio	May 28, 1867	65, 274
Shafting-hanger	J. Richards	Cincinnati, Ohio	June 2, 1868	78, 608
Shafting-hanger	J. Smart	Niles, Mich	June 25, 1872	128, 431
Shafting-hanger	H. F. Snyder	Williamsport, Pa	Jan. 26, 1869	86, 186
Shafting-hanger	F. B. Williams	Sterling, Ill	Aug. 6, 1872	130, 348
Shafting-hanger	J. Yocom, jr	Philadelphia, Pa	Sept. 10, 1867	68, 826
Shafting-hanger, Adjustable	V. W. Mason	Providence, R. I	June 7, 1870	104, 044
Shafting, Hanger and box for	F. W. Howe	Newark, N. J	Sept. 28, 1858	21, 640
Shafting hanger and box	W. Watts	Newark, N. J	Oct. 30, 1860	30, 549
Shafting-hanger and journal-box	I. D. Mathews	Worcester, Mass	Apr. 30, 1867	64, 344
Shafting-hanger, Revolving	A. B. Couch	Worcester, Mass	Apr. 18, 1871	113, 744
Shafting, Hanging	D. Hussey	Lowell, Mass	July 20, 1869	92, 726
Shafting-key	N. Stedman	Aurora, Ind	Dec. 27, 1870	110, 510

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Invention.	Inventor.	Residence.	Date.	No.
Shafting knuckle-joint	S. N. Taylor	Burnet, Wis	Feb. 16, 1864	41, 651
Shafting-lubricator	J. G. Edgell	Brooklyn, N. Y	Aug. 27, 1867	68, 057
Shafting lubricator, Vertical	L. Fagin	Cincinnati, Ohio	Sept. 5, 1871	118, 705
Shafting, Machine for straightening and rounding	F. H. Laforge and W. Geddes	Waterbury, Conn	Apr. 14, 1868	76, 781
Shafting, Manufacture of	C. F. Kneisly and W. Wenstoff	Dayton, Ohio	May 20, 1873	139, 163
Shafting, Mill	E. Bancroft	Philadelphia, Pa	May 22, 1849	6, 464
Shafting, Preventing the lapping of belts on	W. Hayes	Fall River, Mass	Mar. 12, 1867	62, 746
Shafting, Process for casting bearings on	J. Miller	New York, N. Y	Apr. 22, 1873	138, 176
Shafting, Self-lubricating hanger and box for	W. H. Crane	Auburn, N. Y	June 4, 1867	65, 348
Shafting-straightening machine	R. Safely	Cohoes, N. Y	Dec. 4, 1866	60, 260
Shafting, &c., Strap-pillow-block for	G. H. Reynolds	Medford, Mass	June 30, 1857	17, 716
Shafting, Tool for squaring the ends of	L. Bronson	Buffalo, N. Y	Nov. 28, 1865	51, 133
Shafting, &c., Tool for turning	J. A. Cleaveland	La Fayette, Ind	July 7, 1868	79, 729
Shafting-turning device	N. C. Stiles	Meriden, Conn	Sept. 8, 1868	82, 042
Shafting-turning machine	J. Fensom	Toronto, Canada	May 7, 1872	126, 538
Shafting-turning machine	R. Safely	Cohoes, N. Y	Dec. 4, 1866	60, 259
Shafting, Universal	T. Welham	Washington, D. C	Jan. 31, 1865	46, 166
Shaking-table	W. B. Frue	Houghton, Mich	Oct. 16, 1866	58, 806
Shallow-water boat	A. Templeton	Chicago, Ill	Aug. 5, 1862	36, 117
Shampooing-apparatus	M. L. Winn	San Francisco, Cal	Nov. 2, 1869	96, 528
Shampooing-apparatas	M. L. Winn	New York, N. Y	Dec. 12, 1871	121, 921
Shampooing-mixture	M. J. Vieira	Mendota, Ill	Aug. 6, 1e67	67, 467
Shank	H. P. Stewart	Bath, Mich	Mar. 9, 1869	87, 722
Shank-cutting machine	S. D. Tripp	Lynn, Mass	Aug. 15, 1865	49, 456
Shank-marking tool	S. Stone	Lynn, Mass	May 9, 1871	114, 620
Shank-spring	E. Heaton	New Haven, Conn	Mar 10, 1868	75, 266
Shank-stiffener	G. Houghton, S. Moore, and H. Rogers.	Hudson and Sudbury, Mass	Apr. 26, 1870	102, 401
Shank-stiffener	W. N. Sprague	Keene, N. H	Sept. 30, 1873	143, 389
Shaping and molding machine	H. D. Stover	New York, N. Y	Aug. 21, 1860	29, 727
Shaping-engine	S. J. Wethrell and E. P. Morgan	Biddeford, Me	Mar. 31, 1857	16, 940
Shaping-machine	A. B. Couch	Worcester, Mass	May 17, 1870	103, 021
Shaping-machine	W. H. Warren	Worcester, Mass	Apr. 18, 1871	113, 824
Sharpener, Universal instrument	W. Z. W. and J. W. Chapman	Philadelphia, Pa	Nov. 7, 1848	5, 902
Sharpening-machine	J. H. Curran	Rochester, N. Y	Dec. 30, 1873	146, 050
Sharpening-machine	S. F. Emerson	Akron, Ohio	July 22, 1873	141, 042
Sharpening-machine	J. P. Kealey and J. Rigney	Bridgeport, Conn	July 15, 1873	140, 839
Sharpening-machine	H. B. Rorke	Casenovia, N. Y	Dec. 30, 1873	146, 098
Shaving-case, Portable	T. P. Conard	West Grove, Pa	July 31, 1866	56, 715
Shaving-cup	G. P. Brooks and J. McGrady	Boston, Mass	July 16, 1867	66, 788
Shaving-cup	T. E. Hughes	Birmingham, Pa	May 1, 1860	28, 085
Shawl	M. and C. H. Landenberger	Philadelphia, Pa	July 16, 1872	129, 570
Shawl and blanket strap	T. W. and H. K. Porter	Boston, Mass	Dec. 22, 1868	85, 129
Shawl and breast pin	W. H. Hockensmith and C. Coester.	Bridgeport, Conn	Mar. 26, 1872	124, 896
Shawl or dress pins	H. C. Strong	Lansing, Iowa	Jan. 2, 1872	122, 336
Shawl-pin	H. M. Hall	Danby, Vt	July 29, 1862	36, 003
Shawl-pin	L. F. Hall	Fonda, N. Y	Oct. 28, 1862	36, 838
Shawl-pin	W. Knowles	Rockville, Ind	July 21, 1868	80, 187
Shawl-strap	G. B. Broad	Waterville, Me	July 19, 1870	105, 416
Shawl-strap	G. B. Broad	Waterville, Me	Apr. 4, 1871	113, 623
Shawl-strap	D. W. Brookway	Dover, Me	Apr. 18, 1871	113, 734
Shawl-strap	G. Crouch	New York, N. Y	Sept. 29, 1868	82, 606
Shawl-strap	G. Crouch	Westport, Conn	Sept. 26, 1871	119, 223
Shawl-strap	T. R. Dunham	Newark, N. Y	Feb. 4, 1873	135, 530
Shawl-strap	J. B. Higgins	Boston, Mass	Jan. 14, 1873	134, 748
Shawl-strap	F. H. Willis	Boston, Mass	July 22, 1873	141, 024
Shawl-strap and traveling-bag handle	J. S. Topham	Washington, D. C	Feb. 6, 1872	123, 525
Shawl-strap and traveling-bag holder	J. S. Topham	Washington, D. C	Feb. 6, 1872	123, 524
Shawls, Preparing yarn for the manufacture of	H. N. Bruner	Philadelphia, Pa	July 16, 1872	129, 208
Sheaf-band knife	H. and E. B. Sears	Rockford, Ill	June 28, 1870	104, 779
Sheaf-bands, Machine for cutting	H. Haines	Farley, Iowa	Mar. 28, 1865	47, 013
Sheaf-bearer	W. W. Eastman	Meadville, Pa	May 31, 1870	103, 587
Shear-blades, Process of welding and tempering	H. Wendt	Elizabeth, N. J	May 31, 1870	103, 693
Shear-bow-forging die	A. R. Bailey	Plantsville, Conn	Apr. 5, 1870	101, 412

Shears:

See Bench-shears. Bolt-cutting shears. Brush-shears. Cattle-shears. Clipping-shears. Cloth-shears. Counter-shears. Counting-shears. Flower-shears. Flying shears. Hand-shears. Hair-cutting shears. Hedge-shears. Hoof-shears. Iron-cutting shears. Library-shears. Metal-cutting shears. Paper-shears. Pasteboard-shears. Printers' shears. Pruning-shears. Rotary shears. Rut-shears. Sheep-shears. Sheet-iron, &c., shears. Tailors' shears. Tinsmiths' shears. Truss-shears.

Invention.	Inventor.	Residence.	Date.	No.
Shears	H. P. Ball and A. H. Graves	Albany, N. Y	Jan. 29, 1867	61, 597
Shears	G. Bergner	Washington, D. C	June 23, 1868	79, 191
Shears	C. Bishop	Trumbull, Conn	June 23, 1868	79, 193
Shears	J. Booth	Worcester, Mass	Mar. 29, 1870	101, 220
Shears	J. A. Braden	La Grange, Ga	Sept. 21, 1858	21, 546
Shears	W. Braithwaite	Waterbury, Conn	Aug. 6, 1872	130, 184
Shears	A. B. Buell and G. W. Root	Pittsfield, Mass	May 26, 1868	78, 255
Shears	G. Carter	Nottingham, England	Apr. 11, 1865	47, 250
Shears	P. C. Clapp	Dorchester, Mass	July 24, 1866	56, 668
Shears	P. F. Crouch	New York, N. Y	May 8, 1866	54, 508
Shears	J. Gardner	Louisville, Ky	Mar. 26, 1872	125, 041
Shears	C. Gudehus	Hoboken, N. J	Oct. 8, 1872	132, 094
Shears	R. Heinisch	Newark, N. J	Feb. 17, 1863	37, 689
Shears	M. Irion	Utica, N. Y	Aug. 30, 1859	25, [illegible]
Shears	P. N. Jacobus	Flatbrookville, N. J	Mar. 23, 1869	88, 172
Shears	A. Lapham	Paterson, N. J	Oct. 7, 1873	143, 454
Shears	B. W. Nichols	Canton, Ohio	Nov. 2, 1869	96, 339

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Shears	S. H. Parish	Chicago, Ill	Apr. 27, 1869	89, 408
Shears	R. Rens	Naugatuck, Conn	Mar. 26, 1872	124, 975
Shears	J. H. Roome	New York, N. Y	Aug. 31, 1858	21, 369
Shears	J. H. Roome	New York, N. Y	Aug. 16, 1859	25, 140
Shears	F. Schoettle	Philadelphia, Pa	Jan. 2, 1872	122, 333
Shears	R. H. Seymour	New York, N. Y	Aug. 31, 1869	94, 247
Shears	J. Smith	Cincinnati, Ohio	Jan. 24, 1860	26, 955
Shears	J. C. Symmes	West Troy, N. Y	Jan. 27, 1852	8, 696
Shears	F. Ulrich	Brooklyn, E. D., N. Y	Feb. 22, 1870	100, 118
Shears	T. Wallis	Scipio, N. Y	Aug. 9, 1864	43, 809
Shears	H. Wendt	Elizabeth, N. J	July 21, 1868	80, 254
Shears and bolt-cutter, Combined	G. A. Howe	Niles, Mich	Jan. 2, 1872	122, 466
Shears and button-hole cutter, Combined	S. W. Eastern	Tremont, N. Y	July 11, 1871	116, 936
Shears and button-hole cutter, Combined	A. Swingle	San Francisco, Cal	May 6, 1873	138, 542
Shears and punch	T. F. Taft	Worcester, Mass	Mar. 26, 1861	31, 835
Shears and scissors	J. Bryant	Brooklyn, N. Y	Sept. 22, 1863	40, 010
Shears and scissors	C. C. Johnson	Springfield, Vt	May 10, 1870	102, 944
Shears and scissors	H. Wendt	Elizabeth, N. J	Apr. 27, 1869	89, 364
Shears and scissors, Manufacture of	R. and A. Rens	Naugatuck, Conn	July 11, 1871	1 6, 868
Shears and stake-holder	E. H. Camp	Jackson, Mich	Sept. 27, 1864	44, 395
Shears, Construction of	J. Ryals	Terrysville, Conn	Mar. 2, 1869	87, 369
Shears-die	S. H. Woods	Berlin, Conn	Nov. 16, 1869	97, 015
Shears, Gage for	C. Brombacher	New York, N. Y	July 26, 1864	43, 634
Shears, Hair-blowing attachment for	W. C. McIntire	Washington, D. C	Aug. 29, 1871	118, 625
Shears, Manufacture of	J. Abernethy and W. H. White	Woodbury, Conn	Apr. 12, 1864	42, 263
Shears, Manufacture of	W. B. and A. J. Barnard	Waterville, Conn	Aug. 23, 1870	106, 649
Shears, Manufacture of	J. Ryals	Terryville, Conn	Apr. 26, 1870	102, 437
Shears, Manufacturing	W. S. Butler	Rocky Hill, Conn	Aug. 31, 1858	21, 319
Shears, Paper	A. Hathaway	Charlestown, Mass	June 30, 1868	79, 345
Shears-sharpener	M. M. Morse and M. V. Collins	Buffalo, N. Y	June 23, 1868	79, 246
Shears, Sheep	L. B. Fisher	Cold Water, Mich	Mar. 4, 1856	14, 334
Shears, Tailor's	T. J. Sloan	New York	Sept. 23, 1842	2, 787
Shears with curved edges	S. Fry	New York	Nov. 27, 1823	....
Shearing and clipping apparatus	G. Twigg	Birmingham, England	Sept. 6, 1870	107, 128
Shearing and punching machine	I. Lamplugh	Peoria, Ill	Apr. 2, 1867	63, 398
Shearing and punching machine	J. C. Wilcox	New London, Wis	Aug. 9, 1870	106, 300
Shearing and punching machine	T. H. Witherby	Worcester, Mass	Mar. 29, 1870	101, 319
Shearing and punching press	B. F. Hooper	Albany, N. Y	Aug. 11, 1857	17, 996
Shearing-apparatus	I. Lamplugh	Springfield, Ill	Sept. 25, 1866	58, 267
Shearing bolts, Tool for	A. Alexander	Pittsburgh, Pa	Mar. 31, 1868	76, 035
Shearing-machine	E. Hovey	Canaan, N. Y	May 2, 1811	....
Shearing-machine	S. W. Huntington	Augusta, Me	Dec. 8, 1868	84, 695
Shearing-machine	J. K. Priest	Nashua, N. H	Oct. 28, 1873	144, 136
Shearing-machine	F. W. Sally and M. Ryan	Philadelphia, Pa	July 11, 1871	116, 885
Shearing-machine	S. Treadwell	Redding, Conn	Apr. 27, 1812	....
Shearing machine, Animal	R. T. Smith and J. K. Priest	Nashua, N. H	Mar. 30, 1869	88, 340
Shearing machine, Animal	R. T. Smith, J. K. Priest, and W. Earl	Nashua, N. H	June 14, 1870	104, 222
Shearing-machine, Horizontal	T. Blanchard	Sutton, Mass	May 4, 1813	....
Shearing-machine, Vibrating	D. Dewey	Poultney, Vt	Dec. 7, 1814	....
Shearing-machine, Zigzag	E. Durrin	Wethersfield, Vt	Jan. 21, 1814	....
Shearing-machines, Machine for feeding-plates to	F. Westwood	South Wheeling, W. Va	Apr. 30, 1872	126, 169
Shearing, punching, and upsetting tool	J. J. Sandgren	Lyons City, Iowa	Oct. 29, 1867	70, 366
Shearing, punching, bending, and upsetting metal, Compound machine for.	W. Sleeper	Coaticook, Canada	Sept. 13, 1870	107, 415
Sheathing-joint	N. G. Northup	Saint Paul, Minn	May 6, 1873	138, 520
Sheathing, Metallic	A. Whytock	London, England	Oct. 29, 1861	33, 620
Sheathing, Nail for	W. H. Van Gieson	New York, N. Y	Feb. 25, 1862	34, 534
Sheave	J. L. Collins and H. C. Burgie	Chicago, Ill	Mar. 24, 1868	75, 735
Sheave	A. M. Cushing	Lynn, Mass	Nov. 15, 1870	109, 184
Sheave	H. D. Davis	North Andover, Mass	Aug. 16, 1870	106, 335
Sheave	P. Kavanagh	Canarsie, N. Y	Aug. 5, 1873	141, 564
Sheave-block	T. H. Rice	Baltimore, Md	Aug. 16, 1870	106, 507
Sheave or pulley block	H. Nick	Paris, France	Apr. 18, 1871	113, 913
Sheaves, &c., Apparatus for molding bush or cogs for.	T. P. Walworth	Paterson, N. J	July 15, 1816	....
Sheaves for blocks, Method of making	E. C. Toppan	Essex, Mass	Feb. 12, 1810	....
Sheaves, Mold for casting	S. Ray	Alliance, Ohio	June 16, 1863	38, 912
Sheaves of blocks, Roller for	M. Laighton	Portsmouth, N. H	Mar. 14, 1810	....
Shed, Adjustable	F. L. Hall	Oneida, N. Y	June 14, 1870	104, 142
Shed, Portable stock	D. H. Yeiser	Danville, Ky	Aug. 19, 1873	142, 069
Shedding-mechanism	W. Gminder	Reutlingen, Germany	Feb. 11, 1873	135, 798
Sheep and cattle rack	J. B. Brown	Medina, Wis	Sept. 11, 1866	57, 853
Sheep and other animals, Method of grazing	S. C. Davis	Medina, N. Y	Apr. 8, 1862	34, 882
Sheep, Apparatus for holding	S. Minnich	Hopewell, Ohio	Nov. 30, 1858	22, 190
Sheep-chair	A. D. Atwood	Saybrook, Ill	Sept. 10, 1867	68, 591
Sheep-chair	O. Barker and G. E. Blakelee	Huntington, Ohio	Aug. 1, 1865	49, 067
Sheep-chair	C. W. Saladee and J. R. Moore	Newark, Ohio	Dec. 4, 1866	60, 262
Sheep chair and vat	G. D. Matcham	Pittsfield, Ohio	Sept. 3, 1867	68, 449
Sheep, Composition for curing rot in	H. C. Niles and J. C. Brooks	Bristolville, Ohio	June 19, 1866	55, 697
Sheep, Compound for curing foot-rot in	B. Carpenter, W. Russell, and J. Drake.	Northfield and Boston, Ohio	Apr. 23, 1867	64, 151
Sheep, Compound for the cure of foot-rot in	D. Kenney	Loami, Ill	Nov. 20, 1866	59, 843
Sheep-feeding rack	J. J. Smith	Barnesville, Ohio	June 25, 1867	66, 180
Sheep for shearing, Machine for holding	J. Day	Murray, N. Y	July 10, 1866	56, 188
Sheep, hogs, &c., Instrument for seizing and holding	R. Ralston	Kalamazoo, Mich	Apr. 10, 1866	53, 869
Sheep-holder	C. Albert	Harrisville, Ohio	May 5, 1868	77, 435
Sheep-holder	D. R. Reed	Orangeville, N. Y	Sept. 25, 1866	58, 290
Sheep-holder	S. Tucker	Wabash City, Ind	June 21, 1873	135, 175
Sheep-holder and fleece-folder combined	G. Paine	Washington, Ohio	Feb. 25, 1868	74, 767
Sheep-holder and shearing-table	S. L. Sage	Huntington, Ohio	Apr. 17, 1866	54, 023
Sheep-holder and wool-tier, Combined	A. M. Culver	Bedford, Ohio	Mar. 26, 1867	63, 222
Sheep-holder for shearing	C. Albert and J. J. Shank	Harrisville and West Salem, Ohio.	May 8, 1866	54, 479
Sheep-holding apparatus	G. D. A. Krigbaum	Zanesville, Ohio	Nov. 17, 1868	84, 198
Sheep-house	D. Pangle	Belmont, Ohio	Oct. 8, 1867	69, 580
Sheep, Mode of treatment of foot-rot and other diseases in	G. Wilson	New Lexington, Ohio	Apr. 14, 1868	76, 869

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Sheep-rack	A. Allerton	Aztalan, Wis	Nov. 15, 1864	45,011
Sheep-rack	M. Barnard	Unionville, Pa	July 11, 1865	48,641
Sheep-rack	J. S. Beals	Alabama Centre, N. Y	Oct. 24, 1865	50,550
Sheep-rack	J. S. Beals	Alabama Centre, N. Y	Aug. 27, 1867	68,151
Sheep-rack	G. W. Boynton	Auburn, N. Y	May 1, 1866	54,285
Sheep-rack	M. C. Clark	Appleton, Wis	Sept. 18, 1866	58,065
Sheep-rack	J. P. Eaton	Manchester, N. H	Mar. 17, 1863	37,905
Sheep-rack	J. Elliott and W. Lee	Chippewa, Ohio	Nov. 10, 1868	53,840
Sheep-rack	M. Foreacre	Harrisburgh, Ohio	Apr. 24, 1866	54,138
Sheep-rack	J. B. Freeman	Lebanon, N. H	June 16, 1863	38,896
Sheep-rack	G. F. and T. M. Goudy	Independence, Ohio	Apr. 10, 1866	53,811
Sheep-rack	B. Griffin	Lawrence, Mass	May 23, 1865	47,813
Sheep-rack	R. Hale	Fitchburgh, Mass	Jan. 12, 1864	41,216
Sheep-rack	L. Hall	Richfield, Ohio	May 29, 1866	55,090
Sheep-rack	R. Hart	Savanna, Ohio	June 7, 1864	43,023
Sheep-rack	W. Heaton	Centre Township, Pa	Sept. 29, 1863	40,101
Sheep-rack	G. J. Hendricks	Paris, Pa	Aug. 22, 1865	49,520
Sheep-rack	C. M. Hicks	Rushville, N. Y	Aug. 15, 1865	49,403
Sheep-rack	H. G. Ives	Durham, Conn	May 21, 1867	64,983
Sheep-rack	H. H. Ladd	Worcester, Vt	Oct. 30, 1866	59,236
Sheep-rack	S. Lahm	Canton, Ohio	May 1, 1866	54,371
Sheep-rack	D. Lippy	Mansfield, Ohio	Sept. 13, 1864	44,205
Sheep-rack	J. D. Munson	Tyre, N. Y	June 25, 1867	66,164
Sheep-rack	D. L. Pettigrew	Claremont, N. H	Jan. 23, 1866	52,198
Sheep-rack	J. P. Ray	Honeoye, N. Y	June 6, 1865	48,073
Sheep-rack	S. Reed	Scottsville, N. Y	Mar. 23, 1869	88,211
Sheep-rack	J. Romans	Collamer, Pa	Mar. 20, 1866	53,346
Sheep-rack	H. Seeverf	Perry Township, Ohio	Jan. 2, 1866	51,869
Sheep-rack	L. F. Sexton	Whiting, Vt	June 5, 1866	55,370
Sheep-rack	E. and D. Skeels	Springwater, N. Y	Sept. 11, 1866	57,985
Sheep-rack	A. D. Stansbury	Cross Creek Township, W. Va.	July 25, 1865	49,003
Sheep-rack	D. Stapleton	Iowa City, Iowa	Aug. 27, 1867	68,320
Sheep-rack	B. D. Tabor	Wilson, N. Y	Dec. 18, 1866	60,651
Sheep-rack	J. Taylor	Beloit, Ohio	Mar. 3, 1868	75,077
Sheep-rack	A. L. Webb	East Troy, Wis	Sept. 27, 1864	44,478
Sheep-rack	A. A. Webster	Tremont, Ind	July 10, 1866	56,300
Sheep-rack	J. D. White	Kilbourn, Ohio	Jan. 7, 1868	73,065
Sheep-rack	J. D. Woodbury	Wilson, N. Y	Oct. 2, 1866	58,529
Sheep-rack	N. S. Woodbury	Bethel, Vt	Feb. 2, 1869	86,485
Sheep-rack and holder	E. Page	Streetsborough, Ohio	June 26, 1866	55,896
Sheep rack and mow, Combined	A. Harmon	McConnellsville, Ohio	Aug. 27, 1867	68,191
Sheep rack and shed, Combined	D. Porter	Cleveland, Ohio	Sept. 11, 1866	57,965
Sheep rack and shelter	D. Gray	Upper Sandusky, Ohio	Apr. 23, 1867	64,009
Sheep rack and shelter, Combined	O. P. Norris	Fostoria, Ohio	Feb. 11, 1868	74,411
Sheep rack and trough, Combined	G. Febles	Fostoria, Ohio	Oct. 22, 1867	69,976
Sheep rack, Portable and convertible	S. R. Hawkins	Beallsville, Pa	Nov. 11, 1862	36,905
Sheep rack, shed, and fold, Combined portable	S. L. Sage and O. T. Baker	Huntington, Ohio	Nov. 15, 1864	45,080
Sheep-shearer	I. H. Spellman	Baconsburgh, Ohio	May 28, 1867	65,130
Sheep shearing and tagging table	H. Barr	Brecksville, Ohio	Dec. 31, 1867	72,781
Sheep shearing and tagging table	G. Fenton	Streetsborough, Ohio	Feb. 25, 1868	74,808
Sheep-shearing apparatus	H. A. Reid	Beaver Dam, Wis	Dec. 15, 1868	84,905
Sheep-shearing chair	H. D. Brown	Tipton, Iowa	May 12, 1868	77,866
Sheep-shearing device	J. K. Alwood	Delta, Ohio	Oct. 6, 1868	82,673
Sheep-shearing device	A. J. Fullam	Springfield, Vt	May 3, 1864	42,572
Sheep-shearing device	W. S. Lane	Beaver Dam, N. Y	Sept. 29, 1868	82,533
Sheep-shearing implement	P. Lancaster	Burr Oak, Mich	Apr. 24, 1855	12,760
Sheep-shearing instrument	P. Anderson	Kalamazoo, Mich	Feb. 5, 1867	61,700
Sheep-shearing machine	J. K. Alwood	Delta, Ohio	June 23, 1868	79,179
Sheep-shearing machine	R. P. Bradley	Cuyahoga Falls, Ohio	Jan. 27, 1857	16,461
Sneep-shearing machine	C. P. Clark and L. Delent	Beaver Dam, Wis	Oct. 8, 1867	69,541
Sheep-shearing machine	M. C. Davis	Guilford, Ohio	Jan. 3, 1865	45,763
Sheep-shearing machine	M. C. Davis	Guilford, Ohio	Mar. 20, 1866	53,257
Sheep-shearing machine	W. M. Eccles	Oberlin, Ohio	Oct. 11, 1864	44,618
Sheep-shearing machine	G. Harsin and C. T. Sanders	Kirkville, Iowa	Sept. 22, 1868	82,404
Sheep-shearing machine	J. V. Jenkins	Jackson, Mich	Oct. 21, 1856	15,948
Sheep-shearing machine	J. V. Jenkins	Jackson, Mich	Sept. 8, 1857	18,151
Sheep-shearing machine	J. V. Jenkins	Manchester, Mich	July 23, 1867	66,966
Sheep-shearing machine	W. F. Morgan	Rochester, N. Y	Mar. 8, 1859	23,187
Sheep-shearing machine	H. A. Reid	Beaver Dam, Wis	Aug. 18, 1868	81,210
Sheep-shearing machine	A. Washburn and T. Brintnall	York, Ohio	Oct. 23, 1866	59,103
Sheep shearing stock	R. Gregg	Lawrenceburgh, Ind	Aug. 18, 1863	39,566
Sheep-shearing table	D. L. Caddy	Mason, Mich	May 11, 1869	89,850
Sheep-shearing table	C. J. Corlett, W. D. Sherman, N. H. Wolfe, and C. Huston.	Clarkston, Mich	Aug. 27, 1867	68,299
Sheep-shearing table	J. E. Daniels	Pleasant Prairie, Wis	Feb. 9, 1869	86,736
Sheep-shearing table	W. R. Elder and O. T. Baker	Huntington, Ohio	Mar. 27, 1866	53,425
Sheep-shearing table	W. Ellyson	West Branch, Iowa	Sept. 24, 1867	69,105
Sheep-shearing table	W. C. Jones	Orangeville, Ohio	June 9, 1868	78,671
Sheep-shearing table	J. R. Marshall	Marion, Pa	Feb. 22, 1870	100,170
Sheep-shearing table	O. Perry, W. N. Welles, and C. Perry.	Ortonville, Mich	Apr. 30, 1867	64,359
Sheep-shearing table	O. and C. Perry	Ortonville, Mich	Dec. 24, 1867	72,674
Sheep-shearing table	J. T. Styer	Richwood, Ohio	Nov. 3, 1868	83,672
Sheep-shearing table	G. Wiggins	Ortonville, Mich	May 5, 1868	77,693
Sheep shearing table and holder	A. M. Culver	Bedford, Ohio	Oct. 23, 1866	58,191
Sheep-shearing tool	D. McCarthy and J. F. Beck	Tiffin Township, Ohio	Mar. 30, 1869	88,317
Sheep-shears	W. B. Barnard	Waterville, Conn	Jan. 18, 1870	98,840
Sheep shears	D. Campbell	Elizabeth, N. J	July 26, 1870	105,639
Sheep-shears	G. W. Carpenter	Northville, Mich	July 30, 1867	67,164
Sheep-shears	E. G. Chambers	Bucyrus, Ohio	Mar. 3, 1857	16,720
Sheep-shears	P. G. Clancy	Augusta, Me	Aug. 11, 1868	80,914
Sheep-shears	J. A. Hadley	West Waterford, Vt	May 3, 1864	42,579
Sheep-shears	J. T. Henry	Hamden, Conn	Dec. 31, 1867	72,735
Sheep-shears	G. Hilgar	Brownington, Pa	Sept. 10, 1867	68,743
Sheep-shears	G. F. Johnson	Marshall, Iowa	Oct. 6, 1863	40,170
Sheep-shears	A. H. Kennedy	Brunswick, Ohio	Jan. 30, 1866	52,293
Sheep-shears	B. Kingsley	Sharon, Mich	Nov. 12, 1867	70,861

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Sheep-shears	E. Mathers	Eldersville, Pa	May 21, 1867	64, 991
Sheep-shears	A. S. McWilliams	Colusa, Cal	June 24, 1873	140, 292
Sheep-shears	J. Ralston	Slippery Rock, Pa	June 4, 1867	65, 432
Sheep-shears	J. A. Strong	North Wolcott, Vt	Oct. 9, 1866	58, 695
Sheep-shears	F. Van Doren	Adrian, Mich	Oct. 1, 1867	69, 513
Sheep-shears	H. Wendt	Elizabeth, N. J	July 21, 1868	80, 255
Sheep-shears	W. H. White	Woodbury, Conn	May 6, 1862	35, 188
Sheep-shears	R. M. Wilder	Cold Water, Mich	May 6, 1856	14, 840
Sheep-shears	T. and J. W. Wise	Adrian, Mich	June 12, 1866	55, 569
Sheep-shears, Manufacture of	H. Wendt and H. Seymour	Elizabeth, N. J	Nov. 22, 1864	45, 1[illegible]8
Sheep-shed	J. Knupp and H. S. Elliott	New Prospect, Ohio	Nov. 27, 1866	60, 015
Sheep shed and rack	G. Beatty	Carrollton, Ohio	Sept. 24, 1867	69, 164
Sheep shed and rack	G. McWilliams	Fostoria, Ohio	Oct. 15, 1867	69, 925
Sheep shed and rack, Combined	T. P. Sibley	Oberlin, Ohio	Sept. 11, 1866	57, 983
Sheep-shed, Portable	W. M. Baker and J. Hisner	Urbana, Ohio	Sept. 17, 1867	68, 937
Sheep-skins, Shearing	W. D. Cutler	Millbury, Mass	Apr. 30, 1861	32, 184
Sheep, &c., Stock for holding	N. Merritt	De Ruyter, N. Y	Dec. 6, 1864	45, 332
Sheep-table	G. Fenton	Streetsborough, Ohio	Sept. 3, 1867	68, 427
Sheep-table, &c	E. Page	Streetsborough, Ohio	June 30, 1868	79, 383
Sheep-tagging box	E. D. Crawford	North Star, Pa	July 27, 1869	93, 062
Sheep-trough	F. Ketcham	Monongahela City, Pa	Nov. 12, 1867	70, 859
Sheep-wash	E. B. Booth	Saint Louis, Mo	Jan. 14, 1868	73, 225
Sheep, Wash for cure of scab in	H. Smith	San Francisco, Cal	Oct. 11, 1870	108, 1[illegible]9
Sheep while being sheared, Device for holding	M. K. and L. P. Lewis	Iowa City, Iowa	Aug. 29, 1865	49, 626
Sheep while being sheared, Device for holding	D. R. Reed and J. E. Chapman	Castile, N. Y	June 15, 1858	20, 585
Sheet-iron and metal-plate surfacing, Mode of	T. Shaw	Philadelphia, Pa	Apr. 21, 1868	77, 111
Sheet-iron cutter	J. B. Osler	Ogdensburgh, N. Y	May 26, 1868	78, 319
Sheet-iron, Manufacturing	S. Guilfords	Lebanon, Pa	Oct. 22, 1842	2, 824
Sheet-iron, Manufacturing	W. Riesz, sr	Reading, Pa	Sept. 3, 1861	33, 214
Sheet-iron, Process of manufacturing glazed	J. Wood, sr., and J. and W. W. Wood.	New Castle, Del	Oct. 12, 1842	2, 813
Sheet-iron, Process of manufacturing glazed	J. and W. W. Wood	Conshohocken, Pa	Apr. 15, 1851	8, 048
Sheet-iron, Rolled	S. Barker and H. S. Pratt	Hartford, Conn	Sept. 27, 1870	107, 752
Sheet-iron while in the process of manufacture, Method of heating.	H. McCarty	Pittsburgh, Pa	June 29, 1852	9, 075
Sheet-lead and lead-pipe, Apparatus for manufacturing.	A. Dow	Brooklyn, N. Y	Jan. 21, 1868	73, 585
Sheet-lead, Machinery for making	J. Robertson	Brooklyn, N. Y	Aug. 7, 1847	5, 226
Sheet-materials, Implements for cutting	J. F. Bright	Washington, D. C	Feb. 27, 1872	124, 114
Sheet-metal	J. J. Locke	Whitestone, N. Y	June 6, 1871	115, 748
Sheet-metal, Architectural	W. E. Worthen	New York, N. Y	Jan. 21, 1862	34, 224
Sheet-metal-beading machine	C. H. Raymond	Southampton, Conn	Feb. 15, 1870	99, 788
Sheet-metal, Bending	O. W. Stow	Plantsville, Conn	Feb. 28, 1860	27, 319
Sheet-metal-bending machine	C. F. Brand	Philadelphia, Pa	Oct. 14, 1873	143, 558
Sheet-metal-bending machine	W. and H. Cooley	Toronto, Canada	May 30, 1871	115, 281
Sheet-metal-bending machine	W. F. Cozzens and W. H. Wiggin.	Saint Louis, Mo	July 29, 1873	141, 329
Sheet-metal-bending machine	H. Evans, jr	Baltimore, Md	Oct. 30, 1860	30, 532
Sheet-metal-bending machine	J. Garton	New York, N. Y	Dec. 31, 1872	134, 376
Sheet-metal-bending machine	W. F. Kistler	Cincinnati, Ohio	Sept. 16, 1873	142, 921
Sheet-metal-bending machine	J. Pearce	Brooklyn, N. Y	Jan. 21, 1873	135, 150
Sheet-metal-bending machine	S. Pennock	Kennett's Square, Pa	Feb. 7, 1865	46, 261
Sheet metal-bending machine, Corrugated	S. J. Seely	Brooklyn, N. Y	Jan. 6, 1863	37, 308
Sheet-metal boiler	A. O'Neill	Portsmouth, Ohio	Aug. 22, 1865	49, 546
Sheet-metal boilers and other vessels	J. Carroll	New York, N. Y	Apr. 9, 1867	63, 701
Sheet-metal boilers, Construction of	A. C. Brownell	Brooklyn, N. Y	June 29, 1869	91, 203
Sheet-metal boilers, Construction of corrugated	G. R. Moore	Lyons, Iowa	Dec. 3, 1867	71, 632
Sheet-metal box-cover die	C. E. Russ	Boston, Mass	Aug. 8, 1871	117, 932
Sheet-metal boxes, Construction of	M. H. Crane	Cincinnati, Ohio	Nov. 12, 1867	70, 811
Sheet-metal boxes, Construction of	D. Croak	Milwaukee, Wis	Oct. 3, 1865	50, 226
Sheet-metal boxes, Machine for closing	C. G. Everitt	Brooklyn, N. Y	Nov. 21, 1854	11, 962
Sheet-metal boxes, Machine for cutting out and stamping up.	W. J. Gordon	Philadelphia, Pa	Dec. 9, 1873	145, 412
Sheet-metal boxes, Machine for manufacturing	G. W. Bentley	New York, N. Y	May 23, 1865	47, 892
Sheet-metal boxes, Machinery for manufacturing	W. Wilson, jr	Wilmington, Del	Dec. 19, 1865	51, 667
Sheet-metal boxes, Making	G. Anderson	Salem, Oreg	May 16, 1865	47, 689
Sheet-metal boxes, Manufacture of	A. Barnes	Williamsburgh, N. Y	Nov. 27, 1866	59, 942
Sheet-metal can	F. Albaum	Green Point, N. Y	Aug. 23, 1870	106, 533
Sheet-metal can	J. Cartwright	South Reading, Mass	Apr. 21, 1868	76, 890
Sheet-metal can	J. S. Combe and G. H. Perkins	Brooklyn, N. Y	June 28, 1870	104, 747
Sheet-metal can	P. Cook	Baltimore, Md	Aug. 18, 1868	81, 143
Sheet-metal can	E. T. Covell	Brooklyn, N. Y	Mar. 6, 1866	52, 972
Sheet-metal can	H. A. Crain	Whitestown, N. Y	July 12, 1864	43, 479
Sheet-metal can	J. S. Delany	Huntsville, Tex	Dec. 3, 1872	133, 635
Sheet-metal can	J. C. Eiben	New York, N. Y	Oct. 10, 1865	50, 344
Sheet metal can	J. J. Evenden	Chicago, Ill	June 13, 1871	115, 943
Sheet-metal can	H. Everett	Philadelphia, Pa	Apr. 12, 1870	101, 847
Sheet-metal can	S. Hunt	Danville, Ind	Jan. 13, 1863	37, 400
Sheet-metal can	W. M. Lewis	New York, N. Y	Jan. 11, 1870	98, 7[illegible]0
Sheet-metal can	H. Miller	New York, N. Y	June 23, 1863	38, 974
Sheet-metal can	H. Miller	New York, N. Y	Nov. 17, 1863	40, 661
Sheet-metal can	H. Miller	New York, N. Y	Feb. 2, 1869	86, 571
Sheet-metal can	C. Seimel	Greenpoint, N. Y	Sept. 1, 1868	81, 692
Sheet-metal can	C. Seimel	Brooklyn, N. Y	Jan. 19, 1869	86, 038
Sheet-metal can	G. F. Stone	Philadelphia, Pa	Apr. 3, 1866	53, 751
Sheet-metal can	J. H. Stone	Philadelphia, Pa	Oct. 6, 1868	82, 766
Sheet-metal can	L. Stone	Philadelphia, Pa	Nov. 21, 1871	121, 139
Sheet-metal can	J. Widgery	Plumstead, England	Mar. 12, 1872	124, 466
Sheet-metal can for oil, varnish, &c	R. Porter	Philadelphia, Pa	Sept. 2, 1862	36, 359
Sheet-metal-can packing and transporting box	C. E. Russ	Boston, Mass	Feb. 7, 1871	111, 684
Sheet-metal-can-seaming device	R. J. Hollingsworth	Cincinnati, Ohio	Apr. 16, 1867	63, 892
Sheet-metal cans, Implement for opening	S. P. Chapin	Atlantic, N. J	July 17, 1866	56, 368
Sheet-metal cans, Instrument for opening	F. Seymour	Nashville, Tenn	June 18, 1867	65, 957
Sheet-metal cans, Tool for opening	C. Messenger	Cleveland, Ohio	Oct. 22, 1867	70, 010
Sheet-metal cans, Top for	J. Britton	Williamsburgh, N. Y	Sept. 6, 1870	106, 991
Sheet-metal caps, Apparatus for forming threads on	W. T. Gillinder	Philadelphia, Pa	Dec. 3, 1867	71, 605
Sheet-metal caps, &c., Making	O. Newton	Pittsburgh, Pa	May 22, 1860	28, 397
Sheet-metal clasps, Machine for making	J. H. Doolittle	Ansonia, Conn	May 16, 1865	47, 704

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Invention.	Inventor.	Residence.	Date.	No.
Sheet metal, Coated	G. H. Hazelton	Philadelphia, Pa	Nov. 13, 1866	59, 599
Sheet-metal, Coating	E. Morewood and G. Rogers	London, England	Nov. 1, 1853	10, 187
Sheet-metal cone, Clamp for forming	F. I. Seymour	Wolcott, Conn	Mar. 10, 1868	75, 303
Sheet-metal covers, Manufacture of flanges for	J. Fallows	Philadelphia, Pa	Feb. 6, 1872	123, 339
Sheet-metal cutter	S. A. Bostwick	Waltham, Mass	July 11, 1871	116, 923
Sheet-metal, Cutting	S. Hall	New York, N. Y	Jan. 27, 1857	16, 481
Sheet-metal cutting and bending machine	E. Savage	East Berlin, Conn	Mar. 17, 1857	16, 853
Sheet-metal cutting and capping die	C. F. Wilson and S. H. Miller	Northbridge, Mass., and Brooklyn, N. Y.	May 6, 1873	138, 721
Sheet-metal cutting and punching machine	E. C. Fraser	New York, N. Y	Feb. 12, 1861	31, 380
Sheet-metal-cutting machine	C. B. Choate	East Saginaw, Mich	Mar. 7, 1871	112, 418
Sheet-metal-cutting machine	S. B. Fitch	Walton, N. Y	Sept. 13, 1870	107, 351
Sheet-metal-cutting machine	H. Low	Waukon, Iowa	May 30, 1865	47, 967
Sheet-metal-cutting machine	S. P. Ruggles	Boston, Mass.	Aug. 20, 1850	7, 584
Sheet-metal-cutting machine	S. P. Ruggles	Boston, Mass	Aug. 30, 1853	9, 978
Sheet-metal-cutting machine	C. H. Schubens	Newark, N. J	May 7, 1867	64, 583
Sheet-metal-cutting machine	A. Tracy	Poughkeepsie, N. Y	July 17, 1841	2, 181
Sheet-metal-cutting machine	J. Waugh	Elmira, N. Y	Apr. 24, 1860	28, 027
Sheet-metal-cutting machine	J. A. Wells	Holly Springs, Miss	Sept. 28, 1869	95, 294
Sheet-metal-cutting machine	J. Wilmington	South Bend, Ind	Dec. 13, 1853	10, 317
Sheet-metal, Die for stamping or pressing	W. M. Booth and J. H. Mills	Buffalo, N. Y	July 8, 1856	15, 278
Sheet-metal disk, Machine for turning up the edges of.	J. F. Flanders	Newburyport, Mass	Jan. 6, 1852	8, 647
Sheet-metal, Double-acting press for blanking and forming up.	J. Annear and W. J. Gordon	Philadelphia, Pa	Nov. 9, 1869	96, 535
Sheet-metal, Double seamer for working	J. N. Hewes	Putnam, Ind	Jan. 23, 1846	4, 364
Sheet-metal drying and scouring machine	C. E. L. Holmes	Waterbury, Conn	July 21, 1868	80, 179
Sheet-metal elbow	H. S. Hoeller	Cincinnati, Ohio	Dec. 17, 1872	133, 989
Sheet-metal elbow	H. S. and C. Hoeller	Cincinnati, Ohio	June 18, 1872	128, 146
Sheet-metal elbows, Construction of	L. Bancroft	Springfield, Ohio	Apr. 8, 1873	137, 525
Sheet-metal fastening	T. J. Diedrich and F. Diedrichs	Philadelphia, Pa	Feb. 16, 1869	86, 911
Sheet-metal-folding machine	L. A. Gleason	Southington, Conn	Dec. 24, 1867	72, 478
Sheet-metal-folding machine	G. H. Goldsmith	Waverly, Ill	June 9, 1868	78, 734
Sheet-metal-folding machine	O. W. Stow	Plantsville, Conn	June 12, 1855	13, 046
Sheet-metal, Forming hollow articles of	A. Cowradt	Philadelphia, Pa	Mar. 6, 1860	27, 351
Sheet-metal for transportation, Packing	D. McDaniel	New Castle, Del	Jan. 6, 1863	37, 323
Sheet-metal-grooving machine	C. F. Bliesenick	Providence, Pa	Feb. 22, 1870	100, 111
Sheet-metal grooving machine	D. H. Metcalf and D. Squier	Battle Creek, Mich	Apr. 19, 1870	102, 027
Sheet-metal grooving machine	W. Serviss	Sidney, Ohio	June 2, 1868	78, 486
Sheet-metal grooving and swaging machine	S. Hall	Grand Rapids, Mich	June 9, 1868	78, 677
Sheet-metal into oval shapes, Machinery for cutting	H. Everett	New York	Nov. 18, 1846	4, 856
Sheet-metal joints, Fastening for	M. Metcalf	Philadelphia, Pa	Dec. 29, 1868	85, 438
Sheet-metal joints, Forming	J. J. Laubach	Easton, Pa	Jan. 6, 1857	16, 337
Sheet metal key	E. Parker	New Britain, Conn	Dec. 7, 1869	97, 547
Sheet metal, Machine for bending corrugated	S. J. Seely	Brooklyn, N. Y	Jan. 20, 1863	37, 402
Sheet metal, Machine for binding edges of	F. Roys	East Berlin, Conn	May 31, 1864	42, 967
Sheet metal, Machine for curving and shaping	D. Cushing	Lowell, Mass	Aug. 3, 1869	93, 181
Sheet metal, Machine for cutting	C. Applebee	Lyndon, Vt.	July 24, 1855	13, 295
Sheet metal, Machine for cutting	J. N. Cherry	Zanesville, Ohio	Oct. 4, 1864	44, 516
Sheet metal, Machine for cutting	H. Low	Waukon, Iowa	Oct. 17, 1865	50, 481
Sheet metal, Machine for cutting	H. Low	Waukon, Iowa	Jan. 10, 1865	45, 841
Sheet metal, Machine for cutting and bending	E. F. Coates	Mystic Bridge, Conn	May 26, 1857	17, 364
Sheet metal, Machine for cutting and folding	A. G. Gray	Saint John's, New Brunswick.	Aug. 4, 1868	80, 725
Sheet-metal, Machine for cutting figures out of	C. P. S. Betts	New York, N. Y	Sept. 8, 1857	18, 130
Sheet-metal, Machine for cutting out blanks of	C. H. Gatchell	Old Town, Me	Feb. 13, 1872	123, 690
Sheet-metal, Machine for cutting out planchets of.	J. Lowe	Taunton, Mass	Apr. 29, 1873	138, 264
Sheet-metal, Machine for planing edges of	G. B. Rundlett	South New Market, N. H	Dec. 16, 1873	145, 593
Sheet-metal, Machine for pressing down seams in	J. Glober	Omaha City, Nebr	Aug. 17, 1869	93, 703
Sheet-metal, Machine for scouring	H. B. Wooster	Waterbury, Conn	Oct. 6, 1868	82, 780
Sheet-metal, Machine for spinning	A. Rais	Waterbury, Conn	Nov. 10, 1868	83, 998
Sheet-metal, Machine for turning edges of	J. Glober	Omaha City, Nebr	Aug. 17, 1869	93, 705
Sheet-metal, Machinery for cutting and bending	J. F. Flanders	Newburyport, Mass	Dec. 17, 1850	7, 836
Sheet-metal, Machinery for raising	A. Heaton	Irving, N. Y	Jan. 13, 1847	4, 924
Sheet-metal, Machinery for working	O. N. Peck	Southington, Conn	Apr. 25, 1843	3, 061
Sheet-metal, Manufacture of	H. W. Wimshurst	Dalston, England	Sept. 27, 1859	25, 601
Sheet-metal-ornamenting die	C. Kaufman	Oconomowoc, Mis	Jan. 24, 1871	111, 216
Sheet-metal pan	C. Hodgetts	Brooklyn, E. D., N. Y	Feb. 23, 1869	87, 170
Sheet-metal-pan former	W. H. Davis and R. H. Wagor	Dowagiac, Mich	Sept. 17, 1867	68, 962
Sheet-metal pans, Bending	E. A. Smead	Tioga, Pa.	June 16, 1857	17, 589
Sheet-metal pans, Apparatus for making	W. Serviss	Sidney, Ohio	July 30, 1867	67, 358
Sheet-metal pans, Machine for forming	S. H. Kennedy	Hydetown, Pa	Nov. 3, 1868	83, 712
Sheet-metal pans, Machine for forming	E. A. Smead	Tioga, Pa.	Mar. 2, 1858	19, 517
Sheet-metal pans, Machine for forming	B. D. Stevens	Decorah, Iowa	July 2, 1867	66, 411
Sheet-metal pans, Machine for forming	W. A. Tarbutton	Harrisburgh, Pa	Sept. 14, 1869	94, 851
Sheet-metal pans, Machine for forming	W. H. Teal	Weyauwega, Wis	July 14, 1868	80, 028
Sheet-metal pans, Machine for making	C. F. Chambers	Hutsonville, Ill	Nov. 29, 1864	45, 226
Sheet-metal pans, Machine for making	C. F. Chambers	Hutsonville, Ill.	July 4, 1865	48, 516
Sheet-metal pans, Machine for making	W. Fogleson	Hamilton, Ohio	Dec. 17, 1872	133, 975
Sheet-metal pans, Machine for making	G. S. Peck	Towanda, Pa	Oct. 12, 1869	95, 721
Sheet-metal pans, Machine for making	M. S. Sager	Washington, Ohio	Aug. 14, 1866	57, 261
Sheet-metal pans, Machine for making	O. W. Way	Troy, N. Y	Oct. 23, 1866	59, 104
Sheet-metal pans, Machine for manufacturing	J. Goodwin, E. F. Blair, and J. Lyda.	Georgetown, Ohio	July 23, 1867	67, 109
Sheet-metal pans, Machine for pressing	F. M. Woods	York, Ill	Oct. 10, 1865	50, 410
Sheet-metal pans, Machine for raising	H. Fachs	New York, N. Y	Nov. 8, 1864	41, 945
Sheet-metal pans, Machine for wiring	W. Foglesong	Dayton, Ohio	Mar. 18, 1873	136, 986
Sheet-metal pans, Machine for wiring	F. M. Woods	York, Ill	Sept. 18, 1866	58, 162
Sheet-metal pans, Manufacture of square	E. M. Roxford	Indianapolis, Ind	Oct. 30, 1860	30, 545
Sheet-metal pipe	C. Recht	New York, N. Y	Jan. 28, 1868	73, 929
Sheet-metal-pipe elbows, Machine for forming	H. B. Morrison	Le Roy, N. Y	Sept. 16, 1873	142, 929
Sheet-metal-pipe forming and threading machine	M. K. Pierce	Calahan's Ranch, Cal	June 14, 1870	104, 196
Sheet-metal pipes, Joint-ends for	J. T. Fanning	Norwich, Conn	June 6, 1871	115, 588
Sheet-metal pipes, Machine for corrugating and beading.	J. Sargent	Rochester, N. Y	Sept. 16, 1873	142, 945
Sheet-metal pipes, Machine for helically creasing	A. B. Seymour	Claverack, N. Y	May 29, 1855	12, 971
Sheet-metal pipes, Machine for threading	C. Recht	New York, N. Y	Jan. 28, 1868	73, 928
Sheet-metal pipes, Making	C. T. Boardman	Bergen Point, N. J	May 8, 1860	28, 147

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Sheet-metal plates, Method of uniting	J. Le Comte	Brooklyn, N. Y	Jan. 12, 1869	85,742
Sheet-metal, Process for finishing	C. H. Perkins	Providence, R. I	Jan. 1, 1867	60,781
Sheet-metal, Riveting joints of	P. Ball	Wooster, Mass	Sept. 23, 1873	142,979
Sheet-metal-rolling machine	J. Hall	Wheeling, W. Va	May 7, 1872	126,390
Sheet-metal scourer and drier	C. E. L. Holmes	New York, N. Y	Apr. 27, 1869	89,313
Sheet-metal shears	H. C. Dole	Adrian, Mich	June 10, 1856	15,069
Sheet-metal shears	L. T. Hulbert	Painesville, Ohio	May 24, 1864	42,855
Sheet-metal shears	D. Newton	Southington, Conn	Nov. 9, 1858	22,028
Sheet-metal, Spinning articles of	F. J. Seymour	Wolcottville, Conn	Jan. 14, 1873	134,939
Sheet-metal-spinning machine	J. J. Marcy	Meriden, Conn	Mar. 15, 1870	100,912
Sheet-metal-straightening apparatus	J. D. Carter	Thomastown, Conn	Aug. 6, 1867	67,495
Sheet-metal strips, Machine for securing together the ends of.	W. S. Gordon	Philadelphia, Pa	July 17, 1866	56,494
Sheet-metal-swaging machine	W. H. Beach	Chicago, Ill	Feb. 5, 1861	31,347
Sheet-metal to an oval form, Machine for cutting	W. D. Grimshaw	Newark, N. J	Dec. 20, 1870	110,354
Sheet-metal to each other, Mode of attaching the sides of.	P. H. Niles	Boston, Mass	May 22, 1866	55,016
Sheet-metal tubes, Apparatus for forming	R. Fidler	Taunton, Mass	July 2, 1867	66,231
Sheet-metal tubes, Forming	M. G. Wilder	West Meriden, Conn	May 23, 1865	47,888
Sheet-metal tubes, Machine for forming	W. Hall	Dubuque, Iowa	Apr. 16, 1867	63,793
Sheet-metal tubes, Machine for forming	J. Stout and J. T. Stanton	Waynesville, Iowa	July 30, 1850	7,537
Sheet-metal tubes, Machine for making	J. T. Farrand	Port Byron, N. Y	June 15, 1852	9,020
Sheet-metal tubes, Machine for making	D. A. Ritchie	Charlestown, Mass	July 9, 1872	128,911
Sheet-metal tubes, Machine for spinning	F. J. Seymour	Wolcottville, Conn	Nov. 23, 1869	97,234
Sheet-metal tubes, Machine for spinning tapering	F. J. Seymour	Meriden, Conn	Jan. 26, 1869	86,182
Sheet-metal tubes, Machinery for forming	O. W. Stow	Southington, Conn	Sept. 28, 1852	9,288
Sheet-metal tubes, Method of forming	W. Ostrander and W. Webster	New York, N. Y	Mar. 19, 1850	7,195
Sheet-metal tubing	S. R. Wilmot	Bridgeport, Conn	Apr. 15, 1873	137,991
Sheet-metal tubing, Forming	S. M. Cate	Waterbury, Conn	Nov. 21, 1865	51,017
Sheet-metal tubing, Manufacture of	S. R. Wilmot	Bridgeport, Conn	Apr. 15, 1873	137,994
Sheet-metal, Uniting	S. R. Wilmot	Bridgeport, Conn	Oct. 29, 1867	70,383
Sheet-metal vessel	C. B. Cooper	Nashville, Tenn	Oct. 1, 1872	131,812
Sheet-metal vessel	H. W. Shepard	New York, N. Y	Feb. 11, 1873	135,855
Sheet-metal vessels, Casting bottoms on	R. J. Howdon	Cincinnati, Ohio	Mar. 25, 1873	137,204
Sheet-metal vessels, Collar for	J. M. Patterson	Woodbury, N. J	Feb. 20, 1872	123,837
Sheet-metal vessels, Machine for beading	C. W. Priest	Troy, N. Y	Mar. 25, 1873	137,147
Sheet-metal vessels, Machine for forming	J. B. Jones	Brooklyn, E. D., N. Y	Apr. 17, 1860	27,911
Sheet-metal vessels, Manufacture of	J. G. L. Boettcher	Brooklyn, N. Y	Apr. 15, 1873	137,886
Sheet-metal vessels, Method of making double	P. P. Meyer	New York, N. Y	Jan. 1, 1867	60,770
Sheet-metal vessels, Mode of deflecting the bottoms of.	L. T. Hulbert	Painesville, Ohio	May 7, 1867	64,422
Sheet-metal ware, Bottom for	H. W. Shepard	Mannsville, N. Y	May 2, 1871	114,481
Sheet-metal ware, Bottoming	W. C. Bruson	Chicago, Ill	Nov. 12, 1872	132,895
Sheet-metal ware, Die for forming	M. Bray	Newton, Mass	Dec. 17, 1872	133,919
Sheet-metal ware, Die for manufacture of	M. Wells	Brooklyn, N. Y	Jan. 2, 1866	51,883
Sheet-metal ware, Flanged cover for	J. Fallows	Philadelphia, Pa	Feb. 6, 1872	129,338
Sheet-metal ware, Handles for	J. Fallows	Philadelphia, Pa	Dec. 9, 1873	145,286
Sheet-metal ware, Handles for	J. W. Lamb	Troy, N. Y	Apr. 15, 1873	137,848
Sheet-metal ware, Machine for forming	N. C. Lombard and M. Bray	Boston, Mass	May 19, 1868	78,105
Sheet-metal ware, Machine for making	M. Wells	Williamsburgh, N. Y	Nov. 15, 1864	45,103
Sheet-metal ware, Machine for stamping	T. P. Austin	New York, N. Y	Feb. 11, 1873	135,750
Sheet-metal ware, Machinery for forming	M. Bray	Boston, Mass	Dec. 12, 1865	51,421
Sheet-metal ware, Manufacture of	T. Gomme and C. E. A. Beaugrand.	Paris, France	Aug. 12, 1856	15,513
Sheet-metal ware, Process of ornamenting	J. and W. Toothill	Meriden, Conn	Apr. 27, 1869	89,360
Sheet-metal, Working	I. B. Holmes	Cincinnati, Ohio	May 20, 1856	14,916
Sheet-metal, Working	S. B. Miller and E. W. Whitehead.	Newark, N. J	May 13, 1856	14,878
Sheet-metal, Working	S. R. Shepard and O. W. Stow	Plantsville, Conn	Apr. 22, 1856	14,738
Sheet-metal-working machine, Swaging attachment for.	H. E. Anderson	Ripon, Wis	Nov. 24, 1868	84,248
Sheet or bar metal, Machine for cutting	T. F. Taft	Shrewsbury, Mass	May 28, 1867	65,138
Sheet-piling clamp	S. B. Driggs	New Brunswick, N. J	Feb. 16, 1869	87,030
Sheet separator and dropper	W. Van Auden and T. Coffin	Poughkeepsie, N. Y	June 25, 1872	128,339
Shelf, Adjustable store	S. L. Latta	Ligonier, Ind	July 17, 1866	56,422
Shelf and support, Portable	P. D. Root	Weston, N. Y	Jan. 31, 1871	111,384
Shelf, Arm revolving	P. Nichols	Troy, N. Y	July 18, 1871	117,103
Shelf-bracket	C. F. Kuhnle	Harrisburgh, Pa	Aug. 15, 1865	49,419
Shelf-bracket	C. F. Kuhnle	Washington, D. C	July 23, 1867	67,124
Shelf-bracket	E. S. Morse	Salem, Mass	Mar. 31, 1868	76,232
Shelf-bracket and clothes-hook	H. E. Hutchinson	South Brooklyn, N. Y	Dec. 20, 1870	110,239
Shelf, coat-rack, and clothes-frames	J. Danner	Canton, Ohio	Apr. 20, 1869	89,031
Shelf, Culinary	G. T. Hunsaker	Carthage, Ill	Oct. 17, 1871	119,985
Shelf, Folding	G. W. Gillespie	Hartford, Conn	Dec. 19, 1865	51,583
Shelf, Milk	D. B. Sturdevant, W. C. Parsons, and F. Wheeler.	Clifton Springs, N. Y	Mar. 27, 1866	53,500
Shelf or bracket, Extension	A. Rosenfield	San Francisco, Cal	Mar. 12, 1872	124,631
Shelf, Portable	B. F. Rice	Boston, Mass	May 28, 1867	65,273
Shelf, Portable	I. S. Voorheis	Catlettsburgh, Ky	Oct. 25, 1859	25,947
Shelf-rest	G. L. Swett	Leominster, Mass	May 5, 1868	77,676
Shelf, Revolving	J. Danner	Canton, Ohio	Oct. 21, 1873	143,888
Shelf, Revolving	S. Vernoy and N. Overfield	Meshoppan, Pa	Feb. 24, 1863	37,780
Shelf, Suspended	J. B. Stockton	Edmanton, Ky	Aug. 2, 1870	106,090
Shell and horn combs, Machine for cutting, twining, &c.	L. Parmele	Saybrook, Conn	July 15, 1816	....
Shell and shot, Elongated spiral-flanged	W. B. Pier and A. Mack	Detroit, Mich	Apr. 6, 1832	....
Shell, Bomb	S. Driver	Philadelphia, Pa	Oct. 13, 1857	18,424
Shell, Bomb	J. McIntyre	New York, N. Y	July 2, 1861	32,709
Shell, Bomb	W. Rice	Philadelphia, Pa	Sept. 11, 1860	29,995
Shell, Canister	W. S. Williams	Canton, Ohio	Mar. 8, 1864	41,882
Shell, Compound explosive	H. Barton	Baltimore, Md	July 11, 1865	48,642
Shell, Compound explosive	J. McIntyre	New York, N. Y	Oct. 14, 1862	36,664
Shell, Eccentric explosive	W. W. Hubbell	Philadelphia, Pa	Jan. 22, 1856	14,133
Shell, Eccentric explosive	W. W. Hubbell	Philadelphia, Pa	Mar. 2, 1858	19,505
Shell-exploding device	J. J. Dresbach	Circleville, Ohio	June 17, 1862	35,593
Shell, Explosive	E. Estabrook	Jersey City, N. J	Jan. 24, 1865	45,985
Shell, Explosive	A. M. George	Nashua, N. H	Sept. 23, 1856	15,760
Shell, Explosive	R. Graham	Brooklyn, N. Y	Mar. 15, 1864	41,960

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Invention.	Inventor.	Residence.	Date.	No.
Shell, Explosive	J. Groves	Brooklyn, N. Y	May 17, 1864	42, 818
Shell, Explosive	H. Halvorson	Cambridge, Mass	Nov. 3, 1863	40, 538
Shell, Explosive	T. D. Hart	Philadelphia, Pa	Mar. 8, 1864	41, 844
Shell, Explosive	J. H. Hiscock	Turner, Me	Oct. 17, 1865	50, 535
Shell, Explosive	B. B. Hotchkiss	New York, N. Y	May 2, 1865	47, 544
Shell, Explosive	W. W. Hubbell	Philadelphia, Pa	Mar. 25, 1856	14, 503
Shell, Explosive	H. W. Libbey	Cleveland, Ohio	May 9, 1865	47, 651
Shell, Explosive	W. Maginn	New York, N. Y	Sept. 22, 1863	40, 054
Shell, Explosive	I. P. Noyes	Providence, R. I	Jan. 30, 1866	52, 314
Shell, Explosive	J. T. Senn	Troy, Ala	Apr. 1, 1873	137, 491
Shell, Explosive	B. H. Tripp	Culpeper, Va	Sept. 20, 1864	44, 353
Shell, Explosive	L. E. Williams	Peekskill, N. Y	May 30, 1865	48, 005
Shell for ordnance	G. C. Jones	Alna, Me	Feb. 4, 1862	34, 302
Shell for ordnanc	C. Peters	Wadsworth, Ohio	Apr. 15, 1862	34, 979
Shell for ordnance	A. Pfund	New York, N. Y	Oct. 22, 1861	33, 541
Shell for ordnance, Compound	L. B. Olmsted	Binghamton, N. Y	Oct. 12, 1858	21, 773
Shell for ordnance, Explosive	T. Harding	Springfield, Ohio	July 14, 1863	39, 254
Shell for ordnance, Explosive	J. M. Hathaway	New York, N. Y	Mar. 18, 1862	34, 685
Shell for ordnance, Explosive	H. Helm	Salina, Kans	Jan. 12, 1864	41, 220
Shell for ordnance, Explosive	W. W. Hubbell	Philadelphia, Pa	Jan. 7, 1862	34, 059
Shell for ordnance, Explosive	C. T. James	Providence, R. I	June 10, 1862	35, 521
Shell for ordnance, Explosive	H. Resley	Cumberland, Md	Jan. 27, 1863	37, 520
Shell for ordnance, Explosive	L. Wells	New York, N. Y	Aug. 8, 1865	49, 326
Shell for ordnance, Explosive	M. S. Wickersham	Philadelphia, Pa	Mar. 25, 1862	34, 798
Shell for rifled ordnance	J. M. Connel and J. S. Hall	Newark and Columbus, Ohio.	Jan. 28, 1862	34, 242
Shell for rifled ordnance	H. N. Houghton and C. H. Denison.	Halifax and Brattleborough, Vt.	June 10, 1862	35, 520
Shell for rifled ordnance	J. P. Rollins	Cedar Rapids, Iowa	Jan. 28, 1862	34, 268
Shell-grenade and serpentine rocket, Liquid combustible.	J. Lloyd	Adams County, Pa	May 11, 1813	....
Shell, Illuminating and signal	G. Amici	Copenhagen, Denmark	Jan. 5, 1864	41, 173
Shell, Incendiary	W. W. Hubbell	Philadelphia, Pa	Oct. 31, 1865	50, 711
Shell, Incendiary	C. W. Stafford	New York, N. Y	Oct. 6, 1863	40, 198
Shell, Incendiary	L. Wood	Brooklyn, N. Y	May 5, 1863	38, 441
Shell or projectile, Liquid fire	A. Berney	Jersey City, N. J	Nov. 11, 1862	36, 934
Shell, Percussion	G. W. Gardner	Troy, N. Y	Dec. 3, 1861	33, 835
Shell, Submarine explosive	W. W. W. Wood and J. L. Lay	Philadelphia, Pa., and Buffalo, N. Y.	May 16, 1865	47, 776
Shells, Machine for molding	W. H. Ward	Auburn, N. Y	Dec. 1, 1857	18, 782
Shells, Manufacture of bomb	A. Pevey	Lowell, Mass	July 28, 1863	39, 354
Shells, Material for filling	M. L. Callender	New York, N. Y	Aug. 2, 1864	43, 667
Shells, Mold for backing electrotype	A. D. Farmer and R. Rathbone	Brooklyn, N. Y	Sept. 4, 1855	13, 521
Shells, Mold for casting	A. J. Eddy	Brooklyn, N. Y	Jan. 13, 1863	37, 388
Shells by clock-work, Timing explosive	F. Soggenburger	Chicago, Ill	May 2, 1865	47, 586
Shells, &c., Charging	T. P. Shaffner	Louisville, Ky	Dec. 18, 1866	60, 567
Shells, Combined percussion and time fuse for	E. Drake	Stoughton, Mass	Mar. 25, 1873	137, 186
Shells, Composition for explosive	J. P. Perry	Foxborough, Mass	Sept. 1, 1863	39, 746
Shells, Composition for filling	S. Short	Philadelphia, Pa	May 5, 1863	38, 424
Shells, Defending redoubts by	O. Hopkins	New York, N. Y	Jan. 21, 1862	34, 206
Shells from balloons, Discharging explosive	C. Perley	New York, N. Y	Feb. 24, 1863	37, 771
Shells, Igniting explosive	W. Kingsley	New York, N. Y	Sept. 16, 1862	36, 468
Shells, Percussion apparatus for explosive	J. J. Schillinger	Washington, D. C	Mar. 3, 1863	37, 830
Shells' Percussion-exploder for	J. M. Connel	Newark, Ohio	Feb. 3, 1863	37, 566
Shells' Plunger of concussion	C. W. Smith and T. D. Stetson	New York, N. Y	Mar. 25, 1862	34, 788
Shells' Removable charge-chamber for explosive	F. Alger	Boston, Mass	July 21, 1863	39, 267
Shells' Sabot for explosive	C. T. James	Providence, R. I	Apr. 15, 1862	34, 965
Shells to rollers, Mode of coupling	J. M. Mason	New Albany, Ind	Dec. 17, 1867	72, 409
Shellac, Treating	A. Zinsser	New York, N. Y	Oct. 18, 1870	108, 550
Sheller: *See* Clover-seed sheller. Corn-sheller. Pea-sheller. Pea and bean sheller. Pea-nut-sheller.				
Shelling, riddling, and fanning, Machine for	R. Humphrey	Waterville, N. Y	Dec. 24, 1824	....
Shelving-bracket	J. V. Meigs	Lowell, Mass	May 27, 1873	139, 408
Shelving, Extensible	S. H. Mercer	Washington, D. C	Apr. 4, 1871	113, 683
Shelving, Movable stone	G. and W. Koch	Franklin, Pa	June 7, 1870	104, 041
Shielded pin for shawls, &c	T. Woodward	Brooklyn, N. Y	May 7, 1842	2, 609
Shield-pin	J. Johnson	New York, N. Y	Nov. 2, 1858	21, 966
Shields for infantry and artillery, Portable	H. Spears	Snow Hill, N. C	Dec. 27, 1870	110, 599
Shields for infantry or artillery, Portable	M. Saviers	Shawneetown, Kans	June 9, 1863	38, 845
Shields for iron-clad vessel	R. Montgomery	New York, N. Y	June 3, 1862	35, 495
Shields for riflemen, Portable	T. Hunter	New York, N. Y	Oct. 28, 1862	36, 781
Shields for the Army or Navy, Metallic	W. F. Goodwin	Powhatan, Ohio	June 21, 1864	43, 195
Shields for tunneling	A. E. Beach	Stratford, Conn	June 8, 1869	91, 071
Shingle	H. T. Clay	Gardiner, Me	Dec. 21, 1858	22, 350
Shingle	J. Lewis	New York, N. Y	Dec. 29, 1868	85, 316
Shingle	C. Shelmidine	Summit, N. Y	Nov. 15, 1870	109, 258
Shingle	J. Sherman	Burlington, N. J	Jan. 9, 1866	52, 004
Shingle	J. Sweetser	Biddeford, Me	Aug. 30, 1850	25, 288
Shingle	S. R. Tenney and A. Bennett	Hubbardston, Mass	Dec. 8, 1857	18, 828
Shingle and clapboard sawing machine	T. J. Flanders	Bradford, N. H	Sept. 25, 1838	943
Shingle and scale-board machine	J. Fairfield	Vassalborough, Me	Apr. 28, 1830	....
Shingle and stone cutting machine	G. Pack	Peterborough, N. Y	Nov. 11, 1837	464
Shingle and stave dressing machine	E. Suter	Robertson County, Tenn	Jan. 23, 1849	6, 045
Shingle and stave sawing machine	W. Bell	Lexington, Ky	Sept. 22, 1838	941
Shingle and stave sawing machine	H. M. Parsons and T. N. Egery	Bangor, Me	June 16, 1863	38, 932
Shingle-band	C. B. Martin	Fond du Lac, Wis	Dec. 31, 1867	72, 876
Shingle-band	J. W. Wells	Saint Joseph, Mo	Feb. 19, 1867	62, 241
Shingle-band cutting and punching machine	C. B. Choate	East Saginaw, Mich	Oct. 10, 1871	119, 829
Shingle-band cutting and punching machine	J. S. Everitt and C. H. Avery	Oshkosh, Wis	Nov. 7, 1871	120, 634
Shingle-band-cutting machine	J. H. and W. H. Crawford	Oshkosh, Wis	Jan. 19, 1869	85, 911
Shingle-band-notching machine	C. E. McGregory	East Corinth, Me	Aug. 19, 1873	142, 033
Shingle-bands, Cutting and punching	E. Perkins and R. A. Smith	Fond du Lac, Wis	Sept. 3, 1872	131, 024
Shingle-binder	G. E. More	Royalton, Wis	Sept. 21, 1869	95, 127
Shingle-blocks, Bolting	J. B. Hendy	Olean, N. Y	Jan. 5, 1864	41, 156
Shingle-bolt machine	T. Thompson	Buffalo, N. Y	Aug. 52, 1868	81, 435
Shingle-bolt-making machine	D. H. Whitney	Black Rock, N. Y	Sept. 28, 1869	95, 296

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Shingle-bolt-sawing machine	J. C. Brown	Fond du Lac, Wis	Dec. 3, 1861	33, 822
Shingle-bolt-sawing machine	M. Hart	Boston, Mich	Apr. 26, 1870	102, 396
Shingle-bolts to knife, Method of feeding	W. J. Scott	Carthage, N. Y	Oct. 9, 1855	13, 666
Shingle-bolts, Machine for sawing	D. H. Ball	Sinnamahoning, Pa	Nov. 23, 1869	97, 151
Shingle-bundles, Method of making bands for	J. Reese	Pittsburgh, Pa	July 13, 1869	92, 469
Shingle-bundling machine	R. Law	Toledo, Ohio	Jan. 14, 1873	134, 753
Shingle-carriage	C. Taft	Northbridge, Mass	Dec. 31, 1867	72, 769
Shingle-coating composition	T. J. Longley	East Cambridge, Mass	Aug. 1, 1871	117, 647
Shingle-cutter	J. P. Bartley	Flanders, N. J	May 25, 1844	3, 600
Shingle-cutter	J. N. Johnson	Fredonia, N. Y	Dec. 8, 1829	....
Shingle-cutter, Rotary	W. Bevard	Saint Louis, Mo	May 12, 1857	17, 254
Shingle-cutting machine	J. Burt and E. Smith	Sullivan, N. Y	July 9, 1839	1, 2[illegible]5
Shingle-cutting machine	T. Cole	Kent, N. Y	Nov. 26, 1844	3, 837
Shingle-cutting machine	D. M. Cummings	East Lebanon, N. H	May 7, 1842	2, 614
Shingle-cutting machine	G. W. Dana	Lowville, N. Y	Sept. 20, 1827	....
Shingle-cutting machine	W. Foster	Detroit, Mich	Nov. 21, 1842	2, 853
Shingle-cutting machine	J. C. Gillett	Bloomfield, Mich	Dec. 20, 1843	3, 382
Shingle-cutting machine	A. H. Hart	Chagrin Falls, Ohio	Sept. 17, 1842	2, 782
Shingle-cutting machine	H. H. Herrick	Boston, Mass	Mar. 9, 1842	2, 481
Shingle-cutting machine	J. Hinman, J. Thatcher, and A. Palmer.	Persia, N. Y	Mar. 25, 1839	1, 109
Shingle-cutting machine	A. Kinney	Homer, N. Y	Feb. 12, 1842	2, 457
Shingle-cutting machine	D. C. McMillen, J. B. and M. Knoll, and T. S. Henry.	Persia, Collins, and Tully, N. Y.	Sept. 10, 1839	1, 319
Shingle-cutting machine	S. Munson	Dillon, Ill	Oct. 7, 1842	2, 806
Shingle-cutting machine	L. M. Parsons	Castleton, Vt	Mar. 12, 1839	1, 099
Shingle-cutting machine	M. R. Payne	Andersontown, Ind	Oct. 30, 1840	1, 840
Shingle-cutting machine	T. Walcott	Stow, Mass	Jan. 20, 1841	1, 932
Shingle-cutting machine	L. White	Jeffersonville, Ind	Nov. 10, 1841	2, 346
Shingle-cutting machine	G. Wolf	Clear Creek Township, Ohio.	Mar. 22, 1832	....
Shingle-cutting machine	W. Wood	Westport, Conn	Mar. 20, 1844	3, 495
Shingle-cutting machine	W. Wood	Westport, Conn	Jan. 8, 1850	7, 010
Shingle-dressing	N. P. Hauk and J. Keyes	Union, N. Y	Apr. 21, 1836	....
Shingle-dressing machine	S. Carver	Geneva, Ill	June 17, 1851	8, 165
Shingle-dressing machine	J. Heavis	Montgomery County, Va	Mar. 16, 1812	....
Shingle-dressing machine	R. and T. Nicholson	Bairdstown, Ky	Dec. 13, 1808	....
Shingle-dressing machine	J. Tiffany	Cleveland, Ohio	Mar. 8, 1853	9, 614
Shingle-dressing machinery	F. Jenney	New Bedford, Mass	Sept. 18, 1849	6, 716
Shingle-dressing machinery	L. Stockwell	Sutton, Mass	Apr. 10, 1849	6, 296
Shingle-dressing machinery	A. Welch and R. Walker	Bennington, Ind	Jan. 8, 1850	7, 009
Shingle-gaging box	J. W. Alesworth	Santa Cruz, Cal	Dec. 24, 1867	72, 581
Shingle-jointing machine	J. F. Parkes	Detroit, Mich	Oct. 13, 1863	40, 274
Shingle-machine	A. Anderson	Chadwick's Mills, N. Y	Aug. 26, 1873	142, 138
Shingle-machine	S. E. Anthony	Stillwater, N. Y	May 20, 1862	35, 288
Shingle-machine	S. E. Anthony	Stillwater, N. Y	July 25, 1865	48, 885
Shingle-machine	S. E. Anthony	Stillwater, N. Y	Mar. 19, 1867	62, 990
Shingle-machine	J. E. Austin	Oswego, N. Y	Apr. 14, 1868	76, 691
Shingle-machine	J. E. Austin	Oswego, N. Y	Sept. 15, 1868	82, 067
Shingle-machine	J. E. Austin	Oswego, N. Y	July 19, 1870	105, 540
Shingle-machine	H. C. Babcock	Eureka, Cal	Jan. 17, 1871	111, 029
Shingle-machine	J. Baker	Sheridan, Mich	Dec. 28, 1869	98, 334
Shingle-machine	D. H. Ball	Sinnamahoning, Pa	June 2, 1868	78, 508
Shingle-machine	J. Barnes	Cornwall Bridge, Conn	Oct. 10, 1829	....
Shingle-machine	H. D. Barnes	New Haven, Conn	Jan. 29, 1867	61, 503
Shingle-machine	L. Beaudrean	Fond du Lac, Wis	Aug. 9, 1859	24, 985
Shingle-machine	J. Beaudrean	Fond du Lac, Wis	July 7, 1863	39, 110
Shingle-machine	J. Bennet	Amenia, N. Y	July 31, 1846	4, 678
Shingle-machine	N. H. Bolton	Minneapolis, Minn	Dec. 17, 1872	133, 964
Shingle-machine	D. M. Boyd	Indianapolis, Ind	Feb. 2, 1858	19, 233
Shingle-machine	J. A. Bradshaw	Lowell, Mass	Oct. 10, 1854	11, 774
Shingle-machine	J. L. Brown	Indianapolis, Ind	Apr. 7, 1857	16, 964
Shingle-machine	T. J. Burhyte	Barton, N. Y	July 1, 1836	....
Shingle-machine	J. A. Burnap and J. H. Melick	Albany, N. Y	Nov. 14, 1865	50, 900
Shingle-machine	G. Challoner	Omro, Wis	Aug. 8, 1865	49, 228
Shingle-machine	G. Challoner	Omro, Wis	June 13, 1871	115, 932
Shingle-machine	J. F. Chambers	Calistoga, Cal	Mar. 31, 1868	76, 160
Shingle-machine	M. Chase, jr., and H. J. Morton	South Paris, Me	Apr. 13, 1869	88, 943
Shingle-machine	J. D. Chism	Albany, N. Y	June 12, 1860	28, 649
Shingle-machine	A. H. Clark	Fond du Lac, Wis	June 4, 1861	32, 467
Shingle-machine	A. H. Clark	Fond du Lac, Wis	July 21, 1863	39, 272
Shingle-machine	R. Clifford	Lowell, Mass	Mar. 4, 1856	14, 347
Shingle-machine	W. R. Close	Bangor, Me	June 29, 1869	91, 826
Shingle-machine	E. Conger	Lexington, Ohio	Apr. 16, 1867	63, 869
Shingle-machine	A. M. Connett	Madison, Ind	Oct. 16, 1866	58, 938
Shingle-machine	C. G. Conover	Jefferson, Wis	June 21, 1859	24, 445
Shingle-machine	E. B. Cook	North Bellingham, Mass	Aug. 13, 1867	67, 724
Shingle-machine	G. Craine	Fairfield, Iowa	Feb. 16, 1858	19, 349
Shingle-machine	J. Crary	Kittanning, Pa	Nov. 24, 1857	18, 681
Shingle-machine	H. C. Crowell	Morgan, Ohio	Apr. 19, 1864	42, 353
Shingle-machine	J. P. N. Davis	Point Arena, Cal	Apr. 14, 1868	76, 721
Shingle-machine	G. Darby and J. E. Young	Augusta, Me	Jan. 19, 1858	19, 136
Shingle-machine	A. Day	Detroit, Mich	Sept. 14, 1858	21, 490
Shingle-machine	B. Day	Bangor, Me	Dec. 3, 1867	71, 714
Shingle-machine	J. Decker	Holmesville, Ga	Apr. 18, 1871	113, 746
Shingle-machine	L. H. Dodge	Oshkosh, Wis	June 9, 1868	78, 725
Shingle-machine	J. B. Dougherty	Rochester, N. Y	Oct. 9, 1866	58, 618
Shingle-machine	J. B. Dougherty	Rochester, N. Y	July 13, 1869	92, 591
Shingle-machine	E. Drake	Gardiner, Me	Dec. 27, 1864	45, 592
Shingle-machine	C. M. Dyer and D. M. Cummings.	Enfield, N. H	Mar. 20, 1860	27, 534
Shingle machine	H. H. Evarts	Chicago, Ill	Oct. 31, 1854	11, 858
Shingle-machine	J. B. Evins	Greencastle, Ind	Apr. 29, 1856	14, 765
Shingle-machine	L. S. Fairchild	Cleveland, Ohio	Feb. 11, 1862	34, 396
Shingle-machine	W. F. Fitch	Newport, Me	Feb. 27, 1847	4, 962
Shingle-machine	F. Godfrey	Grand Rapids, Mich	July 12, 1859	24, 733
Shingle-machine	H. L. Gooch	East Machias, Me	Feb. 6, 1872	123, 392
Shingle-machine	I. Graves and C. A. Bogert	West Dresden, N. Y	Nov. 29, 1853	10, 284

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Shingle-machine	W. Gregor	New York, N. Y	Feb. 9, 1858	19, 293
Shingle-machine	J. V. Glue and G. I. Anderson	North Western, N. Y	Feb. 27, 1872	124, 057
Shingle-machine	J. R. Hall	Brunswick, Me	June 22, 1858	20, 638
Shingle-machine	E. Hall and J. F. Stewart	East Randolph, N. Y	July 13, 1858	20, 876
Shingle-machine	F. Hand, jr	Chicago, Ill	July 13, 1852	9, 115
Shingle-machine	S. Head	Millersburgh, Pa	July 22, 1862	35, 974
Shingle-machine	S. Head	Millersburgh, Pa	Dec. 22, 1863	41, 039
Shingle-machine	S. Head	Halifax, Pa	Apr. 28, 1868	77, 283
Shingle-machine	E. Hedley	Medina, N. Y	May 20, 1856	14, 914
Shingle-machine	S. Heywood	Claremont, N. H	June 30, 1863	39, 046
Shingle-machine	S. Heywood	Claremont, N. H	Apr. 10, 1866	53, 823
Shingle-machine	M. J. Hine	Equality, Ill	June 30, 1868	79, 557
Shingle-machine	W. Huey	Columbia, Pa	Feb. 3, 1857	16, 546
Shingle-machine	E. Hughes	Gowie, Canada	Nov. 21, 1871	121, 105
Shingle-machine	F. A. Huntington	San Francisco, Cal	Dec. 26, 1871	122, 117
Shingle-machine	S. Ingersoll	New York, N. Y	Apr. 12, 1853	9, 663
Shingle-machine	W. A. Jarratt	Patonsville, Tenn	May 26, 1857	17, 378
Shingle-machine	L. Jennings	Winchendon, Mass	June 9, 1868	78, 744
Shingle-machine	J. Jimo	Vergennes, Vt	May 2, 1871	114, 443
Shingle-machine	E. Keith	Buffalo, N. Y	Jan. 14, 1868	73, 343
Shingle-machine	A. Kendall	Cleveland, Ohio	Nov. 21, 1854	11, 965
Shingle-machine	A. Kendall	Cleveland, Ohio	Jan. 15, 1856	14, 101
Shingle-machine	S. M. King	Lancaster, Pa	Jan. 15, 1856	14, 103
Shingle-machine	S. M. King	Lancaster, Pa	Nov. 2, 1869	96, 444
Shingle-machine	S. M. King	Lancaster, Pa	May 20, 1873	139, 162
Shingle-machine	C. A. Kinney and C. Parker	Corry, Pa	Dec. 22, 1868	85, 103
Shingle-machine	W. Kirkpatrick	Lancaster, Pa	May 3, 1859	23, 846
Shingle-machine	I. I. Lancaster	Vancouver, Wash	Jan. 5, 1869	85, 676
Shingle-machine	R. Law	Portage City, Wis	Jan. 5, 1858	19, 033
Shingle-machine	P. H. Lawler	Rochester, N. Y	Apr. 14, 1868	76, 782
Shingle-machine	C. Leavitt	Quincy, Ill	Mar. 27, 1855	12, 600
Shingle-machine	H. H. Low	Galena, Ill	Apr. 19, 1859	23, 692
Shingle-machine	G. H. Mallary	New York, N. Y	Apr. 21, 1857	17, 104
Shingle-machine	S. Marshall	Philadelphia, Pa	Oct. 27, 1857	18, 512
Shingle-machine	B. F. Mayhew	Carmel, Me	June 29, 1869	91, 952
Shingle-machine	H. D. McGeorge	Morgantown, Va	Mar. 3, 1857	16, 742
Shingle-machine	J. W. McLean and A. Gummer	Indianapolis, Ind	June 5, 1860	28, 591
Shingle-machine	H. Miller	Grafton, Va	Sept. 13, 1859	25, 433
Shingle-machine	W. D. Mihills	Fond du Lac, Wis	May 2, 1871	114, 322
Shingle-machine	E. Morgan	Morgantown, Va	Oct. 10, 1854	11, 791
Shingle-machine	E. Morgan	Morgantown, Va	Jan. 26, 1858	19, 199
Shingle-machine	E. R. Morrison	Troy, Pa	Nov. 22, 1853	10, 263
Shingle-machine	E. R. Morrison	Brooklyn, N. Y	Dec. 13, 1859	26, 463
Shingle-machine	E. R. Morrison	New York, N. Y	Jan. 31, 1865	46, 129
Shingle-machine	F. Muzzy	Bangor, Me	July 11, 1871	116, 985
Shingle-machine	A. Newell	Jordan, N. Y	June 22, 1869	91, 764
Shingle-machine	R. L. Noblet	Haverford, Pa	July 13, 1852	9, 118
Shingle-machine	C. Nordell	New York, N. Y	Sept. 6, 1870	107, 092
Shingle-machine	P. D. Northcraft	Thurston County, Wash	Oct. 19, 1869	96, 027
Shingle-machine	O. A. Olmsted	Sebastopol, Cal	July 11, 1871	116, 988
Shingle-machine	A. V. B. Orr	Steeleville, Pa	Jan. 2, 1855	12, 137
Shingle-machine	A. V. B. Orr	Lancaster, Pa	July 8, 1856	15, 302
Shingle-machine	E. R. Osgood	Columbus, Ohio	May 21, 1867	65, 001
Shingle-machine	W. H. H. Palmer	Rockville, R. I	Feb. 15, 1870	99, 940
Shingle-machine	L. B. Parker	Pine Township, Pa	Jan. 27, 1852	8, 691
Shingle-machine	S. J. Parker	Williamsport, Pa	Apr. 28, 1863	38, 329
Shingle-machine	M. R. Payne	Waldo, Ohio	Sept. 12, 1848	5, 762
Shingle-machine	D. L. Peacock	Rockport, Ind	Jan. 7, 1868	73, 116
Shingle-machine	H. Peavey	Bangor, Me	Feb. 4, 1873	135, 441
Shingle-machine	A. S. Pelton	Clinton, Conn	Oct. 16, 1845	4, 234
Shingle-machine	C. L. Pierce	Buffalo, N. Y	Apr. 17, 1866	54, 010
Shingle-machine	C. L. Pierce	Buffalo, N. Y	June 19, 1866	55, 702
Shingle-machine	W. Porter	Orono, Me	Jan. 31, 1871	111, 379
Shingle-machine	J. H. and A. E. Redstone	Indianapolis, Ind	Feb. 28, 1860	27, 309
Shingle-machine	C. F. Rice	Brookfield, Mass	Jan. 25, 1870	99, 237
Shingle-machine	J. H. Rice	Oshkosh, Wis	Jan. 23, 1872	123, 048
Shingle-machine	A. G. Ritz	Elizabethtown, Ind	Mar. 24, 1868	75, 793
Shingle-machine	A. G. Ritz and J. B. Carter	Elizabethtown and Heartsville, Ind.	June 29, 1869	91, 872
Shingle-machine	D. W. Roche	Rochester, N. Y	Mar. 31, 1868	76, 250
Shingle-machine	L. C. Robinson	Shepardsville, Mich	Aug. 18, 1868	81, 295
Shingle-machine	H. Rogers	Eureka, Cal	Apr. 17, 1866	54, 019
Shingle-machine	S. Ruthenburg	Indianapolis, Ind	Feb. 7, 1860	27, 075
Shingle-machine	S. T. Sanford	Fall River, Mass	Dec. 12, 1865	51, 484
Shingle-machine	N. Shaw, W. B. Estabrooks, and C. A. Piper.	Eau Claire, Wis	Mar. 18, 1862	34, 701
Shingle-machine	C. Shelmidine	Summit, N. Y	July 4, 1871	116, 637
Shingle-machine	P. O. Sherwin	Jamestown, N. Y	Sept. 16, 1856	15, 747
Shingle-machine	F. Skinner	Dunkirk, N. Y	Nov. 25, 1851	8, 5[illegible]0
Shingle-machine	E. Smith	New Haven Mills, Vt	May 13, 1862	35, 266
Shingle-machine	R. Smith	Sherbrook, Canada	Dec. 10, 1872	133, 730
Shingle-machine	G. W. Southwick and J. H. Gillett.	Scott, N. Y	May 12, 1868	77, 776
Shingle-machine	J. J. Speed, jr., and J. A. Bailey	Detroit, Mich	Dec. 19, 1854	12, 105
Shingle-machine	B. F. Stevens and W. Kidder	Lowell, Mass	Dec. 20, 1853	10, 350
Shingle-machine	W. Stoddard	Lowell, Mass	Dec. 7, 1852	9, 456
Shingle-machine	W. Stoddard	Lowell, Mass	Nov. 14, 1854	11, 950
Shingle-machine	O. Stoddard	Busti, N. Y	Aug. 21, 1866	57, 495
Shingle-machine	D. B. Strong and W. Buskirk	Winchester, Mo	Aug. 10, 1869	93, 496
Shingle-machine	J. E. Sturdy	Augusta, Me	Nov. 29, 1859	26, 302
Shingle-machine	A. Thompson	Ridgway, Pa	Apr. 21, 1868	77, 128
Shingle-machine	J. Tiffany and M. Harris	Painesville, Ohio	Dec. 18, 1855	13, 958
Shingle-machine	D. D. Tupper	Boston, Mass	Sept. 16, 1856	15, 749
Shingle-machine	J. Turner	Saint Albans, Me	Oct. 31, 1848	5, 886
Shingle-machine	E. Valentine	Palmer, Mass	Aug. 30, 1853	9, 983
Shingle-machine	W. P. Valentine	Fond du Lac, Wis	Mar. 22, 1859	23, 327
Shingle-machine	I. N. Voris	Pescadora, Cal	May 9, 1865	47, 672
Shingle-machine	W. H. Walker	Fond du Lac, Wis	Apr. 7, 1868	76, 566

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Shingle-machine	G. Walton	Minneapolis, Minn	Feb. 22, 1870	100, 223
Shingle-machine	N. Waterbury	Fond du Lac, Wis	Aug. 30, 1859	25, 293
Shingle-machine	M. Weaver	Millersburgh, Pa	Dec. 15, 1863	40, 969
Shingle-machine	E. Webber	Gardiner, Me	July 28, 1857	17, 906
Shingle-machine	E. T. Wheeler	Cannelton, Ind	June 19, 1860	28, 798
Shingle-machine	E. T. Wheeler	Cannelton, Ind	Apr. 26, 1870	102, 343
Shingle-machine	O. Wheeler	Rochester, N. Y	Nov. 10, 1827	....
Shingle-machine	A. White	Fond du Lac, Wis	Feb. 27, 1872	124, 101
Shingle-machine	G. F. White	Aurora, Oregon	July 27, 1869	93, 148
Shingle-machine	H. White	Oneida Castle, N. Y	May 27, 1856	14, 977
Shingle-machine	H. White	Oneida Castle, N. Y	July 24, 1866	56, 648
Shingle-machine	W. A. Whiting	Saint Louis, Mo	Feb. 3, 1857	16, 562
Shingle-machine	J. P. Wilder	Tonawanda, N. Y	Dec. 5, 1871	121, 698
Shingle-machine	D. Wilkes	Nineveh, Ind	Feb. 1, 1870	99, 507
Shingle-machine	O. T. Williams	Smithland, Ky	Sept. 13, 1870	107, 429
Shingle-machine	A. P. Wilson	Piqua, Ohio	May 8, 1855	12, 842
Shingle-machine	S. Wood	Holden, Mass	Nov. 10, 1829	....
Shingle-machine	H. Woodman	Saco, Me	Jan. 7, 1868	73, 219
Shingle-machine	P. H. Woolsey	Andes, N. Y	Jan. 29, 1861	31, 277
Shingle-machine	C. M. Young	Sinclairville, N. Y	May 19, 1857	17, 347
Shingle-machine	G. Zehech and J. Kiefer	Indianapolis, Ind	Apr. 2, 1861	31, 937
Shingle-machine bolt-feeding device	O. Stoddard	Busti, N. Y	Dec. 20, 1859	26, 533
Shingle-machine, Circular-sawing	J. Creager	Cincinnati, Ohio	Oct. 12, 1858	21, 734
Shingle-machine, Gang-saw	C. Read	Weston, Mass	Apr. 2, 1828	....
Shingle-machine, Hawe's	G. A. Hoard	Antwerp, N. Y	Sept. 20, 1827	....
Shingle-machine, Rotary	C. F. Beverly	Lancaster, Ohio	May 6, 1856	14, 792
Shingle-machine, Rotary	E. Edwards	Oneida Lake, N. Y	Mar. 31, 1857	16, 911
Shingle-machine, Rotary	K. Freeman	Fond du Lac, Wis	June 29, 1858	20, 704
Shingle-machine, Rotary	I. W. Hatcher	Columbia, Tenn	Jan. 9, 1855	12, 206
Shingle-machine, Rotary	A. Olcott	Lakeport, N. Y	Mar. 1, 1859	23, 109
Shingle-machine, Rotary	J. Palmiter	Jamestown, N. Y	June 10, 1856	15, 081
Shingle-machine, Rotary	W. Stoddard	Lowell, Mass	May 16, 1854	10, 906
Shingle-machine tilting device	D. M. Boyd	Indianapolis, Ind	June 25, 1861	32, 616
Shingle-machine, Arrangement of devices in	W. H. Bitzer	Muscatine, Iowa	Nov. 1, 1859	25, 945
Shingle-machines Construction of	H. C. Smith	Cleveland, Ohio	Mar. 28, 1854	10, 709
Shingle-machines, Construction of beds for	H. J. Weston	Buffalo, N. Y	Sept. 11, 1855	13, 555
Shingle-machines, Device by which the width of the bolt checks the feed in.	A. C. Sawyer	Canton, N. Y	May 4, 1858	20, 144
Shingle-machines, Device for clamping bolts in circular-sawing.	K. Freeman	Fond du Lac, Wis	May 24, 1859	24, 111
Shingle-machines, Device for operating the bolts to obtain tapers in.	E. Morgan	Morgantown, Va	June 8, 1858	20, 501
Shingle-machines, Device for operating tilting-tables in.	J. B. Suitt	Indianapolis, Ind	Oct. 9, 1860	30, 364
Shingle-machines, Device for shifting the bolts to effect the taper in.	W. D. Guseman	Morgantown, Va	Jan. 26, 1858	19, 193
Shingle-machines, Device for tilting the bolts in	T. P. Butterfield	Indianapolis, Ind	Apr. 3, 1860	27, 690
Shingle-machines, Device in feed-motion of	E. Drake	Gardiner, Me	June 15, 1858	20, 553
Shingle-machines, Feed-apparatus for	H. Burt	Cohoes, N. Y	Oct. 30, 1849	6, 822
Shingle-machines, Feed-motion for	J. Broughton	Chicago, Ill	Sept. 16, 1856	15, 728
Shingle-machines, Method of feeding bolts in	N. S. Gilbert	Albion, N. Y	May 8, 1860	28, 168
Shingle-machines, Method of feeding bolts in	W. Wood	Westport, Conn	July 28, 1857	17, 907
Shingle-machines, Method of feeding bolts in	T. Wood	Greenwich, Conn	Feb. 2, 1858	19, 273
Shingle-machines, Method of feeding bolts to knife in.	D. Nicholson	Lockport, N. Y	Feb. 14, 1860	27, 192
Shingle-making machine	M. Andrews	Livermore, Me	Dec. 29, 1823	....
Shingle-making machine	J. Bush	Tippecanoe County, Ind	Nov. 19, 1833	....
Shingle-making machine	O. Paine	Foxborough, Mass	June 18, 1813	....
Shingle-making machine	J. Sawyer	Templeton, Mass	May 4, 1824	....
Shingle-making machine	D. Wilder	Rome, N. Y	Aug. 25, 1828	....
Shingle measuring and counting machine	M. Bonney	Mantua, Ohio	May 16, 1865	47, 697
Shingle, Metal-clad	F. N. Hickcox	Brooklyn, N. Y	Apr. 18, 1871	113, 882
Shingle-mill	T. H. Cox	Nashville, Tenn	Feb. 6, 1866	52, 507
Shingle-mill	R. McOmber	Galway, N. Y	Oct. 10, 1829	....
Shingle-packer	R. B. Taylor	Pensaukie, Wis	Dec. 21, 1869	98, 123
Shingle-planing machine	J. R. Cluxton	Russellville, Ohio	Aug. 4, 1863	39, 380
Shingle-planing machinery	J. S. L. Hunt	Boston, Mass	Oct. 9, 1845	4, 227
Shingle riving and dressing machine	W. S. George	Baltimore, Md	May 29, 1841	2, 109
Shingle riving and shaving machine	J. Balcomb	Reading, N. Y	July 15, 18.9	....
Shingle riving, drawing, jointing, and squaring machine.	P. Jones	James City County, Va	Nov. 12, 1829	....
Shingle-riving machine	A. C. Billings and B. H. Ruggles	Palmer, Mass	July 3, 1855	13, 155
Shingle-riving machine	C. Shelmandine	Jefferson, N. Y	Nov. 4, 1873	144, 292
Shingle riving and dressing machinery	E. R. Morrison	Angelica, N. Y	Sept. 18, 1849	6, 725
Shingle riving, planing, and jointing machine	E. R. Morrison	Pittsburgh, Pa	Aug. 8, 1837	345
Shingle sawing and planing machine	G. H. Mallory	New York, N. Y	Nov. 16, 1858	22, 083
Shingle-sawing machine	W. H. Auld	Brighton, Iowa	May 10, 1859	23, 887
Shingle-sawing machine	I. Baker	Amherst, Mass	May 8, 1805	....
Shingle-sawing machine	J. Creager	Cincinnati, Ohio	Apr. 14, 1857	17, 026
Shingle-sawing machine	W. Earle	Hubbardston, Mass	Sept. 3, 1813	....
Shingle-sawing machine	W. Foster	Oswego, N. Y	Jan. 25, 1826	....
Shingle-sawing machine	S. Fuller	Indiana Territory	Nov. 14, 1814	....
Shingle-sawing machine	J. Gilman	Nashua, N. H	Oct. 6, 1857	18, 354
Shingle-sawing machine	S. Goss	Milford, N. H	June 3, 1837	227
Shingle-sawing machine	J. R. Hall	Brunswick, Me	Sept. 11, 1860	29, 967
Shingle-sawing machine	J. R. Hall	Salem, Ohio	Oct. 29, 1872	132, 575
Shingle-sawing machine	G. Hall	Morgantown, Va	Dec. 29, 1857	18, 967
Shingle-sawing machine	J. Hobbs, jr	Falmouth, Mass	Aug. 18, 1831	....
Shingle-sawing machine	J. Hobbs, jr	United States	Sept. 14, 1836	25
Shingle-sawing machine	I. G. Johnson	Augusta, Me	Aug. 12, 1844	3, 701
Shingle-sawing machine	C. Ketcham	Penn Yan, N. Y	Aug. 21, 1855	13, 475
Shingle-sawing machine	D. McArthur and C. McKibben	Urbana, Ohio	Feb. 15, 1832	....
Shingle-sawing machine	A. Pernot	Chilton, Wis	Sept. 4, 1860	29, 911
Shingle-sawing machine	C. L. Pierce	Buffalo, N. Y	Apr. 25, 1865	47, 449
Shingle-sawing machine	E. Sampson	Plymouth, N. H	Sept. 5, 1838	901
Shingle-sawing machine	E. Sampson	Piermont, N. H	Jan. 10, 1843	2, 901
Shingle-sawing machine	Z. Sargent	Contoocookville, N. H	Dec. 1, 1837	492
Shingle-sawing machine	N. Swift	Lebanon, Conn	June 27, 1827	....

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Shingle-sawing machine	W. H. Walker	Fond du Lac, Wis	Feb. 9, 1864	41, 552
Shingle, &c., sawing machine	A. Wilbur	Burrillville, R. I	Mar. 25, 1837	150
Shingle-sawing-machine gage	E. Leonard	Canton, Me	Nov. 4, 1837	453
Shingle-sawing machines, Constructing	G. L. Day	Union, N. Y	Feb. 4, 1843	2, 942
Shingle-sawing machinery	W. Smith	Bangor, Me	Sept. 12, 1848	5, 768
Shingle shaving and dressing machine	D. Newel	Saratoga, N. Y	July 26, 1810	....
Shingle-shaving machine	A. H. Akin	Sparta, Pa	Nov. 4, 1837	452
Shingle-shaving machine	A. R. Benjamin and P. Bushnell	Hunter, N. Y	May 4, 1833	....
Shingle-shaving machine	A. Bradway	Monson, Mass	July 20, 1852	9, 130
Shingle-shaving machine	T. H. Carter	Bremen, Ky	Oct. 21, 1873	143, 877
Shingle-shaving machine	A. A. Cooley	Bolton, Conn	July 13, 1810	....
Shingle-shaving machine	B. Langdon	Troy, N. Y	Jan. 9, 1838	556
Shingle-shaving machine	D. Parker and J. Sanford	Sharon, Conn	May 30, 1811	....
Shingle-shaving machine	W. and J. Thorn, jr	Plainfield, N. J	June 7, 1838	768
Shingle-shaving machine	S. Wood	Worcester, Mass	Jan. 15, 1844	3, 405
Shingle-shaving machinery	S. Brewer	Robertson County, Tenn	May 16, 1848	5, 564
Shingle splitting and shaving machine	D. French	....	July 25, 1803	....
Shingle, stave, heading, &c	D. Flagg, jr	New York	Dec. 28, 1832	....
Shingle-stool	F. Van Doren	Adrian, Mich	Dec. 1, 1868	84, 595
Shingles and clapboards, Composition for coating	O. E. Bowen	Needham, Mass	May 31, 1870	103, 554
Shingles and other articles in liquids, Apparatus for immersing	C. Bates	Kingston, Mass	July 26, 1870	105, 769
Shingles and siding from steamed timber, Machine for cutting	J. S. Raymond	Lodir, N. Y	Aug. 15, 1837	356
Shingles and staves, Machine for dressing	J. McIlvain	Chester, Pa	Apr. 1, 1807	....
Shingles and staves, Shaving	W. W. Wilkinson	Wayne, Ohio	Sept. 26, 1835	....
Shingles, blinds, slats, &c., Sawing	I. Drake	Minot, Me	May 24, 1834	....
Shingles, boards, &c., Making	B. Jarvis	....	July 8, 1797	....
Shingles by machinery, Making	S. Howe and C. Chaffin	Holden, Mass	May 22, 1828	....
Shingles by rotary shave and carriage, Manufacturing	C. Reed	Worcester, Mass	Sept. 28, 1831	....
Shingles, Composition for preserving	F. Henshaw	Brookfield, Mass	Jan. 16, 1834	....
Shingles, Butting and pointing bolts to be sawed into	M. D. and A. Wells	Morgantown, Va	Jan. 19, 1858	19, 167
Shingles, Feeding and sawing	G. Craine	Fairfield, Iowa	Sept. 23, 1856	15, 756
Shingles for roofs and walls of buildings	T. N. Hickcox	Brooklyn, N. Y	May 7, 1872	126, 547
Shingles for roofs, Metallic	C. Southwick and I. J. Richardson	Palmyra, N. Y	Apr. 8, 1835	....
Shingles for roofing	T. H. Squire	Elmira, N. Y	Aug. 2, 1864	43, 717
Shingles from the bolt, Machine for cutting	E. K. Collins	Cambridge, Mass	Nov. 24, 1857	18, 679
Shingles from the bolt, Machine for sawing	A. B. McCans	Ashley, Mo	Jan. 11, 1859	22, 567
Shingles from the bolt, Machine for sawing	J. M. Carlisle	Greenwood, S. C	June 19, 1860	28, 734
Shingles from the bolt, Method of sawing	N. Boardman	Fond du Lac, Wis	June 7, 1859	24, 277
Shingles from the bolt, Method of sawing	W. H. and G. Yates	Chittenango, N. Y	Apr. 5, 1859	23, 522
Shingles from the log, Method of manufacturing	C. L. Story	Owensborough, Ky	Sept. 7, 1858	21, 453
Shingles from the stock, Cutting	G. Knode	Montgomery County, Va	Mar. 10, 1834	....
Shingles from the stock, Sawing	J. W. Smith	Montgomery County, Va	Apr. 25, 1834	....
Shingles, Joining	S. C. Coffin	Lawrenceville, Pa	June 7, 1859	24, 283
Shingles, Laying	S. G. Castor	Orwell, N. Y	Jan. 23, 1872	122, 935
Shingles, Lug for cast-iron	J. Cook	Westmoreland, N. Y	Feb. 5, 1856	14, 185
Shingles, Machine for bunching and pressing	P. Dexter	Clinton, Iowa	Mar. 31, 1863	38, 036
Shingles, &c., Machine for dressing sawed	G. L. Day	Union, N. Y	July 29, 1837	317
Shingles, Machine for jointing	W. Stoddard	Lowell, Mass	Mar. 23, 1852	8, 831
Shingles, Machine for planing or dressing sawed	O. N. May	Windsor, N. Y	Apr. 29, 1839	1, 138
Shingles, Machine for sapping timber for	G. M. Hinkley	Milwaukee, Wis	Apr. 4, 1871	113, 666
Shingles, &c., Machine for siding staves, laths	R. Hunt	Carroll, N. Y	Nov. 19, 1833	....
Shingles, Machinery for manufacturing	W. Earl	Boston, Mass	Dec. 28, 1822	....
Shingles, Making	A. A. Kelsey	Hartford, Conn	Oct. 9, 1805	....
Shingles, Making	J. Loomis	Geneva County, N. Y	Dec. 24, 1812	....
Shingles, Manufacturing	P. Hawes	Lockport, N. Y	Apr. 30, 1827	....
Shingles, Manufacturing	W. Thomas	Farmington, Mich	Aug. 25, 1831	....
Shingles, Manufacturing	J. E. Young	Augusta, Me	Sept. 15, 1857	18, 222
Shingles, Operating the knife in riving	J. Wood	Brooklyn, N. Y	Mar. 29, 1859	23, 420
Shingles or tapering pieces, Machine for planing	R. W. Sharp	Montgomery, Ala	Jan. 13, 1857	16, 403
Shingles, Sawing	C. I. Conrod	Lower Augusta Township, Pa	Sept. 19, 1854	11, 689
Shingles, Sawing	O. Goddard	Bridgeton, Me	Apr. 6, 1826	....
Shingles, Sawing	J. Hobbs, jr	Falmouth, Me	Sept. 14, 1836	....
Shingles, Sawing	O. Merritt	Berkhemsted, Conn	May 22, 1816	....
Shingles, Sawing	D. B. Moore	Stafford County, N. H	Aug. 15, 1835	....
Shingles, Sawing	F. B. Northrop	Newark, N. J	Dec. 18, 1866	60, 542
Shingles, Saw-mill for	E. Parker	Cheshire County, N. H	Dec. 17, 1825	....
Shingles, Shaving and jointing	S. B. Chapman	Camden, N. J	June 12, 1835	....
Shingles, Shaving and pointing	S. B. Chapman	Burlington, N. J	Mar. 15, 1834	....
Shingles, Splitting	J. Coppinger	Baltimore, Md	Oct. 31, 1809	....
Shingles, veneers, &c., Machine for cutting	R. A. Quatermass	Auburn, Mich	Aug. 17, 1843	3, 222
Shingles with a gang-saw, Sawing	J. Culver	Norfolk, N. Y	Nov. 15, 1825	....
Shingling and slating bracket	L. W. Fifield	Worcester, Mass	Aug. 8, 1871	117, 875
Shingling-bracket	L. A. Goodsell	Southington, Conn	Sept. 9, 1856	15, 720
Shingling-bracket	L. W. Merriam	Fitchburgh, Mass	Apr. 1, 1873	137, 312
Shingling-bracket	L. W. Merriam	Fitchburgh, Mass	Apr. 29, 1873	138, 425
Shingling-bracket	A. Rollo	Friendship, Wis	Mar. 9, 1869	87, 709
Shingling-bracket	E. J. Worcester	Worcester, Mass	Oct. 25, 1870	108, 748
Shingling-gage	E. P. Newbanks	Lincoln, Ill	May 8, 1866	54, 584
Ship and boat, Steam	B. T. Babbitt	New York, N. Y	June 11, 1872	127, 825
Ship-builder's mold, Adjustable	J. J. Cassidey	Wilmington, N. C	Sept. 3, 1867	68, 487
Ship-building	J. W. Banta	Buffalo, N. Y	Nov. 15, 1859	26, 080
Ship-building	A. Brewster	Hartford, Conn	Mar. 6, 1820	....
Ship-building	D. Brown	New York, N. Y	Oct. 30, 1847	5, 344
Ship-building	W. H. Degges	Washington, D. C	Apr. 28, 1863	38, 294
Ship-building	J. W. Griffiths	Brooklyn, N. Y	Feb. 11, 1862	34, 360
Ship-building	J. W. Griffiths	Brooklyn, N. Y	Dec. 5, 1865	51, 308
Ship-building	S. E. Howell	Vincent Town, N. J	Aug. 31, 1837	365
Ship-building	R. F. Loper	Philadelphia, Pa	Nov. 13, 1847	5, 368
Ship-building	C. Olcott	Medina, Ohio	Apr. 15, 1835	....
Ship-building	P. Pardee	Washington, D. C	Oct. 29, 1861	33, 598
Ship-building	S. L. Pionnier	New York, N. Y	Sept. 4, 1860	29, 912
Ship-building	H. Randall	Philadelphia, Pa	Oct. 22, 1861	33, 559

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Ship-building	D. M. Randolph	Richmond, Va	Aug. 2, 1815	....
Ship-building	J. B. Stoddard	Baltimore, Md	Aug. 17, 1869	93, 920
Ship-building	E. M. Strange	New York, N. Y	July 25, 1871	117, 345
Ship-building	D. Vrooman	Hudson, Ohio	Nov. 16, 1858	22, 097
Ship-building	N. W. Wheeler	Brooklyn, N. Y	Jan. 16, 1866	52, 100
Ship-building, Building-block for	J. Thomas	Washington, D. C	May 17, 1822	....
Ship building, Iron	S. Holmes and W. M. Bowron	Philadelphia, Pa	June 10, 1873	139, 789
Ship-carpenter's boring-machine	B. Hall	Canaan, N. Y	Mar. 8, 1810	....
Ship, Floating	G. W. Corey and T. Losie	New York, N. Y	Mar. 8, 1870	100, 606
Ship-hook blanks, Die for making	C. E. Billings	Hartford, Conn	May 6, 1873	138, 471
Ship, Iron	R. Montgomery	New York, N. Y	Dec. 6, 1859	26, 367
Ship, Life or safety	M. Gill	Battle Creek, Mich	June 25, 1861	32, 623
Ship, Life-preserving	T. Burr	Battle Creek, Mich	Feb. 12, 1861	31, 424
Ship-loading apparatus	F. Paterson	Montreal, Canada	Aug. 1, 1871	117, 673
Ship of war	C. Slater	Brooklyn, N. Y	Apr. 25, 1865	47, 463
Ship of war	J. Wheatley	The Royal Navy, England	Aug. 18, 1863	39, 601
Ship or vessel for carrying liquid cargo	J. W. Marshall, G. Joslin, N. Curtis, and O. Edwards.	Boston and Brookline, Mass.	Dec. 14, 1869	97, 787
Ship, Revolving-screw steam-	D. F. Masnata	New York, N. Y	Mar. 20, 1866	53, 316
Ship, Rotary steam-	D. F. Masnata	New York, N. Y	Mar. 13, 1866	53, 160
Ship, Safety	E. S. Willson	Saratoga Springs, N. Y	Mar. 12, 1861	31, 687
Ship steam-kitchen	N. Boureau	....	Aug. 30, 1802	....
Ship-tendon, Swivel	W. Sniffin	Sing Sing, N. Y	Aug. 27, 1867	68, 251
Ship-timber, Instrument for laying down curves of	C. Scales	Bath, Me	Dec. 17, 1850	7, 846
Ship-timber, Machine for dressing	J. E. Crowell	Salem, Mass	Aug. 29, 1854	11, 634
Ship-timber, Ventilating	J. L. Harley and S. Maxwell	Baltimore, Md	Sept. 12, 1854	11, 669
Ship-ventilating	F. Emerson	Boston, Mass	Oct. 10, 1848	5, 842
Ship-ventilating	R. Knecht	New York, N. Y	Nov. 11, 1856	16, 059
Ship-ventilating	A. J. Sexton and W. Ennis	Brooklyn and New York, N. Y.	Sept. 23, 1851	8, 378
Ship-ventilating apparatus	O. D. Wells	Westerly, R. I	Dec. 12, 1865	51, 504
Ship-ventilating bellows	J. Barron	Philadelphia, Pa	Feb. 20, 1835	....
Ship-ventilator	E. Bahr	Rochester, Ind	June 5, 1855	12, 992
Ship-ventilator	R. Bulkley	New York, N. Y	Nov. 26, 1850	7, 794
Ship-ventilator	B. J. Burnett	Mount Vernon, N. Y	Aug. 15, 1865	49, 374
Ship-ventilator	W. Robinson	Lebanon, Conn	Aug. 13, 1850	7, 569
Ship-ventilator	W. Robinson	New Haven, Conn	Feb. 14, 1854	10, 523
Ship-ventilator	C. Sinclair	New York, N. Y	Sept. 20, 1864	44, 349
Ship-ventilator	W. F. Thiers	New York, N. Y	July 25, 1871	117, 484
Ship-ventilator	W. Thompson	New Haven, Conn	July 11, 1854	11, 276
Ship-ventilator	W. W. Vanderbilt	New York, N. Y	June 22, 1869	91, 796
Ship-ventilator, Lighted	N. W. Wheeler	Brooklyn, N. Y	Aug. 6, 1867	67, 471
Ship's air-port	W. G. Maupin and J. B. Rooke	Portsmouth, Va	Sept. 18, 1860	30, 075
Ships and boats, Building steam	A. W. Thompson	New York, N. Y	Mar. 12, 1872	124, 641
Ships and heating steam-boilers, Apparatus for ventilating.	J. Thomas	Middlesborough, England	July 8, 1873	140, 741
Ships and other navigable vessels, Construction of	R. Germain	Buffalo, N. Y	Nov. 15, 1859	26, 099
Ships and other vessels, Air-cell for giving buoyancy to.	S. Nowlan	New York, N. Y	June 22, 1858	20, 657
Ships and other vessels, Constructing	V. P. Corbett	Corbettsville, N. Y	Feb. 6, 1855	12, 359
Ships and other vessels, Construction of	J. B. Sardy	New York, N. Y	Jan. 14, 1862	34, 165
Ships and other vessels from the water, Apparatus for lifting.	T. Bell	Brookhaven, N. Y	Nov. 14, 1838	1, 009
Ships and other vessels, Means for covering and repairing iron.	R. F. Loper	Philadelphia, Pa	Jan. 14, 1862	34, 151
Ships and other vessels, Means for increasing the buoyancy of.	A. Le Mat	New Orleans, La	Mar. 4, 1856	14, 305
Ships and other vessels, Mode of building	H. Higinson	Boston, Mass	Apr. 4, 1838	673
Ships and other vessels, Vibrating stop-water for.	S. Saunders	South Kingston, R. I	July 10, 1855	13, 231
Ships and other structures, Coating for iron	F. Cruickshank	Edinburgh, Great Britain	May 14, 1867	64, 638
Ships and tanks, Joint for iron	D. E. Merrick	Milwaukee, Wis	Sept. 2, 1873	142, 406
Ships, &c., Apparatus for docking	J. W. Nystrom	St. Petersburgh, Russia	Jan. 15, 1861	31, 125
Ships, Apparatus for trimming	W. L. and T. Winans	London, England	Sept. 4, 1866	57, 834
Ships, Attaching the shrouds of	J. Taber	Bangor, Me	Jan. 1, 1861	31, 067
Ship's battery, War	C. W. S. Heaton	Belleville, Ill	June 9, 1863	38, 824
Ship's block	C. F. Annan	Boston, Mass	Mar. 15, 1870	100, 709
Ship's block	W. and S. G. Coleman	Providence, R. I	Feb. 3, 1852	8, 709
Ship's block	W. and S. G. Coleman	Providence, R. I	Aug. 16, 1853	9, 946
Ship's block	W. W. Hill	Greenport, N. Y	July 10, 1847	5, 186
Ship's block	C. H. Platt	New York, N. Y	May 18, 1852	8, 950
Ship's block	C. H. Platt	New York, N. Y	Sept. 27, 1853	10, 059
Ship's block	S. Waterman and I. D. Russell	Greenwich, Conn., and New York, N. Y.	Jan. 31, 1844	3, 421
Ship's block	E. Webber	Gardiner, Me	Mar. 28, 1854	10, 688
Ship's block and dead-eyes, Cutting scores around.	T. Blanchard	New York, N. Y	Aug. 10, 1836	....
Ship's block and warping-chock	J. D. Leach	Penobscot, Me	Aug. 13, 1867	67, 775
Ship's block bushing-sheave	W. Taylor	Camptown, N. J	Aug. 8, 1854	11, 510
Ship's block, Anti-friction bushing for	J. Kelly	Sag Harbor, N. Y	Oct. 14, 1856	15, 886
Ship's blocks, Cutting sheaves and pins of	T. Blanchard	New York, N. Y	Aug. 31, 1836	....
Ship's blocks, Finishing wooden sheave for	T. Blanchard	New York, N. Y	Aug. 1, 1836	....
Ship's blocks, Forming end-pieces of plank for	T. Blanchard	New York, N. Y	Aug. 10, 1836	....
Ship's blocks, Forming the cheeks of plank of	T. Blanchard	New York, N. Y	Aug. 31, 1836	....
Ship's blocks, Lubricator for sheave-pin of	J. M. Riley	Newark, N. J	Sept. 30, 1856	15, 817
Ship's blocks, Machine for stretching the straps of.	E. Mack	United States Navy	Oct. 30, 1860	30, 535
Ship's blocks, Mortising and boring wooden shells of	T. Blanchard	New York, N. Y	Aug. 10, 1836	....
Ship's blocks, Riveting plank for	T. Blanchard	New York, N. Y	Aug. 10, 1836	....
Ship's blocks, Rounding edges and ends of	T. Blanchard	New York, N. Y	Aug. 10, 1836	....
Ship's blocks, Screw-cog for sheave of	R. Kingsbury	Bath, Me	May 22, 1830	....
Ship's blocks, Sustaining friction-roller in	J. Allender	New London, Conn	Mar. 3, 1857	16, 707
Ship's boats, Apparatus for lowering	S. Brown and L. Level	San Francisco, Cal	May 29, 1866	55, 053
Ship's boats, Apparatus for raising and lowering	W. A. Devon	Richmond, N. Y	Aug. 6, 1867	67, 419
Ship's boats, Apparatus for working	H. Davidson	United States Navy	Nov. 15, 1859	26, 094
Ship's boats, Apparatus for working	R. S. Stubbs	Claremont, N. H	Aug. 20, 1861	33, 110
Ship's boats, Attaching and detaching	R. S. Stubbs	Claremont, N. H	Nov. 20, 1860	30, 698
Ships, boats, &c., Composition for coating	E. V. Gardner and P. M. Crane	Oxford Street, and Manchester, England.	Jan. 18, 1870	98, 862
Ships, boats, &c., Constructing	G. F. Bigelow	Norfolk, Va	Feb. 18, 1840	1, 492
Ships, boats, &c., Constructing and navigating	B. Connor	Portsmouth, N. H	Aug. 26, 1813	....

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Ship's boats, Device for suspending and liberating	D. P. Mealey	Washington, D. C	May 10, 1859	23, 985
Ship's boats, Disengaging hook for liberating	T. W. Wilson and L. Raymond	New York, N. Y	Nov. 22, 1859	26, 220
Ship's boats, Lowering and attaching	J. A. Davis	Portsmouth, Va	July 10, 1860	29, 064
Ship's boats, Suspending, lowering, and liberating	W. S. Lacon	Great Yarmouth, England	Feb. 22, 1853	9, 594
Ships, boats, &c., to be propelled by steam or other power, Construction of.	E. F. Aldrich	New York	July 8, 1842	2, 709
Ships' bolts, Casting	J. Share	Baltimore, Md	Oct. 28, 1805	....
Ships' bolts, Rolling iron round for	C. Reutgen	West Chester, Pa	June 27, 1810	....
Ships' bottoms, Coating for	J. Russell	New Bedford, Mass	Jan. 29, 1820	....
Ships' bottoms, Composition for	W. Russell, jr	New Bedford, Mass	Nov. 8, 1819	....
Ships' bottoms, Composition for coating	G. A. F. Fowke	Westminster, Great Britain	Nov. 12, 1867	70, 826
Ships' bottoms, Composition for coating	F. N. Gisborne	London, England	Nov. 22, 1864	45, 219
Ships' bottoms, Composition for coating	W. J. Hay	Southsea, England	Jan. 8, 1867	61, 064
Ships' bottoms, Composition for coating	C. M. Spooner	New Bedford, Mass	Aug. 22, 1865	49, 567
Ships' bottoms, Composition for preventing the fouling of.	K. Sim	Naples	July 20, 1869	92, 757
Ships' bottoms, Composition for protecting	W. B. Davis	Brooklyn, N. Y	June 14, 1864	43, 169
Ships' bottoms, Composition for protecting	M. Vian	Marseilles, France	Nov. 8, 1864	45, 006
Ships' bottoms, &c., Compound for coating	C. J. Eames	New York, N. Y	Nov. 13, 1866	59, 568
Ships' bottoms, Constructing	S. W. Brown	Lowell, Mass	Jan. 8, 1856	14, 048
Ships' bottoms, Means of protecting	C. P. Cole	Ventnor, England	Apr. 3, 1866	53, 756
Ships' bottoms, Mode of protecting	J. Brown	London, England	Nov. 24, 1863	40, 672
Ships' bottoms, Sheathing and coating	J. Scoffern	Finsbury, England	Jan. 19, 1869	86, 104
Ships' bottoms, Sheathing of	F. L. Roux	Toulon, France	Aug. 27, 1867	68, 116
Ship's bulk-head	C. Maliphant	New York, N. Y	Mar. 23, 1858	19, 737
Ships, Buoying	T. C. McKeen	Nashville, Tenn	Jan. 17, 1860	26, 856
Ships by a center-point spring bit, Cutting plugs for.	D. Flint	Nobleborough, Me	Apr. 19, 1832	....
Ship's cabin chair	W. Thomas	Hingham, Mass	May 13, 1856	14, 890
Ship's cabin, Table for	W. N. Boggs	Southborough, Mass	May 1, 1849	6, 402
Ship's cabin, Table for	W. L. Bass	Cambridgeport, Mass	May 16, 1854	10, 908
Ship's cargo-indicator	W. O. Reim	Springfield, Ohio	July 13, 1869	92, 645
Ships, &c., Cargo-port for	C. Perley	New York, N. Y	Jan. 15, 1856	14, 113
Ships, &c., Calking	N. W. Chavalier	Baltimore, Md	Dec. 27, 1831	....
Ships, &c., Ceiling for	A. M. Frink	New London, Conn	Dec. 31, 1833	....
Ships, cellars, &c., Mode of calking the seams of	W. Bennet	New York, N. Y	Apr. 20, 1844	3, 557
Ships, Coating and water-proofing	M. Anton	Huntington, N. Y	Sept. 10, 1867	68, 590
Ships, Composition for coating	C. R. Milks	Waterford, N. Y	July 3, 1866	56, 078
Ships, &c. Compound for sheathing	J. Revere	Boston, Mass	Mar. 24, 1831	....
Ships, Constructing	J. R. Deming	New York	Apr. 15, 1831	....
Ships, Constructing decks of	J. Bearce	Bristol, Me	Feb. 7, 1833	....
Ships, Constructing iron	O. Tufts	Boston, Mass	July 17, 1855	13, 278
Ships, Constructing, propelling, and turning steam-	R. L. Stevens	New York	Oct. 17, 1842	2, 821
Ships, Construction of	J. Betteley	London, England	Dec. 3, 1872	133, 621
Ships, &c., Construction of	J. Brown	....	May 14, 1800	....
Ships, Construction of	J. W. Griffiths	New York, N. Y	Oct. 10, 1854	11, 784
Ships, Construction of	H. Hirsch	Berlin, Prussia	Aug. 23, 1859	25, 198
Ships, Construction of	H. Jordan	Liverpool, England	Aug. 29, 1871	118, 458
Ships, Construction of	R. F. Loper	Philadelphia, Pa	Feb. 28, 1868	27, 298
Ships, Construction of	R. Montgomery	New York, N. Y	Aug. 21, 1866	57, 359
Ships, Construction of	D. Pierce	Woodstock, Vt	Sept. 7, 1869	94, 510
Ships, Construction of	J. Reeves	Brooklyn, N. Y	Jan. 5, 1858	19, 043
Ships, Construction of	A. W. Thompson	New York, N. Y	Mar. 4, 1873	136, 393
Ships, Construction of	J. Weems	Johnstone, England	Oct. 9, 1866	58, 742
Ships, Construction of iron	T. B. Daft	London, England	Oct. 31, 1865	50, 767
Ship's deck, Detachable buoyant	J. Sawyer	Sebewaing, Mich	Nov. 16, 1869	96, 941
Ships, Device for securing port-stoppers of	J. A. Howe	Bangor, Me	July 19, 1864	43, 584
Ship's distance at sea, Machine to keep a	C. Gould	....	May 27, 1799	....
Ships, Double pendulum for	R. Leslie	....	Jan. 30, 1793	....
Ship's fender	E. B. Lake	Bridgeport, N. J	June 23, 1868	79, 235
Ship's fender	W. D. Robinson	Buffalo, N. Y	Aug. 31, 1869	94, 242
Ships for safety and escape, Constructing	J. Burch	Macclesfield, England	May 23, 1854	10, 945
Ships' frames, Adjustable templet for	A. Perrin	Marine City, Mich	June 17, 1873	140, 071
Ships' frames, Bent timber for	W. Ballard	New York, N. Y	June 6, 1854	11, 007
Ship's galley	W. Young	Washington, D. C	Feb. 7, 1865	46, 313
Ships, Hewing, dubbing, and dressing timber for	J. Judge	Washington, D. C	Apr. 27, 1831	....
Ships' holds from water, Apparatus for freeing	J. W. Mackenzie	San Francisco, Cal	Feb. 14, 1860	27, 138
Ships' holds, Jack-screw for stowing goods in	T. Evans	New York, N. Y	Feb. 16, 1829	....
Ships' hooks, Machine for bending	E. Harris	Providence, R. I	Feb. 5, 1859	14, 193
Ship's hull	E. C. Béléguic	Paris, France	Dec. 23, 1873	145, 832
Ship's knee	W. Ballard	New York, N. Y	May 2, 1854	10, 854
Ship's knee	R. Thomas	Buffalo, N. Y	July 19, 1864	43, 611
Ship's light	S. Goodrich	New York, N. Y	Feb. 4, 1851	7, 927
Ship's light	E. Hidden	New York, N. Y	Oct. 24, 1848	5, 879
Ship's light	E. Hidden	New York, N. Y	Mar. 15, 1859	23, 247
Ships, Lighting the binnacle of	W. Lewis	Boston, Mass	June 24, 1808	....
Ships' lights, Means of closing	E. S. Hidden	New York, N. Y	Dec. 26, 1865	51, 718
Ships, Machine for cutting plugs for waists and decks of.	C. Josselyn	New York	June 28, 1826	....
Ships, Machinery for raising and carrying	H. L. Meeker and J. Bergan	Jersey City, N. J., and New York.	May 25, 1838	749
Ships, &c., Maintaining-power applied on board	D. Pearson	Newbury, Mass	Jan. 24, 1816	....
Ships, Means for recovery of sunken	E. Bazin	Paris, France	Jan. 1, 1867	60, 671
Ships, Metal for sheathing	J. Le Ferre	Charlestown, Mass	Feb. 18, 1862	34, 435
Ships, &c., Metallic framing for	R. J. La Mothe	New York, N. Y	Dec. 23, 1862	37, 236
Ships, Mode of framing the stem and dead-wood of	J. W. Griffiths	Brooklyn, N. Y	Dec. 5, 1865	51, 307
Ships, Mode of preventing the decay of	A. Planton	Philadelphia, Pa	Oct. 1, 1825	....
Ships of war and defensive armor for fortifications, Construction for defense of.	O. Collins	New York, N. Y	Apr. 19, 1864	42, 349
Ships of war and other batteries for defense against projectiles, Construction of.	J. S. Gibbons	New York, N. Y	Feb. 10, 1863	37, 620
Ships of war, Armament of	A. Albini	Genoa, Italy	Nov. 15, 1864	45, 113
Ships of war, Construction and equipment of	R. G. McDougall	New York, N. Y	June 28, 1864	43, 322
Ships of war, Construction of	H. Caudwell	Shillingford, England	Jan. 19, 1864	41, 278
Ships of war, Construction of	A. Walker	Buffalo, N. Y	Aug. 25, 1863	39, 708
Ships out of water, Lifting	T. Evans	New York	May 28, 1830	....
Ships or vessels, Building or modeling	T. Tudor	Boston, Mass	Dec 17, 1812	....
Ships over land, Mode of transporting	E. M. Deey	New York, N. Y	Sept. 14, 1869	94, 721

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Ships over sand-bars, Apparatus for floating	E. M. Decy	New York, N. Y	Dec. 28, 1869	98, 356
Ship's planking clamp	P. Staples	Stockton, Me	Aug. 3, 1869	93, 241
Ships, Plug and trunnel geared machine for	J. Reed	Marshfield, Mass	July 22, 1833	....
Ships, prisons, and hospitals by machinery, Ventilating	R. Jarvis	Boston, Mass	Mar. 5, 1834	....
Ship's riding-bit	T. Brown	London, England	Apr. 3, 1855	12, 620
Ship's rigging	R. B. Forbes	Boston, Mass	Nov. 16, 1869	96, 789
Ship's rigging, Check-piece and shroud-yoke for	H. Townsend	Philadelphia, Pa	Mar. 15, 1870	100, 819
Ship's rigging, Fair-leader for	J. J. Walton	New York, N. Y	Dec. 23, 1873	145, 919
Ships, Screw-cradle for raising	C. Miner	Lyme, Conn	Oct. 12, 1827	....
Ships, &c., Sheathing	J. Revere	Boston, Mass	Sept. 4, 1860	29, 916
Ship's side-light	E. Hidden	New York, N. Y	June 21, 1853	9, 811
Ship's side-light	E. Hidden	New York, N. Y	July 10, 1860	29, 079
Ship's side-light	C. Perley	New York, N. Y	Oct. 25, 1853	10, 157
Ship's signal	G. Read and J. J. Nickoll	Deal and Gravesend, England.	Nov. 26, 1872	133, 385
Ship's spars, &c., Automatic machine for turning	W. Blackburn	Jersey City, N. J	July 10, 1855	13, 208
Ship's stop-block	A. J. Bentley and W. H. Allen	New York, N. Y	May 10, 1859	23, 894
Ship's table	G. Patrick	Wilkesbarre, Pa	Nov. 8, 1814	....
Ship's table	I. H. Stoddard	Amenia, N. Y	July 3, 1866	56, 117
Ship's tackle-blocks, Countersinking to receive bushes in	T. Blanchard	New York, N. Y	Aug. 31, 1836	....
Ship's thimble	B. Thacker	Yarmouth, Mass	Mar. 2, 1833	....
Ship's thimble	P. White	Yarmouth, Mass	July 2, 1836	....
Ship's topmast	E. Denton	Braintree, Mass	July 19, 1870	105, 554
Ships to protect from lightning, Method of coppering the interior of.	R. W. Haskins	Buffalo, N. Y	July 13, 1858	20, 877
Ships, &c., under water, Mode of chopping	L. G. Merrill	Angel's, Cal	Jan. 21, 1862	34, 211
Ship's warping-chock	D. Knowlton	Camden, Me	July 19, 1859	24, 810
Ship's way, "Perambulater" for measuring a	A. Whittemore	....	Nov. 19, 1796	....
Ships with fresh water, Floating machine for supplying.	J. F. Randolph	New York	Apr. 25, 1811	....
Ship's yards, Making truss for hanging	P. Fish	New York	Sept. 24, 1824	....
Ship's yards, Suspending	T. Batty	Brooklyn, N. Y	Dec. 4, 1855	13, 861
Shipper's device	J. F. Light	Worcester, Mass	Jan. 16, 1866	52, 050
Shipper's saddle	L. D. Lothrop	Dover, N. H	Dec. 12, 1871	121, 792
Shipping and unshipping hook	N. Havermale	Canton, Ill	Feb. 8, 1870	99, 671
Shipping-apparatus	C. W. Baldwin	Boston, Mass	Apr. 2, 1872	125, 252
Shipping-can	E. H. Campbell	Chicago, Ill	Apr. 9, 1872	125, 437
Shipping can, Oil, &c	H. G. Porter	Dayton, Ohio	Nov. 5, 1872	132, 858
Shipping-can shield	H. M. Smith	Chicago, Ill	Apr. 8, 1873	137, 627
Shipping-case	M. H. Nichols	Hancock, N. Y	May 26, 1868	78, 316
Shipping, Cast-iron shive for	F. Seymour	Plymouth, Mass	Dec. 29, 1827	....
Shipping-mechanism for machinery	F. N. Bixby	West Meriden, Conn	Mar. 4, 1873	136, 483
Shipwright's clamp	W. H. Phillips	Bridgeton, N. J	Dec. 28, 1869	98, 295
Shirred goods, Machine for making	R. Solis	New Brunswick, N. J	Dec. 11, 1860	30, 891
Shirred goods, Machinery for manufacturing	R. Solis	New Brunswick, N. J	Nov. 9, 1858	22, 038
Shirred goods, Manufacture of	H. H. Day	New York, N. Y	Jan. 3, 1860	26, 658
Shirring-machine	J. Bogardus	New York, N. Y	Nov. 21, 1845	4, 278
Shirt	L. P. Ballow, jr	New York, N. Y	Nov. 1, 1859	25, 947
Shirt	W. H. Carroll	Columbus, Miss	Oct. 25, 1870	108, 567
Shirt	A. Drey	Baltimore, Md	Sept. 22, 1863	40, 026
Shirt	S. H. and C. E. Furman	New York N. Y	Apr. 19, 1864	42, 362
Shirt	O. Gowing	Boston, Mass	Feb. 4, 1873	135, 424
Shirt	S. S. Gray	Boston, Mass	Dec. 9, 1873	145, 414
Shirt	J. Hayden	Philadelphia, Pa	Apr. 4, 1871	113, 639
Shirt	C. J. Kaskel	New York, N. Y	July 30, 1872	130, 056
Shirt	T. S. Lambert	Peekskill, N. Y	Apr. 22, 1862	35, 028
Shirt	A. D. Marr	Boston, Mass	Jan. 14, 1873	134, 901
Shirt	C. Minzesheimer	New York, N. Y	Nov. 8, 1859	26, 043
Shirt	J. H. Myers	New York, N. Y	Feb. 13, 1872	123, 721
Shirt	J. A. Peters	Jordanville, N. Y	Aug. 20, 1872	130, 657
Shirt	A. Salmon	New York, N. Y	Feb. 21, 1871	111, 978
Shirt	S. Sibley	Boston, Mass	Feb. 7, 1871	111, 600
Shirt	S. H. and J. Strouse	New York, N. Y	Dec. 23, 1856	16, 289
Shirt	S. H. and J. Strouse	New York, N. Y	May 3, 1870	102, 612
Shirt	G. C. Thomas	Chicago, Ill	June 17, 1873	139, 933
Shirt	H. Wallach	New York, N. Y	May 10, 1870	102, 990
Shirt	W. B. Watson	Somerville, Tenn	Sept. 23, 1873	143, 108
Shirt	J. Wieser	Williamsport, Pa	June 17, 1873	139, 937
Shirt	A. Wormser	New York, N. Y	Jan. 31, 1865	46, 172
Shirt and brace, Combined	W. H. Towers	New York, N. Y	Oct. 3, 1865	50, 289
Shirt and collar, Combined	J. A. Jones	Washington, D. C	May 17, 1870	103, 195
Shirt and drawers, Combined	E. S. Bennett	Brooklyn, N. Y	Oct. 27, 1868	83, 447
Shirt-bosom	E. F. French	New York, N. Y	July 25, 1865	49, 027
Shirt-bosom	G. Harrington	Springfield, Mass	June 18, 1872	127, 974
Shirt-bosom	C. W. Jenks	Somerville, Mass	Feb. 4, 1873	135, 478
Shirt-bosom	J. Neil	Clinton, Mass	Feb. 21, 1865	46, 487
Shirt-bosom	J. Pagan	Yonkers, N. Y	July 1, 1873	140, 431
Shirt-bosom	M. Palmer, jr	Boston, Mass	May 17, 1870	103, 272
Shirt-bosom	J. A. Pease	New York, N. Y	Oct. 27, 1863	40, 426
Shirt-bosom	I. Perego, jr	New York, N. Y	Sept. 25, 1860	30, 154
Shirt-bosom	G. B. Perkins	Bridgeport, Conn	June 11, 1867	65, 596
Shirt-bosom	C. F. Pidgin	Boston, Mass	Sept. 18, 1866	58, 131
Shirt-bosom	S. Sibley	Boston, Mass	Oct. 31, 18 1	120, 462
Shirt-bosom	M. Tassie	Brooklyn, N. Y	Mar. 13, 1847	5, 019
Shirt-bosom and lung-protector, Combined	W. R. Trask	Skowhegan, Me	Sept. 23, 1873	143, 205
Shirt-bosom and wristbands, Combined	E. H. N. Warner	New York, N. Y	Apr. 12, 1870	101, 794
Shirt-bosom expander	C. Crowell	Syracuse, N. Y	July 4, 1871	116, 687
Shirt-bosom expander	S. J. Shaw	Marlborough, Mass	Dec. 4, 1860	30, 842
Shirt-bosom folder	J. Stevens	New York, N. Y	Nov. 9, 1858	22, 039
Shirt-bosom, Metallic	L. Bullon	Brooklyn, N. Y	Sept. 5, 1865	49, 701
Shirt bosom, Metallic	O. G. Brady	New York, N. Y	Oct. 25, 1864	44, 781
Shirt-bosom pattern	M. Rosenthal	Philadelphia, Pa	Aug. 27, 1866	52, 888
Shirt-bosom, Plaited	A. Drey	Baltimore, Md	June 14, 1864	43, 106
Shirt-bosom, Plaited	A. Drey	Baltimore, Md	June 14, 1864	43, 107
Shirt-bosom stay	J. R. Little	West Roxbury, Mass	Dec. 1, 1868	84, 498
Shirt-bosom stretcher	E. Bessett	Topeka, Kans	June 17, 1873	14[illegible], 000
Shirt-bosom support	I. L. Landis	Lancaster, Pa	June 10, 1873	139, 797

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Shirt-bosom support	I. M. Post	Philadelphia, Pa	July 1, 1873	140, 537
Shirt-bosom support and shoulder-brace, Combined	S. F. Long	Cleveland, Ohio	July 1, 1873	140, 379
Shirt-bosom supporter	G. F. Johnson	Philadelphia, Pa	July 1, 1873	140, 373
Shirt-bosoms, Apparatus for folding the plaits in	F. M. Chandler	Buffalo, N. Y	Mar. 21, 1863	37, 952
Shirt-bosoms, Fluted puffing for	G. E. King	New York, N. Y	Oct. 23, 1866	59, 036
Shirt-bosoms, Machine for polishing	J. J. Kenna	San Francisco, Cal	June 8, 1869	91, 138
Shirt-collar	G. W. Heard	Boston, Mass	Feb. 1, 1859	22, 800
Shirt-fastener	H. Link	Little Falls, N. Y	Dec. 26, 1865	51, 733
Shirt-front	T. M. Denham	New Bedford, Mass	Aug. 26, 1873	142, 212
Shirt-front	J. A. Scriven	New York, N. Y	Mar. 11, 1873	136, 771
Shirt-pattern	J. W. Bonner	Philadelphia, Pa	July 16, 1872	129, 521
Shirt-pattern	J. H. Myers	New York, N. Y	Oct. 6, 1868	82, 740
Shirt-pattern	J. W. Rand	Charlestown, Mass	May 26, 1868	78, 325
Shirt-plaiting machine	W. Whitaker	Troy, N. Y	Nov. 14, 1848	5, 923
Shirt-polishing machine	E. B. Blackwell	Newton, Mass	Mar. 14, 1871	112, 533
Shirt, Reversible	C. O. Richter	New York, N. Y	Mar. 8, 1870	100, 669
Shirt-sleeves	W. A. Ramsay	Philadelphia, Pa	Jan. 4, 1870	98, 521
Shirt-wristband	R. K. Chandler	Richmond, Va	May 22, 1855	12, 899
Shirt-wristband	S. H. Scribner	Chicago, Ill	Apr. 14, 1868	76, 829
Shirt-yoke	H. Griswold	Hartford, Conn	Jan. 30, 1855	12, 313
Shirt-yoke	M. Palmer, jr	Lynn, Mass	Mar. 22, 1870	101, 155
Shirts, Drafting	J. Peckham	New Haven, Conn	Dec. 21, 1858	22, 375
Shirts, India-rubber over	H. Clark and F. A. Wilder	San Francisco, Cal	July 19, 1864	43, 572
Shirts, Making	O. F. Winchester	Baltimore, Md	Feb. 1, 1848	5, 421
Shirts, Measuring and cutting out	M. Palmer, jr	Lynn, Mass	Mar. 19, 1872	124, 849
Shirting, Evening the edges of	A. T. Underhill	New York, N. Y	Sept. 11, 1860	30, 029
Shoal-water indicator	R. M. Knapp	Jerseyville, Ill	Dec. 6, 1864	45, 328
Shock-tier	W. Rice	London, Ohio	July 13, 1869	92, 646
Shoe	J. C. Bailey	Boston, Mass	Jan. 16, 1866	52, 110
Shoe	A. Ballard	Dublin, Ind	May 29, 1866	55, 041
Shoe	D. Brown and W. S. Wooton	Kokomo, Ind	Aug. 1, 1865	49, 076
Shoe	L. Bullard	Marlborough, Mass	Jan. 28, 1868	73, 773
Shoe	E. Chesterman	Roxbury, Mass	Jan. 23, 1866	52, 138
Shoe	E. S. Converse	Boston, Mass	May 23, 1871	115, 169
Shoe	S. C. Crowe	Cambridgeport, Mass	Apr. 30, 1872	126, 190
Shoe	S. C. Crowe	Cambridgeport, Mass	July 16, 1872	129, 398
Shoe	W. A. Deitz	Albany, N. Y	Apr. 30, 1867	64, 205
Shoe	J. J. Drown	Plattsburgh, N. Y	May 7, 1872	126, 450
Shoe	T. R. Evans	Philadelphia, Pa	May 17, 1870	103, 164
Shoe	F. T. Ferguson	Boston, Mass	Aug. 17, 1869	93, 814
Shoe	J. H. Fisher	Albany, N. Y	Jan. 10, 1871	110, 840
Shoe	J. W. Fisher	Albany, N. Y	Nov. 29, 1870	109, 729
Shoe	W. S. Foster	Montgomery, Ala	July 27, 1869	92, 950
Shoe	S. W. Francis	Newport, R. I	Mar. 7, 1871	112, 439
Shoe	C. C. Geller	Albany, N. Y	July 11, 1871	116, 828
Shoe	W. H. Gilman	Farmington, N. H	July 16, 1872	129, 333
Shoe	F. Gurney	Newburyport, Mass	Nov. 22, 1870	109, 407
Shoe	G. B. Hall	Rising Sun, Ind	Sept. 12, 1871	118, 929
Shoe	M. L. Hill	New York, N. Y	May 26, 1868	78, 287
Shoe	G. Houghton	Hudson, Mass	Apr. 23, 1867	64, 015
Shoe	G. C. Howe	Haverhill, Mass	July 11, 1871	116, 959
Shoe	J. H. Hurd	Dover, N. H	Apr. 2, 1872	125, 299
Shoe	J. B. Johnson	Lynn, Mass	Feb. 7, 1865	46, 299
Shoe	J. L. Joyce	New Haven, Conn	Aug. 15, 1865	49, 415
Shoe	J. L. Joyce	New Haven, Conn	Aug. 16, 1870	106, 488
Shoe	A. S. Kelly	Haverhill, Mass	Oct. 12, 1869	95, 805
Shoe	F. Kilsheimer	Cincinnati, Ohio	May 10, 1870	102, 946
Shoe	J. S. Lester and P. H. Cardwell	Knoxville, Tenn	Aug. 25, 1868	81, 516
Shoe	C. D. Letherbury	Chester, Pa	June 4, 1867	65, 492
Shoe	R. O. Lowrey	Salem, N. Y	May 26, 1868	78, 384
Shoe	D. S. McNamara	Troy, N. Y	Feb. 18, 1868	74, 707
Shoe	F. Merkle	New York, N. Y	Feb. 20, 1866	52, 732
Shoe	C. C. Morse	Rochester, N. Y	June 4, 1872	127, 504
Shoe	C. C. Morse	Rochester, N. Y	Sept. 10, 1872	131, 295
Shoe	C. Perley	New York, N. Y	Mar. 3, 1868	75, 048
Shoe	J. Putnam	Danvers, Mass	Aug. 18, 1868	81, 106
Shoe	J. Putnam	Danvers, Mass	Sept. 13, 1870	107, 289
Shoe	J. P. Rand	Dallas City, Ill	Mar. 12, 1872	124, 512
Shoe	G. A. Richardson	Reading, Mass	Feb. 27, 1872	124, 084
Shoe	J. A. Rose and G. J. Mason	Prairie City, Ill	Oct. 31, 1871	120, 460
Shoe	J. A. Rose and G. J. Mason	Prairie City, Ill	May 14, 1872	126, 836
Shoe	N. J. Simonds	Woburn, Mass	June 6, 1871	115, 648
Shoe	L. S. Starrett	Newburyport, Mass	Jan. 28, 1868	73, 847
Shoe	C. E. Tyler	Georgetown, Mass	Apr. 25, 1871	114, 067
Shoe	E. Walcott	Natick, Mass	Sept. 19, 1871	119, 207
Shoe	F. Weed	Middleborough, Mass	Sept. 19, 1865	50, 057
Shoe	M. Wesson	Springfield, Mass	Feb. 25, 1868	74, 962
Shoe	L. U. Williams	La Fayette, Ind	June 25, 1872	128, 345
Shoe and bag holder	J. Allender	New London, Conn	Feb. 7, 1860	27, 030
Shoe and boot, Gum	L. Banhoefer	Philadelphia, Pa	Jan. 22, 1861	31, 146
Shoe and boot, Water-proof gaiter	T. C. Wales	Dorchester, Mass	Feb. 2, 1858	19, 269
Shoe and boot, Wooden-shank	J. M. Watson	Sharon, Mass	Mar. 14, 1871	112, 754
Shoe and gaiter	F. P. Buzzell	Milton Junction, Wis	Nov. 14, 1871	120, 852
Shoe and gaiter	A. Hay	Philadelphia, Pa	Dec. 20, 1859	26, 493
Shoe and gaiter-boot	J. Brackett	Swampscott, Mass	Sept. 28, 1852	9, 280
Shoe and leather polisher	J. Day	New York, N. Y	Jan. 7, 1873	134, 525
Shoe and other lacings, Metal tap for	W. B. Moore	Philadelphia, Pa	Dec. 3, 1872	133, 540
Shoe and over-gaiter	T. R. Evans	Philadelphia, Pa	Mar. 28, 1870	113, 149
Shoe-bench	S. Haynes	Malden, Mass	Sept. 1, 1834	....
Shoe-binders, Manufacture of	M. H. Merriam and E. L. Norton.	Charlestown, Mass	June 5, 1866	55, 329
Shoe-binding	W. and R. B. Packard	North Bridgewater, Mass	Dec. 18, 1866	60, 543
Shoe-binding, Leather	J. Turner, jr	Charlestown, Mass	Jan. 1, 1856	14, 040
Shoe-binding strips, Device for fastening ends of	C. E. Morrill	Deering, Me	Jan. 14, 1873	134, 763
Shoe-binding, tape, &c., Machine for winding	M. H. Merriam and E. L. Norton.	Charlestown, Mass	June 5, 1866	55, 332
Shoe-bindings, Machine for manufacture of	A. O. Lindsey	Charlestown, Mass	Apr. 12, 1864	42, 300
Shoe-bindings, Machine for slitting	C. E. Morrill	Deering, Me	Jan. 23, 1872	122, 958

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Shoe-bindings, Process of manufacturing	C. E. Morrill	Deering, Me	Nov. 28, 1871	121, 460
Shoe-bindings, Process of manufacturing leather	E. L. Norton	Charlestown, Mass	June 2, 1857	17, 445
Shoe-blacking apparatus	S. Macferran	Philadelphia, Pa	Apr. 12, 1864	42, 302
Shoe-blacking, &c., Manufacture of black pigment for making.	G. F. Wilson	East Providence, R. I	May 18, 1869	90, 327
Shoe-boxes, Shoe-fastening for	W. W. Walton	Roanoke, Ind	Nov. 22, 1870	109, 563
Shoe, Brake	A. A. Hotchkiss	Hannibal, Mo	Sept. 21, 1869	94, 960
Shoe-button-fastener	C. F. Spencer	Rochester, N. Y	Feb. 8, 1870	99, 724
Shoe-buttoner	E. Card	North Providence, R. I	Aug. 18, 1868	81, 250
Shoe-buttoner	J. F. Goldthwait	Boston, Mass	Sept. 3, 1867	68, 361
Shoe-clasp	I. Banister	Newark, N. J	Feb. 26, 1867	62, 306
Shoe-cleaner	T. Board	Ripley, Va	Aug. 28, 1860	29, 739
Shoe-cleaner	B. F. Earley	Palmyra, Pa	Aug. 14, 1866	57, 102
Shoe-cutting machine	B. Miller	Philadelphia, Pa	May 9, 1814	....
Shoe-dealers, Sample for	A. N. Breneman	Lancaster, Pa	Oct. 26, 1869	96, 080
Shoe-edge-burnishing machine	N. C. Stow	Rockland, Me	July 29, 1873	141, 399
Shoe-fastener	J. Coykendall	Farmington, Ill	May 13, 1873	138, 863
Shoe-fastener	J. W. Fiester	Winchester, Ohio	Aug. 27, 1867	68, 059
Shoe-fastener	A. Klinger	California, Mo	Feb. 6, 1872	123, 405
Shoe-fastener	A. McKenney	Portland, Me	May 3, 1870	102, 694
Shoe-fastener	J. E. Otto	Elmore, Ohio	July 19, 1870	105, 482
Shoe-fastening	J. Adams	Kokomo, Ind	Aug. 1, 1865	49, 061
Shoe-fastening	S. Babbitt	Brazil, Ind	Dec. 23, 1873	145, 776
Shoe-fastening	I. Banister	Newark, N. J	Apr. 22, 1873	138, 117
Shoe-fastening	J. Barbier	Boston, Mass	Jan. 7, 1868	72, 961
Shoe-fastening	M. Boch	New York, N. Y	May 20, 1873	139, 109
Shoe-fastening	C. Burchardt	New York, N. Y	Sept. 12, 1865	49, 854
Shoe-fastening	C. E. Chinnock and C. G. Schneider.	New York, N. Y., and Washington, D. C.	July 16, 1872	129, 318
Shoe-fastening	J. R. Cluxton	Hillsborough, Ohio	June 11, 1872	127, 847
Shoe-fastening	F. Coeller	New Haven, Conn	Dec. 12, 1871	121, 757
Shoe-fastening	J. F. Coppock	Earlham, Iowa	Jan. 30, 1872	123, 087
Shoe-fastening	J. Coykendall	Farmington, Ill	Sept. 6, 1870	107, 064
Shoe-fastening	G. L. Fitch and H. M. Jones	Little Lake, Cal	Oct. 7, 1873	143, 445
Shoe-fastening	F. D. Ford and E. D. McIntosh	New Bedford, Mass., and Washington, D. C.	Aug. 8, 1871	117, 876
Shoe-fastening	W. H. Fortney and W. E. Sheaffer.	Middletown, Pa	Mar. 29, 1870	101, 360
Shoe-fastening	C. Goldthwait	South Weymouth, Mass	Mar. 11, 1873	136, 649
Shoe-fastening	E. C. Harrington	Fair Plains, Mich	July 7, 1863	39, 144
Shoe-fastening	G. B. Hart	Buffalo Township, Iowa	Sept. 23, 1873	143, 148
Shoe-fastening	C. B. Hatfield	Boston, Mass	Apr. 18, 1865	47, 356
Shoe-fastening	A. E. Kröger	Norwalk, Conn	May 3, 1870	102, 557
Shoe-fastening	A. Lawson	Petaluma, Cal	Apr. 9, 1872	125, 400
Shoe-fastening	H. T. Lee	Marysville, Cal	Oct. 18, 1870	108, 491
Shoe-fastening	G. Merrill	East Orange, N. J	Jan. 14, 1873	134, 761
Shoe-fastening	C. A. Rolfe	Utica, N. Y	July 16, 1872	129, 496
Shoe-fastening	I. J. Saunders	Davisville, Cal	July 16, 1872	129, 255
Shoe-fastening	G. Sickles	Boston, Mass	Apr. 23, 1867	64, 155
Shoe-fastening	J. Slatcher	Bridgeport, Conn	Dec. 26, 1871	122, 287
Shoe-fastening	S. P. R. Triscott and G. A. Wheeler.	Worcester, Mass	Dec. 26, 1871	122, 203
Shoe-fastening	E. Webb	Norfolk, Va	July 4, 1871	116, 653
Shoe-fastening	L. F. and O. P. Whitman	Macomb, Ill	Mar. 2, 1869	87, 451
Shoe-fastening device	N. Kirchner	Philadelphia, Pa	Mar. 24, 1868	75, 768
Shoe fastening, Gaiter	R. Solis	New Brunswick, N. J	Mar. 19, 1861	31, 750
Shoe, Felt	R. Evans	Milltown, N. J	Apr. 13, 1869	88, 860
Shoe, Felt	C. W. Palmer and C. Houghton	Lynn and Boston, Mass	Jan. 11, 1870	98, 793
Shoe-finishing jack	J. E. Plummer	Binghamton, N. Y	Apr. 6, 1869	88, 735
Shoe-finishing jack	J. E. Plummer	Binghamton, N. Y	Oct. 3, 1871	119, 533
Shoe-fitting machine	W. H. Pruden and J. P. Benjamin.	Williamsburgh, N. Y	June 18, 1872	128, 065
Shoe for bathing and other purposes	L. D. J. Ferry	Paris, France	Aug. 11, 1868	80, 934
Shoe for cripples	H. S. Loper	New Haven, Conn	Nov. 2, 1869	96, 452
Shoe for horses or oxen, Cast-iron	S. W. Whitman	Madison, Ohio	Nov. 4, 1825	....
Shoe, Gaiter	A. Baron	San Francisco, Cal	July 23, 1872	129, 643
Shoe, Gaiter	F. H. A. Hussey	Lynn, Mass	July 18, 1871	117, 078
Shoe, Gaiter	A. M. Preble	Lynn, Mass	Mar. 27, 1866	53, 483
Shoe-gores, Machine for gumming the edges of elastic.	J. Walden and G. Platte	Newark, N. J	Oct. 21, 1873	143, 798
Shoe-goring machine	C. D. Bigelow	Brooklyn, N. Y	May 21, 1872	127, 015
Shoe-goring machine	J. H. Gardiner and A. J. Goodwin.	Worcester and Brookline, Mass.	Dec. 10, 1872	133, 703
Shoe, Heating	W. Rogers	New York, N. Y	May 18, 1869	90, 197
Shoe-holder	A. N. Breneman	Lancaster, Pa	Oct. 15, 1867	69, 754
Shoe-holder	A. N. Breneman	Lancaster, Pa	Jan. 14, 1868	73, 228
Shoe-holder	L. C. Keeler	Montrose, Pa	June 18, 1867	65, 815
Shoe-hook	E. L. Tevis	Philadelphia, Pa	July 7, 1868	79, 788
Shoe-horn	D. E. Eaton	Boston, Mass	Jan. 25, 1859	22, 714
Shoe-horn	L. Schwingrouber	New York, N. Y	Aug. 1, 1854	11, 445
Shoe, India-rubber	H. H. Day	Jersey City, N. J	May 20, 1851	8, 100
Shoe, India-rubber	L. Elliott, jr	New Haven, Conn	July 11, 1871	116, 938
Shoe, India-rubber	L. Elliott, jr	New Haven, Conn	Oct. 24, 1871	120, 252
Shoe, India-rubber	L. Elliott, jr., and G. H. Fowler	New Haven, Conn	Aug. 16, 1870	106, 346
Shoe, India-rubber	C. Meyer	New Brunswick, N. J	Mar. 19, 1861	31, 730
Shoe, India-rubber	C. Meyer and J. Evans	New York, N. Y., and New Brunswick, N. J.	Feb. 21, 1871	111, 962
Shoe, India-rubber	R. Story and T. Hopper	New Brunswick, N. J	Aug. 7, 1847	5, 233
Shoe, India-rubber over	J. A. Pease	New York, N. Y	Nov. 14, 1854	11, 947
Shoe, Infant's	W. M. Carpenter	Rowley, Mass	May 2, 1871	114, 261
Shoe-jack	T. L. Brown	Cincinnati, Ohio	Jan. 9, 1866	51, 193
Shoe-jack	L. H. Proctor	East Saugus, Mass	May 22, 1866	54, 954
Shoe-knife	A. J. Hall	Farmington, N. H	Dec. 9, 1873	145, 295
Shoe-knife	M. E. Hall	Spring, Pa	Oct. 5, 1869	95, 470
Shoe-knife	I. Hatch	Essex, Vt	Aug. 15, 1833	....
Shoe-knife	I. Merritt	Abington, Mass	June 7, 1859	24, 354
Shoe-knife	N. M. Ray	Ellsworth, Me	Mar. 24, 1868	75, 975
Shoe-knife	F. Richard	Southbridge, Mass	Apr. 26, 1864	42, 537

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Shoe-knife	H. Sauerbier	Newark, N. J	Oct. 1, 1867	69, 490
Shoe-knife	H. Sauerbier	Newark, N. J	Oct. 1, 1867	69, 491
Shoe-knife	G. W. Spencer	South Groveland, Mass	Mar. 2, 1869	87, 440
Shoe-knife	W. W. Wright	Killingly, Conn	Dec. 9, 1862	37, 122
Shoe-knife and gage	R. R. McDonald	Syracuse, N. Y	May 11, 1869	89, 877
Shoe-knife guard	G. G. Townsend	Rochester, N. Y	Mar. 17, 1868	75, 602
Shoe-lace	L. Rice	Stockbridge, Mich	Mar. 17, 1868	75, 702
Shoe-lacer	W. H. Christie	Albany, N. Y	May 7, 1867	64, 489
Shoe-lacer	O. H. Cooke	Morristown, Vt	Mar. 3, 1868	75, 126
Shoe-lacer	D. A. Gilbert	Morrisville, Vt	Apr. 21, 1868	77, 029
Shoe-lacers, Fastening for	L. J. Worden	Utica, N. Y	Jan. 24, 1860	26, 939
Shoe-lacing	M. Bray	Boston, Mass	May 2, 1865	47, 513
Shoe-lacing	J. Harding	Galesburgh, Ill	June 10, 1873	139, 713
Shoe-lacing	T. J. Kelleher	Boston, Mass	Sept. 19, 1865	50, 008
Shoe-lacing	W. F. Oliver	Lynn, Mass	Sept. 8, 1868	82, 022
Shoe-lacing	A. Rock and W. Moorhouse	Foxborough and Mansfield, Mass.	July 2, 1867	66, 396
Shoe-lacing	C. F. Spencer	Rochester, N. Y	Apr. 26, 1864	42, 517
Shoe-lacing	L. A. Sprague	New York, N. Y	Jan. 2, 1866	51, 878
Shoe-lacing	M. White	Providence, R. I	Sept. 15, 1868	82, 188
Shoe-lacing	R. Wright	Brooklyn, N. Y	Apr. 26, 1870	102, 359
Shoe-lacing clasp	W. E. Darrah	Middletown, N. Y	Sept. 20, 1864	44, 286
Shoe-lacing cutter	F. C. Summer	Stoughton, Mass	Feb. 13, 1866	52, 620
Shoe-lacing device	H. L. C. Müller	Bridgeport, Conn	June 16, 1868	78, 888
Shoe-lacing eyelet	J. Autenreith	Philadelphia, Pa	Jan. 6, 1863	37, 328
Shoe-lacing fastening	G. Butterfield	Boston, Mass	Aug. 14, 1866	57, 247
Shoe-lacing fastening	B. B. Cheat	Springfield, Vt	June 17, 1873	139, 871
Shoe-lacing hook	A. Patten	Biddeford, Me	Dec. 6, 1870	109, 933
Shoe-lacings, Device for fastening	O. H. Marston and M. L. Morse	Sandwich, N. H., and Stoneham, Mass.	Feb. 25, 1868	74, 839
Shoe-lacings, Manufacture of	J. P. Tirrell	North Bridgewater, Mass	Jan. 22, 1867	61, 369
Shoe, Lady's gaiter	H. C. Letsinger	New York, N. Y	July 15, 1873	140, 836
Shoe-latchet	I. Banister	Newark, N. J	Sept. 23, 1851	8, 381
Shoe-lifter	W. H. Winans	Newark, N. J	Dec. 10, 1867	72, 144
Shoe-lining, Removable	H. A. Everts	Cedar Falls, Iowa	Sept. 27, 1870	107, 767
Shoe-maker	G. Drake	Windsor, Conn	Mar. 14, 1816	....
Shoemaker's bench	D. Fisk and J. M. Blodgett	Clyde, N. Y	Dec. 15, 1868	84, 871
Shoemaker's bench	B. Gantner	Tell City, Ind	Oct. 1, 1867	69, 334
Shoemaker's bench	J. A. Hahn and C. Vogler	De Graff, Ohio	May 5, 1868	77, 607
Shoemaker's bench	J. Tramblie	Janesville, Wis	Sept. 1, 1863	39, 763
Shoemaker's bench	B. Way	Ontario County, N. Y	June 7, 1817	....
Shoemaker's bench, Mechanical	J. Soper	Windsor, Conn	Aug. 12, 1815	....
Shoemaker's burnisher	R. Egan	Brooklyn, N. Y	Dec. 12, 1865	51, 439
Shoemaker's clamp	P. Hanes	Edina, Mo	Feb. 26, 1861	31, 539
Shoemaker's cutting-board	C. E. Cooper	Philadelphia, Pa	July 8, 1873	140, 680
Shoemaker's finishing-tool	W. Wilson and J. Foster	Chariton, Iowa	Apr. 22, 1873	138, 063
Shoemaker's float	E. Bates and J. and M. Weist	York, Pa	Mar. 20, 1860	27, 514
Shoemaker's float	F. L. Langley	Troy, Ohio	May 15, 1860	28, 285
Shoemaker's float	J. W. Foard	San Francisco, Cal	July 4, 1865	48, 544
Shoemaker's implement	A. Barbarin	New Orleans, La	Oct. 13, 1868	83, 023
Shoemaker's jack	L. L. Coon	Nunica, Mich	May 15, 1866	54, 691
Shoemaker's jack	A. Rust	Egg Harbor City, N. J	Apr. 18, 1871	113, 935
Shoemaker's jack	F. Weissenborn	Egg Harbor City, N. J	Oct. 3, 1871	119, 675
Shoemaker's lap-anvil	H. Brunk	Albany, N. Y	May 27, 1851	8, 111
Shoemaker's paring-knife	W. De Camp	Newark, N. J	May 26, 1868	78, 363
Shoemaker's paring-knife	I. S. Pendergast	Barnstead, N. H	July 16, 1841	2, 177
Shoemaker's pinchers	A. Clarke	Philadelphia, Pa	Apr. 4, 1871	113, 261
Shoemaker's pinchers	M. Walpole	Milford, Mass	Feb. 14, 1871	111, 889
Shoemaker's shave	J. Y. Simons	Troy, N. Y	Nov. 17, 1868	84, 140
Shoemaker's shoulder-iron	J. W. Newberry	Kensington, Pa	Feb. 20, 1845	3, 916
Shoemaker's shoulder-tool	C. Malboit	Sutton, Mass	Aug. 29, 1871	118, 620
Shoemaker's tool	A. and A. Clark	Philadelphia, Pa	May 31, 1870	103, 566
Shoemaker's tool	I. A. Clippinger	Newton, Iowa	Jan. 25, 1870	99, 163
Shoemaker's tool	W. T. Fisher	Roane County, Tenn	July 21, 1868	80, 161
Shoemaker's tool	M. W. Lyman and F. C. Wyman	Chicago, Ill	Jan. 17, 1871	110, 987
Shoemaker's tool	J. F. Ober	Mount Desert, Me	Nov. 26, 1872	133, 383
Shoemaker's tool	C. St. Germain	Oxford, Mass	June 21, 1870	104, 658
Shoemaker's tool	M. Walpole	Milford, Mass	Sept. 21, 1869	95, 172
Shoemaker's tool-handle	C. G. Wegner	Philadelphia, Pa	May 23, 1871	115, 257
Shoemaker's trimming-knife	J. Reist	Philadelphia, Pa	Jan. 21, 1868	73, 462
Shoemaking-machine	J. Hall	North Bridgewater, Mass	May 6, 1836	....
Shoemaking-table	T. Carpenter	Battle Creek, Mich	Nov. 8, 1859	26, 011
Shoe-manufacture	M. L. Brett	Warren, Ohio	Dec. 10, 1867	71, 846
Shoe-manufacturing apparatus	J. C. Touzet	Paris, France	Dec. 29, 1868	85, 492
Shoe-nail	J. M. Bent	Mayland, Mass	Feb. 25, 1868	74, 745
Shoe-nail	J. F. Paine	Providence, R. I	May 27, 1873	139, 327
Shoe-nail	A. Waldron	Milford, Mass	Apr. 27, 1869	89, 451
Shoe-nail	H. F. Whidden	South Abington, Mass	June 1, 1869	90, 902
Shoe-nail	A. A. Wilcox	Fair Haven, Conn	Aug. 14, 1866	57, 234
Shoe-nails, Machine for making	W. H. Field	Taunton, Mass	Jan. 6, 1863	37, 340
Shoe-nails, Making	J. P. Davis	Middletown, Conn	Nov. 1, 1864	48, 854
Shoe-nailing machine	J. H. Brown	Boston, Mass	Dec. 8, 1863	40, 880
Shoe, Over	L. Elliott, jr	New Haven, Conn	Apr. 14, 1868	76, 731
Shoe, Over gaiter	T. R. Evans	Philadelphia, Pa	Oct. 1, 1872	131, 862
Shoe-pattern	J. A. French	Scenery Hill, Pa	May 18, 1869	90, 252
Shoe-pattern	S. Haynes	Malden, Mass	Oct. 16, 1834	....
Shoe-pattern	E. Shopbell	Ashland, Ohio	Apr. 5, 1870	101, 528
Shoe-patterns, Scale for laying out	W. Sheill	Dayton, Ohio	June 28, 1870	104, 891
Shoe-pegs, Method of preparing blanks for	B. F. Sturtevant	Boston, Mass	Feb. 2, 1858	19, 282
Shoe-pegs, Wire for	E. Townsend	Boston, Mass	Mar. 23, 1869	88, 231
Shoe-pegs, Wire for	E. Townsend	Boston, Mass	Mar. 23, 1869	88, 232
Shoe pegging and trimming machine	R. E. Draper	Enfield, N. C	Apr. 15, 1873	137, 897
Shoe-plate	T. W. Porter	Bangor, Me	May 8, 1860	28, 194
Shoe-quarter, &c	S. Babbitt	Brazil, Ind	Nov. 28, 1871	121, 312
Shoe, Rubber	L. L. Hyatt and J. H. Canfield	New Brunswick, N. J	July 15, 1873	140, 829
Shoe, Rubber	J. Letson	New Brunswick, N. J	Aug. 8, 1871	117, 807
Shoe, Rubber	J. Weidenman	Hartford, Conn	Nov. 19, 1867	71, 005
Shoe, Seamless	C. W. Palmer	Lynn, Mass	Feb. 16, 1869	87, 063

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Invention.	Inventor.	Residence.	Date.	No.
Shoe, Sewed	H. Dunham, jr	Abington, Mass	Oct. 17, 1865	50, 462
Shoe-shank	J. M. Watson	Sharon, Mass	Oct. 8, 1872	132, 125
Shoe-shanks, Machine for cutting, punching, and bending metal.	J. Hyslop, jr	Abington, Mass	July 16, 1872	129, 347
Shoe-shanks, Manufacture of	S. Moore	Sudbury, Mass	Feb. 14, 1871	111, 863
Shoe-shanking	T. K. Reed	East Bridgewater, Mass	Sept. 18, 1866	58, 178
Shoe-shanking machine	W. H. Kimball	Lynn, Mass	Mar. 14, 1865	46, 805
Shoe-shave	M. M. Elliott	New England Village, Mass	Jan. 21, 1868	73, 588
Shoe-shave	I. Hayes	Farmington, N. H	Sept. 27, 1864	44, 420
Shoe, Skating	C. F. W. Meyer	Oconomowoc, Wis	June 29, 1869	92, 679
Shoe-spike	R. Hutchison	Newark, N. J	Sept. 17, 1867	68, 881
Shoe-stay stock and machine for making the same	S. N. Smith	Providence, R. I	Sept. 13, 1870	107, 300
Shoe-stretching device	W. Jones	Norfolk, Va	July 30, 1867	67, 314
Shoe, &c., stretching machine	A. Burwell	Rochester, N. Y	July 11, 1854	11, 301
Shoe-string	W. Freeman	New Haven, Conn	May 17, 1864	42, 759
Shoe-string	W. H. Towers	New York, N. Y	Feb. 14, 1865	46, 408
Shoe-string cutter, Leather	J. A. Safford	Boston, Mass	Apr. 18, 1865	47, 340
Shoe-string fastener	W. G. A. Bonwill	Dover, Del	June 25, 1867	66, 073
Shoe-string fastener	S. B. Parker	Springfield, Mass	Mar. 24, 1868	75, 9 2
Shoe-string fastener	E. S. Scripture	Williamsburgh, N. Y	July 31, 1866	56, 806
Shoe-string fastening	C. M. O'Hara	Bolivar, Tenn	July 12, 1870	105, 236
Shoe-string tag	J. Twamley	New York, N. Y	June 14, 1870	104, 229
Shoe-strings, Ferrule for	G. H. White	Huntington, N. Y	June 1, 1869	90, 710
Shoe-strings, Mode of pointing tags of	J. Hill	Providence, R. I	Apr. 28, 1863	38, 309
Shoe-strings, Tagged braid for	J. Hill	Providence, R. I	Apr. 14, 1863	38, 164
Shoe-supporter	C. W. Soule	Abington, Mass	Feb. 16, 1869	87, 009
Shoe-tacks, Machinery for rolling metal for	J. F. Sargent	Boston, Mass	Feb. 4, 1862	34, 334
Shoe-tip	W. M. Davis	Carmel, Me	Mar. 13, 1860	27, 433
Shoe-tip	A. B. Ely	Newton, Mass	Feb. 25, 1868	74, 901
Shoe-tip blanks, Machine for cutting	G. A. Mitchell	Turner, Me	June 26, 1860	28, 887
Shoe-tip cutting and swaging machine	H. M. Bearce and L. C. Peck	North Auburn and Lewiston, Me.	Aug. 28, 1860	29, 756
Shoe-tip-perforating press	E. B. Stimpson	New York, N. Y	July 12, 1870	105, 382
Shoe-tips, Machine for swaging	G. A. Mitchell	Turner, Me	June 26, 1860	28, 888
Shoe-tips, Method of securing	P. Riley	New Bedford, Mass	Nov. 13, 1866	59, 656
Shoes to horses' feet, Mode of securing	J. Fenn	Plainville, Conn	May 24, 1864	42, 845
Shoe-tool, Combination	D. J. Tapley	Danvers, Mass	Aug. 17, 1858	21, 223
Shoe-tree	T. R. Evans	Philadelphia, Pa	Apr. 27, 1869	89, 473
Shoe-tree	C. Stoddard	North Brookfield, Mass	Aug. 6, 1872	130, 329
Shoe-trimming	W. P. Demarest	Brooklyn, N. Y	Apr. 5, 1870	101, 593
Shoe, Turned	W. Duchemin	Boston, Mass	June 24, 1873	140, 258
Shoe, Turned	G. McKay and L. R. Blake	Boston and Quincy, Mass	May 16, 1865	47, 770
Shoe-uppers, Device for folding and ironing edges of.	C., A. J., and T. K. Keith	Danvers, Charlton, and Lynn, Mass.	Sept. 13, 1870	107, 385
Shoe-uppers, Fitting	J. Cowles	Rochester, N. Y	Sept. 13, 1864	44, 163
Shoe-uppers, Machine for folding and cutting material for.	G. W. and B. F. Parrott and E. H. Timson.	Lynn, Mass	Dec. 22, 1868	85, 123
Shoe-uppers, Machine for gumming	P. E. Clark	Hartford, Conn	Sept. 30, 1873	143, 275
Shoe-uppers, Machinery for goring	A. J. Goodwin	Brookline, Mass	Aug. 12, 1873	141, 642
Shoe-uppers, Method of laying off	C. Glanville	San Francisco, Cal	Oct. 28, 1873	144, 087
Shoe, Water-proof	E. G. Augustin	New York	July 6, 1835	....
Shoe, Water-proof	J. Stetson	New Brunswick, N. J	Nov. 6, 1866	59, 419
Shoe, Water-proof	F. M. Shepard	New York, N. Y	Dec. 1, 1868	84, 650
Shoe, Water-proof	W. H. Towers	Boston, Mass	Jan. 25, 1870	99, 262
Shoe, Water-proof	T. C. Wales	Dorchester, Mass	Jan. 13, 1863	37, 413
Shoe-welts, Machine for cutting	J. H. Busell	Boston, Mass	May 14, 1872	126, 673
Shoe, Wooden	W. A. Webster	Westford, Mass	Jan. 1, 1869	90, 900
Shoe, Wooden-soled	H. Wight	Cambridge, Mass	Mar. 6, 1860	27, 414
Shoes and boots of metallic substances, Mode of making the bottoms of.	S. Milliken	Lexington, Mass	Feb. 10, 1807	....
Shoes and gaiters, Pattern for cutting	E. Shopbell	Ashland, Ohio	Jan. 27, 1863	37, 527
Shoes and other articles, Compound to be applied to.	E. Osgood	Boston, Mass	May 18, 1869	90, 118
Shoes, Attachment for ladies'	O. H. Taylor	San Francisco, Cal	Oct. 11, 1864	44, 676
Shoes, bags, &c., Implement for holding open	J. Allender	New London, Conn	Feb. 9, 1858	19, 284
Shoes, belts, &c., Clasp for	E. S. Winchester	Boston, Mass	Mar. 24, 1863	38, 009
Shoes, Catch for India-rubber	N. Hayward	Colchester, Conn	Nov. 4, 1856	16, 013
Shoes, Cutting	H. P. Hayward	Fitchburgh, Mass	Nov. 23, 1869	97, 195
Shoes, Cutting out	C. Weston	Salem, Mass	May 27, 1834	....
Shoes, Cutting out uppers for	E. H. Thurston	Montreal, Canada	Mar. 4, 1873	136, 561
Shoes, Device for inserting the gores of	J. M. Hunter	New York, N. Y	Apr. 14, 1863	38, 168
Shoes, Fabric for the manufacture of	E. Waite	Franklin, Mass	Sept. 20, 1870	107, 642
Shoes, &c., Fastening buttons on	C. C. Morgan	New York, N. Y	Sept. 28, 1869	95, 253
Shoes, Heating-apparatus for the manufacture of cemented-sole.	J. Jenkins	Charlestown, Mass	Sept. 14, 1858	21, 500
Shoes, Hook or clasp fastening for	J. W. H. Doubler	Darlington, Wis	July 2, 1872	128, 603
Shoes, Insole for manufacturing	C. S. Dunbrack	Swampscott, Mass	Nov. 8, 1840	108, 985
Shoes, Jack for holding	J. G. Ross	Philadelphia, Pa	June 27, 1865	48, 447
Shoes, Jack for holding	A. K. Washburn	Bridgewater, Mass	Sept. 30, 1873	143, 267
Shoes, Jack-post for pegging	D. Bouker	Boston, Mass	July 4, 1871	116, 672
Shoes, Machine for arranging nails for use in machine for nailing.	O. Gilmore	Raynham, Mass	Mar. 17, 1863	37, 909
Shoes, Machine for cutting leather in making	G. P. Mitchell	Burlington, N. J	May 15, 1828	....
Shoes, Machine for feeding rivets and inserting them in.	L. A. Cook	Woonsocket, R. I	Mar. 14, 1871	112, 554
Shoes, Machine for turning rand for	H. H. Bigelow	Worcester, Mass	Mar. 28, 1871	113, 009
Shoes, Machinery for cutting welts for	C. Rogers	East Bridgewater, Mass	May 29, 1849	6, 481
Shoes, Manufacture of	C. S. Dunbrack	Swampscott, Mass	Sept. 28, 1869	95, 211
Shoes, Manufacture of	C. W. Green	Pontiac, Mich	Sept. 9, 1873	142, 691
Shoes, Manufacture of	C. W. Green	Pontiac, Mich	Sept. 9, 1873	142, 692
Shoes, Manufacture of	J. E. Hayes	Farmington, N. H	May 21, 1872	127, 054
Shoes, Manufacture of	W. J. B. Mills	Philadelphia, Pa	May 14, 1872	126, 822
Shoes, Manufacture of	G. A. Richardson	Reading, Mass	July 16, 1872	129, 252
Shoes, Manufacture of	F. Rogers	Detroit, Mich	Nov. 19, 1872	133, 119
Shoes, Manufacture of	I. R. Rogers	Lynn, Mass	Nov. 26, 1867	71, 331
Shoes, Manufacture of gum-elastic	C. Goodyear	Roxbury, Mass	July 24, 1838	849
Shoes, Manufacture of India-rubber	G. H. Fowler	New Haven, Conn	May 22, 1866	54, 883

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Invention.	Inventor.	Residence.	Date.	No.
Shoes, Manufacture of machine-sewed	E. Thompson and L. R. Mears	Abington, Mass., and Brooklyn, N. Y.	June 6, 1865	48,113
Shoes, Manufacture of seamless	C. W. Peeler and N. C. Johnson	Chicago, Ill., and Springfield, Mass.	Aug. 8, 1871	117,811
Shoes, Method of making turned sewed	W. Duchemin	Boston, Mass	May 10, 1870	102,786
Shoes, Pattern for cutting the uppers of	G. Leinroth	Philadelphia, Pa	Nov. 4, 1873	144,341
Shoes, Rounding-up machine for	H. S. Vrooman	Boston, Mass	Sept. 20, 1870	107,641
Shoes, socks, and moccasins, Making	S. Norris and J. C. Wood	Philadelphia, Pa	Jan. 30, 1822	....
Shoes soled by a sewing-machine, Device for registering the number of	A. J. Tewksbury	Haverhill, Mass	Oct. 24, 1865	50,642
Shoes, Vulcanizing India-rubber tips for	H. B. Goodyear	New Haven, Conn	Nov. 20, 1860	30,675
Shoeing animals, Stock for	J. Ditch	Five Forks, Pa	Nov. 25, 1873	144,963
Shoeing-device	T. Rogers and D. Thompson	Fredericktown, Ohio	Feb. 2, 1869	86,455
Shook-holder	J. I. Berry	Williamsport, Pa	Sept. 9, 1873	142,553
Shooting-board, Carpenter's	J. Jones	Newark, N. J	Feb. 20, 1866	52,719
Shooting-gallery	J. S. Conlin	New York, N. Y	June 16, 1868	78,929
Shop-bin or substitute for drawers	S. B. Shultz	Princeton, Ill	Mar. 5, 1861	31,633
Shot and bullet machine	E. A. Hyde	Ann Arbor, Mich	Dec. 7, 1869	97,512
Shot and bullets by pressure, Making	T. Bruff	Washington, D. C	June 4, 1813	....
Shot and bullets, Machine for making	P. Williamson	Baltimore, Md	May 12, 1813	....
Shot and cartridge pouch	H. Hammond	Bridgeport, Conn	Apr. 24, 1866	54,147
Shot and shell, Adaptation of wads to	S. C. Abbott	Zanesville, Ohio	Oct. 18, 1859	25,795
Shot and shell, Casting	T. J. Lovegrove	Philadelphia, Pa	May 30, 1867	48,022
Shot and shell, Grinding and smoothing	J. Williams	Boston, Mass	Oct. 20, 1863	40,386
Shot and shell, Machine for polishing spherical	J. B. Tarr	Fair Haven, Mass	July 7, 1868	79,610
Shot and shell, Manufacture of spherical	J. B. Tarr	Fair Haven, Mass	Mar. 31, 1868	76,271
Shot and shell mold	P. L. Weimer	Lebanon, Pa	June 24, 1862	35,721
Shot and shell, Molding	D. Huestis	Cold Spring, N. Y	May 15, 1860	28,277
Shot and shell, Rotating	J. B. Hyde	Newark, N. J	Apr. 5, 1859	23,468
Shot and shell, Sabot for rotating	W. W. Hubbell	Philadelphia, Pa	June 10, 1856	15,073
Shot and shell, Sizing and smoothing	J. Cumming	Boston, Mass	Jan. 5, 1864	41,059
Shot, Case	J. F. Clew	New York, N. Y	Dec. 20, 1864	45,474
Shot, Case	S. W. Paine	Williamsport, Pa	Feb. 28, 1871	112,274
Shot case and distributer	S. Booton	Seguin, Tex	Jan. 3, 1871	110,625
Shot, Chain	J. Gault	Boston, Mass	June 24, 1862	35,731
Shot, Chain	G. P. Gauster	New York, N. Y	July 21, 1863	39,282
Shot-charger	C. W. Camp	Hartford, Conn	July 12, 1853	9,837
Shot-charger	G. D., G. A., and J. T. Capewell	Woodbury, Conn	Mar. 28, 1871	113,139
Shot, Compound sabot for hot	L. P. Jenks	Boston, Mass	Sept. 15, 1863	39,930
Shot, Expanding sabot for hot	C. T. James	Providence, R. I	Apr. 15, 1862	34,950
Shot, Explosive-canister	S. Groom	Troy, N. Y	Oct. 28, 1862	36,820
Shot for ordnance, Canister	B. B. Hotchkiss	Sharon, Conn	Jan. 7, 1862	34,058
Shot for ordnance, Canister	A. M. Sawyer	Fitchburgh, Mass	Nov. 19, 1861	33,754
Shot for ordnance, Canister or case	E. Townsend	Boston, Mass	Mar. 4, 1862	34,602
Shot for ordnance, Chain	A. B. Ely	Newton, Mass	Mar. 11, 1862	34,626
Shot for ordnance, Chain	J. Gault	Boston, Mass	Mar. 11, 1862	34,628
Shot-hole stopper	E. Lockwood	Ulster, Pa	Feb. 25, 1862	34,509
Shot, Machine for manufacturing	A. Duvall	Baltimore, Md	May 8, 1838	727
Shot, Making	A. Booth	New York, N. Y	May 18, 1858	20,250
Shot, Making	P. Daniel		Mar. 31, 1804	....
Shot, Making	E. Shiver	Columbia, S. C	Feb. 2, 1869	86,596
Shot, Making and discharging chain and cleaver	I. Hatch		Mar. 24, 1801	....
Shot-making machine	W. W. Brigg	Home, Tenn	Dec. 26, 1871	122,102
Shot, Manufacture of	W. Glasgow, jr., and J. G. Wood	Saint Louis, Mo	Oct. 20, 1868	83,152
Shot, Manufacture of	S. Stevenson	Oil City, Pa	Dec. 27, 1864	45,651
Shot, Manufacture of	C. B. Tatham	Brooklyn, N. Y	Mar. 8, 1859	23,202
Shot, Manufacturing	J. W. Josse	Philadelphia, Pa	July 17, 1809	....
Shot, Manufacturing	J. Willard	Baltimore, Md	July 10, 1830	....
Shot, Manufacturing buck	J. Snyder	New York	Jan. 26, 1832	....
Shot, Manufacturing drop	D. Smith	New York, N. Y	May 22, 1849	6,460
Shot-measuring receptacle	E. C. Carleton	Port Huron, Mich	July 26, 1870	105,641
Shot, Mode of "patching" rifle	R. H. Isham	Greenwich, Conn	July 29, 1856	15,425
Shot-plug	S. I. Seely	New York, N. Y	Oct. 10, 1848	5,845
Shot-pouch	A. F. Allen	Providence, R. I	Nov. 2, 1869	96,298
Shot-pouch	J. T. Capewell	Woodbury, Conn	Jan. 29, 1856	14,151
Shot-pouch	J. M. Hathaway	New York, N. Y	Aug. 1, 1854	11,497
Shot-pouch	C. Johnston	Clarksville, Mo	Apr. 16, 1861	32,067
Shot-pouch charger	T. W. Allen	Waterbury, Conn	Jan. 10, 1871	110,887
Shot-pouch charger	T. W. Allen	Waterbury, Conn	Jan. 24, 1871	111,102
Shot-pouch charger	J. S. Capewell	Woodbury, Conn	Apr. 16, 1872	125,719
Shot-pouch charger	J. M. Hathaway	New York, N. Y	Sept. 2, 1856	15,651
Shot-pouch charger	C. Johnston	Clarksville, Mo	Sept. 3, 1867	68,512
Shot-proof dome or cupola	A. C. Currier	Hallowell, Me	Nov. 11, 1862	36,896
Shot-rounding machine	C. Koehler	Rosiclare, Ill	Jan. 25, 1870	99,209
Shot, Screening-table for separating	J. W. Haney	Herculaneum, Mo	Feb. 10, 1825	....
Shot-separating device	W. A. Shaw	New York, N. Y	Jan. 9, 1866	52,003
Shot, Tubulated-cylinder	J. M. Ludlum	New York	Aug. 3, 1813	....
Shotting apparatus, Metal	T. Shaw	Philadelphia, Pa	July 13, 1869	92,480
Shotting machine, Metal	W. Butcher, jr., and T. Shaw	Sheffield, England, and Philadelphia, Pa.	June 4, 1867	65,339
Shoulder-brace	A. Adamson	Washington, D. C	Dec. 8, 1868	84,787
Shoulder-brace	A. W. Braman	Boston, Mass	Aug. 8, 1871	117,728
Shoulder-brace	H. F. Briggs	Poughkeepsie, N. Y	May 16, 1848	5,565
Shoulder-brace	H. F. Briggs	Poughkeepsie, N. Y	Apr. 17, 1849	6,364
Shoulder-brace	N. C. Burnap	Argusville, N. Y	May 27, 1873	139,366
Shoulder-brace	H. N. Conklin	Indianapolis, Ind	Jan. 4, 1870	98,564
Shoulder-brace	F. Durand	Seymour, Conn	Feb. 6, 1866	52,400
Shoulder-brace	S. S. Fitch	New York, N. Y	June 5, 1849	6,512
Shoulder-brace	J. E. Kent	Philadelphia, Pa	Sept. 28, 1869	95,235
Shoulder-brace	S. S. Ritter	Philadelphia, Pa	Feb. 1, 1870	99,478
Shoulder-brace	A. N. Smith	Hallowell, Me	Dec. 18, 1866	60,582
Shoulder-brace	A. W. Upton	Lowell, Mass	Aug. 9, 1864	43,807
Shoulder-brace	G. W. Walker	Lowell, Mass	June 8, 1869	90,974
Shoulder-brace and abdominal supporter, Combined	J. S. Dare	Knightstown, Ind	Aug. 12, 1851	8,297
Shoulder-brace and suspenders	E. Jennings, jr	New York, N. Y	Oct. 27, 1868	83,387
Shoulder-brace and suspenders, Combined	D. W. Canfield	New York, N. Y	Dec. 16, 1862	37,149
Shoulder-brace and suspenders, Combined	A. M. Eaton	Boston, Mass	Aug. 25, 1868	81,482

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Invention.	Inventor.	Residence.	Date.	No.
Shoulder-brace and suspenders, Combined	F. C. Pratt and G. W. Whitney	Cleveland, Ohio	Mar. 26, 1872	124, 913
Shoulder-brace for knapsacks, Soldier's	H. S. Weston	Akron, Ohio	Nov. 15, 1864	45, 104
Shoulder-pad	L. Kyser	Philadelphia, Pa	Dec. 16, 1873	145, 661
Shoulder-strap	J. C. Merritt	West Point, N. Y	June 17, 1873	140, 061
Shoulder-strap	G. Robinson	New York, N. Y	Dec. 2, 1862	37, 056
Shoulder-strap fastening	B. G. Barney	Philadelphia, Pa	Dec. 17, 1861	33, 925
Shoulder-strap, Officer's	G. G. Evans	Philadelphia, Pa	Dec. 9, 1862	37, 143
Shoulder-strap, Officer's	J. L. Smith	New York, N. Y	June 18, 1861	32, 588
Shoulder-strap slide	G. D. Kellogg	Troy, N. Y	May 30, 1865	47, 958
Shoulder-supporter	J. W. Kimball and J. Mahady	Boston and Cambridge, Mass.	May 23, 1865	47, 836
Shoulder-supporter	J. B. Smith	Milwaukee, Wis	July 20, 1869	92, 750
Shovel: See Ash-shovel. Barn-shovel. Cinder-shovel. Coal-shovel. Excavating-shovel. Fire-shovel. Grain-shovel. Lifting-shovel. Malt-shovel. Oven-shovel. Plow-shovel. Sacket and sand shovel. Scoop-shovel. Seed-shovel. Sifting-shovel. Snow-shovel. Stove-shovel. Team-shovel.				
Shovel	O. Ames	Eas'on, Mass	Mar. 5, 1827	....
Shovel	R. Calhoun	Allegheny City, Pa	Nov. 28, 1871	121, 331
Shovel	J. U. Fiester	Winchester, Ohio	July 17, 1860	29, 153
Shovel	S. J. Goucher	Philadelphia, Pa	Oct. 9, 1866	58, 636
Shovel	G. W. Gregory	New York, N. Y	June 14, 1870	104, 140
Shovel	D. B. Nelson	Elmira, N. Y	May 7, 1867	64, 442
Shovel	W. H. Smith	Jackson, Pa	Sept. 27, 1870	107, 827
Shovel and ash-sifter, Combined	R. Schaap, jr	Brooklyn, N. Y	Mar. 21, 1865	46, 946
Shovel and dung-fork, Combined	J. Carpenter	Niconza, Ind	Aug. 16, 1870	106, 464
Shovel and fork-handle, Adjustable	J. N. Pease	Panama, N. Y	Feb. 5, 1867	61, 859
Shovel and post-hole digger, Combined	J. Thompson	Decatur, Mich	July 11, 1871	116, 888
Shovel and sifter	S. P. Brooks	Somerville, Mass	Dec. 10, 1867	71, 969
Shovel and sifter, Combined	F. S. Bidwell	Mystic Bridge, Conn	Dec. 14, 1869	97, 860
Shovel and sifter, Combined	D. Boynton	Saint Johnsbury, Vt	Dec. 17, 1867	72, 160
Shovel and spade	W. T. Wells and G. E. Morehouse.	Decatur, Ill	Feb. 18, 1873	135, 954
Shovel and tongs	R. D. Bradley	Preston, Md	July 10, 1866	56, 169
Shovel and tongs, Combined	J. W. Evans	Forsyth, Ga	May 15, 1860	28, 264
Shovel and tongs, Combined	S. Huffman	Richmond, Va	Apr. 22, 1856	14, 754
Shovel and tongs, Combined	H. Kliperd and B. Newbury	Clarksville, Ohio	Dec. 7, 1869	97, 523
Shovel and tongs, Combined	T. G. Newnam	Pleasant Hill, Mo	Apr. 9, 1872	125, 480
Shovel and tongs, Combined	H. Ogborn	Richmond, Ind	Feb. 13, 1866	52, 590
Shovel and tongs, Combined	H. C. Sisco	Indianapolis, Ind	Mar. 17, 1868	75, 652
Shovel and tongs stand	B. Roux	Cincinnati, Ohio	Nov. 2, 1869	96, 484
Shovel-blades to handle-straps, Uniting	J. White	Antrim, N. H	Nov. 15, 1853	10, 244
Shovel-blank	G. W. Jope	Pittsburgh, Pa	Feb. 15, 1870	99, 775
Shovel-forming die	H. O. Ganyard	Rochester, N. Y	Mar. 8, 1870	100, 521
Shovel-handle	F. Alsip	North McGregor, Iowa	Nov. 7, 1871	120, 607
Shovel-handle	G. C. Choate	Wyoming Station, Wyo	Apr. 12, 1870	101, 711
Shovel-handle	C. Pomeroy and J. D. Owen	Mattoon, Ill	Oct. 14, 1873	143, 714
Shovel-handle	J. L. Shaw	Grand Rapids, Mich	Jan. 25, 1870	99, 247
Shovel-handle	H. C. Trask	Vienna, Me	Apr. 4, 1871	113, 709
Shovel-handle top	S. M. Knapp and J. Switter	Massillon, Ohio	June 29, 1869	92, 060
Shovel-handles, Bending	T. Blanchard	Boston, Mass	Mar. 2, 1858	19, 480
Shovel-handles, Machine for cutting the inside hold of.	G. Fetter and J. L. Pennock	Holmesburgh, Pa	June 19, 1855	13, 084
Shovel-handles, Machine for making	R. D. Bartlett	Bangor, Me	Mar. 14, 1854	10, 631
Shovel-handles, Machine for making	H. R. Butterfield	Vassalborough, Me	Nov. 28, 1871	121, 274
Shovel-handles, Machine for making	W. Wells	Middleton, Mass	Dec. 20, 1864	45, 546
Shovel-handles, Machine for making head-part of	E. Webber	Gardiner, Me	Nov. 7, 1854	11, 915
Shovel-handles, Machine for making heads of	R. D. Bartlett	Bangor, Me	July 11, 1854	11, 288
Shovel-handles, Strap for	C. H. Sayre	Utica, N. Y	Oct. 16, 1860	30, 428
Shovel-making machine	D. B. Rogers	Pittsburgh, Pa	June 2, 1857	17, 452
Shovel, Sitting	P. A. Sabbaton	Albany, N. Y	Jan. 4, 1859	22, 514
Shovel, spade, or dung-fork handle	G. C. Howard	Hardwick, Mass	July 21, 1857	17, 837
Shovels and plowshares to standards, Device for securing.	J. Pierpont	La Harpe, Ill	Feb. 8, 1870	99, 702
Shovels and spades, Making	J. Wood	Philadelphia, Pa	Feb. 10, 1825	....
Shovels and spades, Manufacturing	J. Lippincott	Pittsburgh, Pa	July 2, 1861	32, 701
Shovels, Constructing	H. M. Myers	Allegheny City, Pa	Feb. 5, 1867	61, 756
Shovels, Construction of	H. Kimball	Worcester, Mass	Jan. 6, 1852	8, 635
Shovels, Machine for swaging or setting	U. Reid	Harford County, Md	Aug. 31, 1810	....
Shovels, Manufacture of	C. Ellis and O. Ames, 2d	Canton and North Easton, Mass.	Jan. 23, 1872	122, 881
Shovels, Manufacture of	H. L. Lowman	Birmingham, Conn	Sept. 16, 1873	142, 830
Shovels, Manufacture of	H. M. Myers	Allegheny City, Pa	May 14, 1867	64, 691
Shovels, Manufacture of	H. M. Myers	Allegheny City, Pa	June 9, 1868	78, 679
Shovels, Manufacture of	S. D. Nelson	Pittsburgh, Pa	May 15, 1860	28, 293
Shovels, Manufacture of	E. A. Yerkes	Philadelphia, Pa	June 24, 1873	140, 344
Shovels, Manufacturing	J. Fox	New York, N. Y	Nov. 9, 1869	96, 572
Shovels, scythes, &c., Making	C. Bulkley	Colchester, Conn	Feb. 28, 1837	....
Shovels, spades, &c., Making	W. W. Richards	Philadelphia, Pa	Oct. 25, 1853	10, 160
Show-card	A. H. Dixon	Toronto, Canada	Feb. 11, 1873	135, 636
Show-cards, Mounting for	B. T. Harris	Brooklyn, N. Y	May 21, 1872	126, 885
Show-cards, Printing	W. C. Hutchins	Hartford, Conn	June 18, 1872	128, 148
Show-case	A. Arnold and H. Merz	Chicago, Ill	Feb. 4, 1873	135, 505
Show-case	T. L. Ball	New York, N. Y	Aug. 2, 1859	24, 919
Show-case	M. M. Belding	Brooklyn, N. Y	Sept. 27, 1870	107, 753
Show-case	D. D. Elder	Philadelphia, Pa	July 8, 1873	140, 689
Show-case	W. H. Grove	Philadelphia, Pa	May 23, 1871	115, 195
Show-case	W. H. Grove	Philadelphia, Pa	Nov. 7, 1871	120, 752
Show-case	J. Haines	West Middlebury, Ohio	Aug. 7, 1866	56, 931
Show-case	G. A. Hearn, jr	New York, N. Y	Apr. 4, 1871	113, 660
Show-case	G. A. Hearn, jr	New York, N. Y	June 27, 1871	116, 306
Show-case	J. A. Holmes	Shopiere, Wis	Aug. 23, 1870	106, 586

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Invention.	Inventor.	Residence.	Date.	No.
Show-case	J. A. Hughes	Somerville, Mass	Mar. 14, 1871	112,712
Show-case	P. Price	West Chester, Pa	Nov. 29, 1870	109,063
Show-case	W. H. Reiff	Philadelphia, Pa	Feb. 11, 1873	135,848
Show-case	W. C. Spellman	Hartford, Conn	June 17, 1873	140,089
Show-case	E. Watson and R. H. Norris	Paterson, N. J	Aug. 9, 1870	106,240
Show-case, Advertising	W. H. Reiff	Philadelphia, Pa	Nov. 21, 1871	121,196
Show-case and counter	W. Cooper, jr	Mexico, N. Y	July 4, 1871	116,564
Show-case door	D. Barclay	Chicago, Ill	Apr. 24, 1860	27,937
Show-case for cigars and tobacco	C. E. Brown	Owego, N. Y	June 13, 1865	48,152
Show-case for counters	G. D. Leonard	New York, N. Y	Apr. 5, 1870	101,475
Show-case for counters	N. Mayo and E. S. Morse	Bath, Me	Aug. 24, 1869	94,016
Show-case for ribbons	J. Gross and A. Ruth	Decatur, Ill	Oct. 15, 1872	132,207
Show-case for ribbons, &c	J. Gross and A. Ruth	Decatur, Ill	Nov. 26, 1872	133,366
Show-case for ribbons, &c	G. W. Pagett	Oxford, Ind	July 26, 1870	105,835
Show-case for silk, cotton, &c	G. D. Leonard	New York, N. Y	Jan. 18, 1870	98,982
Show-case for watches	I. S. Huckins	Wenona, Mich	Nov. 21, 1871	121,171
Show-case, Jeweler's	M. Martin and J. A. Studer	Pittsburgh, Pa	Sept. 9, 1873	142,555
Show-case, Portable	D. C. Price	Saint Paul, Minn	Apr. 2, 1872	125,329
Show-case, Revolving	O. H. Melendy	Delhi, Iowa	June 15, 1869	91,470
Show-case, Revolving	W. J. Scott	Albany, N. Y	Feb. 21, 1871	111,980
Show-case, Rotary	T. E. Wood	Chicago, Ill	Mar. 26, 1872	125,109
Show-case, Spool	I. Dimock	Florence, Mass	Sept. 13, 1870	107,343
Show-case, Spool	J. N. Leonard	Rockville, Conn	July 13, 1869	92,618
Show-case, Spool, &c	J. N. Leonard	Rockville, Conn	Feb. 15, 1870	99,920
Show-case, Spool	R. H. Norris	Paterson, N. J	Feb. 28, 1871	112,272
Show-case, Spool-thread	J. N. Leonard	Rockville, Conn	Oct. 22, 1872	132,366
Show-case, Spool-thread	A. C. Phillips	Chicago, Ill	Feb. 28, 1871	112,277
Show-case, Thread	A. Steward	Plano, Ill	June 16, 1868	79,023
Show-case, Tobacco-box	A. Bernstein	Saint Louis, Mo	July 19, 1870	105,414
Show-case, Ventilating	W. H Lockwood	Brooklyn, N. Y	Apr. 28, 1868	77,389
Show-case, Wall-paper	T. L. Odell and J. C. Hudson	Iowa Falls, Iowa	Aug. 20, 1872	130,738
Show-cases, boxes, &c., Corner-socket for	J. W. Truby	Chicago, Ill	Aug. 8, 1871	117,831
Show-frame, Advertising	W. P. Brown	Watertown, N. Y	Sept. 1, 1868	81,532
Show-frame, Revolving	T. Dickinson, jr	Buffalo, N. Y	Mar. 9, 1869	87,551
Show-seat	D. C. Pierce	Saint Paul, Minn	Dec. 31, 1872	134,486
Show-stand	W. Fisher	New York, N. Y	May 30, 1871	115,456
Show-stand	J. G. Oonk	Owensville, Ohio	Nov. 19, 1867	71,047
Show-stand	J. R. Palmenberg	New York, N. Y	Oct. 4, 1870	108,046
Show-stand	J. R. Palmenberg	New York, N. Y	Jan. 30, 1872	123,122
Show-stand	J. R. Palmenberg	New York, N. Y	Sept. 10, 1872	131,178
Show-stand, Window	J. P. Doughten	Wilmington, Del	Mar. 12, 1872	124,555
Show-window stand	J. R. Palmenberg	New York, N. Y	Nov. 14, 1871	120,825
Show-window, Bracket-hook for	J. Hodgkins	Harrisburgh, Pa	Jan. 23, 1872	122,890
Shower-bath	D. P. Baldwin	San Francisco, Cal	May 16, 1854	10,919
Shower-bath	S. Bates	Dedham, Mass	Oct. 12, 1843	3,302
Shower-bath	W. H. Brown	Worcester, Mass	Oct. 14, 1851	8,421
Shower-bath	S. Corthan	Baltimore, Md	Jan. 23, 1849	6,047
Shower-bath	J. Essex	Bennington, Vt	Sept. 25, 1849	6,746
Shower-bath	H. H. King	New York, N. Y	Feb. 1, 1847	4,949
Shower-bath	D. P. Lacey	Orfordville, Wis	Apr. 23, 1867	64,112
Shower-bath	E. Larrabee	Baltimore, Md	Jan. 2, 1849	5,993
Shower-bath	J. Mansfield	Jefferson, Wis	Dec. 14, 1858	22,298
Shower-bath	H. Wells	Hartford, Conn	Nov. 4, 1846	4,836
Shower-bath apparatus	C. P. Brown	Hudson, Mich	Feb. 28, 1871	112,217
Shower-bath apparatus	W. Meyer	Progress, N. J	Sept. 1, 1857	18,101
Shower-bath apparatus	N. Warlick	La Fayette, Ala	Aug. 4, 1857	17,948
Shower-bath appendage	W. Miller	Waltham, Mass	Oct. 6, 1857	18,349
Shower-bath, Folding	G. Woods	Boston, Mass	Jan. 18, 1848	5,414
Shower-bath fountain	H. Blodgett	Albany, N. Y	Jan. 15, 1847	4,930
Shower-bath, Hand	D. Sterling	Eaton Rapids, Mich	Oct. 28, 1873	144,156
Shower-bath, Portable	F. Holm	Brooklyn, N. Y	Feb. 10, 1852	8,723
Shower-bath, Portable	J. C. Smith	Chelsea, Mass	June 2, 1845	4,067
Shower-bath, Portable	N. Waterman	Boston, Mass	Aug. 11, 1843	3,213
Shower-bath table	C. C. Bisbee	Rochester, N. Y	July 26, 1853	9,873
Shinking and punching machine, Combined	C. V. Statler	Woodhull, Ill	Nov. 19, 1867	71,079
Shrub and flower box	G. Gustafson	Oakland, Cal	Aug. 31, 1869	94,202
Shuck-hackling machine	W. H. Tappey, W. C. Lumsden, and A. Steel	Petersburgh, Va	Oct. 11, 1870	108,207
Shutter and awning, Combined	R. D. King	Brooklyn, N. Y	May 18, 1869	90,177
Shutter and awning for windows, Combined	J. David	New York, N. Y	Aug. 21, 1860	29,675
Shutter and blind bolt	A. Reeve	Allowaystown, N. J	Sept. 10, 1861	33,266
Shutter and blind fastener	W. B. Farrar	Greensborough, N. C	Dec. 8, 1868	84,811
Shutter a d blind fastening	C. H. Gilman	Portland, Me	Apr. 3, 1866	53,601
Shutter a d blind operator	W. E. Brooke	Trenton, N. J	Oct. 20, 1868	83,248
Shutter and door fastener	D. J. Moffitt	Thornton, Ind	June 17, 1873	140,054
Shutter and door fastener	W. Patton	Towanda, Pa	July 2, 1861	32,712
Shutter and door, Iron	J. W. Hoyt	Springfield, Mass	Mar. 5, 1872	124,271
Shutter and sash fastener	T. Harvey	Baltimore, Md	Apr. 16, 1850	7,289
Shutter and window fastener, Combined,	W. T. Fry	Brooklyn, N. Y	Dec. 9, 1873	145,343
Shutter and window fastening	W. L. Barnes	Irvington, N. Y	July 28, 1868	80,266
Shutter-blind frame, Iron	W. E. Brock	New York, N. Y	Jan. 16, 1872	122,805
Shutter-blinds, Metal slats for	W. E. Brock	New York, N. Y	Jan. 16, 1872	122,806
Shutter-blinds, Tie-rods for	W. E. Brock	New York, N. Y	Jan. 16, 1872	122,807
Shutter-bolt	E. Andrews	Palo Alto, Pa	Jan. 24, 1865	45,963
Shutter-bolt	P. Burke	Philadelphia, Pa	Dec. 24, 1867	72,610
Shutter-bolt	J. W. Custer	Limerick Station, Pa	Jan. 26, 1869	86,282
Shutter-bolt	B. K. Dorwart	Lancaster, Pa	Mar. 5, 1867	62,617
Shutter-bolt	D. C. Heller	Reading, Pa	July 5, 1864	43,407
Shutter-bolt	D. C. Heller	Reading, Pa	Jan. 3, 1865	45,712
Shutter-bolt	A. Reeve	Allowaystown, N. J	Sept. 18, 1860	30,091
Shutter-bolt	J. F. Sipple	Frederica, Del	Apr. 27, 1869	89,511
Shutter-bolt	P. Warner	Lancaster, Pa	June 10, 1856	15,094
Shutter-bolt	T. Warner	Germantown, Pa	June 14, 1864	43,145
Shutter bolt, Store	W. C. Fisher	Charlestown, Mass	June 26, 1860	28,844
Shutter bolt, Window	E. Childs	Philadelphia, Pa	Jan. 2, 1866	51,893
Shutter bolt, Window	S. Green	Lambertville, N. J	Nov. 8, 1853	10,229
Shutter-bowing bolt	J. M. and M. L. Cummings	Philadelphia, Pa	Oct. 29, 1867	70,173
Shutter-bowing bolt	W. H. Fitzgerald	Philadelphia, Pa	Nov. 5, 1867	70,428

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Shutter-bowing device	T. Royer	Lancaster, Pa	May 18, 1873	137, 031
Shutter-case	J. Ingram	New York, N. Y	Aug. 15, 1865	49, 411
Shutter-catch	F. Raymond	Woodhaven, N. Y	Oct. 29, 1867	70, 264
Shutter, Corrugated metallic rolling	A. Clark	London, England	Apr. 8, 1873	137, 595
Shutter, Double-panel	C. S. Bruff	Baltimore, Md	May 6, 1856	14, 798
Shutter-fastener	W. Altick	Dayton, Ohio	June 4, 1872	127, 543
Shutter-fastener	J. Andrews	Marlborough, Mass	Jan. 30, 1872	123, 074
Shutter-fastener	R. R. Ball	West Meriden, Conn	Sept. 10, 1872	131, 145
Shutter-fastener	F. A. Brenner	Philadelphia, Pa	Apr. 30, 1872	126, 176
Shutter-fastener	F. T. Brown	New York, N. Y	Oct. 19, 1869	95, 979
Shutter-fastener	N. H. Byerley	Philadelphia, Pa	Jan. 28, 1873	135, 319
Shutter-fastener	H. D. Chance	Llewellyn, Pa	Oct. 29, 1872	132, 630
Shutter-fastener	E. S. Collamer	Georgetown, D. C	Mar. 2, 1869	87, 469
Shutter-fastener	J. L. Devol	Parkersburgh, W. Va	Feb. 28, 1871	112, 225
Shutter-fastener	L. G. Dodge	Syracuse, N. Y	Dec. 29, 1868	85, 290
Shutter-fastener	A. Yerber	Elizabeth, N. J	Jan. 31, 1860	26, 979
Shutter-fastener	J. B. Field	Detroit, Mich	May 24, 1870	103, 316
Shutter-fastener	A. L. France	Wilmington, Del	Sept. 13, 1870	107, 354
Shutter-fastener	A. L. France	Wilmington, Del	Aug. 20, 1872	130, 708
Shutter-fastener	J. Frick	Philadelphia, Pa	Nov. 6, 1860	30, 571
Shutter-fastener	F. W. Frost	Somerville, Mass	Apr. 19, 1870	102, 108
Shutter-fastener	E. A. Goods	Philadelphia, Pa	Jan. 10, 1871	110, 943
Shutter-fastener	C. B. Goodrich, jr	Boston, Mass	Dec. 14, 1869	97, 769
Shutter-fastener	W. M. Griscom	Philadelphia, Pa	Apr. 30, 1861	32, 221
Shutter-fastener	H. Grow	Philadelphia, Pa	Oct. 11, 1870	108, 256
Shutter-fastener	T. Hair and J. Wood	Morristown, Pa	Dec. 6, 1870	109, 818
Shutter-fastener	J. C. Hanna	Rossville, Iowa	Oct. 29, 1872	132, 661
Shutter-fastener	T. Houghton	Philadelphia, Pa	July 23, 1872	129, 664
Shutter-fastener	L. D. Howard	Saint Johnsbury, Vt	July 27, 1869	92, 970
Shutter-fastener	P. Keffer	Reading, Pa	May 23, 1871	115, 063
Shutter-fastener	P. Keffer	Reading, Pa	Dec. 30, 1873	145, 951
Shutter-fastener	P. Keffer and E. M. Reazor	Reading, Pa	Jan. 30, 1872	123, 179
Shutter-fastener	J. W. King	New York, N. Y	Aug. 9, 1870	106, 176
Shutter-fastener	J. S. Lash	Philadelphia, Pa	June 13, 1871	115, 965
Shutter-fastener	D. M. Lawrence	Cincinnati, Ohio	Nov. 14, 1856	16, 038
Shutter-fastener	I. O. Lucy	Bernardston, Mass	Nov. 15, 1870	109, 329
Shutter-fastener	J. McGerrah	Philadelphia, Pa	Nov. 30, 1858	22, 187
Shutter-fastener	J. W. Megan	Wilmington, Del	June 6, 1871	115, 762
Shutter-fastener	N. V. Merrill	Goffstown, N. H	Jan. 9, 1872	122, 628
Shutter-fastener	H. L. Norton	Middletown, Conn	Aug. 6, 1872	130, 308
Shutter-fastener	C. K. Osborn	Dixon, Ill	May 31, 1870	103, 766
Shutter-fastener	G. W. Ouram	Philadelphia, Pa	Feb. 2, 1869	86, 437
Shutter-fastener	C. Pabst	Wilmington, Del	Mar. 21, 1871	112, 840
Shutter-fastener	J. R. Peterson	Philadelphia, Pa	Feb. 9, 1869	86, 686
Shutter-fastener	J. D. Phyfe and J. D. Perrine	New York, N. Y	Apr. 25, 1871	114, 037
Shutter-fastener	A. Rankin	Philadelphia, Pa	Oct. 4, 1870	107, 052
Shutter-fastener	E. F. Reed and J. C. Grundy	Chelsea, Mass	Sept. 19, 1871	119, 180
Shutter-fastener	J. L. Routzahn	Frederick, Md	Feb. 5, 1867	61, 764
Shutter-fastener	J. B. Sargent	New Haven, Conn	Nov. 5, 1872	132, 864
Shutter-fastener	T. S. Seabury	Saint James, N. Y	Feb. 6, 1872	123, 519
Shutter-fastener	A. P. Seymour	Hecla Works, N. Y	May 30, 1871	115, 364
Shutter-fastener	J. F. Smith	Boston, Mass	Oct. 3, 1871	119, 473
Shutter-fastener	C. S. Van Wagoner	New York, N. Y	June 11, 1872	127, 941
Shutter-fastener	B. D. Washburn	Boston, Mass	Nov. 10, 1868	84, 032
Shutter-fastener	W. H. Wayne	Philadelphia, Pa	Oct. 29, 1867	70, 300
Shutter-fastener	P. L. Weimer	Lebanon, Pa	Mar. 14, 1871	112, 756
Shutter-fastener	J. L. Whetstone and P. C. Guion	Cincinnati, Ohio	May 19, 1843	3, 083
Shutter-fastener	W. W. and C. E. Williams	Worcester and Clinton, Mass.	May 14, 1872	126, 858
Shutter-fastener	G. Wunderlich and L. H. Mauch	Philadelphia, Pa	Apr. 9, 1872	125, 425
Shutter fastener and bower, Combined	R. Ruhlman	Trenton, N. J	Sept. 23, 1873	143, 189
Shutter fastener and holder, Window	C. Adams	Pittsburgh, Pa	Oct. 25, 1853	10, 146
Shutter fastener, Store-window, &c	N. Hall and J. Chase	Brunswick and Waterborough, Me.	Oct. 11, 1836	46
Shutter-fastener, Window	C. R. Doane	Williamsburgh, N. Y	Mar. 31, 1868	76, 170
Shutter-fastener, Window	J. Stroop	Philadelphia, Pa	July 10, 1849	6, 587
Shutter-fastening	E. D. Anderson	Frederick, Md	Apr. 8, 1873	137, 647
Shutter-fastening	S. D. Arnold	New Britain, Conn	July 19, 1870	105, 409
Shutter-fastening	J. Berbecker	New York, N. Y	Sept. 27, 1870	107, 651
Shutter-fastening	J. P. Bush	Boston, Mass	Oct. 21, 1873	143, 805
Shutter-fastening	T. C. Cary	Poughkeepsie, N. Y	Dec. 30, 1841	2, 411
Shutter-fastening	E. Cole	Tarrytown, N. Y	Jan. 9, 1866	51, 924
Shutter-fastening	A. Cutter	Chelsea, Mass	Apr. 21, 1868	77, 005
Shutter-fastening	B. Doe	Boston, Mass	Apr. 14, 1868	76, 723
Shutter-fastening	F. Doepke	Cincinnati, Ohio	Dec. 10, 1872	133, 838
Shutter-fastening	B. K. Dorwart	Lancaster, Pa	Aug. 27, 1867	68, 033
Shutter-fastening	S. Ehrman	Mount Joy, Pa	May 27, 1862	35, 368
Shutter-fastening	W. C. Fisher	Charlestown, Mass	Mar. 23, 1869	88, 152
Shutter-fastening	J. Frick	Philadelphia, Pa	May 16, 1865	47, 711
Shutter-fastening	J. Harrar	Philadelphia, Pa	May 29, 1866	55, 095
Shutter-fastening	R. Hayden	Middletown, Conn	Nov. 23, 1869	97, 104
Shutter-fastening	G. G. Hickman	Coatesville, Pa	Jan. 28, 1868	73, 893
Shutter-fastening	W. B. Howard	Baltimore, Md	Feb. 5, 1867	61, 834
Shutter-fastening	A. Hyde	Lima, N. Y	Feb. 10, 1863	37, 625
Shutter-fastening	H. H. Miner	Boston, Mass	Dec. 23, 1873	145, 884
Shutter-fastening	W. J. Miller	Gettysburgh, Pa	May 12, 1868	77, 748
Shutter-fastening	J. A. Morris	Atlanta, Ga	Oct. 14, 1873	143, 585
Shutter-fastening	S. Mowry	Womelsdorf, Pa	Dec. 17, 1872	134, 000
Shutter-fastening	A. S. Palmberg	Boston, Mass	Oct. 7, 1873	143, 460
Shutter-fastening	J. Perker	Meriden, Conn	Oct. 28, 1873	144, 126
Shutter-fastening	J. A. Pipo and W. Walbaum	Hoboken, N. J	Mar. 24, 1868	75, 788
Shutter-fastening	J. Pusey	Philadelphia, Pa	Sept. 27, 1870	107, 720
Shutter-fastening	P. T. Share	Baltimore, Md	Jan. 3, 1871	110, 626
Shutter-fastening	H. A. Skinner	Worcester, Mass	Dec. 30, 1873	146, 028
Shutter-fastening	T. J. Townsend	Baltimore, Md	Dec. 8, 1863	40, 868
Shutter-fastening	B. D. Washburn	Boston, Mass	Aug. 31, 1869	94, 363
Shutter-fastening	A. Westcott	Syracuse, N. Y	Aug. 17, 1869	93, 930
Shutter-fastening	G. D. Whitmore	Boston, Mass	Dec. 15, 1863	40, 972

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Shutter-fastening	J. D. Winslow	Wilmington, Del	Aug. 14, 1866	57, 239
Shutter-fastening	W. Zeiter	Mount Ætna, Pa	Nov. 26, 1872	133, 514
Shutter-fastening	F. Zell	Louisville, Ky	June 16, 1868	79, 047
Shutter-fastening, Fire-proof	T. and W. L. Reese	Saint Louis, Mo	June 8, 1869	91, 043
Shutter fastening, Window	J. Blanchard	New York	Jan. 14, 1809	....
Shutter fastening, Window	C. Lehnert	Boston, Mass	Feb. 26, 1867	62, 493
Shutter fastening, Window	R. Reed	Pittsburgh, Pa	Sept. 3, 1867	68, 387
Shutter fastening, Window	E. J. Steele	New Britain, Conn	June 6, 1871	115, 781
Shutter, &c., fastening, Window	B. West and P. Soper	Rome, N. Y	Jan. 31, 1822	....
Shutter, Fire-proof	J. B. Cornell	New York, N. Y	Aug. 12, 1873	141, 696
Shutter, Fire-proof	A. Gottlieb	Chicago, Ill	Sept. 9, 1873	142, 563
Shutter, Fire-proof	T. Hyatt	New York, N. Y	Sept. 23, 1873	143, 156
Shutter, Fire-proof	T. Hyatt	New York, N. Y	Sept. 23, 1873	143, 157
Shutter, Fire-proof	G. H. Knight	Cincinnati, Ohio	Jan. 9, 1872	122, 615
Shutter, Fire-proof	I. S. Mettler	Jersey City, N. J	July 15, 1873	140, 839
Shutter, Fire-proof	S. B. Munson, jr	Chicago, Ill	Oct. 29, 1872	132, 683
Shutter, Fire-proof	F. Shumann	Washington, D. C	June 11, 1872	127, 803
Shutter, Fire-proof	W. M. Vars	Westerly, R. I	Mar. 25, 1873	137, 158
Shutter, Fire-proof window	J. Brown and G. W. Robinson	Providence, R. I	Feb. 16, 1826	....
Shutter, Folding metal	S. J. Seely	New York, N. Y	Feb. 4, 1868	74, 155
Shutter for shop-fronts	J. Root	Cincinnati, Ohio	Aug. 5, 1851	8, 274
Shutter for the port-holes of vessels, &c	H. D. Stover and W. W. W. Wood.	New York, N. Y., and Philadelphia, Pa.	Apr. 29, 1862	35, 129
Shutter-holder, Adjustable	C. N. Herr	Lampeter, Pa	May 10, 1870	102, 817
Shutter holder, Window	W. F. Hofmann	Philadelphia, Pa	July 16, 1867	66, 710
Shutter-hook	D. C. Sage	Middletown, Conn	Sept. 21, 1869	95, 146
Shutter, Illuminating iron rolling	J. McIntyre	New York, N. Y	Apr. 13, 1858	19, 941
Shutter, Iron window	B. A. Jenkins	La Crosse, Wis	Nov. 17, 1868	84, 124
Shutter, Iron window	S. B. Munson, jr	Chicago, Ill	July 1, 1873	140, 526
Shutter-lock	S. S. Garver	Hamilton, Ohio	July 25, 1865	48, 925
Shutter-lock-bolt	J. Nock	Philadelphia, Pa	July 2, 1850	7, 480
Shutter, Metallic	D. H. Carpenter	Hartford, Conn	Oct. 1, 1872	131, 738
Shutter, Metallic	I. Hodgson	Indianapolis, Ind	Feb. 7, 1860	27, 052
Shutter, Metallic	E. Perkins	Fond du Lac, Wis	Sept. 15, 1868	82, 159
Shutter, Metallic	W. H. Rodden	Toronto, Canada	Jan. 28, 1873	135, 246
Shutter, Metallic fire-proof	J. B. Clark	Ypsilanti, Mich	Apr. 23, 1872	126, 020
Shutter, Metallic rolling	W. W. Cornell	New York, N. Y	June 22, 1858	20, 630
Shutter, Metallic rolling	J. B. and W. W. Cornell	New York, N. Y	May 15, 1860	28, 259
Shutter, Metallic rolling	W. E. Worthen	New York, N. Y	May 11, 1858	20, 236
Shutter, Metallic slat	J. B. Cornell	New York, N. Y	Sept. 12, 1854	11, 663
Shutter, Metallic window	J. B. Cornell	New York, N. Y	Feb. 16, 1858	19, 348
Shutter, Metallic window	B. A. Jenkins	La Crosse, Wis	Aug. 24, 1869	93, 996
Shutter openers and fasteners, Method of bolting in window.	S. B. Snedaker	Cincinnati, Ohio	Feb. 12, 1850	7, 091
Shutter opening and closing	C. Lehnert	Boston, Mass	July 28, 1868	80, 414
Shutter opening and closing device	G. G. Morton and E. Lamasure	Philadelphia, Pa	Sept. 12, 1865	49, 909
Shutter-operating device	T. Watson	Brooklyn, N. Y	July 7, 1868	79, 792
Shutter-operator	J. K. Baker	Lawrence, Mass	Apr. 12, 1859	23, 541
Shutter-operator	J. H. Barker	Washington, D. C	Aug. 11, 1868	80, 799
Shutter-operator	H. Collins	Salisbury, Mass	June 10, 1856	15, 064
Shutter-operator	J. R. Creighton	Boston, Mass	July 29, 1856	15, 416
Shutter-operator	J. Ebner	Lancaster, Pa	Mar. 20, 1860	27, 535
Shutter-operator	C. R. Edwards	Niagara City, N. Y	July 8, 1856	15, 287
Shutter-operator	E. Mattocks	Lyndon, Vt	Mar. 6, 1860	27, 372
Shutter-operator	E. Mattocks	Lyndon, Vt	Mar. 13, 1860	27, 458
Shutter-operator	I. Rogers	Owego, N. Y	Aug. 31, 1858	21, 368
Shutter-operator	C. Seltman	Washington, D. C	June 26, 1860	28, 906
Shutter-operator	J. Solan	Fredericksburgh, Va	Dec. 18, 1860	30, 991
Shutter-operator	M. Streeter	New Haven, Conn	June 23, 1868	79, 086
Shutter operator and fastener	G. A. and J. B. Harris	Salem County, N. J	Apr. 6, 1869	88, 565
Shutter or blind, Fastening window	N. Briggs	New York	Oct. 21, 1824	....
Shutter or blind for stores	D. Rohan	Cincinnati, Ohio	Aug. 28, 1855	13, 500
Shutter or guard, Window	A. L. Johnson	Baltimore, Md	Apr. 11, 1842	2, 554
Shutter-retaining link	M. Thomas	Lower Merion, Pa	Nov. 5, 1867	70, 651
Shutter, Rolling	H. Von Langen and A. Robb	Chicago, Ill	Feb. 20, 1872	123, 802
Shutter, Rolling iron	J. L. Cochrane	New York, N. Y	Feb. 5, 1861	31, 300
Shutter, Rolling iron	G. F. Letz	Chicago, Ill	Jan. 29, 1861	31, 250
Shutter, Rolling iron	C. Mettam	New York, N. Y	Jan. 23, 1855	12, 281
Shutter stand, Window	J. W. Knapp	Chester, N. Y	Sept. 4, 1860	29, 890
Shutter, Window	T. Bartolomew	New York	June 17, 1809	....
Shutter, Window	G. J. Colby	Waterbury, Vt	July 25, 1865	48, 908
Shutter, Window	F. Engel	Romeo, Mich	Oct. 13, 1868	83, 053
Shutter, Window	A. S. Flint	Hartford, Conn	Oct. 8, 1872	132, 001
Shutter, Window	B. McCollum	New York, N. Y	Nov. 6, 1866	59, 430
Shutter, Window	P. Miller	Sharpsburgh, Pa	Dec. 31, 1867	72, 749
Shutter, Window	E. Perkins	Fond du Lac, Wis	Nov. 9, 1869	96, 723
Shutter, Window	G. W. Phipps	Philadelphia, Pa	May 15, 1855	12, 872
Shutter, Window	N. Poulson	Washington, D. C	Sept. 8, 1868	82, 031
Shutter, Window	F. A. Reiber	Cincinnati, Ohio	Nov. 17, 1868	84, 868
Shutter, Window	S. M. Sherman	Fort Dodge, Iowa	Dec. 15, 1868	84, 913
Shutter, Window	J. A. Vrydagh	Cincinnati, Ohio	Dec. 6, 1864	45, 366
Shutter-worker	H. H. Barr	Harrisburgh, Pa	May 16, 1871	114, 748
Shutter-worker	H. W. Boynton	Haverhill, Mass	Aug. 9, 1870	107, 114
Shutter-worker	T. H. Bradley	Saint Louis, Mo	Sept. 7, 1869	94, 691
Shutter-worker	A. Brown	Boston, Mass	Sept. 26, 1871	119, 304
Shutter-worker	C. M. Brown	Chicago, Ill	Aug. 22, 1871	118, 190
Shutter-worker	F. E. Brown	Springville, Iowa	Aug. 10, 1869	93, 408
Shutter-worker	A. C. Cornell	Saint Louis, Mo	Apr. 19, 1870	101, 983
Shutter-worker	G. L. Danforth	Lebanon, N. H	Aug. 2, 1870	105, 918
Shutter-worker	S. Duff	Lowell, Mass	July 23, 1872	129, 656
Shutter-worker	S. R. Foster	Saint John's, Canada	July 29, 1873	141, 267
Shutter-worker	A. H. Gibbs	Norwalk, Conn	May 13, 1873	138, 879
Shutter-worker	J. W. Jedkins	Monmouth, Me	June 6, 1871	115, 616
Shutter-worker	J. W. Jedkins	Monmouth, Me	Sept. 23, 1873	143, 159
Shutter-worker	S. E. Jewett	Haverhill, Mass	Apr. 20, 1869	89, 150
Shutter-worker	D. Kidder	Franklin, N. H	June 8, 1869	91, 026
Shutter-worker	L. B. Kenny	Charlotte, Mich	Oct. 24, 1871	120, 281
Shutter-worker	L. Muller	Hartford, Conn	Oct. 7, 1873	143, 416

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Shutter-worker	L. Muller and C. Hova	Hartford, Conn	Nov. 10, 1868	83, 989
Shutter-worker	F. W. Nichols	Lynn, Mass	Oct. 28, 1873	143, 994
Shutter-worker	H. S. Phillips	Wilmington, Del	June 24, 1873	140, 217
Shutter-worker	J. T. Pope	Scranton, Pa	Dec. 19, 1871	122, 056
Shutter-worker	C. A. Potter	Providence, R. I	Nov. 29, 1870	109, 661
Shutter-worker	T. and C. T. Rowe	New York, N. Y	Dec. 16, 1873	145, 688
Shutter-worker	E. W. Scott	Wauregan, Conn	Oct. 26, 1869	96, 149
Shutter-worker	C. W. Shattuck	Fitchburgh, Mass	Feb. 16, 1869	86, 946
Shutter-worker	F. Strattner	Wilmington, Del	May 16, 1871	114, 875
Shutter-worker	L. H. Watson	Pittsburgh, Pa	July 18, 1871	117, 226
Shutter-worker	J. W. Wheeler	North Urbana, N. Y	Aug. 17, 1869	93, 934
Shutter-worker	H. Wolff	Milwaukee, Wis	Apr. 19, 1870	102, 191
Shutter-worker	H. Wolff	Milwaukee, Wis	Apr. 19, 1870	102, 192
Shutter-worker	H. Wolff	Milwaukee, Wis	July 12, 1870	105, 460
Shutter-worker and blind-operator, Combined	D. M. Leonard	La Crosse, Wis	Sept. 30, 1873	143, 289
Shutter worker and fastener	J. Ball	Wilmington, Del	Feb. 13, 1872	123, 664
Shutters and show-windows, Securing	F. Becker	Scranton, Pa	Mar. 10, 1863	37, 849
Shutters, &c., Apparatus for moving and securing	N. W. Speers	Cincinnati, Ohio	Mar. 25, 1851	7, 998
Shutters, Chain and flange apparatus for opening and closing window	G. Welsh	Washington, D. C	Jan. 22, 1850	7, 042
Shutters, Device for fastening the slats of venetian	G. L. Chapin	Chicago, Ill	Sept. 4, 1866	57, 675
Shutters for doors, windows, &c., Iron	M. C. Root	Toledo, Ohio	Nov. 3, 1857	18, 554
Shutters, Hinge-eye for	J. B. Cornell	New York, N. Y	Jan. 12, 1858	19, 076
Shutters in any required position, Apparatus for securing	C. W. Krebs	Baltimore, Md	Mar. 25, 1851	7, 995
Shutters, Machine for securing window	T. Bartholomew	New York	June 30, 1829	......
Shutters, Manufacture of corrugated-metal	A. Clark	London, England	Apr. 15, 1873	137, 827
Shutters, Mode of arranging and operating window	D. Rohan	Cincinnati, Ohio	Apr. 7, 1857	16, 968
Shutters, Mode of fastening window	T. Bartholomew	New York	Feb. 19, 1828	......
Shutters, Operating	T. J. Sloan	New York, N. Y	July 14, 1868	80, 023
Shutters, Operating window	H. Besse	Delaware, Ohio	May 28, 1872	127, 216
Shutters, Operating window	S. E. Jewett	Haverhill, Mass	Feb. 11, 1868	74, 227
Shutters, Operating window	W. C. Marshall	New York, N. Y	Sept. 10, 1867	68, 636
Shutters, Operating window	T. J. Sloan	New York, N. Y	Apr. 21, 1868	77, 114
Shutters, Swing-bolt for fastening	J. Gunner, jr	New York, N. Y	May 20, 1856	14, 912
Shuttle	D. Carroll	Baltimore, Md	Dec. 20, 1853	10, 335
Shuttle	N. Clough and J. Baldwin	Lowell, Mass., and Manchester, N. H.	Sept. 15, 1868	82, 090
Shuttle	G. L. Crandall	Pitcher, N. Y	Oct. 29, 1867	70, 171
Shuttle	G. Crompton	Worcester, Mass	Dec. 24, 1867	72, 457
Shuttle	A. M. Damon and J. Whitaker	Lowell, Mass	July 7, 1868	79, 556
Shuttle	P. Laflin	Warren, Mass	June 30, 1868	79, 483
Shuttle	E. P. Marble	Sutton, Mass	Mar. 31, 1868	76, 090
Shuttle	J. A. Metcalf	Lawrence, Mass	June 30, 1868	79, 490
Shuttle	E. A. Paine	Sutton, Mass	May 26, 1868	78, 229
Shuttle	J. F. Scholfield	Lawrence, Mass	Jan. 28, 1862	34, 271
Shuttle	H. E. Towle	New York, N. Y	Oct. 18, 1870	108, 409
Shuttle and crochet-needle, Combined tatting	C. Hingher	New Brunswick, N. J	Apr. 25, 1871	114, 008
Shuttle-binder	F. Haskins	Ware, Mass	Mar. 17, 1868	75, 545
Shuttle-binder	W. C. Macomber	Groton, Conn	Oct. 15, 1872	132, 164
Shuttle-binder	F. Rea	Gloucester, N. J	Mar. 4, 1873	136, 384
Shuttle-binder-actuating mechanism	H. H. Law	Gloucester, N. J	June 11, 1872	127, 776
Shuttle-binder, Adjustable	N. J. Allen and J. C. Moody	Brunswick, Me	Feb. 7, 1871	111, 506
Shuttle-box-actuating mechanism	J. and J. Brierly	Worcester and Milbury, Mass.	June 11, 1872	127, 841
Shuttle-box-actuating mechanism	A. Nimmo	Philadelphia, Pa	July 16, 1872	129, 361
Shuttle-box cushion	S. Boorn	Lowell, Mass	July 8, 1862	35, 808
Shuttle-box mechanism	G. Crompton	Worcester, Mass	Sept. 2, 1873	142, 441
Shuttle-box mechanism	J. Schrack	Philadelphia, Pa	Sept. 9, 1873	142, 736
Shuttle-box motion	B. H. Jenks	Bridesburgh, Pa	Oct. 15, 1872	132, 157
Shuttle-box motion	B. H. Jenks	Bridesburgh, Pa	Dec. 17, 1872	134, 069
Shuttle-box-operating cam	C. H. Knowlton	Camden, N. J	Sept. 1, 1868	81, 792
Shuttle-box-operating mechanism	R. B. Goodyear	Wilmington, Del	Oct. 28, 1873	144, 089
Shuttle-box-operating mechanism	H. Wyman	Worcester, Mass	July 16, 1872	129, 640
Shuttle-box swell, Relieving the pressure on	J. Potter	Danielsonville, Conn	Feb. 15, 1870	99, 786
Shuttle-drilling machine	C. E. Billings	Hartford, Conn	Jan. 10, 1871	110, 822
Shuttle-drivers, Composition for	S. Boorn	Lowell, Mass	Mar. 3, 1857	16, 709
Shuttle-drop-box-mechanism	J. Dyson	Philadelphia, Pa	Aug. 1, 1871	117, 523
Shuttle for weaving hair-cloth	D. S. Dewey	Hartford, Conn	Apr. 27, 1852	8, 902
Shuttle-frame-forming die	C. E. Billings	Hartford, Conn	Apr. 16, 1867	63, 978
Shuttle-holder	C. H. Parmenter	Lowell, Mass	Apr. 13, 1869	88, 897
Shuttle, Knot	J. Thorp	Providence, R. I	Nov. 20, 1828	......
Shuttle-spindle	C. E. Smith	Lowell, Mass	Oct. 20, 1868	83, 331
Shuttle-spindle	H. H. Wheeler and O. A. Reed	Lowell, Mass	Nov. 23, 1869	97, 256
Shuttle-spindle-head-forming die	A. A. Stone	Shirley, Mass	Jan. 18, 1870	99, 028
Shuttle-spindle, Spring	S. Cranston	Cumberland, R. I	Mar. 20, 1822	......
Shuttle-stopping device	T. Bosshard	Columbus, Ohio	Aug. 30, 1870	106, 774
Shuttle, Tatting	C. H. Smith	Brooklyn, N. Y	Aug. 16, 1870	106, 415
Shuttle-threading mechanism	L. Ripley	North Chelmsford, Mass	Nov. 26, 1867	71, 413
Shuttle-tip-forming die	A. A. Stone	Shirley, Mass	Jan. 18, 1870	99, 027
Shuttle, Weavers'	C. L. Frink	Rockville, Conn	June 17, 1862	35, 602
Shuttle, Weavers'	L. J. Knowles	Warren, Mass	Mar. 3, 1857	16, 734
Shuttle, Weavers'	L. Litchfield	Southbridge, Mass	Sept. 30, 1851	8, 390
Shuttle, Weavers'	W. Murkland and J. Milnes	Lowell, Mass	Oct. 1, 1850	7, 687
Shuttles, Cop-tube for	J. Eaton	Townsend Harbor, Mass	Aug. 3, 1858	21, 068
Shuttles, Manufacture of weavers'	N. J. Willis	Lawrence, Mass	Nov. 30, 1858	22, 221
Sick-chair	C. H. Bagley	Waltham, Mass	May 2, 1865	47, 509
Sickle and file cutting machine	S. Hornback	La Fayette, Ind	Feb. 11, 1831	......
Sickle-bar	C. O. Gardiner	Springfield, Ohio	Mar. 1, 1870	100, 392
Sickle-bars, Method of securing cutter to	C. S. Williamson	Covert, N. Y	Mar. 26, 1867	63, 350
Sickle-bars, Mode of attaching pitmen to	V. Cox	New Vienna, Ohio	Jan. 7, 1873	134, 519
Sickle-grinder	J. M. Connel	Newark, Ohio	July 16, 1872	129, 395
Sickle-grinder	J. G. Fisher and S. Coons	Greensburgh, Pa	Oct. 29, 1872	132, 632
Sickle-grinder	A. B. Jones	Lowell, Wis	Jan. 11, 1870	98, 693
Sickle-sections and method of serrating them	S. D. Sheldon	Fitchburgh, Mass	Mar. 24, 1868	75, 990
Sickle-sections, Apparatus for tempering	F. Meyer	Auburn, N. Y	Dec. 30, 1873	145, 960
Sickle-sections, Machine for cutting	S. C. Hall	Whitewater, Wis	Dec. 4, 1866	60, 180
Sickle-sections, Machine for serrating	S. D. Sheldon	Fitchburgh, Mass	Feb. 2, 1869	86, 462

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Sickle-sections, Machine for serrating	A. A. and G. F. Simonds	Fitchburgh, Mass	Nov. 3, 1868	83, 736
Sickle-sections, Method of making serrated	G. F. Simonds	Fitchburgh, Mass	May 25, 1869	90, 593
Side and neck comb	U. Bailey	West Newbury, Mass	Nov. 15, 1827	....
Side-arm clasp	F. A. Will and J. Finch	San Francisco, Cal	Apr. 23, 1872	125, 921
Side-arm sheath	J. J. M. Frey	Sacramento, Cal	Aug. 22, 1871	118, 228
Sideboard and extension table	D. Arnaud	Boston, Mass	June 7, 1870	103, 958
Sideboard and extension table, Combined	N. B. Goodnow and S. W. French.	Watertown and Boston, Mass.	June 11, 1872	127, 761
Sideboard and refrigerator	J. B. M. Fifield	Philadelphia, Pa	Sept. 10, 1867	68, 723
Side-comb, Combination	C. H. Noyes	Brooklyn, N. Y	Aug. 30, 1870	106, 861
Side-pipes with steam-chests, Connecting	H. R. Dunham	New York, N. Y	Mar. 20, 1847	5, 032
Side-table	E. Green	North East, Pa	Mar. 19, 1872	124, 811
Sidewalk	S. I. Russell	Chicago, Ill	May 12, 1868	77, 766
Sidewalk, Composition	C. H. Howard	Batavia, N. Y	Mar. 18, 1873	136, 919
Sidewalk, Concrete	L. P. Rogers	Hartford, Conn	Dec. 3, 1872	133, 544
Sidewalk, Endless traveling	A. Speer	Passaic, N. J	Oct. 10, 1871	119, 796
Sidewalk-plate, Ridge-and-furrow	T. Hyatt	New York, N. Y	July 8, 1873	140, 707
Sidewalk-plate, Ridge-and-furrow	T. Hyatt	Atchison, Kans	July 8, 1873	140, 708
Sidewalks, Cover for openings in	W. Dale	New York, N. Y	Mar. 7, 1871	112, 428
Sidewalks, &c., Gas-apparatus for melting snow and ice on.	J. Folkmann and F. Külgen	Vienna, Austria	May 28, 1872	127, 162
Sidewalk-registers, Attachment for	J. M. W. Kitchen	Brooklyn, N. Y	Aug. 17, 1869	93, 722
Siding-gage	S. V. Barns	Whitney's Point, N. Y	July 13, 1869	92, 563
Siding-gage	J. Eaton	Atlanta, Ill	Sept. 2, 1873	142, 449
Siding-gage	W. E. Lewis	Princeton, Iowa	Jan. 17, 1871	110, 982
Siding-gage	J. Mason	Buffalo, N. Y	Oct. 24, 1871	120, 301
Siding-hook	P. J. Coon	Nunica, Mich	Oct. 7, 1873	143, 436
Siding-hook	J. F. Elliott	Forest, Ill	July 15, 1873	140, 904
Siding, Manufacture of	H. Millingar	Pittsburgh, Pa	Apr. 5, 1864	42, 212
Sieve	A. E. and J. B. Blood	Lynn, Mass	Jan. 22, 1861	31, 149
Sieve	S. V. Gifford	Hudson, N. Y	Oct. 17, 1865	50, 465
Sieve	J. D. Jones	Jersey City, N. J	Aug. 11, 1868	80, 966
Sieve	R. J. Mann	Dallas City, Ill	Aug. 23, 1870	106, 597
Sieve	R. J. Mann	Dallas City, Ill	Mar. 28, 1871	113, 184
Sieve	G. Mohler	Yates City, Ill	July 7, 1868	79, 589
Sieve	E. L. Pratt	Boston, Mass	Nov. 6, 1866	59, 450
Sieve	T. M. Sheppard	Chicago, Ill	Jan. 2, 1866	51, 871
Sieve	G. Wright	Savannah, Mo	May 13, 1873	138, 976
Sieve	G. Wright	Saint Joseph, Mo	Dec. 23, 1873	145, 924
Sieve and oat-extractor, Grain	T. Follett	Clermont, Iowa	Dec. 20, 1870	110, 351
Sieve bodies, Machine for forming metallic	R. J. Mann	Burlington, Iowa	Aug. 13, 1872	130, 512
Sieve bodies, Stamp for forming metallic	R. J. Mann	Burlington, Iowa	Aug. 13, 1872	130, 513
Sieve, Boxed	J. O. Durgin and J. Walker	Yarmouth, Me	June 23, 1863	38, 953
Sieve, Coal	S. T. Savage	Albany, N. Y	July 12, 1859	24, 761
Sieve, Flour	C. E. Yager	Hudson, N. Y	May 22, 1866	54, 994
Sieve for sanding paper	J. P. Gage	New York	May 30, 1848	5, 602
Sieve for separating grain	H. W. Putney	Lyons, N. Y	Sept. 25, 1860	30, 183
Sieve, Grain and seed	N. S. Greenwood	Dorset, Ill	July 5, 1870	105, 066
Sieve, Flour	J. T. Foster	Jersey City, N. J	Apr. 15, 1873	137, 966
Sieve for gas-purifiers, Wooden	W. Combe	New York, N. Y	Oct. 21, 1862	36, 752
Sieve for gas-purifiers, Wooden	R. G. Hunt	New York, N. Y	Dec. 2, 1862	37, 074
Sieve for gas-purifiers, Wooden	R. G. Hunt	New York, N. Y	Oct. 13, 1863	40, 264
Sieve for separating ashes from cinders	J. J. Hess	Philadelphia, Pa	Jan. 9, 1834	....
Sieve for separating coal from dirt	J. E. Dow, W. M. Edmands, and S. Davis.	Charlestown, Mass	Mar. 27, 1834	....
Sieve for separating oats from wheat	J. H. Mather	Lawrenceville, Pa	Dec. 5, 1865	51, 334
Sieve for separators	B. and M. Miller	Lowell, Wis	Mar. 25, 1873	137, 145
Sieve, Grain	J. J. Bradner	Pine Creek, N. Y	May 3, 1864	42, 551
Sieve, Grain	G. Brooks and W. Ogden	Waverly, N. Y	May 27, 1862	35, 360
Sieve, Grain	J. Capell	Dansville, N. Y	Oct. 13, 1863	40, 242
Sieve, Grain	L. D. Carpenter	Buffalo Grove, Iowa	June 15, 1869	91, 307
Sieve, Grain	L. D. Carpenter	Buffalo Grove, Iowa	Aug. 19, 1873	141, 917
Sieve, Grain	J. Carson	Clinton, N. J	Feb. 11, 1868	74, 313
Sieve, Grain	P. Plamandan and N. A. Maher	Atchison, Kans	June 15, 1869	91, 262
Sieve, Grain	T. B. Wheeler	Albany, N. Y	Dec. 16, 1851	8, 601
Sieve, Metallic	R. J. Mann	Burlington, Iowa	Aug. 13, 1872	130, 514
Sieve, Metallic	R. J. Mann	Burlington, Iowa	Oct. 1, 1872	131, 764
Sieve, Metallic	R. J. Mann	Burlington, Iowa	Feb. 18, 1873	135, 925
Sieve, Metallic	R. J. Mann	Burlington, Iowa	Feb. 18, 1873	135, 926
Sieve, Mill	E. D. Norton	Bradford, Pa	June 26, 1866	55, 890
Sieve, Revolving	A. E. Neat	New Albany, Ind	Jan. 28, 1873	135, 355
Sieve, Rotary	T. C. Strawn and W. C. Drum	Perry Township, Pa	May 13, 1873	138, 823
Sieve, Seed and grain	H. S. Townsend	Greenvale, Ill	June 25, 1867	66, 188
Sieve, Separator	J. Barker	Amboy, Ill	Feb. 18, 1868	74, 483
Sieves and screens, Method of hanging	S. Thompson	Ballston Spa, N. Y	Mar. 17, 1868	75, 599
Sieves, Construction of	R. J. Mann	Burlington, Iowa	Jan. 16, 1872	122, 728
Sieves, Construction of	F. J. Meyers	Covington, Ky	Feb. 6, 1872	123, 501
Sieves, Machine for making wire	E. B. Bigelow and C. H. Waters	Boston and Groton, Mass	June 5, 1866	55, 411
Sieves, Machine for slotting gas	R. G. Hunt	New York, N. Y	July 23, 1861	32, 871
Sieves, Method of constructing	R. J. Mann	Burlington, Iowa	Aug. 8, 1871	117, 790
Sieves of grain-separators, Method of hanging	B. Wright	Hudson, Mich	Feb. 24, 1857	16, 701
Sifter	A. Bardell	Williamsburgh, N. Y	July 15, 1873	140, 869
Sifter	S. O. Blanding	Vineland, N. J	Dec. 27, 1870	110, 543
Sifter	S. S. Hughson	Newark, N. J	Apr. 7, 1868	76, 327
Sifter	R. C. Ludlow	Saint Louis, Mo	June 4, 1867	65, 406
Sifter	D. Pierce	Washington, D. C	Sept. 30, 1873	143, 250
Sifter	N. L. Robertson	Rockford, Ill	Nov. 20, 1866	59, 927
Sifter and measure, Flour	G. G. Carver	Roxbury, Mass	Jan. 30, 1866	52, 266
Sifter and renovator, Flour	M. S. Bassett	Wilmington, Del	June 20, 1854	11, 115
Sifter and shovel, Coal	A. H. Knapp	Newton Centre, Mass	Feb. 26, 1861	31, 575
Sifter and shovel, Combined ash	T. H. Porter	New York, N. Y	Dec. 27, 1864	45, 630
Sifter and strainer	L. Fay	Fall River, Mass	Feb. 7, 1871	111, 623
Sifter and strainer	J. M. Muhlig	Cambridge, Mass	July 3, 1866	56, 083
Sifter and table, Coal-ash	P. J. Dwyer	Elizabethport, N. J	Oct. 12, 1869	95, 783
Sifter, Ash	D. W. Barker	New Haven, Conn	Oct. 15, 1867	69, 748
Sifter, Ash	F. G. Beach	Hartford, Conn	Dec. 15, 1868	84, 986
Sifter, Ash	G. W. Bishop	Stamford, Conn	Nov. 26, 1867	71, 358
Sifter, Ash	J. Brady and C. L. Wall	Philadelphia, Pa	Aug. 22, 1871	118, 334

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Sifter, Ash	J. S. Brooks	Rochester, N. Y	July 9, 1872	128, 785
Sifter, Ash	T. W. Brown	Cambridge, Mass	May 9, 1865	47, 615
Sifter, Ash	P. Ceredo	Montreal, Canada	Nov. 27, 1866	59, 964
Sifter, Ash	J. Chisholm	Boston, Mass	June 22, 1869	91, 521
Sifter, Ash	C. S. Collins	Baltimore, Md	Mar. 18, 1873	136, 902
Sifter, Ash	A. Cummings	New York, N. Y	Mar. 8, 1859	23, 158
Sifter, Ash	J. W. Custer	Trappe, Pa	Nov. 12, 1867	70, 817
Sifter, Ash	W. S. Esty and I. S. Clough	Brooklyn, N. Y	Nov. 8, 1870	108, 891
Sifter, Ash	C. Fay	Boston, Mass	Feb. 27, 1872	123, 987
Sifter, Ash	C. Folsom	New York, N. Y	June 16, 1868	78, 949
Sifter, Ash	L. F. Frazee	New Brunswick, N. J	Mar. 13, 1860	27, 439
Sifter, Ash	L. F. Frazee	Tottenyille, N. Y	Mar. 19, 1861	31, 709
Sifter, Ash	B. J. Greely	Boston, Mass	June 15, 1869	91, 329
Sifter, Ash	P. Harlow	Kingston, N. Y	Apr. 24, 1866	54, 149
Sifter, Ash	L. G. Hoffman	Albany, N. Y	June 28, 1870	104, 735
Sifter, Ash	J. S. Holcomb	Syracuse, N. Y	Apr. 30, 1872	126, 296
Sifter, Ash	B. F. Horn	Boston, Mass	July 13, 1869	92, 449
Sifter, Ash	C. Jones	Brooklyn, N. Y	Mar. 25, 1856	14, 505
Sifter, Ash	F. X. Lipp	Baltimore, Md	Mar. 1, 1870	100, 421
Sifter, Ash	L. Marsh	South Adams, Mass	Nov. 11, 1873	144, 466
Sifter, Ash	W. McConnell	Philadelphia, Pa	Dec. 16, 1862	37, 174
Sifter, Ash	G. F. Millard	Pittsfield, Mass	May 7, 1872	126, 475
Sifter, Ash	C. T. Miller	Providence, R. I	June 13, 1865	48, 196
Sifter, Ash	J. A. Miller	New York, N. Y	Jan. 14, 1868	73, 361
Sifter, Ash	C. F. Myer	Troy, N. Y	Mar. 26, 1867	63, 170
Sifter, Ash	J. H. O'Neil	Pittsburgh, Pa	June 27, 1865	48, 429
Sifter, Ash	D. E. Paris	Troy, N. Y	Nov. 12, 1867	70, 820
Sifter, Ash	C. L. Pierce	Buffalo, N. Y	Sept. 18, 1866	58, 132
Sifter, Ash	A. H. Pulcifer	Brooklyn, N. Y	Apr. 23, 1872	125, 906
Sifter, Ash	D. T. Robinson	Boston, Mass	Sept. 7, 1869	94, 651
Sifter, Ash	G. W. Rogers	New York, N. Y	Apr. 4, 1871	113, 349
Sifter, Ash	S. Smith	Brooklyn, N. Y	Mar. 25, 1873	137, 153
Sifter, Ash	J. Spear	Philadelphia, Pa	Apr. 15, 1862	34, 990
Sifter, Ash	D. Stevens	Newark, N. J	June 15, 1869	91, 491
Sifter, Ash	W. T. Stoutenborough	Brooklyn, N. Y	June 13, 1871	115, 990
Sifter, Ash	G. W. Taylor	Baltimore, Md	Apr. 25, 1871	114, 224
Sifter, Ash	W. Vogel	Norwich, Conn	June 22, 1869	91, 692
Sifter, Ash	W. Weaver	Greenwich, N. Y	Feb. 14, 1871	111, 795
Sifter, Ash	S. Wheeler	Albany, N. Y	Dec. 18, 1860	30, 942
Sifter, Automatic coal	W. Gluck	Baltimore, Md	Jan. 4, 1870	98, 583
Sifter, Barrel	C. Breasted	Chicago, Ill	May 5, 1868	77, 578
Sifter, Coal	S. Adams	Boston, Mass	Sept. 8, 1857	18, 125
Sifter, Coal	S. Adams	Boston, Mass	Aug. 23, 1870	106, 532
Sifter, Coal	E. G. Anthony	Boston, Mass	Mar. 20, 1866	53, 254
Sifter, Coal	C. G. Austin	Nantucket, Mass	Aug. 19, 1862	36, 202
Sifter, Coal	M. Battel	Albany, N. Y	Oct. 25, 1859	25, 877
Sifter, Coal	S. Booth	New York, N. Y	Oct. 20, 1857	18, 430
Sifter, Coal	W. D. Brown	Weymouth, Mass	Sept. 1, 1857	18, 082
Sifter, Coal	J. P. Buckland	Chicopee Falls, Mass	Dec. 20, 1859	26, 474
Sifter, Coal	O. N. Chase	Boston, Mass	Apr. 12, 1864	42, 273
Sifter, Coal	J. I. Doane and W. H. Denny	New York	Nov. 28, 1842	2, 863
Sifter, Coal	J. S. Fifield	Westerly, R. I	June 11, 1867	65, 736
Sifter, Coal	W. C. Frederick	Chicago, Ill	July 27, 1869	93, 074
Sifter, Coal	E. French	Braintree, Mass	July 11, 1854	11, 245
Sifter, Coal	F. N. Frost	New Britain, Conn	Apr. 15, 1862	34, 998
Sifter, Coal	S. Grover and S. Putnam	Newton, Mass	June 10, 1862	35, 516
Sifter, Coal	J. Holmes	Boston, Mass	Feb. 25, 1862	34, 499
Sifter, Coal	J. A. Howland	Providence, R. I	Jan. 10, 1860	26, 768
Sifter, Coal	W. Lines	Rochester, N. Y	Oct. 14, 1862	36, 659
Sifter, Coal	J. Martino	Philadelphia, Pa	May 16, 1865	47, 768
Sifter, Coal	A. D. McMaster	Rochester, N. Y	June 20, 1871	116, 207
Sifter, Coal	D. Morrison	Portland, Me	Mar. 3, 1868	75, 043
Sifter, Coal	L. T. Newell	Geneva, Ohio	June 11, 1872	127, 703
Sifter, Coal	R. C. Nichols	Roxbury, Mass	Aug. 25, 1863	39, 668
Sifter, Coal	G. W. Pittock	Union Mills, N. Y	Dec. 18, 1860	30, 983
Sifter, Coal	G. Pratt	West Roxbury, Mass	June 17, 1862	35, 624
Sifter, Coal	C. K. Rice	Malborough, Mass	Nov. 17, 1868	84, 216
Sifter, Coal	B. Sears	Cold Spring, N. Y	Mar. 1, 1870	100, 331
Sifter, Coal	J. A. Sheffer	Rochester, N. Y	Jan. 10, 1860	26, 789
Sifter, Coal	W. Shelly	New York, N. Y	June 11, 1872	127, 805
Sifter, Coal	G. Sickels	Brooklyn, N. Y	Nov. 20, 1855	13, 831
Sifter, Coal	D. J. Starrett	Thomaston, Me	Apr. 30, 1861	32, 211
Sifter, Coal	W. W. Stevens	Portland, Me	Oct. 27, 1863	40, 449
Sifter, Coal	S. W. Stuart	Richmond, Me	Apr. 2, 1872	125, 348
Sifter, Coal	L. Tibbetts	Augusta, Me	Aug. 12, 1873	141, 737
Sifter, Coal	W. B. Wadman	Boston, Mass	June 17, 1862	35, 642
Sifter, Coal	A. P. Webb	Charlestown, Mass	June 21, 1870	104, 671
Sifter, Coal and ash	A. E. and J. B. Blood	Lynn, Mass	Feb. 7, 1865	46, 293
Sifter, Coal and ash	E. S. Boynton	Hartford, Conn	Sept. 13, 1864	44, 157
Sifter, Coal and ash	E. G. Cady	Warwick, R. I	Aug. 29, 1871	118, 513
Sifter, Coal and ash	W. R. Evans	Thomaston, Me	Aug. 28, 1866	57, 492
Sifter, Coal and ash	J. L. Gilbert	Boston, Mass	Mar. 21, 1865	46, 894
Sifter, Coal and ash	S. C. Maine	Boston, Mass	June 25, 1865	48, 293
Sifter, Coal-ash	J. W. Campbell	New York, N. Y	Feb. 6, 1866	52, 486
Sifter, Coal-ash	J. L. Griffin	Redding, Conn	Oct. 12, 1869	95, 678
Sifter, Coal-ash	A. Hagadorn	Canajoharie, N. Y	Dec. 7, 1869	97, 503
Sifter, Coal-ashes, &c	L. H. Proctor	East Saugus, Mass	June 22, 1858	20, 662
Sifter, Coal or ash	L. D. Bartlett	Boston, Mass	Sept. 7, 1858	21, 405
Sifter, colander, and strainer, Flour	A. T. Boon and L. Mills	Galesburgh, Ill	Apr. 5, 1870	101, 423
Sifter, Drug and spice	W. Devines	Brooklyn, N. Y	Feb. 20, 1866	52, 693
Sifter, egg-beater, and spice-mixer	C. Rosenberry and T. Worth	Chicago, Ill	July 30, 1867	67, 218
Sifter, Farm	J. Blanc	New Orleans, La	Jan. 21, 1847	4, 937
Sifter, Flour	P. Becker	Mount Vernon, N. Y	June 7, 1870	103, 964
Sifter, Flour	A. E. and J. B. Blood	Lynn, Mass	Sept. 17, 1861	33, 293
Sifter, Flour	A. E. and J. B. Blood	Lynn, Mass	Jan. 9, 1866	51, 992
Sifter, Flour	C. Burnham	Philadelphia, Pa	Oct. 17, 1865	50, 447
Sifter, Flour	C. Burnham	Philadelphia, Pa	Apr. 24, 1866	54, 106
Sifter, Flour	D. C. Colby	Claremont, N. H	June 13, 1865	48, 156

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Sifter, Flour	D. C. Colby	New York, N. Y	July 4, 1865	48, 520
Sifter, Flour	J. Coyle	Boston, Mass	Mar. 23, 1869	88, 014
Sifter, Flour	J. Earnshaw	Lowell, Mass	July 25, 1865	48, 916
Sifter, Flour	H. Fairbanks	Boston, Mass	July 11, 1865	48, 668
Sifter, Flour	T. I. Fontaine	New Madrid, Mo	June 18, 1872	128, 031
Sifter, Flour	F. G. Ford	Philadelphia, Pa	Dec. 9, 1873	145, 410
Sifter, Flour	N. W. Foye	Cambridge, Mass	Sept. 12, 1865	49, 870
Sifter, Flour	G. Gessert	Edwardsville, Ill	July 26, 1870	105, 667
Sifter, Flour	E. C. Hickman	Washington, D. C	June 1, 1869	90, 750
Sifter, Flour	C. Huntley	Lowell, Mass	Feb. 7, 1871	111, 545
Sifter, Flour	B. Illingworth	Freeport, Ill	Oct. 30, 1866	59, 315
Sifter, Flour	W. J. Johnson	Newton, Mass	May 16, 1865	47, 732
Sifter, Flour	S. D. Jones	Providence, R. I	Apr. 17, 1866	53, 987
Sifter, Flour	J. H. Littlefield	Cambridge, Mass	June 13, 1865	48, 189
Sifter, Flour	H. Locke	Boston, Mass	July 4, 1865	48, 571
Sifter, Flour	S. C. Maine	Boston, Mass	July 4, 1865	48, 572
Sifter, Flour	W. C. McGill	Cincinnati, Ohio	Feb. 20, 1866	52, 729
Sifter, Flour	W. C. McGill	Cincinnati, Ohio	Apr. 3, 1866	53, 644
Sifter, Flour	W. C. McGill	Cincinnati, Ohio	May 8, 1866	54, 575
Sifter, Flour	H. L. Meservey	Boston, Mass	Dec. 19, 1865	51, 657
Sifter, Flour	J. Myers, jr	New York, N. Y	Sept. 19, 1865	50, 025
Sifter, Flour	O. D. Myers	Doylestown, Pa	Apr. 4, 1871	113, 443
Sifter, Flour	W. B. Nichols	Seymour, Conn	May 16, 1871	114, 961
Sifter, Flour	L. S. Nourse	Templeton, Mass	Jan. 3, 1871	110, 672
Sifter, Flour	J. Novek	New York, N. Y	May 12, 1868	77, 832
Sifter, Flour	E. L. Pratt	Boston, Mass	Sept. 26, 1865	50, 160
Sifter, Flour	G. Purple	Cameron, Mo	Nov. 4, 1873	144, 225
Sifter, Flour	U. Rice	Cincinnati, Ohio	Oct. 31, 1865	50, 734
Sifter, Flour	C. Richardson	Philadelphia, Pa	Nov. 21, 1871	121, 197
Sifter, Flour	H. F. Read	Brooklyn, N. Y	Feb. 20, 1866	52, 746
Sifter, Flour	D. T. Robinson	Boston, Mass	Jan. 2, 1867	51, 901
Sifter, Flour	H. W. Sargeant, jr	Lowell, Mass	Aug. 15, 1865	49, 441
Sifter, Flour	Z. and A. F. Saunders	Tewksbury and Boston, Mass.	Nov. 7, 1865	50, 847
Sifter, Flour	A. C. Selleck	Chicago, Ill	Jan. 30, 1872	123, 129
Sifter, Flour	J. A. Sinclair	Woodsfield, Ohio	Mar. 26, 1867	63, 316
Sifter, Flour	H. C. Smith	Champaign City, Ill	Jan. 8, 1867	61, 026
Sifter, Flour	E. Spencer	Philadelphia, Pa	Oct. 24, 1865	50, 640
Sifter, Flour	E. Spencer	Philadelphia, Pa	May 15, 1866	54, 788
Sifter, Flour	H. Tilden	Philadelphia, Pa	Mar. 28, 1865	47, 056
Sifter, Flour	H. Tilden	Philadelphia, Pa	May 16, 1865	47, 756
Sifter, Flour	H. Tilden	Boston, Mass	June 13, 1865	48, 223
Sifter, Flour	H. Tilden	Boston, Mass	Jan. 2, 1866	51, 881
Sifter, Flour	G. W. Tileston	New Haven, Conn	Aug. 1, 1865	49, 200
Sifter, Flour	J. Tobin	Newark, N. J	Oct. 29, 1867	70, 377
Sifter, Flour	C. J. Tripp	Wallingford, Conn	Oct. 19, 1869	96, 055
Sifter, Flour	L. W. Turner	Meriden, Conn	Sept. 19, 1865	50, 054
Sifter, Flour	K. F. Worcester and J. B. Perkins.	Nashua and Hollis, N. H	July 10, 1866	56, 317
Sifter, Flour and meal	E. C. Sears	Crystal Lake, Ill	May 8, 1866	54, 609
Sifter, Flour and sauce	J. Wells	Brooklyn, N. Y	Dec. 26, 1865	51, 766
Sifter, Hand coal	G. H. Roth	Boston, Mass	June 30, 1868	79, 398
Sifter, leach, and smoke-house, Ash	D. W. Doan	Rochester, N. Y	Jan. 4, 1870	98, 477
Sifter, Meal and flour	F. Arnolds	Haddam Neck, Conn	July 31, 1866	56, 692
Sifter, mixer, and grinder for glass-stock	G. B. Barnes and J. A. Leasure	Bellaire, Ohio	May 6, 1873	138, 554
Sifter, mixer, and kneader, Flour	E. A. Adams	Boston, Mass	Nov. 6, 1866	59, 335
Sifter or pulverizer	W. C. Bruson	Chicago, Ill	Nov. 12, 1872	132, 896
Sifter, Parlor coal	S. Albee	Providence, R. I	Mar. 24, 1868	75, 719
Sifter, Portable gravitating coal	W. E. Brown	Boston, Mass	Jan. 31, 1865	46, 070
Sifter, Pulp	S. A. Sweet	Tryingham, Mass	Dec. 31, 1833	....
Sifter, Revolving coal	T. Borbridge and A. Martin	Kingston Township, Pa	Dec. 30, 1826	....
Sifter, Rotary	M. F. Morse	Boston, Mass	Dec. 18, 1866	60, 539
Sifter, Salt	W. A. Fenn	Wolcott, N. Y	Nov. 12, 1867	70, 709
Sifter, Sand	W. Bailey	Friendship, N. Y	Feb. 7, 1871	111, 604
Sifter, Sand	D. Brobston	Chicago, Ill	Sept. 23, 1873	142, 987
Sifter, Sand	S. C. Rundlett	Portland, Me	Mar. 26, 1867	63, 180
Sifter, Snuff	S. G. Rice	Albany, N. Y	Nov. 8, 1864	44, 974
Sifter, Sugar	G. A. Jasper	Charlestown, Mass	June 29, 1869	91, 850
Sifter ventilating-attachment, Ash	H. A. Newhall	Providence, R. I	Nov. 3, 1868	83, 653
Sifter, Wire rolling	N. Sellers	Philadelphia, Pa	Aug. 16, 1820	....
Sifting and bolting	M. S. Bassett	Wilmington, Del	Oct. 24, 1854	11, 822
Sifting-apparatus	S. O. Blanding	Vineland, N. J	Mar. 1, 1870	100, 360
Sifting-apparatus	E. L. Seymour	New York, N. Y	Aug. 14, 1855	13, 449
Sifting-apparatus, Mode of imparting momentum motion to.	S. Clark	New York, N. Y	June 28, 1859	24, 600
Sifting coal and grain, Machine or screw for	E. D. Payne and E. Woodruff	Newark, N. J	Apr. 19, 1841	2, 058
Sifting coal, &c., Machine for	S. Harris	Springfield, Mass	Apr. 8, 1856	14, 609
Sifting grain, flour, flaxseed, &c., Machine for	J. Nichols	Boston, Mass	Apr. 29, 1829	....
Sifting-machine	G. L. Harris and S. Harris	Mobile, Ala., and Springfield, Mass.	Aug. 26, 1862	36, 296
Sifting-machine	R. N. Lampman	Rutland, Vt	June 27, 1871	116, 457
Sifting-machine	J. J. Rink	Brooklyn, N. Y	Nov. 26, 1867	71, 328
Sifting-machine	G. Sidey	Brooklyn, N. Y	Aug. 2, 1870	105, 969
Sifting machine, Sand	D. A. Goodsell	Glen Cove, N. Y	Mar. 20, 1866	53, 295
Sifting machine, Sand and lime	E. Blanc, jr	New Orleans, La	Apr. 14, 1821	....
Sifting meal	D. Homan	Brookhaven, N. Y	Mar. 8, 1813	....
Sifting-shovel	J. P. Buckland	Holyoke, Mass	Aug. 15, 1865	49, 370
Sifting-shovel	M. J. Butler	Cooperstown, N. Y	June 4, 1872	127, 405
Sifting-shovel	C. Kaestner	Chicago, Ill	Nov. 25, 1873	144, 850
Sifting shovel	T. F. Rooney	Chicago, Ill	Feb. 21, 1871	112, 078
Sifting shovel, Ash	G. W. Dean	New York, N. Y	Jan. 7, 1873	134, 647
Sight, Means of renovating and correcting	J. Ball	New York, N. Y	Apr. 22, 1851	8, 049
Sign	J. H. and C. W. Crane	Boston, Mass	Feb. 20, 1872	123, 871
Sign	W. P. Delaplain	Peoria, Ill	Mar. 30, 1869	88, 458
Sign	G. A. Fall	Hoboken, N. J	Nov. 5, 1872	132, 821
Sign	J. Harrison	Albany, N. Y	May 18, 1858	20, 273
Sign	J. Harrison	New York, N. Y	May 16, 1871	114, 811
Sign	J. Harrison	New York, N. Y	Aug. 12, 1873	141, 788

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Sign	W. B. Lambert	Geneseo, Ill	July 29, 1873	141, 281
Sign	W. B. Little	New York, N. Y	Apr. 30, 1861	32, 195
Sign	E. M. May	Fond du Lac, Wis	Mar. 11, 1873	136, 744
Sign	F. Walker	Windsor, Vt	Mar. 5, 1872	124, 235
Sign-boards, &c., Mode of fastening letters to	T. Champion and T. Motley	Washington, D. C	June 14, 1859	24, 374
Sign, door-plate, &c	J. T. Willman	Lowell, Mass	Apr. 13, 1858	19, 970
Sign, Express-call	J. B. Wiesmann	Cincinnati, Ohio	Jan. 29, 1867	61, 694
Sign for lamps, Transparent	F. L. Hagadorn	Brooklyn, N. Y	Mar. 21, 1865	46, 897
Sign for lottery-offices and other purposes	E. Secor	New York	Feb. 9, 1825	......
Sign for street-lamps	E. Caswell and H. Lachmann	Chicago, Ill	Sept. 21, 1869	94, 944
Sign for street-lamps	J. W. Larimore	Chicago, Ill	Oct. 26, 1869	96, 121
Sign, Illuminated	C. Lewando	Boston, Mass	Dec. 31, 1867	72, 869
Sign, Illuminated	J. L. Tarbox	New Orleans, La	May 9, 1865	47, 669
Sign, Illuminating	J. Harrison	New York, N. Y	Sept. 4, 1866	57, 711
Sign, Illuminating	C. F. Jacobsen	New York, N. Y	May 21, 1872	127, 059
Sign, Metallic	S. C. Collis	Philadelphia, Pa	May 16, 1871	114, 927
Sign, show-card, &c., from papier-maché, Raised lettered.	T. C. Jenks	Philadelphia, Pa	June 22, 1869	91, 540
Sign, Tobacconist's	J. W. Boughton	Appleton, Wis	May 26, 1868	78, 254
Signs, Construction of	G. H. Kitchen	New York, N. Y	June 18, 1867	65, 817
Signs, Gilding and ornamenting glass	J. B. Blair	Philadelphia, Pa	June 30, 1868	79, 303
Signs, &c., Mode of lettering	A. Griffin	Neshoppen, Pa	Mar. 30, 1869	88, 383
Signs in paint, Process for producing	A. Brandon	New York, N. Y	July 25, 1871	117, 376
Signs or banners, Mode of hanging	S. Wing	Boston, Mass	May 5, 1868	77, 695
Signs, &c., Ornamental transparent letter for	E. F. Meyer	Brooklyn, N. Y	Oct. 12, 1869	95, 709
Signs, Process of making ornamental	J. H. and C. W. Crane	Charlestown, Mass	May 25, 1869	90, 505
Signs, show-cards, &c., Process of making glass	C. Flammer	Chicago, Ill	Mar. 15, 1870	100, 881
Signs, &c., Suspending	J. H. and C. W. Crane	Boston, Mass	Apr. 4, 1871	113, 403
Signal: *See* Alarm-signal. Breakage-signal. Bridge-signal. Car-signal. Crossing-signal. Danger-signal. Draw-bridge signal. Electro-magnetic signal. Express-signal. Fire-alarm signal. Flash-light signal. Fog-signal. Game-signal. Illuminating-signal. Lantern-signal. Locomotive signal. Low-water signal. Magnetic signal. Marine-engine signal. Marine leak-signal. Milkman's signal. Night-signal. Pneumatic signal. Pneumatic-railway signal. Pyrotechnic signal. Pyrotechnic night-signal. Railway-signal. Railway alarm-signal. Railway-crossing signal. Railway danger-signal. Railway-draw-bridge signal. Railway-switch signal. Railway time-signal. Railway-train signal. Rocket-signal. Semaphoric signal. Speaking-tube signal. Speed-signal. Steamboat-signal. Switch-signal. Telegraphic signal. Temperature-signal. Time-signal. Track-signal.				
Signal	A. J. Meyer	Washington, D. C	Nov. 14, 1865	50, 946
Signal-alarm motor	J. Walk	Vienna, Austria	July 2, 1872	128, 683
Signal-apparatus	A. H. Huntington	Galesburgh, Ill	Feb. 22, 1870	100, 153
Signal-apparatus	T. T. Woodward	South Reading, Mass	May 15, 1860	28, 336
Signal-box	W. McKee	Neponset, Ill	Apr. 28, 1868	77, 394
Signal box, Electro-automatic	C. T. Chester	New York, N. Y	Dec. 3, 1867	71, 701
Signal-code for rockets	G. H. Felt	New York, N. Y	Dec. 1, 1863	40, 744
Signal-flag for vessels	J. F. H. King	Port Richmond, N. Y	Oct. 6, 1868	82, 849
Signal-frame	W. H. Sprague	Boston, Mass	Apr. 11, 1865	47, 230
Signal house, Electro-magnetic	T. S. Hall	West Meriden, Conn	Dec. 12, 1871	121, 870
Signal-lantern	J. J. Miner	Buffalo, N. Y	July 21, 1863	39, 302
Signal-light	A. M. Holmes	Morrisville, N. Y	Sept. 12, 1871	118, 941
Signal-light	H. White	Phillipsburgh, N. J	Feb. 27, 1872	124, 181
Signal-light, Electric	S. Gardiner, jr., and L. Blossom	New York, N. Y	June 29, 1858	20, 706
Signal light, Locomotive	J. M. Crull	Harrisburgh, Pa	Oct. 19, 1869	95, 991
Signal light, Railway	J. Pfeiffer	Niagara Falls, N. Y	Oct. 29, 1861	33, 600
Signal light, Railway	E. H. Tobey	Watertown, N. Y	Dec. 18, 1866	60, 594
Signal light, Railway-car	H. A. Wright	Logansport, Ind	Nov. 16, 1869	97, 016
Signal light, Street-car	J. Stephenson	New York, N. Y	Mar. 16, 1869	87, 800
Signal lights, Composition for marine	N. J. Holmes	London, England	Dec. 17, 1872	134, 058
Signal-rocket	G. H. Felt	New York, N. Y	Aug. 25, 1863	39, 636
Signal-rope guide	W. G. Creamer	Brooklyn, N. Y	Jan. 28, 1868	73, 698
Signal-tower	J. Dow	Biddeford, Me	July 24, 1866	56, 535
Signal-tower	B. P. Lamason	Alexandria, Va	Dec. 13, 1864	45, 453
Signal-tower	B. P. Lamason and S. D. King	Alexandria, Va	Mar. 28, 1865	47, 026
Signals, Transmitting	P. A. Sparre	Stockholm, Sweden	June 23, 1868	79, 271
Signaling-apparatus	P. H. Colomb	Fulham, England	Aug. 9, 1864	43, 763
Signaling-apparatus	J. Gisborne	Liverpool, England	Dec. 18, 1866	60, 502
Signaling-apparatus	S. S. Laws	New York, N. Y	Mar. 24, 1868	75, 775
Signaling-mirrors, Method of adjusting	M. M. Kenney	Travis, Tex	Apr. 22, 1873	138, 162
Signalizing system	A. J. Myer	Buffalo, N. Y	Jan. 29, 1861	31, 276
Silica and in applying the same to useful purposes, Preparing soluble.	A. L. Fleury	Philadelphia, Pa	Feb. 12, 1867	61, 931
Silica, Apparatus for dissolving	B. Hardinge	New York, N. Y	May 8, 1855	12, 819
Silicate and the manufacture of hydro-fluo silicic acid, Treatment of metallic.	T. Cobley	Hahl, Bavaria	Apr. 28, 1863	38, 285
Silicate, Preparation of soluble	G. E. Vanderburgh	Mamaroneck, N. Y	May 29, 1860	28, 540
Silicate, Preparing alkaline	J. M. Ordway	Roxbury, Mass	Feb. 24, 1857	16, 706
Silicate, Soluble	S. P. Duffield	Detroit, Mich	Mar. 22, 1864	41, 978
Silicium, Manufacture of fluoride	C. M. T. Du Motay and E. Karcher.	Metz, France, and Saarbrück, Prussia.	Mar. 17, 1868	75, 538

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Silk and other thread, Machine for cleaning and finishing.	T. Kohn	Hartford, Conn	Aug. 8, 1865	49, 280
Silk and other thread, Machine for sorting	I. Dimock	Mansfield Centre, Conn	Sept. 14, 1858	21, 556
Silk and other thread, Machine for sorting	G. Holland	Willimantic, Conn	Feb. 5, 1861	31, 316
Silk and other thread, Machine for sorting	G. Holland	Willimantic, Conn	Feb. 19, 1861	31, 458
Silk and other thread, Machine for twisting, stretching, cleaning, and reeling.	T. Kohn	Hartford, Conn	Oct. 2, 1866	58, 434
Silk and thread cleaning and finishing machine	C. L. Frink	Vernon, Conn	Dec. 5, 1871	121, 505
Silk and thread skeining machine	C. Fisher	Canton, Mass	July 2, 1867	66, 232
Silk and woolen goods, Removing spots from	A. and J. Hall	Boston, Mass	Dec. 31, 1817	....
Silk, &c., Case and sample-card for spooled	W. G. Kelly	Oneida, N. Y	Nov. 2, 1869	96, 442
Silk-cleaner	W. G. Watson	Paterson, N. J	Feb. 18, 1868	74, 644
Silk-cleaning knife	G. Singleton	Paterson, N. J	Mar. 31, 1868	76, 109
Silk, Compound for cleaning	K. Fries	West Zanesville, Ohio	Apr. 26, 1870	102, 246
Silk-finishing machinery	T. White	Mount Pleasant, Ohio	Dec. 30, 1841	2, 412
Silk, Flyer and bobbin for twisting	O. Ellsworth	Hartford, Conn	July 12, 1839	1, 235
Silk, &c., Flyer for twisting	E. L. Young	Norfolk, Va	Oct. 8, 1840	1, 806
Silk for use with felting-substances, Preparing	A. Taylor	Brooklyn, N. Y	Mar. 16, 1858	19, 657
Silk from cocoons, Machine for reeling	J. Dennis, jr	Portsmouth, R. I	Dec. 28, 1838	1, 041
Silk from cocoons, Reel for winding	E. Snow	Mansfield, Conn	Mar. 16, 1832	....
Silk from cocoons, Reeling	G. Heritage	Chestertown, Md	Dec. 19, 1840	1, 910
Silk from cocoons, Spinning	G. Heritage	Chestertown, Md	Dec. 19, 1840	1, 909
Silk from cocoons, &c., Unwinding	G. Gay	Poughkeepsie, N. Y	Aug. 17, 1835	....
Silk from living spiders and other producers, Mode of obtaining.	B. G. Wilder, S. Wales, and W. Nichols.	United States Army and Boston, Mass.	Jan. 9, 1866	51, 988
Silk goods, Finishing and dyeing	A. Stearns and W. Barrett	West Cambridge, Mass	Jan. 30, 1818	....
Silk-holder, &c	B. A. Armstrong	Jersey City, N. J	Dec. 13, 1870	109, 995
Silk in the bank, Machine for stretching	L. Dimock	Hebron, Conn	July 17, 1860	29, 146
Silk in the skein, Machine for stretching and glossing.	L. Leigh	Seymour, Conn	Aug. 30, 1864	44, 004
Silk, Machine for doubling and twisting	H. A. Chapin	Bridgeport, Conn	Feb. 4, 1873	135, 522
Silk, Machine for measuring, stretching, and skeining.	S. K. Smith	Newark, N. J	May 9, 1871	114, 721
Silk, Machine for reeling, spinning, and twisting	J. Pratt	Sherburne, Mass	Oct. 12, 1839	1, 368
Silk, &c., Machine for stretching	G. Holland	Willimantic, Conn	Sept. 25, 1866	58, 256
Silk, Machine for throwing and twisting	L. H. Mosely	Poughkeepsie, N. Y	May 9, 1835	....
Silk, &c., Machinery for doubling and twisting	J. Conant and L. Dimock	Northampton, Mass	Dec. 17, 1850	7, 833
Silk, Manufacture of sewing	J. E. Atwood and G. Holland	Mansfield, Conn	Apr. 5, 1864	42, 133
Silk or thread reel	S. W. and J. F. Palmer	Auburn, N. Y	May 15, 1860	28, 297
Silk, &c., Process of dyeing	N. Mary, sr	Philadelphia, Pa	Jan. 5, 1858	19, 036
Silk, Quill for	I. Dimock	Boston, Mass	Aug. 1, 1871	117, 612
Silk-reel	C. G. Green	Windsor, Vt	May 31, 1832	....
Silk-reel	J. S. Harris	Poultney, Vt	July 30, 1844	3, 684
Silk-reel	W. H. Jones	Manchester, Conn	Feb. 12, 1842	2, 458
Silk, Reel for skeining	R. Simon	New York, N. Y	Aug. 26, 1873	142, 177
Silk-skeining machine	G. Heritage	Chestertown, Md	Nov. 26, 1840	1, 871
Silk, Spinning-machine for doubling and twisting	J. Dennis, jr	Portsmouth, R. I	Dec. 28, 1838	1, 040
Silk, Spooling	H. L. Brown	Middletown, Conn	June 4, 1872	127, 456
Silk-spreading machine	J. Sault	South Manchester, Conn	July 22, 1873	141, 017
Silk, Staining and printing	T. and W. Bryan	New York	June 29, 1821	....
Silk, &c., stretching machine	G. R. Kennedy	Worcester, Mass	May 17, 1870	103, 051
Silk-stretching machine	J. N. Leonard	Rockville, Conn	June 27, 1871	116, 461
Silk stretching and winding machine, Stop-motion for.	P. Dunham	Leeds, Mass	July 20, 1869	92, 944
Silk stuffs, Machine for coloring and finishing	A. Stearns	West Cambridge, Mass	Mar. 22, 1809	....
Silk thread, Apparatus for cleaning	J. Jeannotat	Paterson, N. J	Jan. 29, 1867	61, 665
Silk thread, &c., Apparatus for dressing	J. Day	Brooklyn, N. Y	Aug. 8, 1865	49, 240
Silk, thread, &c., Sewing	A. Turner	Leicester, England	June 6, 1871	115, 661
Silk-thread-sorting machine	J. E. Atwood and L. Leigh	Mansfield Centre and Seymour, Conn.	Feb. 19, 1861	31, 510
Silk-thread stretching and winding machine	M. Cellerie	Philadelphia, Pa	Apr. 9, 1867	63, 703
Silk-twisting machine	J. A. De Maniquet	Paris, France	July 9, 1861	32, 756
Silk-twisting machine	G. Gay	Philadelphia, Pa	June 7, 1839	1, 169
Silk water-proof, Composition for rendering	E. Winslow, T. Chandler, J. M. Milliken, and H. Winslow.	Unity, Me	June 4, 1832	....
Silk-winder guide	J. H. Campbell	Willimantic, Conn	Apr. 1, 1872	137, 417
Silk, Winding	A. Brooks	South Scituate, Mass	June 20, 1836	....
Silk-winding apparatus	J. Macfarlane	Mansfield, Conn	June 20, 1871	116, 203
Silk-winding guide	J. N. Leonard	Rockville, Conn	Dec. 12, 1871	121, 879
Silk-winding machine	J. W. Cox	Paterson, N. J	Aug. 27, 1872	130, 901
Silk-winding machinery	H. L. Brown	Mansfield Centre, Conn	Sept. 8, 1868	81, 874
Silk-worm feeder	E. Morris	Burlington, N. J	June 16, 1841	2, 130
Silk-worms, Feeding	J. W. Gill	Mount Pleasant, Ohio	May 12, 1843	3, 083
Silk-worms, Hurdle for rearing	G. Gay	Poughkeepsie, N. Y	Oct. 6, 1835	....
Silk-worms, Method of constructing and arranging cocoonery for.	J. B. Tillinghast	Huron, Ohio	Nov. 10, 1841	2, 331
Sill and weather strip	J. E. Lindsley	Goshen, Ind	June 19, 1866	55, 683
Silver	J. H. Hagenmacker	Philadelphia, Pa	Feb. 11, 1834	....
Silver and gold from arsenio-sulphurets of lead, copper, &c., Process of extracting.	C. M. T. Du Motay	Paris, France	May 24, 1870	103, 433
Silver and gold from lead, Process of separating	E. Balback	Newark, N. J	July 5, 1864	43, 385
Silver and other metals, Process of refining the waste from German.	F. Wilcox	Waterbury, Conn	Nov. 2, 1869	96, 524
Silver, Coating metals with	L. L. Hill	Hudson, N. Y	Apr. 14, 1857	17, 049
Silver from argentiferous lead-ore, Method of extracting.	C. F. Flach	Call, Prussia	Apr. 2, 1867	63, 493
Silver from other metals, Process of separating	C. Wiegand	Virginia City, Nev	Dec. 2, 1873	145, 265
Silver from the ore, Process of separating	W. Ziervogel	Treskow, Pa	Aug. 12, 1856	15, 543
Silver from waste solutions, Apparatus for saving	J. Shaw	Bridgeport, Conn	July 8, 1862	35, 842
Silver, Preparation of sulphates for the manufacture of.	F. Gutzkow	San Francisco, Cal	Dec. 15, 1868	85, 005
Silver-ores, Concentrating	T. Wren	Hamilton, Nev	Oct. 17, 1871	120, 014
Silver-ores, Treating	J. H. Selwyn	London, England	Feb. 18, 1873	136, 102
Silver-stains, Compound for removing	V. G. Bloede	Brooklyn, N. Y	Feb. 9, 1869	86, 636
Silver-ware box	E. Steinle	New York, N. Y	July 16, 1872	129, 067
Silver-ware, jewelry, &c., Compound for cleaning	G. H. Baxter	Geneseo, Ill	Sept. 29, 1868	82, 479
Single-tree	G. and W. Gibbs	Canton, Ohio	Mar. 10, 1868	75, 408

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Single-tree	H. J. Hanna	New Garden Township, Pa	Apr. 19, 1870	102, 000
Single-tree	L. Williams and W. S. McKinnie.	Stonelick Township, Ohio	Mar. 18, 1873	136, 888
Single-tree brace	C. R. Elmer	Bridgeton, N. J	June 16, 1868	78, 868
Single-trees, Attachment for the ends of	E. Cole	Fairfield, Mich	July 20, 1869	92, 706
Single-trees, Mode of attaching	P. Conover	Franklin, Ohio	Apr. 26, 1864	42, 462
Sink	L. C. and M. C. Bignall	Medina, N. Y	Jan. 1, 1867	60, 675
Sink	A. Brady	New York, N. Y	July 16, 1872	129, 091
Sink	J. H. Coyne	New York, N. Y	Nov. 26, 1872	133, 414
Sink	H. H. Craigie	New York, N. Y	July 2, 1867	66, 210
Sink	S. N. Maxam	Shelburne Falls, Mass	Jan. 20, 1863	37, 454
Sink	H. Miller	Johnston, R. I	Dec. 2, 1873	145, 069
Sink	W. Seaman and G. A. Banta	New York, N. Y	Mar. 23, 1869	88, 219
Sink	S. Smith	Greenfield, Mass	Feb. 12, 1867	62, 082
Sink	J. Walch	New York, N. Y	Aug. 20, 1861	33, 115
Sink	S. Walsh	New York, N. Y	Oct. 18, 1870	108, 538
Sink and dish-washer, Combined	T. Ireland	Negaunee, Mich	Apr. 6, 1869	88, 636
Sink and wash-stand	C. L. Hedell	Galesburgh, Ill	Apr. 19, 1870	102, 002
Sink, Cast-iron	Z. and L. B. Tarbox	Delaware County, N. Y	Aug. 6, 1834	....
Sink, Counter-	C. Krebs	West Springfield, Mass	May 12, 1868	77, 819
Sink-drain	G. R. Moore	Philadelphia, Pa	Apr. 15, 1873	137, 788
Sink-drain pipes, Mode of attaching	A. B. Nott	Fairhaven, Mass	Mar. 14, 1871	112, 621
Sink, Kitchen	A. B. Nott	Fairhaven, Mass	Nov. 23, 1869	97, 219
Sink, Kitchen	F. Wyttenbach	Evansville, Ind	Mar. 11, 1873	136, 802
Sink, Kitchen and household	E. G. Chorman and E. McLaughlin.	Philadelphia, Pa	Dec. 20, 1870	110, 203
Sink, Movable	P. Barthelemy	New York	Dec. 2, 1834	....
Sink-pipes, Mode of attaching	S. C. Ketchum	Winchendon, Mass	Aug. 30, 1864	43, 998
Sink-strainer	J. L. Mott	Mott Haven, N. Y	Apr. 2, 1872	125, 322
Sink-strainer and stench-trap, Combined	H. F. Shaw	West Roxbury, Mass	May 24, 1864	42, 917
Sink-trap	G. Preterae	New York, N. Y	Sept. 10, 1872	131, 226
Sink-trap	J. S. Rogers	Worcester, Mass	Dec. 31, 1867	72, 909
Sink-trap	J. E. Taber	Fall River, Mass	Apr. 2, 1867	63, 578
Sink-trap	T. B. Voorhees	New York, N. Y	May 12, 1863	38, 517
Sink-trap	N. Wright	New York, N. Y	Feb. 25, 1873	136, 296
Sink, Water-tight	T. J. Mayall	Roxbury, Mass	May 31, 1859	24, 221
Sinks and cess-pools, Apparatus for emptying	F. J. Wildenthaler	Philadelphia, Pa	July 29, 1873	141, 410
Sinks, Fitting	J. Ingram	New York, N. Y	Mar. 20, 1860	27, 545
Sinks, sewers, &c., "Flushing-valve" trap for	S. Mathews	New York, N. Y	July 27, 1858	21, 011
Sinks, water-closets, &c., Ventilating	W. G. Mackay	New York, N. Y	Jan. 10, 1860	26, 773
Siphon	J. A. Bostwick	New York, N. Y	Feb. 8, 1870	99, 526
Siphon	S. C. Catlin	Cleveland, Ohio	May 31, 1870	103, 564
Siphon	J. W. Fox	Cincinnati, Ohio	May 28, 1872	127, 334
Siphon	J. W. Fox	Cincinnati, Ohio	Apr. 9, 1872	125, 559
Siphon	S. S. Moyer	Allentown, Pa	Mar. 15, 1870	100, 786
Siphon	J. M. Naglee	Philadelphia, Pa	July 24, 1866	56, 597
Siphon	N. W. Paynter	Baltimore, Md	Feb. 18, 1873	135, 935
Siphon	E. I. Stearns	Honesdale, Pa	Sept. 25, 1866	58, 316
Siphon	H. M. Walker	Watertown, Conn	Dec. 2, 1856	16, 154
Siphon attached to gas-retorts	H. Guild	New Orleans, La	Apr. 3, 1860	27, 711
Siphon-attachment	S. Lenher	Philadelphia, Pa	Oct. 31, 1854	11, 867
Siphon for raising water, Stream	H. S. Lansdell	Saint Louis, Mo	Jan. 5, 1864	41, 158
Siphon for separating gold from crushed quartz	A. W. Hall	New York, N. Y	Aug. 30, 1864	44, 043
Siphon-propeller	J. Marquis	San Francisco, Cal	Oct. 22, 1867	70, 101
Siphon, Suction	E. De Lagillardaie	Lorient, France	Aug. 8, 1871	117, 750
Siphon, Water-elevating	A. Aldrich	Douglass, Mass	May 8, 1847	5, 105
Siphons, Construction of and mode of charging	G. Johnson	New York	Dec. 23, 1841	2, 401
Siphons for the uniform drawing of oil, &c., Mode of applying.	J. Gray	Fredericksburgh, Va	Apr. 25, 1838	712
Sirup and saccharine solutions, Process for treating	E. P. Eastwick	Baltimore, Md	Apr. 25, 1865	47, 402
Sirup and sugar from Indian corn or other grain, Process for making.	F. W. Gressling	Jersey City, N. J	Sept. 5, 1865	49, 749
Sirup boiler and evaporator	L. Thomas	New Philadelphia, Ill	Oct. 24, 1865	50, 644
Sirup-can	A. Tumler	New York, N. Y	Nov. 29, 1870	109, 691
Sirup-charging apparatus	W. C. Turner	Saint Louis, Mo	Apr. 5, 1859	23, 515
Sirup, Compound	C. Birdsall	Jersey City, N. J	May 8, 1866	54, 492
Sirup-cooler	F. W. Tilton	Bristol Station, Ill	Aug. 29, 1865	49, 664
Sirup-decolorizing	H. N. Fryatt	Belleville, N. J	June 25, 1861	32, 622
Sirup-dispensing apparatus	J. Matthews, jr	New York, N. Y	Dec. 21, 1869	98, 177
Sirup-evaporator	L. P. Harris	Mansfield, Ohio	Sept. 8, 1863	39, 810
Sirup for flavoring beverages, &c	V. Rillet	Hoboken, N. J	Oct. 5, 1869	95, 605
Sirup fount or cup	G. H. Knight and F. Milward	Cincinnati, Ohio	Apr. 24, 1866	54, 252
Sirup from corn, Making	H. J. Deissner	Waukesha, Wis	June 19, 1866	55, 629
Sirup from corn, Manufacture of	H. A. Tilden	New Lebanon, N. Y	July 25, 1865	49, 012
Sirup from Indian corn or other grain, Process for making.	F. A. Goessling	Jersey City, N. J	Sept. 5, 1865	49, 751
Sirup, Lemon fruit	S. W. Mahan	Adrian, Mich	July 12, 1870	105, 226
Sirup or cream and soda-water, Apparatus for manufacture of.	A. Piccaluga	Paris, France	Oct. 31, 1871	120, 531
Sirup-pan elevator	O. W. Burnham and H. F. Burnham.	Hillsborough and Acworth, N. H.	Aug. 11, 1868	80, 804
Sirup, Process of refining sorghum	J. F. Shelden	Viola, Ill	Dec. 15, 1863	40, 953
Sirup, Raspberry and strawberry fruit	S. W. Mahan	Adrian, Mich	July 12, 1870	105, 227
Sirup-stand and soda-fountain	E. Bigelow	Springfield, Mass	Sept. 25, 1866	58, 205
Sirup, sugar, &c., Filter-tank and other vessels used in refining.	W. Moller	Irvington, N. Y	Dec. 27, 1870	110, 488
Sirup, sugar, &c., from upper to lower floors, Device for transferring.	J. A. Livingston	New York, N. Y	Jan. 26, 1869	86, 237
Sizing-machine	A. H. Sturges	Lewiston, Me	Jan. 24, 1871	111, 153
Sizing, Composition for preparing	J. Dodd	Providence, R. I	June 16, 1868	78, 866
Sizing-compound	T. Gorrell	Warren, R. I	Apr. 22, 1873	138, 147
Sizing, Covering of roller for	E. Williams	Stratford, N. H	Apr. 13, 1822	....
Skate	G. W. Ansley	Cleveland, Ohio	Oct. 7, 1862	36, 595
Skate	G. W. Ansley	Cleveland, Ohio	Jan. 20, 1863	37, 428
Skate	J. S. Armstrong	Saint John's, Canada	Oct. 1, 1872	131, 806
Skate	F. W. Arvine	New Haven, Conn	Oct. 2, 1866	58, 367
Skate	W. Bailey	Utica, N. Y	Dec. 8, 1863	40, 857
Skate	A. Barclay and C. W. Bontgen	Newark, N. J	Apr. 17, 1849	6, 330

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Skate	W. H. Barker	Windsor, Nova Scotia	Apr. 4, 1871	113, 615
Skate	E. H. Barney	Springfield, Mass	Jan. 16, 1866	52, 013
Skate	E. H. Barney	Springfield, Mass	Apr. 7, 1868	76, 383
Skate	E. H. Barney	Springfield, Mass	Apr. 8, 1873	137, 526
Skate	E. H. Barney and J. Berry	Springfield, Mass	June 11, 1867	65, 531
Skate	E. H. Barney and J. Berry	Springfield, Mass	May 12, 1868	77, 862
Skate	A. Bassford, jr., and W. B. Carpenter.	New York, N. Y	Apr. 30, 1861	32, 173
Skate	P. Bauer	Newark, N. J	May 27, 1862	35, 358
Skate	P. G. Beckley	Newark, N. J	Feb. 11, 1868	74, 280
Skate	E. Behr	Brooklyn, N. Y	July 2, 1861	32, 734
Skate	R. W. Belson	Philadelphia, Pa	June 2, 1857	17, 414
Skate	I. F. Blondin	Niagara Falls, N. Y	Oct. 2, 1860	30, 195
Skate	J. Bourke	Curraghleagh, Ireland	Sept. 15, 1868	82, 201
Skate	O. G. Brady	New York, N. Y	Sept. 23, 1862	36, 503
Skate	D. S. Brigham	Worcester, Mass	Apr. 11, 1865	47, 185
Skate	T. W. Brown	Boston, Mass	Feb. 15, 1859	22, 932
Skate	T. W. Brown	Boston, Mass	Jan. 24, 1860	26, 882
Skate	G. Brownlee	Princeton, Iowa	Dec. 24, 1867	72, 448
Skate	C. Bushman	West Chester, Pa	Feb. 12, 1867	61, 998
Skate	N. W. Camp	Trenton, N. J	July 9, 1861	32, 750
Skate	R. Carmichael	Newark, N. J	Sept. 3, 1867	68, 558
Skate	S. P. Castle	Urbana, Ohio	Aug. 31, 1869	94, 184
Skate	E. G. Chormann	Philadelphia, Pa	July 17, 1866	56, 369
Skate	H. Clark	Rochester, N. Y	Mar. 19, 1861	31, 699
Skate	H. Clark	Rochester, N. Y	Apr. 22, 1862	35, 012
Skate	H. Clark	Jordan, N. Y	Mar. 27, 1866	53, 414
Skate	S. H. Clark	Philadelphia, Pa	Sept. 26, 1865	50, 096
Skate	W. F. Cornell	Adrian, Mich	Nov. 17, 1868	84, 171
Skate	G. A. Corser and A. O. Bundy	Clappville, Mass	July 16, 1861	32, 821
Skate	S. G. Crane	Rochester, N. Y	Oct. 28, 1862	36, 819
Skate	C. T. Day	Newark, N. J	Dec. 28, 1869	98, 237
Skate	C. T. Day	Newark, N. J	Mar. 22, 1870	101, 108
Skate	C. T. Day	Newark, N. J	July 11, 1871	116, 935
Skate	J. A. De Brame	New York, N. Y	Apr. 9, 1861	32, 024
Skate	J. A. De Brame	New York, N. Y	June 4, 1861	32, 495
Skate	H. W. Dopp and C. P. Weiss	Buffalo, N. Y	Nov. 20, 1866	59, 899
Skate	F. E. Drake	Chicopee, Mass	Nov. 28, 1865	51, 155
Skate	S. A. Du Bois	Chicago, Ill	June 30, 1868	79, 329
Skate	W. H. Dutton	Utica, N. Y	Apr. 15, 1862	34, 949
Skate	G. W. Dyer	Derby, Conn	July 30, 1861	32, 938
Skate	R. E. Ellerbeck	Washington, D. C	Jan. 22, 1867	61, 409
Skate	A. W. Elwer	Springfield, Mass	Nov. 20, 1866	59, 796
Skate	S. H. Evans and L. Gentsch	Philadelphia, Pa	Nov. 24, 1857	18, 685
Skate	D. J. Farmer	Newark, N. J	Sept. 5, 1865	49, 741
Skate	J. P. Farmer, jr	Cambridge, Mass	Apr. 18, 1865	47, 287
Skate	M. Feurstein	Williamsburgh, N. Y	Dec. 15, 1863	40, 921
Skate	M. Fleisher	Philadelphia, Pa	Sept. 18, 1866	58, 084
Skate	L. Fogg	Boston, Mass	Sept. 4, 1860	29, 871
Skate	E. Foote	Saratoga Springs, N. Y	Nov. 22, 1864	45, 148
Skate	J. Forbes	New York, N. Y	July 2, 1867	66, 316
Skate	J. Forbes	New York, N. Y	Oct. 8, 1867	69, 649
Skate	O. C. Forsyth, jr	Washington, D. C	Sept. 13, 1864	44, 176
Skate	E. O. Frink	Indianapolis, Ind	Mar. 15, 1864	41, 959
Skate	B. Gallagher	Saint John, New Brunswick.	Oct. 8, 1872	131, 948
Skate	B. Geiger	Somerville, Mass	Dec. 17, 1872	134, 047
Skate	H. Getty	Brooklyn, N. Y	Feb. 23, 1864	41, 694
Skate	A. J. Gibson	Worcester, Mass	Mar. 26, 1861	31, 797
Skate	S. B. Going	Brooklyn, N. Y	Dec. 17, 1861	33, 939
Skate	C. Gooch	Cincinnati, Ohio	Apr. 30, 1867	64, 304
Skate	C. Gooch	Cincinnati, Ohio	Aug. 18, 1868	81, 269
Skate	R. A. Goodyear and L. O. Sprague.	Binghamton, N. Y	May 21, 1861	32, 360
Skate	E. H. Graham	Manchester, N. H	Oct. 2, 1860	30, 278
Skate	W. L. Gregory	Amsterdam, N. Y	Mar. 4, 1862	34, 611
Skate	G. G. Griswold	Chester, Conn	July 23, 1861	32, 867
Skate	F. Hasse and W. Rost	Proviso, Ill	Dec. 24, 1867	72, 483
Skate	M. C. Haight	Geneva, N. Y	Apr. 7, 1868	76, 324
Skate	C. E. Hale	Milbury, Mass	July 16, 1861	32, 833
Skate	J. Hartman, jr	Philadelphia, Pa	Apr. 30, 1867	64, 314
Skate	A. Hathaway	Charlestown, Mass	Jan. 1, 1861	31, 017
Skate	G. Havell	Newark, N. J	Nov. 3, 1868	83, 631
Skate	W. Hawkins	Birmingham, Conn	Mar. 28, 1865	47, 018
Skate	J. Heath	Providence, R. I	July 3, 1860	28, 984
Skate	M. Heisel and M. Nadig	Rochester, N. Y	June 23, 1863	39, 013
Skate	W. W. Hendricks	Philadelphia, Pa	Jan. 15, 1867	61, 193
Skate	J. R. Henshaw	Middletown, Conn	Feb. 14, 1860	27, 187
Skate	B. H. Hibler	Newport, Ky	May 1, 1866	54, 344
Skate	J. M. Hoadley	Derby, Conn	July 30, 1861	32, 944
Skate	J. Holland	Brooklyn, N. Y	Apr. 7, 1868	76, 453
Skate	H. B. Hooker	Rochester, N. Y	Oct. 13, 1868	82, 952
Skate	H. B. Hooker	Rochester, N. Y	Oct. 13, 1868	82, 953
Skate	T. Hope	Boston, Mass	Dec. 2, 1862	37, 072
Skate	A. S. Hunter	Newburgh, N. Y	June 22, 1869	91, 539
Skate	B. Irving	New York, N. Y	Dec. 16, 1862	37, 169
Skate	B. Irving	New York, N. Y	Jan. 20, 1863	37, 447
Skate	T. A. Jebb and A. Cutler	Buffalo, N. Y	July 2, 1861	32, 696
Skate	C. W. Jenkins	New York, N. Y	Dec. 9, 1873	145, 349
Skate	E. C. Jenkins, jr	Springfield, Mass	July 31, 1860	29, 378
Skate	A. W. Johnson	Auburn, N. Y	June 9, 1863	38, 829
Skate	E. Johnson, jr	Cleveland, Ohio	July 25, 1865	48, 950
Skate	L. F. Johnson	Buffalo, N. Y	July 7, 1863	39, 149
Skate	W. Josephs	Quincy, Mass	May 3, 1859	23, 844
Skate	D. Kerr and A. E. Hovey	San Francisco, Cal	Mar. 28, 1871	113, 062
Skate	M. Kinsey	Newark, N. J	Mar. 30, 1869	88, 393
Skate	M. Kinsey	Newark, N. J	Mar. 14, 1871	112, 604
Skate	J. Kinzer	Pittsburgh, Pa	Aug. 21, 1866	57, 335

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Skate	F. Klein	Newark, N. J	Apr. 1, 1856	14, 586
Skate	G. V. B. Ladd	Boston, Mass	June 4, 1867	65, 396
Skate	B. M. Lank	Oswego, Kans	May 30, 1871	115, 487
Skate	J. T. Larkin	Halifax, Nova Scotia	Apr. 15, 1873	137, 780
Skate	J. Lovatt	Newark, N. J	May 29, 1860	28, 495
Skate	J. Lovatt	Newark, N. J	Dec. 12, 1865	51, 466
Skate	T. Lovelidge and J. Grindrod	Philadelphia, Pa	Mar. 31, 1868	76, 214
Skate	C. O. Luce	Brandon, Vt	May 19, 1863	38, 591
Skate	J. Lyon	Mott Haven, N. Y	Sept. 15, 1863	39, 938
Skate	A. Mabon	Philadelphia, Pa	Oct. 2, 1866	58, 440
Skate	M. W. Marshall	Hudson, Mich	June 15, 1869	91, 460
Skate	C. H. Marvin	New York, N. Y	Apr. 14, 1863	38, 173
Skate	D. Maydole	Norwich, N. Y	Dec. 9, 1862	37, 104
Skate	J. McCluskey, jr	South Boston, Mass	Oct. 4, 1859	25, 665
Skate	J. J. McCormick	Brooklyn, N. Y	June 16, 1863	38, 207
Skate	J. H. McGuire	Rochester, N. Y	Nov. 11, 1862	36, 910
Skate	J. P. McLean	New York, N. Y	Oct. 11, 1859	25, 751
Skate	A. F. Migeon	Wolcottville, Conn	May 12, 1868	77, 901
Skate	H. C. Moore	Springfield, Mass	June 11, 1867	65, 685
Skate	E. Murray	New York, N. Y	Dec. 27, 1864	45, 674
Skate	E. Murray	New York, N. Y	May 9, 1865	47, 682
Skate	E. Murray	New York, N. Y	Sept. 5, 1865	49, 832
Skate	E. Murray	New York, N. Y	Sept. 29, 1868	82, 543
Skate	J. W. Nathan	Chicago, Ill	July 27, 1869	93, 114
Skate	J. H. Noakes	New York, N. Y	Aug. 31, 1869	94, 433
Skate	I. W. and F. M. Norcross	Lowell, Mass	Apr. 19, 1859	23, 696
Skate	E. Norton	Boston, Mass	Aug. 9, 1859	25, 035
Skate	A. C. Platt	Sandusky, Ohio	Aug. 23, 1870	106, 725
Skate	A. C. Platt	Sandusky, Ohio	Dec. 6, 1870	109, 935
Skate	J. L. Plimpton	New York, N. Y	Jan. 6, 1863	37, 305
Skate	J. L. Plimpton	New York, N. Y	June 26, 1866	55, 901
Skate	R. Pohl	Port Huron, Mich	Apr. 21, 1868	77, 089
Skate	J. W. Post	Castile, N. Y	June 4, 1867	65, 5[illegible]2
Skate	J. W. Post	Castile, N. Y	Aug. 13, 1867	67, 799
Skate	J. W. Post	Castile, N. Y	Feb. 4, 1868	74, 129
Skate	J. W. Post	Castile, N. Y	Feb. 11, 1868	74, 421
Skate	J. W. Post	Castile, N. Y	Mar. 16, 1869	87, 791
Skate	W. Race	Lockport, N. Y	Sept. 6, 1864	44, 115
Skate	W. Race	Lockport, N. Y	Nov. 15, 1864	45, 075
Skate	W. Race	Lockport, N. Y	Feb. 21, 1865	46, 497
Skate	C. A. Ruff	Boston, Mass	Feb. 7, 1860	27, 074
Skate	R. J. Russell	Moundsville, W. Va	Nov. 3, 1868	83, 665
Skate	R. J. Russell	Wheeling, W. Va	May 25, 1869	90, 587
Skate	H. W. Sandford	Thomaston, Conn	Apr. 16, 1867	63, 946
Skate	N. C. Sanford	Meriden, Conn	Mar. 7, 1834	....
Skate	N. C. Sanford	Meriden, Conn	June 29, 1852	9, 079
Skate	N. C. Sanford	Meriden, Conn	Feb. 20, 1855	12, 426
Skate	N. C. Sanford	Meriden, Conn	Feb. 20, 1855	12, 427
Skate	N. C. Sanford	Meriden, Conn	Feb. 8, 1859	22, 895
Skate	N. C. Sanford	Meriden, Conn	May 28, 1861	32, 435
Skate	W. Scarlett	Aurora, Ill	May 29, 1860	28, 506
Skate	J. F. Schneider	Brooklyn, N. Y	July 14, 1863	39, 247
Skate	J. F. Schneider	Brooklyn, N. Y	Mar. 22, 1870	101, 049
Skate	G. V. Scobey	Waterloo, N. Y	Apr. 5, 1870	101, 523
Skate	G. Scott and J. W. Smith	Boston, Mass	Dec. 11, 1866	60, 431
Skate	G. B. Sennett and H. Essex	Meadville, Pa	Jan. 23, 1866	52, 212
Skate	G. W. Shearer	Crown Point Centre, N. Y	Nov. 12, 1867	70, 906
Skate	B. F. Shelabarger	Mifflintown, Pa	June 5, 1847	5, 138
Skate	D. H. Shirley	Boston, Mass	Apr. 12, 1859	23, 615
Skate	D. H. Shirley	Boston, Mass	June 25, 1861	32, 656
Skate	D. H. Shirley	Boston, Mass	Apr. 12, 1864	42, 316
Skate	A. B. Smith	Philadelphia, Pa	Dec. 28, 1869	98, 437
Skate	H. N. M. Smith	Philadelphia, Pa	Jan. 30, 1866	52, 331
Skate	P. Smith	New York, N. Y	Mar. 16, 1869	87, 799
Skate	E. T. Starr	New York, N. Y	Aug. 19, 1862	36, 244
Skate	E. T. Starr	New York, N. Y	May 4, 1869	89, 804
Skate	B. Stetson	Uxbridge, Mass	Apr. 24, 1860	28, 042
Skate	W. H. Stevens	Waterford, N. Y	Jan. 14, 1868	73, 405
Skate	W. Strasser	Taylorsville, Ohio	June 3, 1873	139, 628
Skate	W. A. Sutton	New York, N. Y	Aug. 28, 1866	57, 597
Skate	O. W. Taft	New York, N. Y	July 4, 1865	48, 601
Skate	J. R. Tempest	Philadelphia, Pa	Feb. 13, 1866	52, 624
Skate	R. Tillman	New York, N. Y	Nov. 15, 1864	45, 093
Skate	L. B. Tyng	Lowell, Mass	Feb. 25, 1868	74, 866
Skate	M. Vandenburg	Newark, N. J	Mar. 1, 1859	23, 129
Skate	T. Van Wagoner	Newark, N. J	Mar. 14, 1865	46, 836
Skate	E. Vorster	Brooklyn, N. Y	Feb. 2, 1864	41, 455
Skate	E. P. Waggoner	Syracuse, N. Y	Aug. 23, 1870	106, 748
Skate	H. W. Warner	Greenfield, Mass	Jan. 1, 1861	31, 043
Skate	W. H. Welsteed	Buffalo, N. Y	June 24, 1862	35, 722
Skate	C. Wheat	Geneva, N. Y	Oct. 25, 1870	108, 662
Skate	A. Wheeler	Brattleborough, Vt	Aug. 30, 1859	25, 295
Skate	J. A. Whelpley	Dartmouth, Nova Scotia	Nov. 18, 1873	144, 718
Skate	L. and I. J. White	Buffalo, N. Y	July 10, 1860	29, 116
Skate	F. Wichelhaus and C. Rothe	Newark, N. J	Oct. 1, 1867	69, 522
Skate	L. J. Wicks	New York, N. Y	Jan. 31, 1860	27, 015
Skate	J. A. Winslow	Roxbury, Mass	Apr. 28, 1857	17, 179
Skate	J. M. Yates	Fultonville, N. Y	Mar. 17, 1863	37, 934
Skate and fastening	C. V. Ramsdell	Bangor, Me	June 23, 1863	38, 983
Skate-attachment	F. T. Thurston	Providence, R. I	Oct. 20, 1868	83, 339
Skate-buckling tongs	W. P. Patton	Harrisburgh, Pa	Mar. 10, 1868	75, 453
Skate, Combined roller and ice	A. J. Gibson	Cincinnati, Ohio	Nov. 23, 1869	97, 075
Skate-fastener	E. H. Barney and J. Berry	Springfield, Mass	July 23, 1867	66, 935
Skate-fastener	T. Harcourt	Indianapolis, Ind	Dec. 4, 1866	60, 182
Skate-fastening	T. Almond	Fitchburgh, Mass	June 7, 1870	103, 822
Skate-fastening	G. W. Barlaw	New York, N. Y	Dec. 16, 1873	145, 551
Skate-fastening	E. Behr	New York, N. Y	Mar. 29, 1859	23, 344
Skate-fastening	E. Behr	New York, N. Y	May 10, 1859	23, 893

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Skate-fastening	T. Bergner	Philadelphia, Pa	Sept. 6, 1864	44,066
Skate-fastening	E. Brady	Philadelphia, Pa	Nov. 3, 1868	83,756
Skate-fastening	J. Charlton	Newark, N. J	Mar. 29, 1859	23,349
Skate-fastening	C. Cheney	Milford, Mass	May 3, 1859	23,822
Skate-fastening	P. J. Clark	West Meriden, Conn	Feb. 5, 1861	31,348
Skate-fastening	J. H. Coe and W. B. Sniffen	Stratford, Conn	May 3, 1859	23,826
Skate-fastening	T. P. Costello	Buffalo, N. Y	Dec. 6, 1859	26,341
Skate-fastening	G. S. Curtis	Chicago, Ill	Apr. 23, 1861	32,162
Skate-fastening	C. T. Day	Newark, N. J	Aug. 11, 1863	39,468
Skate-fastening	C. T. Day	Newark, N. J	Dec. 15, 1863	40,916
Skate-fastening	P. Dooley	Newark, N. J	Mar. 30, 1869	88,459
Skate-fastening	F. Douglass	Norwich, Conn	Sept. 8, 1863	39,800
Skate-fastening	J. Doyle	Hoboken, N. J	Jan. 12, 1864	41,204
Skate-fastening	W. H. Dutton	Utica, N. Y	Sept. 29, 1863	40,093
Skate-fastening	E. L. Fenerty	Halifax, Canada	Nov. 21, 1871	121,092
Skate-fastening	E. L. Fenerty	Halifax, Nova Scotia	Aug. 13, 1872	130,415
Skate-fastening	M. Fleisher	Philadelphia, Pa	Nov. 13, 1866	59,575
Skate-fastening	B. Gallagher	Saint John, New Brunswick	Oct. 25, 1870	108,581
Skate-fastening	H. N. Gallagher	Geneva, N. Y	July 12, 1864	43,488
Skate-fastening	J. B. Gibbs	Boston, Mass	Jan. 29, 1861	31,280
Skate-fastening	G. Gunderson	Chicago, Ill	July 23, 1867	67,110
Skate-fastening	J. Harrar	Philadelphia, Pa	Apr. 26, 1864	42,472
Skate-fastening	J. Hewett	Clinton, Mass	Oct. 6, 1863	40,211
Skate-fastening	H. B. Hooker	Rochester, N. Y	Apr. 26, 1870	102,269
Skate-fastening	J. Hunter and J. T. Chenoweth	Denver, Colo	Nov. 26, 1872	133,314
Skate-fastening	M. Kinsey	Newark, N. J	May 31, 1870	103,623
Skate-fastening	H. B. Lucas	Middletown, Conn	May 26, 1868	78,216
Skate-fastening	C. B. Maedel and J. Wolff	Chicago, Ill	Apr. 21, 1868	77,061
Skate-fastening	D. Maydole	Norwich, N. Y	Apr. 8, 1862	34,896
Skate-fastening	D. Maydole	Norwich, N. Y	Sept. 16, 1862	36,470
Skate-fastening	E. C. Mayloy	Rochester, N. Y	July 21, 1868	80,195
Skate-fastening	H. Pickford	Boston, Mass	Feb. 17, 1857	16,653
Skate-fastening	J. L. Plimpton	New York, N. Y	Mar. 4, 1862	34,590
Skate-fastening	F. C. Poole and H. Howe	Boston, Mass	Nov. 22, 1870	109,451
Skate-fastening	H. Rasquin	New York, N. Y	Jan. 10, 1860	26,783
Skate-fastening	D. A. Ross	Newport, N. Y	May 21, 1867	64,908
Skate-fastening	G. P. Schifflin	New York, N. Y	Jan. 26, 1864	41,399
Skate-fastening	G. W. Street	Brooklyn, N. Y	Apr. 26, 1870	102,446
Skate-fastening	R. J. Stuart	Yonkers, N. Y	Mar. 5, 1872	124,228
Skate-fastening	G. Weber	Newark, N. J	Apr. 7, 1863	38,132
Skate-fastening	E. Wirths	New York, N. Y	Dec. 20, 1859	26,542
Skate-fastening	A. Woodham	New York, N. Y	Feb. 4, 1868	74,185
Skate-foot	A. H. Hook and J. H. Darlington.	New York, N. Y	Feb. 28, 1865	46,563
Skate, Field	T. L. Luders	Olney, Ill	May 4, 1869	89,833
Skate-heater	O. W. Taft	New York, N. Y	Dec. 12, 1865	51,492
Skate-heel fastening	H. N. Gallagher	Geneva, N. Y	July 12, 1864	43,486
Skate-heel screw	J. Heath	Providence, R. I	Feb. 21, 1860	27,215
Skate-iron	C. A. and R. Williams and G. A. Morse.	Bloomfield, Me	Sept. 21, 1858	21,585
Skate, Parlor	G. Flint	Lowell, Mass	Apr. 30, 1867	64,301
Skate, Parlor	R. Hewson	San Francisco, Cal	May 26, 1868	78,207
Skate, Parlor	N. W. Hubbard	New York, N. Y	Oct. 26, 1869	96,117
Skate, Parlor	D. Kerr and A. E. Hovey	San Francisco, Cal	Aug. 1, 1871	117,643
Skate, Parlor	T. F. Leak	Montgomery, Ala	Nov. 8, 1870	109,026
Skate, Parlor	J. Lemman	Cincinnati, Ohio	May 24, 1870	103,346
Skate, Parlor	O. B. Oakley	San Francisco, Cal	June 6, 1871	115,767
Skate, Parlor	J. Pollitt	Indianapolis, Ind	Oct. 11, 1870	108,184
Skate, Parlor	C. Raitz	San Francisco, Cal	July 25, 1871	117,329
Skate, Roller	A. Anderson	Bridgeport, Conn	Nov. 12, 1861	33,689
Skate, Roller	J. L. Boone	San Francisco, Cal	Oct. 24, 1871	120,147
Skate, Roller	P. R. Borein	San Leandro, Cal	May 2, 1871	114,398
Skate, Roller	R. T. Bradley and H. W. Wansbrough.	Cincinnati, Ohio	May 24, 1870	103,419
Skate, Roller	A. T. Covell	San Leandro, Cal	June 20, 1871	116,161
Skate, Roller	G. S. Curtis	Chicago, Ill	July 4, 1871	116,690
Skate, Roller	O. H. Dodge	Jackson, Tenn	Mar. 11, 1873	136,711
Skate, Roller	J. H. Fenton	Indianapolis, Ind	Jan. 2, 1872	122,376
Skate, Roller	J. A. Fremon and J. H. Carkeet	Montgomery, Ala	Aug. 2, 1870	106,045
Skate, Roller	W. P. Gregg	Boston, Mass	July 25, 1865	48,929
Skate, Roller	W. P. Gregg	Boston, Mass	Apr. 22, 1873	138,018
Skate, Roller	I. Hodgson	Indianapolis, Ind	Apr. 6, 1869	88,711
Skate, Roller	M. H. Kimball	San Francisco, Cal	Jan. 10, 1871	110,858
Skate, Roller	W. R. Morris	Cincinnati, Ohio	July 27, 1869	93,110
Skate, Roller	H. Pennie	Brooklyn, N. Y	Apr. 9, 1861	31,994
Skate, Roller	H. Robbins	Cincinnati, Ohio	May 10, 1870	102,971
Skate, Roller	G. K. Stillman	Cincinnati, Ohio	May 25, 1869	90,603
Skate, Roller	J. A. Todd	Sacramento, Cal	Sept. 10, 1872	131,234
Skate, Roller	G. Vincent	Stockton, Cal	July 4, 1871	116,648
Skate-runner	J. E. Forbes	Hoboken, N. J	Dec. 16, 1856	16,231
Skate-runner	P. A. Peer	Kalamazoo, Mich	Aug. 31, 1869	94,336
Skate-runner, Reversible	T. T. McGrath	Detroit, Mich	May 18, 1869	90,282
Skate-runners, Machine for grinding	A. Kipp, jr	Sing Sing, N. Y	July 16, 1867	66,853
Skate, Self-adjusting	L. J. Masterson	Newton, Mass	Oct. 2, 1860	30,237
Skate-sharpener	J. F. Cameron	Brooklyn, N. Y	Mar. 16, 1869	87,822
Skate-sharpener	W. F. Hellen	Washington, D. C	May 7, 1867	64,529
Skate-sharpener	R. F. Prettyman	Alexandria, Va	Jan. 7, 1878	73,118
Skate-sharpener	F. R. Willis	Waltham, Mass	Mar. 28, 1865	47,061
Skate-sharpener	F. R. Willis	Waltham, Mass	Sept. 26, 1865	50,196
Skate-shoe and foot-check	J. B. Gibbs	Boston, Mass	Nov. 13, 1860	30,627
Skate, Skeleton	H. Wilson	Binghamton, N. Y	Nov. 3, 1863	40,530
Skate, Spring	D. Lovejoy	Lowell, Mass	Feb. 14, 1860	27,137
Skate, Spring	J. S. Mitchell	South Boston, Mass	Feb. 21, 1860	27,232
Skate, Stilt	W. Jordan	Galena, Ill	Apr. 7, 1868	76,465
Skate-stop	J. Lyon	Newark, N. J	May 31, 1864	42,955
Skate-strap	E. Behr and L. Froelich	New York, N. Y	Nov. 1, 1859	25,993
Skate, Wheel	G. W. Hawk	Chicago, Ill	Apr. 25, 1871	114,135
Skate, Wheel	R. Shaler	Madison, Conn	May 29, 1860	28,509

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Skates, Manufacture of	E. B. Phillips	Cambridgeport, Mass	Feb. 14, 1860	27, 193
Skates, Manufacturing	W. Whitaker	Troy, N. Y	Dec. 30, 1831	....
Skates, Means for attaching	J. Forbes	Halifax, Nova Scotia	Dec. 1, 1863	40, 745
Skates to boots, Attaching	T. S. Whitman	New York, N. Y	Dec. 20, 1859	26, 540
Skater and invalid supporter	Ph. J. Schopp	Louisville, Ky	Feb. 9, 1869	86, 699
Skaters, Ankle-supporter for	M. C. Haight	Buffalo, N. Y	Aug. 12, 1862	36, 149
Skaters, Apparatus for the support of	P. J. Schopp	Louisville, Ky	Oct. 18, 1870	108, 395
Skating-boot	G. F. Barker	Pittsfield, Mass	June 23, 1863	38, 938
Skating-floor	H. P. Gengembre	Pittsburgh, Pa	Nov. 20, 1866	59, 906
Skating-pond, Artificial	M. C. Campbell	Philadelphia, Pa	Apr. 25, 1865	47, 391
Skating-rink	W. Dennison	Cambridge, Mass	Feb. 2, 1869	86, 374
Skating-rink	I. H. A. Hervey	Cleveland, Ohio	Jan. 28, 1868	73, 806
Skating rod and stool	W. Hall, jr	North Adams, Mass	May 25, 1869	90, 530
Skating-wand	K. S. Todd	Yankton, Dak	May 21, 1872	126, 999
Skein for axle-arms	J. M. Burke	Danville, N. Y	Mar. 4, 1856	14, 345
Skein-holder	T. F. Brown, jr	Concord, N. H	Aug. 25, 1868	81, 471
Skein-twisting machine	T. Stibbs	Wooster, Ohio	July 18, 1871	117, 218
Skelp-bending machine	J. Peace	Camden, N. J	Feb. 12, 1867	62, 063
Skelps from which iron tubes are made, Method of bending.	J. McCarty	Reading, Pa	Jan. 9, 1849	6, 003
Skelps or metallic strips, &c., Machinery for beveling the edges of.	R. Knight	Cleveland, Ohio	Sept. 21, 1852	9, 274
Skelping-die	M. Blakey	Pittsburgh, Pa	Nov. 5, 1867	70, 397
Skewer-making machine	C. Andrews	Paterson, N. J	Apr. 25, 1871	113, 964
Skewer-making machine	L. W. Boynton	Hartford, Conn	Mar. 13, 1866	53, 107
Skewer-pointing machine	L. W. Boynton	Hartford, Conn	Mar. 13, 1866	53, 108
Skid	S. Sowle	New Albany, Ind	Apr. 23, 1867	64, 162
Skid and friction-roller	F. Van Doren	Adrian, Mich	Sept. 10, 1867	68, 811
Skid and ladder, Combined extension	E. B. Field	Yonkers, N. Y	July 16, 1872	129, 468
Skid and truck, Combined	J. M. Lane	South Norwalk, Conn	July 11, 1871	116, 966
Skid for discharging and loading vessels	R. Bragg	San Francisco, Cal	July 14, 1863	39, 211
Skiff or boat	W. E. Bond	Cleveland, Ohio	June 14, 1864	43, 084
Skimming machine, Liquid	C. Harivel	Baton Rouge, La	Apr. 26, 1845	4, 014
Skin, Instrument for irritating the	F. Klee	Williamsburgh, N. Y	June 19, 1866	55, 775
Skin, Method of treating affections of the	A. Barnes	Southington, Conn	May 28, 1867	65, 044
Skins and furs, Tawing and coloring	H. Hibbard	Henrietta, N. Y	Aug. 4, 1857	17, 955
Skins and hides, Liquid composition for bating	R. Wager	Lancaster, Pa	Apr. 21, 1863	38, 267
Skins and leather, Finishing	G. T. Woodbury and T. Burch	Newark, N. J	May 12, 1868	77, 792
Skins and leather, Machinery for graining, pebbling, and softening.	N. O. Lounsberry	Wilmington, Del	Jan. 28, 1873	135, 350
Skins and leather, Machine for splitting and shaving.	P. White	Worcester, Mass	Nov. 1, 1810	....
Skins and leather, Machine for whitening and shaving.	J. Hodskinson	Salem, Mass	May 30, 1871	115, 473
Skins and leather, Process of coloring	J. Brainerd	Cleveland, Ohio	Sept. 24, 1861	*33, 331
Skins and pelt, Machine for splitting	W. Bent	Philadelphia, Pa	June 17, 1822	....
Skins, Apparatus for stretching	A. Marsh	Newark, N. J	Aug. 20, 1867	67, 996
Skins, Apparatus for washing sheep	E. H. Ashcroft	Lynn, Mass	Dec. 24, 1867	72, 585
Skins, Boarding-machine for softening	E. Kendall	Asby, Mass	June 19, 1835	....
Skins, Depilating and bating	J. Brainerd	Cleveland, Ohio	May 20, 1862	35, 293
Skins, Device for stretching and drying	V. Colvin	Albany, N. Y	July 9, 1867	66, 565
Skins, Dressing deer	S. Blanchard, jr	Ashland, N. H	Nov. 19, 1872	133, 140
Skins, Dressing deer	O. Kyes	Norwich, Conn	Sept. 6, 1833	....
Skins, Dressing or tawing	H. A. Hibbard	Augusta, Mich	Aug. 23, 1870	106, 584
Skins for tanning, Mode of cleaning sheep and other.	A. and E. Fau	Castres, France	July 6, 1869	92, 179
Skins, Machine for cleaning and softening sheep	J. M. Brown	Boston, Mass	July 2, 1867	66, 294
Skins, Machine for cutting fur from	I. Ives	Bristol, Conn	May 19, 1812	....
Skins, Machine for cutting fur from	S. Johnson	Walnut Lane, N. C	Feb. 24, 1837	131
Skins, Machine for dressing	H. P. Reed and T. E. Wilson	Peabody, Mass	Sept. 20, 1870	107, 625
Skins, Machine for dressing kid	T. Newhall	Lynn, Mass	May 24, 1859	24, 139
Skins, Machine for extracting hair from	N. Swett	Readfield, Me	Nov. 14, 1835	....
Skins, Machine for pulling hair from	N. Young	....	June 28, 1803	....
Skins, Machine for shaving hair from deer	R. Groning	New Orleans, La	Oct. 10, 1831	....
Skins, Machine for splitting	W. Bent	Boston, Mass	Sept. 9, 1813	....
Skins, Machine for splitting	I. Cobb	Walpole, N. H	July 12, 1808	....
Skins, Machine for splitting	W. Lillie	West Chester, N. Y	Nov. 9, 1805	....
Skins, Machine for staking, glassing, and perching	W. A. Watson	Beverly, Mass	May 27, 1873	139, 442
Skins, Machine for stretching and softening	C. Schmitz	Philadelphia, Pa	July 14, 1868	80, 018
Skins, Machine for turning	I. C. Mayer	Jersey City, N. J	July 19, 1859	24, 814
Skins, Machinery for pebbling and graining wet	N. O. Lounsberry	Wilmington, Del	July 8, 1873	140, 633
Skins, Machinery for removing dirt from	C. Turner	Lenton, England	Oct. 14, 1873	143, 733
Skins, Manufacture of artificial	J. H. Browne	Abbey Mills, Romsey, Hants, England.	Mar. 9, 1858	19, 542
Skins, Manufacturing seal	J. Eaton	....	Feb. 16, 1796	....
Skins, Method of preparing coon	C. Williams, jr	Alba, Pa	Mar. 16, 1869	87, 894
Skins, Method of separating hair from	S. Brooks	New York	Apr. 4, 1822	....
Skins, Mode of shaving and polishing	C. Schmitz	Philadelphia, Pa	Dec. 15, 1868	85, 030
Skins of animals, Preserving	L. S. Robbins	New York, N. Y	Mar. 24, 1868	75, 794
Skins of animals, Removing wool or hair from	F. and H. Robinson	Wilmington, Del	May 15, 1841	2, 096
Skins or neat's leather, Machine for splitting	S. Payn	....	Mar. 31, 1806	....
Skins, Process for removing wool and hair from	B. F. Emery	Bath, Me	July 31, 1837	336
Skins, Softening and removing fleece from sheep	J. Mann	Amesburgh, Mass	May 1, 1834	....
Skins, Softening sheep and other	J. H. Brown	Lynn, Mass	Nov. 22, 1870	109, 379
Skins, Splitting	A. W. Chickering	....	Nov. 29, 1802	....
Skins, Splitting sheep	J. Stansfield	....	Nov. 16, 1796	....
Skins without removing the hair or fur, Treating	D. Mumma	Mount Carroll, Ill	Dec. 24, 1861	34, 005
Skinning eels, Apparatus for	A. Emeigh	Jerusalem, N. Y	June 29, 1858	20, 703
Skinning-knife	A. M. Carraher	Sadisbury Township, Pa	Feb. 6, 1872	123, 497
Skinning-knife	G. W. Myers	Hartleton, Pa	May 19, 1868	78, 002
Skinning-knife	S. J. Patterson	Bridgeport, Conn	Apr. 21, 1868	77, 086
Skinning-knife	M. Rufe	Doylestown, Pa	May 16, 1871	114, 975
Skipping-hoop	E. Whitehead	Cincinnati, Ohio	Jan. 21, 1870	104, 674
Skipping-rod	J. Murphy	Philadelphia, Pa	June 24, 1873	140, 298
Skirt	T. B. De Forrest	Birmingham, Conn	Apr. 2, 1867	31, 876
Skirt	S. Fribourg	New York, N. Y	July 19, 1864	43, 622
Skirt	H. Hayward	New York, N. Y	Oct. 12, 1869	95, 684
Skirt	W. Heppenstall	Springfield, Mass	Oct. 30, 1860	30, 534

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Invention.	Inventor.	Residence.	Date.	No.
Skirt	C. W. Peiree, jr	Bristol, Pa	Mar. 14, 1871	112, 625
Skirt	H. Schultz	Paris, France	Dec. 6, 1870	109, 947
Skirt	W. S. Taylor	Brooklyn, N. Y	Sept. 23, 1873	143, 198
Skirt and hose supporter combined	M. J. Foss	Charlestown, Mass	Oct. 20, 1868	83, 146
Skirt-binding	T. B. De Forest	Birmingham, Conn	Jan. 15, 1867	61, 171
Skirt-binding	T. B. De Forest	Birmingham, Conn	Jan. 15, 1867	61, 172
Skirt-board	J. F. Nettleton	New Haven, Conn	Mar. 28, 1871	113, 195
Skirt-board and ironing-table	L. M. Harvey	Albany, N. Y	June 15, 1869	91, 439
Skirt clasp, Skeleton	T. D. Day	New York, N. Y	Apr. 16, 1867	63, 865
Skirt clasp, Skeleton	T. D. Day	New York, N. Y	Apr. 16, 1867	63, 866
Skirt clasp, Skeleton	J. Grunwald	New York, N. Y	Aug. 16, 1859	25, 112
Skirt clasp, Skeleton	W. D. Sloan	New York, N. Y	Oct. 18, 1859	25, 876
Skirt-clasp, Apparatus for applying	J. Jenkinson	Brooklyn, N. Y	Nov. 26, 1867	71, 492
Skirt-clasps, Pliers for closing	J. Beck	New York, N. Y	June 24, 1862	35, 666
Skirt-clasping apparatus	S. R. Wilmot	Brooklyn, N. Y	Mar. 24, 1863	37, 992
Skirt-cord	D. Perry	Paterson, N. J	Apr. 13, 1858	19, 946
Skirt-elevator	M. H. Bergen	Brooklyn, N. Y	July 30, 1872	129, 919
Skirt-elevator	P. J. Boris	Boston, Mass	Sept. 18, 1866	58, 053
Skirt-elevator	B. V. Kirk	Philadelphia, Pa	Sept. 24, 1867	69, 222
Skirt-elevator	A. F. Nathan	New Haven, Conn	Jan. 15, 1867	61, 236
Skirt-elevator	H. N. Walter	Norwich, N. Y	Oct. 16, 1866	58, 920
Skirt elevator, Ladies'	C. Grün	New York, N. Y	Oct. 2, 1866	58, 406
Skirt-former	F. Hull	Birmingham, Conn	May 26, 1868	78, 374
Skirt-former, Adjustable	J. Amos	New York, N. Y	July 5, 1864	43, 380
Skirt-hoop	J. W. Bradley	New York, N. Y	Feb. 20, 1866	52, 665
Skirt-hoop	L. De Forest	Birmingham, Conn	May 21, 1867	64, 952
Skirt-hoop	T. B. De Forest	Birmingham, Conn	Mar. 26, 1867	63, 144
Skirt-hoop	J. C. Gilbert	Winthrop, Me	Feb. 8, 1859	22, 868
Skirt-hoop	D. Holmes	Westfield, Mass	June 15, 1858	20, 561
Skirt-hoop	A. Kelley	New York, N. Y	July 6, 1858	20, 801
Skirt-hoop	J. R. Lattin	Birmingham, Conn	Apr. 30, 1867	64, 231
Skirt-hoop	M. Landenberger	Philadelphia, Pa	June 29, 1858	20, 720
Skirt-hoop	J. Levy	Philadelphia, Pa	Oct. 9, 1866	58, 651
Skirt-hoop	R. J. Mann	Brooklyn, N. Y	June 22, 1858	20, 681
Skirt-hoop	R. Stokes and D. J. Jones	New York, N. Y	June 19, 1860	28, 790
Skirt, Hoop	G. W. Lockwood and A. Carter	New York, N. Y	June 3, 1873	139, 510
Skirt-hoop clasp	G. W. Cheesman	Ansonia, Conn	Feb. 13, 1866	52, 639
Skirt-hoop clasp	G. W. Cheesman and C. Durand	Ansonia, Conn	Apr. 17, 1866	54, 055
Skirt-hoop clasp	S. B. Guernsey	Waterbury, Conn	July 12, 1859	24, [illegible]7
Skirt-hoop clasp	T. Wallace, jr	Ansonia, Conn	June 15, 1858	20, 598
Skirt-hoop fastening	A. Douglas and S. S. Sherwood	New York, N. Y	Oct. 12, 1858	21, 747
Skirt hoop, Lady's	C. S. Goodman	Washington, D. C	Aug. 18, 1857	18, 013
Skirt-hoop joint	T. D. Day	New York, N. Y	Sept. 5, 1865	49, 732
Skirt hoop, Skeleton	S. C. Moore	Providence, R. I	Aug. 9, 1859	25, 029
Skirt hoop, Skeleton	J. F. Pond	Cleveland, Ohio	Sept. 27, 1859	25, 583
Skirt-hoop slide	W. M. Warren	New York, N. Y	Oct. 5, 1858	21, 709
Skirt-hoop slide and fastening	A. Douglas and S. S. Sherwood	New York, N. Y	Dec. 21, 1858	22, 355
Skirt-hoops, Machine for attaching clamps to	C. Newman	New York, N. Y	May 22, 1866	54, 939
Skirt-hoops, Machine for attaching spangles to	A. Carter	Forrestville, Conn	July 14, 1868	79, 810
Skirt-hoops, Machine for attaching spangles to	A. Komp	New York, N. Y	Apr. 7, 1868	76, 473
Skirt-hoops, Machine for clasping	A. Komp	New York, N. Y	May 7, 1867	64, 543
Skirt, Lady's	D. M. Church	Derby, Conn	Sept. 25, 1866	58, 336
Skirt, Lady's	A. Douglas and S. S. Sherwood	English Neighborhood and Acquackanonck, N. J.	Mar. 4, 1862	34, 568
Skirt, Lady's	S. Folsom	Bridgeport, Conn	Dec. 17, 1846	4, 897
Skirt, Lady's	D. Hough, jr	New York	June 16, 1846	4, 584
Skirt, Lady's	H. C. Traphagen	New York, N. Y	May 5, 1857	17, 241
Skirt, Lady's	E. F. Woodward	Brooklyn, N. Y	June 16, 1857	17, 602
Skirt, Lady's corded	W. E. Maginnis	Philadelphia, Pa	Feb. 8, 1848	5, 441
Skirt, Lady's felted	A. M. Boynton	Norwalk, Conn	Dec. 27, 1864	45, 578
Skirt lifter, Lady's	T. H. Bradley	Saint Louis, Mo	May 8, 1866	54, 496
Skirt lifter, Lady's	R. Leavitt	Melrose, Mass	Jan. 26, 1864	41, 382
Skirt lifter, Lady's	L. C. Pennell	Portland, Me	Nov. 13, 1866	59, 640
Skirt lifter, Lady's	Z. Waters	Bloomington, Ill	July 19, 1864	43, 613
Skirt lining and binding, Fabric for	C. Spannagel	Barmen, Prussia	Oct. 3, 1865	50, 317
Skirt-looping clasp	M. R. Zerbe	New York, N. Y	Mar. 5, 1872	124, 308
Skirt-printing apparatus	T. Byrne and T. Henry	Brooklyn, N. Y., and New York, N. Y.	Jan. 26, 1869	86, 132
Skirt-protector	L. Humphrey	Tipton, Iowa	Apr. 22, 1862	35, 026
Skirt-protector	J. Jenkinson	Brooklyn, N. Y	Nov. 18, 1873	144, 617
Skirt-protector	G. E. King	New York, N. Y	Dec. 9, 1873	145, 429
Skirt-protector	J. C. Livermore	Boston, Mass	Sept. 30, 1873	143, 361
Skirt, Skeleton	E. G. Atwood	Derby, Conn	Oct. 19, 1858	21, 806
Skirt, Skeleton	E. G. Atwood	Derby, Conn	Dec. 18, 1860	30, 907
Skirt, Skeleton	A. J. Colby	New York, N. Y	Feb. 6, 1866	52, 390
Skirt, Skeleton	T. D. Day	Brooklyn, N. Y	Sept. 20, 1864	44, 287
Skirt, Skeleton	J. Draper	New York, N. Y	Oct. 4, 1859	25, 701
Skirt, Skeleton	M. Fishel	New York, N. Y	Jan. 14, 1862	34, 182
Skirt, Skeleton	R. W. Hill	Naugatuck, Conn	Jan. 17, 1860	26, 848
Skirt, Skeleton	J. M. Kinney	Columbus, Ohio	Dec. 23, 1862	37, 256
Skirt, Skeleton	P. Lippmann	New York, N. Y	Nov. 25, 1873	144, 911
Skirt, Skeleton	G. W. Lockwood	New York, N. Y	Sept. 2, 1862	36, 384
Skirt, Skeleton	C. Neumann	New York, N. Y	Aug. 16, 1859	25, 136
Skirt, Skeleton	C. Neumann	New York, N. Y	Dec. 20, 1859	26, 514
Skirt, Skeleton	M. Opper	New York, N. Y	July 1, 1862	35, 776
Skirt, Skeleton	L. S. Scofield	Somerville, Mass	July 29, 1862	36, 061
Skirt, Skeleton	S. J. Sherman	Brooklyn, N. Y	Apr. 3, 1866	53, 691
Skirt, Skeleton	S. S. Sherwood	New York, N. Y	June 26, 1860	28, 941
Skirt, Skeleton	W. H. Towers	New York, N. Y	July 8, 1862	35, 848
Skirt, Skeleton	J. Wesley	Providence, R. I.	Sept. 6, 1859	25, 374
Skirt, Skeleton	E. F. Woodward	Brooklyn, N. Y	Aug. 9, 1859	25, 073
Skirt-springs, Machine for covering skeleton	J. T. Loft	Brooklyn, N. Y	Mar. 13, 1860	27, 456
Skirt-springs, Machine for forming and cutting	J. J. Fairbanks	New York, N. Y	Aug. 21, 1866	57, 305
Skirt-supporter	S. A. Baldwin	Waterbury, Conn	June 11, 1861	32, 506
Skirt-supporter	H. F. Brown	Chagrin Falls, Ohio	Dec. 20, 1859	26, 473
Skirt-supporter	J. F. Brown	New London, Conn	Dec. 17, 1861	33, 971
Skirt-supporter	M. Chambers	New York, N. Y	July 12, 1859	24, 720
Skirt-supporter	D. B. Hale	New York, N. Y	Dec. 20, 1859	26, 491

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Skirt-supporter	P. V. Harrington	Attleborough, Mass	June 19, 1866	55, 651
Skirt-supporter	J. L. Kendall	New York, N. Y	Jan. 8, 1867	61, 011
Skirt-supporter	J. McNeven	Brooklyn, N. Y	Oct. 25, 1859	25, 905
Skirt-supporter	N. C. Nelson	Concord, N. H	Mar. 9, 1858	19, 576
Skirt-supporter	J. Taggart	Philadelphia, Pa	Oct. 2, 1866	58, 505
Skirt-supporter	N. A. Vurgason	Brooklyn, N. Y	Oct. 6, 1868	82, 772
Skirt-supporter	N. Wiard and H. Shlarbaum	New York, N. Y	May 5, 1863	38, 437
Skirt supporter, Lady's	W. Bacheller	West Newbury, Mass	May 29, 1866	55, 196
Skirt-wire	W. Darker, jr	Philadelphia, Pa	Oct. 20, 1863	40, 379
Skirt-wire	G. W. Hubbell	Birmingham, Conn	Mar. 26, 1867	63, 253
Skirt-wire in lengths for hoops, Marking	J. Fraser	Williamsburgh, N. Y	Jan. 29, 1867	61, 660
Skirts, Apparatus for applying clasps to	J. H. Baird	Waterbury, Conn	Dec. 9, 1862	37, 124
Skirts, Apparatus for clasping hoops to lady's	D. M. Smyth	New York, N. Y	Feb. 17, 1863	37, 711
Skirts, Bustle-attachment to	R. B. Duncan	West Roxbury, Mass	Aug. 18, 1868	81, 262
Skirts, Device for manufacturing skeleton	F. S. Otis	Brooklyn, N. Y	June 5, 1860	28, 598
Skirts, Forming skeleton	D. E. Rugg	New York, N. Y	Apr. 4, 1865	47, 155
Skirts, Frame for gathering	I. M. Rose	New York, N. Y	Mar. 21, 1865	46, 944
Skirts, Machine for clasping hoops to lady's	B. A. Mann	West Meriden, Conn	Dec. 24, 1861	34, 026
Skirts, Method of manufacturing skeleton	R. J. Mann	Brooklyn, N. Y	Apr. 2, 1861	31, 932
Skirts, Stiffening-cord for	H. Hayward	New York, N. Y	Aug. 3, 1869	93, 200
Skirts, Tape for spring	T. D. Hoxey	Paterson, N. J	Feb. 12, 1861	31, 388
Skirts together, Attachment for holding	E. Loiseau	New York, N. Y	Jan. 22, 1867	61, 440
Skirting-material, Manufacture of	E. Bredt	New York, N. Y	Sept. 14, 1858	21, 481
Skiver, Lap	J. S. P. Taylor	Oxford, Ohio	Oct. 2, 1866	58, 508
Skiving and splitting machine	W. S. Marsh	Indianapolis, Ind	July 25, 1865	48, 964
Skiving counters, Machine for	C. Keniston	Somerville, Mass	Jan. 7, 1873	134, 551
Skiving-machine	W. S. Atchley	Williamsburgh, Ohio	May 15, 1866	54, 664
Skiving-machine	J. W. and C. F. Chase	North Weare, N. H	May 24, 1864	42, 836
Skiving-machine	J. Kavanagh and M. S. Moulton	Providence, R. I., and Boston, Mass.	Mar. 15, 1870	100, 771
Skiving-machine	J. H. Mudgett	Lynn, Mass	Dec. 12, 1871	121, 887
Skiving-machine	J. A. Safford and J. W. Chase	Winchester, Mass., and North Weare, N. H.	Sept. 13, 1859	25, 444
Skiving-machine	C. Stoddard and H. J. Newman	North Brookfield, Mass	Aug. 6, 1872	130, 330
Sky-light	G. B. Clark	Leonardsville, N. Y	Feb. 18, 1873	135, 888
Sky-light	G. Hayes	New York, N. Y	Feb. 22, 1870	100, 143
Sky-light	G. Hayes	New York, N. Y	Aug. 9, 1870	106, 157
Sky-light	G. Hayes	New York, N. Y	Sept. 23, 1873	143, 149
Sky-light	G. Hayes	New York, N. Y	Sept. 23, 1873	143, 150
Sky-light	G. Hayes	New York, N. Y	Sept. 23, 1873	143, 151
Sky-light	C. S. Snead	Louisville, Ky	Mar. 14, 1871	112, 644
Sky-light	S. P. Snead	Louisville, Ky	Aug. 30, 1870	106, 967
Sky-light	H. Weston	Boston, Mass	June 11, 1867	65, 712
Sky-light and ventilator	G. Hayes	New York, N. Y	Mar. 9, 1869	87, 668
Sky-light-bar	C. Sellman	New York, N. Y	July 8, 1873	140, 650
Sky-light-cover	G. Hayes	New York, N. Y	Sept. 23, 1873	143, 152
Sky-light, conservatory, and other glazed structures	G. Hayes	New York, N. Y	Mar. 14, 1871	112, 594
Sky-light, Fire-proof	J. B. Cornell	New York, N. Y	May 18, 1869	90, 249
Sky-light, Metallic	G. E. Dayton	Baltimore, Md	Apr. 15, 1873	137, 832
Sky-light-operating device	W. Dyatt	New York, N. Y	Oct. 25, 1870	108, 572
Sky-light-pane	O. F. Saunders	Corning, N. Y	Aug. 12, 1873	141, 820
Sky-light, turret, and conservatory	G. Hayes	New York, N. Y	Sept. 23, 1873	143, 153
Sky-light, Ventilating	J. W. Geddes	Baltimore, Md	July 23, 1872	129, 658
Sky-light, Ventilating	N. W. Wheeler	Brooklyn, N. Y	May 14, 1867	64, 816
Sky-rocket	J. W. Hadfield	Newtown, N. Y	Dec. 10, 1867	72, 029
Sky-rocket	J. W. Hadfield	East Williamsburgh, N. Y	Dec. 10, 1867	72, 030
Slats and flanged metallic plates, Manufacture of hollow.	T. Prosser	New York, N. Y	Jan. 24, 1854	10, 450
Slag, Apparatus for cooling and removing blast-furnace.	A. Kloman	Pittsburgh, Pa	July 15, 1873	140, 927
Slag from iron and glass furnaces for producing a useful material, Treating.	J. Player	Philadelphia, Pa	May 31, 1870	103, 650
Slag from iron-furnaces for reduction, Treating	J. M. Hartman	Philadelphia, Pa	Aug. 20, 1872	130, 578
Slag, Furnace for treating	J. Hornig	Troy, N. Y	May 31, 1864	42, 947
Slag, iron, &c., Apparatus for granulating	C. Wood	Middlesborough-on-Tees, England.	Oct. 7, 1873	143, 485
Slag, Method and apparatus for treating furnace	F. A. Luckenback	New York, N. Y	Nov. 26, 1872	133, 466
Slag, Mode of granulating furnace	C. E. Morris and J. Eynon	Bridgeport, Pa	July 24, 1866	56, 595
Slag-ware, Making	W. G. Elliott	Blisworth, England	Sept. 19, 1854	11, 692
Slat board, &c., jointing apparatus	A. Blanchard	West Cambridge, Mass	May 28, 1850	7, 392
Slat fastener, Window	W. H. Andrews	New Haven, Conn	Oct. 13, 1863	40, 304
Slat-machine	L. S. Colburn	Oberlin, Ohio	Oct. 6, 1868	82, 802
Slats, Machinery for planing	L. McGill	Philadelphia, Pa	Feb. 5, 1847	4, 955
Slats or blinds, Mode of operating	J. Wyberd	New York, N. Y	July 23, 1861	32, 920
Slate	W. F. Baade	Buffalo, N. Y	Aug. 15, 1871	117, 964
Slate	C. Drasser	Chicago, Ill	Mar. 11, 1873	136, 591
Slate	W. A. Kenyen, jr	Lancaster, Ohio	July 16, 1872	129, 142
Slate	F. D'Ossone	Philadelphia, Pa	Sept. 26, 1871	119, 332
Slate	L. Pritchard	Brooklyn, N. Y	July 27, 1869	93, 120
Slate	E. W. Roberts	Troy, N. Y	Jan. 21, 1873	135, 158
Slate and blackboard rubber	H. W. Holly	Brooklyn, N. Y	Nov. 18, 1873	144, 764
Slate and other frames, Joint for	F. Shenton	Slatington, Pa	Dec. 8, 1863	40, 858
Slate and other frames, Machine for making	F. Shenton	Slatington, Pa	May 10, 1864	42, 695
Slate, Artificial	T. J. Mayall	Roxbury, Mass	Apr. 10, 1860	27, 818
Slate, Artificial school	C. and H. Volkner	Baltimore, Md	Nov. 1, 1864	44, 921
Slate, Artificial writing	J. Street	Philadelphia, Pa	Nov. 21, 1843	3, 345
Slate-cleaner	F. Hickman	Reading, Pa	Feb. 18, 1873	136, 058
Slate-cleaner	A. W. Overbaugh	New York, N. Y	Nov. 27, 1866	60, 045
Slate-cutter	T. R. Drummond	Hartford, Conn	Aug. 20, 1867	67, 963
Slate-cutter	H. Hopper and J. G. Hetzell	Newark, N. J	Nov. 3, 1868	83, 634
Slate cutting and trimming machine	A. Keyes	Brattleborough, Vt	Jan. 2, 1855	12, 164
Slate-cutting machine	T. R. Drummond	Hartford, Conn	Nov. 10, 1868	83, 939
Slate-cutting machine	J. W. Durgin	Bangor, Me	May 28, 1867	65, 285
Slate-cutting machine	W. H. Rayner	Springfield, Mass	Sept. 12, 1871	118, 816
Slate dressing and punching machine	J. Jaeger	Tompkinsville, N. Y	Apr. 4, 1871	113, 672
Slate-dressing machine	C. E. Amos and J. Francis	Southwark and North Wales, Great Britain.	Jan. 26, 1864	41, 353

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Invention.	Inventor.	Residence.	Date.	No.
Slate-dressing machine	F. Shenton	Slatington, Pa	Jan. 14, 1873	134, 773
Slate-edges, Machine for beveling	S. Hagaman	Weissport, Pa	Feb. 11, 1868	74, 216
Slate-frame	W. N. Bartholomew	Newton, Mass	Jan. 26, 1869	86, 272
Slate-frame	W. N. Bartholomew	Newton Centre, Mass	Mar. 15, 1870	100, 712
Slate-frame	W. N. Bartholomew	Newton Centre, Mass	June 20, 1871	116, 139
Slate-frame	W. N. Bartholomew	Newton, Mass	Apr. 9, 1872	125, 519
Slate-frame	S. B. Bushfield, jr	Parkersburgh, W. Va	Feb. 15, 1870	99, 841
Slate-frame	E. Butter	Salina, N. Y	Feb. 15, 1870	99, 756
Slate-frame	H. M. Clay	Easton, Pa	Oct. 17, 1871	120, 039
Slate-frame	J. M. and J. Connel, jr	Newark, Ohio	June 18, 1867	65, 795
Slate-frame	D. Cumming, jr	New York, N. Y	Sept. 18, 1866	58, 925
Slate-frame	C. B. Dickinson	New York, N. Y	Mar. 8, 1870	100, 507
Slate-frame	J. H. Foote	Pittsfield, Mass	Mar. 31, 1868	76, 368
Slate-frame	J. H. French	Albany, N. Y	Mar. 30, 1869	88, 467
Slate-frame	W. W. Hamilton	Flushing Township, N. Y.	May 2, 1871	114, 289
Slate-frame	H. W. Harper	Berlinsville, Pa	Aug. 27, 1861	33, 144
Slate-frame	R. Heneage	Buffalo, N. Y	July 28, 1868	80, 410
Slate frame	W. Hersee	Buffalo, N. Y	Jan. 25, 1870	99, 187
Slate-frame	A. H. Jocelyn	New York, N. Y	Oct. 28, 1873	144, 104
Slate-frame	W. Knight	Covington, Ky	Sept. 26, 1871	119, 368
Slate-frame	P. Lugenbell and W. A. Ford	Greensburgh, Ind	Apr. 4, 1871	113, 678
Slate-frame	A. Lynch and M. L. Moffat	Brooklyn, N. Y	Aug. 10, 1869	93, 542
Slate-frame	E. Morris	Burlington, N. J	June 20, 1854	11, 134
Slate-frame	E. Morris	Burlington, N. J	Nov. 7, 1854	11, 903
Slate-frame	W. J. Rhees	Washington, D. C	Jan. 15, 1867	61, 254
Slate-frame	F. Schauer	Dayton, Ohio	Sept. 17, 1872	131, 412
Slate-frame	F. Shenton	Slatington, Pa	Mar. 27, 1866	53, 495
Slate-frame	G. C. Smith	Hamilton, Ohio	June 25, 1872	128, 256
Slate-frame	C. Wendell	Albany, N. Y	Aug. 11, 1868	80, 846
Slate-frame	W. C. Wendell	Albany, N. Y	Mar. 24, 1868	76, 014
Slate-frame	W. A. Wilde	Malden, Mass	Jan. 4, 1870	98, 653
Slate-frame	W. A. Wilde	Malden, Mass	Apr. 12, 1870	101, 798
Slate-frame	C. J. Wirth	Dansville, N. Y	Dec. 1, 1868	84, 522
Slate-frame	E. Young	Philadelphia, Pa	Apr. 8, 1856	14, 624
Slate frame, Artificial	W. J. Rhees	Washington, D. C	Jan. 15, 1867	61, 253
Slate-frame clamp	J. H. Coffin	Danielsville, Pa	May 3, 1870	102, 656
Slate-frame-dressing machine	H. W. Harper	Berlinsville, Pa	Dec. 3, 1867	71, 609
Slate-frame-dressing machine	W. F. Mosser	Allentown, Pa	July 28, 1868	80, 363
Slate-frame-edge-dressing machine	J. W. Sayre and A. S. Shull	Martin's Creek, Pa	Sept. 26, 1865	50, 170
Slate-frame-rounding machine	S. Hagaman	Weissport, Pa	June 16, 1868	78, 959
Slate frame, Transparent	W. F. Boucher	Philadelphia, Pa	Jan. 28, 1873	135, 315
Slate-frames, Constructing	W. P. Uhlinger and J. Doering	Philadelphia, Pa	Feb. 2, 1869	86, 610
Slate-frames, Machine for finishing	J. H. and G. S. Coffin	Danielsville, Pa	Apr. 22, 1873	138, 005
Slate-frames, Machine for making	W. Kester	Cherryville, Pa	July 30, 1867	67, 316
Slate-frames, Machine for rounding corners of	E. Coffin	Flicksville, Pa	Dec. 17, 1867	72, 371
Slate-frames, Machine for rounding corners of	J. Flory	Flicksville, Pa	May 26, 1868	78, 290
Slate-frames, Machine for rounding corners of	R. Heneage and A. Storer	Buffalo, N. Y	Aug. 31, 1869	9[illegible], 205
Slate-frames, Machine for rounding corners of	E. Snyder	Slantington, Pa	Apr. 21, 1868	76, 951
Slate from coal, Apparatus for separating	H. Bradford	Reading, Pa	Feb. 27, 1872	123, 974
Slate from coal, Apparatus for separating	L. P. Garner	Ashland Borough, Pa	Aug. 7, 1860	29, 479
Slate grinding and polishing machine	H. W. Harper	Berlinsville, Pa	Sept. 28, 1869	95, 342
Slate grinding and polishing machine, School	S. Hagaman	Weissport, Pa	Oct. 6, 1868	82, 828
Slate grinding and polishing machine, School	H. W. Harper	Berlinsville, Pa	Sept. 28, 1869	95, 341
Slate holding and dressing machine	S. E. Crocker	Boston, Mass	Apr. 30, 1850	7, 320
Slate, Manufacture of artificial	H. W. Holly and S. L. Geer	Norwich, Conn	Jan. 15, 1867	61, 196
Slate, Manufacturing	J. Madison, and P. and P. S. Mattes.	Easton, Pa	Dec. 22, 1826	....
Slate, Method of quarrying	J. E. Wootten	Cressona, Pa	Oct. 16, 1866	58, 932
Slate, Office	C. Boyle	Washington, D. C	Oct. 21, 1873	143, 804
Slate or tile for covering buildings, Artificial	T. Woodsend	....	Aug. 7, 1806	....
Slate polishing and framing machine, Cyphering	J. Coleman	Baltimore, Md	Dec. 31, 1813	....
Slate-polishing machine	S. Hagaman	Weissport, Pa	Aug. 31, 1869	94, 309
Slate-polishing machine	S. Hagaman	Weissport, Pa	Aug. 31, 1869	94, 310
Slate, &c., polishing machine	E. Snyder	Slatington, Pa	July 7, 1868	79, 784
Slate punching and cutting machine	L. M. Ham	Boston, Mass	Mar. 23, 1869	88, 037
Slate, School	S. R. Burrell	New York, N. Y	Apr. 14, 1857	17, 019
Slate, School	J. La Bar	Slatington, Pa	Nov. 21, 1865	51, 114
Slate, School	F. Melville	New York, N. Y	Oct. 6, 1868	82, 734
Slate, School	G. N. and G. Munger	New Haven, Conn	Jan. 24, 1860	26, 916
Slate, School and family	J. H. French	Geddes, N. Y	Dec. 11, 1866	60, 356
Slate, stone, marble, &c., grinding machine	H. W. Harper	Berlinsville, Pa	Sept. 28, 1869	95, 343
Slate surface, Artificial	O. A. Wagner	Davenport, Iowa	Apr. 28, 1868	77, 430
Slate-surfaces, blackboards, &c., Composition for	J. N. Pierce	Darby, Pa	Feb. 10, 1863	37, 639
Slate to various uses, Application of	W. Sheldon, jr	Springfield, Mass	Mar. 2, 1811	....
Slate-trimming machine	H. J. Ruggles	Poultney, Vt	Aug. 18, 1868	81, 112
Slate-washer	O. T. Bedell	New York, N. Y	Jan. 1, 1867	60, 849
Slate-washer	S. G. Dugdale	Richmond, Ind	Apr. 19, 1870	101, 987
Slate-washer	W. T. Fry	New York, N. Y	Feb. 4, 1868	73, 967
Slate-washer	W. T. Fry	New York, N. Y	Feb. 4, 1868	73, 968
Slate-washer	D. W. Leet and W. C. Shields	Bellaire, Ohio	May 6, 1873	138, 692
Slate-washer	J. G. Murphy	Matteawan, N. Y	Nov. 4, 1873	144, 280
Slate-washer	F. W. Porter	Winona, Minn	Aug. 15, 1871	118, 150
Slate-washer	W. Westlake	Chicago, Ill	Apr. 22, 1873	138, 218
Slate, Writing	J. H. French	Albany, N. Y	Feb. 8, 1870	99, 661
Slate, Writing	R. F. Leighton and S. Severy	Melrose, Mass	Nov. 3, 1868	83, 645
Slate, Writing	D. W. Niles	Cambridgeport, Mass	Jan. 26, 1869	86, 177
Slate, Writing	G. E. Poor	Charlestown, Mass	Mar. 15, 1870	100, 799
Slates and slate-pencils by machinery, Making	T. Symington	Baltimore, Md	Nov. 17, 1828	....
Slates, Composition for manufacture of school	G. B. Garland	Gardiner, Me	Nov. 9, 1869	96, 688
Slates, Machine for grinding and polishing school	W. Kester	Cherryville, Pa	Aug. 4, 1868	80, 634
Slates, Machine for ruling school	J. H. French	Albany, N. Y	Dec. 29, 1868	85, 376
Slates, Marking	J. W. Hoard	Providence, R. I	Feb. 24, 1857	16, 687
Slates, Mounting writing	G. F. Bowman	Cleveland, Ohio	Dec. 28, 1869	98, 458
Slates, Preparing and mounting	H. Beebe	New Haven, Conn	Mar. 29, 1859	23, 343
Slates, Preparing school	L. Wiegel, J. Lehnbeuter, and C. Fegers.	Cincinnati, Ohio	Feb. 25, 1868	74, 964
Slating-nail	T. O'Gara	Worcester, Mass	Jan. 7, 1873	134, 309
Slaughter-houses, Device for hoisting hogs in	J. K. Martin	Chicago, Ill	Dec. 3, 1867	71, 628
Slaughtered animals, Device for suspending	W. Leland and V. E. Rusco	Chicago, Ill	Dec. 22, 1868	85, 109

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Slaughtered animals, Machine for cleaning the intestines of.	J. A. Thompson	Bucyrus, Ohio	June 16, 1868	79, 031
Slaughtering apparatus	M. Brenner	Baltimore, Md	Mar. 26, 1872	125, 015
Slaughtering apparatus	M. Brenner	Baltimore, Md	Oct. 7, 1873	143, 401
Slaughtering, Apparatus for handling animals in	A. Graves	Roscoe, Ill	Feb. 18, 1868	74, 681
Slaughtering, Apparatus for handling hogs in	H. P. Haskin	Roscoe, Ill	Feb. 5, 1867	61, 736
Slaughtering apparatus, Hog	T. J. Foodman	Madison, Ind	July 15, 1856	15, 337
Slaughtering apparatus, Hog	G. W. B. Stoy	Carlisle, Pa	Mar. 1, 1859	23, 124
Slaughtering, Chain-clasp for handling hogs in	P. W. Dalton	Jersey City, N. J	Sept. 10, 1867	68, 714
Slaughtering, Clutch-kook for	D. Davis and W. Leland	Chicago, Ill	Sept. 11, 1866	57, 876
Slaughtering device, Hog	W. M. and R. Savage	Chicago, Ill	Feb. 19, 1867	62, 158
Slaughtering machine, Hog	J. J. Fouts	Middletown, Ohio	Apr. 28, 1868	77, 368
Slaughtering machine, Hog	J. Parker	Louisville, Ky	Feb. 13, 1855	12, 395
Slaughtering purposes, Gambrel and support for	V. E. Rusco	Chicago, Ill	Dec. 22, 1868	85, 134
Slaughtering-windlass	M. Brenner	Baltimore, Md	Dec. 31, 1872	134, 359
Slaw-cutter	M. Keefer	Washington County, Md	Aug. 3, 1869	93, 312
Slaw or cabbage cutter	D. F. Dietrich	Noblesville, Ind	Nov. 9, 1869	96, 679
Sled	S. R. Bowie	Portland, Me	Feb. 20, 1866	52, 663
Sled	C. De Bodisco	St. Petersburg, Russia	Mar. 30, 1869	88, 457
Sled	C. H. Douglass	Hartford, Conn	Sept. 13, 1870	107, 345
Sled	J. Fisher and J. Meill	Saint Joseph, Wis., and Stillwater City, Minn.	Oct. 22, 1867	69, 979
Sled	D. W. Gould	Fostoria, Ohio	Oct. 6, 1868	82, 826
Sled	H. R. Hawkins	Akron, Ohio	Nov. 9, 1869	96, 589
Sled	B. E. Heminway	Portland, Me	Sept. 27, 1870	107, 776
Sled	H. C. Hunt	Amboy, Ill	Oct. 18, 1864	44, 727
Sled	J. Johnson	Boston, Mass	Dec. 17, 1867	72, 401
Sled	A. C. Kasson	Milwaukee, Wis	Jan. 19, 1869	85, 935
Sled	G. F. Krollpheiffer	New York, N. Y	Dec. 17, 1867	72, 369
Sled	J. Martin	Chesterfield, Ohio	Sept. 21, 1869	95, 125
Sled	W. Nevers	Bridgeton, Me	Mar. 11, 1873	136, 750
Sled	S. E. Oviatt	Richfield, Ohio	Oct. 27, 1863	40, 425
Sled	S. H. Partridge	Peterborough, N. H	Aug. 24, 1869	94, 024
Sled	F. Peabody	Vevay, Ind	Sept. 11, 1866	57, 959
Sled	J. K. Reichert	Lancaster, Ohio	Mar. 26, 1872	125, 082
Sled	J. Schaaber	Reading, Pa	Sept. 3, 1867	68, 534
Sled	E. L. Stevens	Houlton, Me	June 23, 1868	79, 273
Sled	J. Stevens	Marengo, N. Y	Jan. 10, 1865	45, 874
Sled	S. Way	La Porte, Ind	May 19, 1868	78, 162
Sled	A. T. Woolsey and A. F. Hubbell	Sandusky, Ohio	Nov. 5, 1867	70, 401
Sled and sleigh runner	S. H. Noble	Vernon Springs, Iowa	Apr. 29, 1862	35, 106
Sled, Bob	J. W. Doty	Lockport, N. Y	Sept. 16, 1873	142, 902
Sled, Bob	D. Holtz	Tiffin, Ohio	Oct. 3, 1871	119, 611
Sled, Bob	J. Killefer	West Richfield, Ohio	Dec. 28, 1869	98, 274
Sled, Bob	S. C. Shepard	Richfield, Ohio	May 3, 1870	102, 603
Sled, Bob	A. H. Walrath	Pamelia Four Corners, N. Y	Sept. 12, 1871	118, 831
Sled, Bob	J. Wampach	Shakopee, Minn	May 24, 1870	103, 396
Sled, Bob	J. Wampach	Shakopee, Minn	Mar. 12, 1872	124, 522
Sled, Boy's	J. N. Brown	New York, N. Y	Apr. 8, 1862	34, 874
Sled, Boy's	D. G. Hussey	Nantucket, Mass	June 13, 1865	48, 178
Sled, Boy's	S. D. Mott	Milford, Pa	Sept. 23, 1873	143, 090
Sled, Boy's	N. C. Sanford	Meriden, Conn	Sept. 22, 1863	40, 065
Sled-brake	J. M. Ackerson	La Fayette, N. J	Dec. 1, 1868	84, 526
Sled-brake	R. Ayers	Vienna, N. J	Jan. 19, 1869	86, 052
Sled-brake	S. W. Barber	Heath, Mass	Apr. 13, 1869	88, 832
Sled-brake	S. R. Bolton and F. Hoyt	Prescott, Wis	Jan. 12, 1869	85, 785
Sled-brake	A. J. Braley	Berlin, Vt	Apr. 20, 1869	89, 016
Sled-brake	J. Cassidy	Montezuma, Iowa	Mar. 3, 1868	74, 989
Sled-brake	A. S. Clark	Dryden, N. Y	May 21, 1861	32, 351
Sled-brake	F. A. Clark	New Sharon, Me	Jan. 19, 1869	86, 003
Sled-brake	J. E. Coutant	Rondout, N. Y	Jan. 21, 1870	104, 429
Sled-brake	J. E. Coutant	Rondout, N. Y	Aug. 22, 1871	118, 202
Sled-brake	S. A. and A. J. Cummins	Vienna, N. J	Sept. 28, 1869	95, 327
Sled-brake	R. B. Dutton	Iron Hill, Iowa	Dec. 11, 1866	60, 348
Sled-brake	W. F. Foley	Albany, N. Y	Aug. 3, 1869	93, 190
Sled-brake	P. Gable	Elizabeth, Ill	Sept. 9, 1873	142, 673
Sled-brake	J. L. Heffron	Marathon, N. Y	Dec. 31, 1867	72, 851
Sled-brake	W. D. Johnston	Harrisville, Pa	Sept. 10, 1872	131, 220
Sled-brake	H. E. Knapp	Benson, Vt	June 11, 1867	65, 756
Sled-brake	A. Larrowe	Cohocton, N. Y	Dec. 14, 1858	22, 295
Sled-brake	A. Larrowe	Cohocton, N. Y	June 21, 1859	24, 469
Sled-brake	J. Latta and L. Snyder	Bethlehem Centre, N. Y	Nov. 10, 1868	83, 977
Sled-brake	C. M. Lufkin	Alstead, N. H	Dec. 7, 1869	97, 661
Sled-brake	J. Maxson and W. Kinyon	Scott, N. Y	Apr. 6, 1869	88, 655
Sled-brake	T. S. Minnis	Meadville, Pa	Oct. 8, 1867	69, 692
Sled-brake	S. A. Mitchell	Alstead Centre, N. H	Mar. 16, 1869	88, 797
Sled-brake	J. Moon	Spring Valley, Minn	June 4, 1872	127, 503
Sled-brake	L. P. Mosher	Stoney Creek, N. Y	Jan. 18, 1870	98, 993
Sled-brake	H. L. Naramore	Cummington, Mass	Sept. 11, 1866	57, 951
Sled-brake	G. W. Sanborn	Gilmanton, N. H	Mar. 8, 1870	100, 560
Sled-brake	J. Slater	Sandy Lake, Pa	June 3, 1873	139, 621
Sled-brake	H. W. and B. C. Smith	Rainsburgh, Pa	Jan. 26, 1869	86, 325
Sled-brake	J. B. Story and I. N. Ross	Butler, Pa	Aug. 10, 1869	93, 495
Sled-brake	S. K. Sutton	Paterson, N. J	Oct. 29, 1867	70, 287
Sled-brake	L. H. Thomas	Waterbury, Vt	Aug. 1, 1865	49, 173
Sled-brake	S. H. Wallize	Washingtonville, Pa	Dec. 3, 18 7	71, 825
Sled-brake	J. W. Wright	Chicago, Ill	Dec. 24, 1867	72, 708
Sled-brake	J. Willis	Mifflin, Wis	Dec. 15, 1868	84, 979
Sled-brake	J. Willis	Mifflin, Wis	Oct. 18, 1870	108, 545
Sled-brake	A. W. Wright	Calvin, Pa	Feb. 2, 1869	86, 487
Sled-brake, Self-acting	C. E. Myers	Bristol, Vt	Feb. 23, 1864	41, 714
Sled by hand, Method of propelling	J. A. Bartlett and F. Walman	Oxfordville, Wis	Aug. 27, 1867	68, 031
Sled-clamp	L. R. Dexter	Lancaster, N. H	Sept. 14, 1869	94, 723
Sled-clevis	J. Van Antwerp	Cleveland, Minn	Dec. 6, 1870	109, 973
Sled, Child's	B. P. Crandall	New York, N. Y	Nov. 22, 1859	26, 164
Sled, Child's	J. A. Crandall	New York, N. Y	Jan. 23, 1866	52, 141
Sled, Child's	D. G. Hussey	Nantucket, Mass	Nov. 28, 1865	51, 188
Sled, Child's	N. P. Lindergreen	Boston, Mass	Aug. 21, 1866	57, 344
Sled, Child's	W. Sellers and J. Harrison	New York, N. Y	Nov. 19, 1872	133, 261

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Sled, Dumping	J. L. Knoll	Hummelstown, Pa	Oct. 15, 1867	69, 918
Sled, Dumping	E. R. Whitney	Plattsburgh, N. Y	May 5, 1868	77, 692
Sled hold-back	J. Andrews	Camden, Me	Feb. 16, 1837	128
Sled hold-back	P. Dickson	Blooming Valley, Pa	Apr. 27, 1852	8, 903
Sled, Ice	L. Darozir	Worcester, Mass	Jan. 4, 1870	98, 474
Sled, Ice	G. H. Kirk	Philadelphia, Pa	Feb. 26, 1867	62, 427
Sled, Joint-standard	I. Kingman	Waltham, Me	Sept. 7, 1869	94, 612
Sled-knee	J. W. Blake	Jefferson, Wis	Apr. 28, 1868	77, 250
Sled-knee	B. F. Cady	Chittenango, N. Y	Sept. 22, 1868	82, 380
Sled-knee	C. Shaw	Milledgeville, Pa	May 2, 1871	114, 357
Sled-knee	A. L. Shears	Flint, Mich	Dec. 5, 1871	121, 673
Sled, Log	C. W. Mosher	East Leon, N. Y	Aug. 4, 1868	80, 654
Sled, Logging	A. R. Baxter	Peck Post Office, Mich	Nov. 30, 1869	97, 267
Sled, Lumber	G. Engle	Patch Grove, Wis	July 6, 1869	92, 177
Sled, Metallic	R. J. Mann	Seneca Falls, N. Y	Sept. 3, 1861	33, 202
Sled or carriage	H. Smith	Waubuc, Conn	May 2, 1865	47, 580
Sled or sleigh, Locking	J. C. Rickey	New Cumberland, Ohio	July 16, 1842	2, 721
Sled, Portable	J. Lamb	New York, N. Y	Feb. 14, 1860	27, 189
Sled, Rocking-propeller	J. Wiarda	Hoboken, N. J	Dec. 16, 1862	37, 191
Sled-propelling	J. Braun	Philadelphia, Pa	July 13, 1869	92, 574
Sled, Propelling-attachment for child's	F. P. Bourne	William's Bridge, N. Y	Apr. 16, 1867	63, 845
Sled reach, Bob	J. W. Smith	Battle Creek, Mich	May 27, 1873	139, 336
Sled, Reversible and dumping	J. H. Nonamaker	Middletown, Pa	Feb. 26, 1867	62, 435
Sled-runner	W. N. Berkeley	Cedar Rapids, Iowa	Sept. 14, 1869	94, 699
Sled-runner	S. Bullard	Hartland, Mich	Apr. 20, 1858	19, 980
Sled-runner	J. Hoyt	Fishkill, N. Y	Apr. 20, 1858	19, 994
Sled-runner	J. M. Spooner	Springfield, Mass	June 14, 1859	24, 412
Sled-running-gear	R. Sutton	East Avon, N. Y	June 14, 1859	24, 415
Sled, Steam	J. S. Ross	Hamilton County, Iowa	Aug. 27, 1867	68, 115
Sled-steering device	G. Buchanan	Washington, Pa	Apr. 20, 1869	89, 021
Sled, Tip	S. Chamberlin	Boston, Mass	Feb. 25, 1868	74, 891
Sled, Velocipede	C. H. Gray	Milton, Mass	Feb. 13, 1872	123, 691
Sled-way attachment for covered roadways	J. B. Foote	Hamden, N. Y	Apr. 6, 1869	88, 704
Sledge, &c., Method of shoeing	W. Barton	New York	Dec. 13, 1819	....
Sleeping-cushion, Travelling	E. G. Fast	Washington, D. C	Jan. 18, 1870	98, 859
Sleeve and legging, Attachment for	J. H. O'Neil	Kingston, N. Y	May 8, 1866	54, 585
Sleeve, Automatic lubricating	S. R. Bartlett	Chicago, Ill	Aug. 16, 1870	106, 454
Sleeve-fastener	R. L. Allen	Providence, R. I	Nov. 29, 1859	26, 239
Sleeve-fastener	W. A. Bates	Boston, Mass	June 2, 1857	17, 413
Sleeve-fastener	J. P. Derby	Cavendish, Vt	Nov. 11, 1856	16, 050
Sleeve-fastener	D. C. Peacock	Brooklyn, N. Y	Sept. 22, 1857	18, 247
Sleeve-fastener	D. Wilcox	Providence, R. I	Feb. 12, 1861	31, 421
Sleeve-fastener	D. Wilcox	Providence, R. I	June 24, 1862	35, 724
Sleeve, Overcoat, &c	J. Steinhauser	Lancaster, Pa	Oct. 5, 1869	95, 615
Sleeve-supporter	T. Powell	Milroy, Ind	Mar. 19, 1867	63, 092
Sleigh	A. A. Abbott	Chicago, Ill	Dec. 9, 1873	145, 323
Sleigh	A. Armstrong and A. Weller	Buffalo, N. Y	Apr. 21, 1868	76, 877
Sleigh	S. R. Bailey	Bath, Me	Jan. 19, 1869	85, 895
Sleigh	S. R. Bailey	Bath, Me	Nov. 23, 1869	97, 150
Sleigh	D. S. Barber and A. and D. Thompson.	Pittsfield, Vt	May 15, 1855	12, 850
Sleigh	D. J. Bigelow	Bane Centre, N. Y	Oct. 30, 1866	59, 167
Sleigh	D. A. T. Black	Kay's Hill, Pa	Nov. 6, 1866	59, 345
Sleigh	D. Carpenter	Nelson, N. Y	Sept. 20, 1839	1, 334
Sleigh	A. Day	Bordentown, N. J	Jan. 19, 1811	....
Sleigh	A. D. De Lano	Goodrich, Mich	Nov. 18, 1873	144, 746
Sleigh	J. P. Dorman	Galesburgh, Ill	June 16, 1868	78, 939
Sleigh	A. E. Doty	Ilion, N. Y	Feb. 19, 1867	62, 119
Sleigh	R. Elliott	Chester, Pa	Mar. 14, 1871	112, 566
Sleigh	D. P. Fales	Poultney, Vt	June 23, 1863	38, 954
Sleigh	J. Fisher	Kennebeck, Me	Dec. 30, 1820	....
Sleigh	E. H. Gillman	Montpelier, Vt	Oct. 6, 1868	82, 706
Sleigh	W. W. Guirvits	Rodgersville, N. Y	Mar. 13, 1855	12, 513
Sleigh	C. Heald	Marshalltown, Iowa	June 9, 1868	78, 737
Sleigh	W. Huyck	Chariton, Iowa	Apr. 2, 1867	63, 522
Sleigh	W. Leslie	Gray, Me	Nov. 28, 1871	121, 251
Sleigh	A. Jones	Randolph, Wis	Dec. 27, 1870	110, 571
Sleigh	C. P. Kimball	Portland, Me	Mar. 16, 1869	87, 943
Sleigh	C. P. Kimball	Portland, Me	Jan. 25, 1870	99, 207
Sleigh	J. Martin	Morenci, Mich	Nov. 22, 1870	109, 531
Sleigh	W. M. C. Mathews	Summer Hill, Pa	Jan. 1, 1867	60, 765
Sleigh	W. Miller	Fort Ann, N. Y	July 28, 1846	4, 667
Sleigh	S. Morrill	Vienna, Me	Feb. 11, 1873	135, 660
Sleigh	S. H. Noble	Chicago, Ill	Mar. 12, 1867	62, 771
Sleigh	H. D. Palmer and J. H. Beard	Leonidas, Mich	Dec. 24, 1867	72, 532
Sleigh	T. W. Porter	Bangor, Me	June 19, 1866	55, 705
Sleigh	T. W. Porter	Boston, Mass	Mar. 24, 1868	75, 971
Sleigh	A. Rank	Salem, Ohio	Mar. 14, 1871	112, 630
Sleigh	H. Smith	West Gray, Me	Apr. 26, 1870	102, 327
Sleigh	H. Smith	West Gray, Me	Oct. 3, 1871	119, 660
Sleigh	S. S. Spear	South Weymouth, Mass	Nov. 29, 1870	109, 682
Sleigh	L. A. Spickler	Clear Spring, Md	Sept. 1, 1868	81, 699
Sleigh	I. Stephenson	Maranett, Wis	July 11, 1865	48, 736
Sleigh	B. Thompson	Chicago, Ill	Feb. 11, 1868	74, 450
Sleigh	R. Webb	Star Prairie, Wis	Oct. 10, 1871	119, 804
Sleigh	N. T. Whiting	Lawrence, Mass	Apr. 23, 1867	64, 177
Sleigh and carriage, Baby's	L. Shmetzer	Chicago, Ill	Nov. 24, 1868	84, 310
Sleigh and carriage, Child's	B. P. Crandell, jr	Williamsburgh, N. Y	Aug. 9, 1870	106, 126
Sleigh and cutter	L. B. Randall	Penn Yan, N. Y	May 5, 1857	17, 232
Sleigh and sled	D. C. Frazeur	Sidonsburgh, Pa	Jan. 28, 1868	73, 885
Sleigh and sled runner	C. H. Johnson	Chelsea, Mass	Oct. 19, 1869	95, 907
Sleigh and wheeled vehicle	D. C. Frazeur	Sidonsburgh, Pa	Feb. 2, 1869	86, 525
Sleigh-bell	W. E. Barton	East Hampton, Conn	June 28, 1870	104, 690
Sleigh-bell	A. G. Bevin	Chatham, Conn	Dec. 18, 1866	60, 613
Sleigh-bell	C. R. Clark	Cobalt, Conn	Nov. 5, 1867	70, 526
Sleigh-bell	E. G. Cone	East Hampton, Conn	Mar. 31, 1868	76, 163
Sleigh-bell	G. W. Gough and A. D. Willard.	East Hampton, Conn	Oct. 29, 1872	132, 657

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Sleigh-bell	H. W. Hayden	Waterbury, Conn	Sept. 3, 1872	130, 995
Sleigh-bell	G. W. Lamb	Cobalt, Conn	Aug. 24, 1869	94, 010
Sleigh-bell	W. H. Nichols	East Hampton, Conn	June 11, 1867	65, 689
Sleigh-bell	W. H. Nichols	East Hampton, Conn	June 20, 1871	116, 085
Sleigh-bell	H. K. Smith	Boston, Mass	Oct. 29, 1867	70, 278
Sleigh-bell	G. M. Strong	Boston, Mass	Mar. 3, 1868	75, 071
Sleigh-bell	H. Veazey	East Hampton, Conn	Aug. 10, 1869	93, 568
Sleigh-bell attachment	W. E. Barton	East Hampton, Conn	June 6, 1865	48, 040
Sleigh-bell fastening	I. H. Abell	East Hampton, Conn	Jan. 1, 1867	60, 658
Sleigh-bell fastening	H. Veazey	East Hampton, Conn	Aug. 10, 1869	93, 569
Sleigh-bells, Manufacture of	W. E. Barton	East Hampton, Conn	Dec. 31, 1867	72, 716
Sleigh-bells, Mode of attaching	W. E. Barton	East Hampton, Conn	July 19, 1870	105, 412
Sleigh-bells, Mode of stringing	L. C. Chase	Boston, Mass	May 14, 1861	32, 274
Sleigh-bells to harness, Attaching	B. E. Dexter	Gowanda, N. Y	June 24, 1873	140, 123
Sleigh-bells to straps, Attaching	W. E. Barton	East Hampton, Conn	Mar. 7, 1865	46, 623
Sleigh-bells to straps, Attaching	W. E. Barton	East Hampton, Conn	Aug. 16, 1870	106, 456
Sleigh-bells to straps, Attaching	A. G. Bevin	Chatham, Conn	July 22, 1856	15, 366
Sleigh-bench	E. Milner	Marquette, Mich	Mar. 29, 1870	101, 298
Sleigh, Bob	G. O. Momeny	Locust Point, Ohio	Aug. 13, 1867	67, 790
Sleigh, Bob	L. F. Skinner	Springvale, Wis	Oct. 1, 1867	69, 497
Sleigh-bodies, Pattern for drafting	D. Pierce	Waverly, Iowa	Feb. 4, 1868	74, 126
Sleigh-bottom	S. R. Bailey	Bath, Me	Jan. 19, 1869	85, 896
Sleigh-brake	T. H. Bromley	Stoneborough, Pa	Nov. 25, 1873	144, 949
Sleigh-brake	J. Ast	Maquoketa, Iowa	Aug. 20, 1867	67, 838
Sleigh-brake	F. Cohlmeier	Keck's Centre, N. Y	May 14, 1867	64, 633
Sleigh-brake	E. J. Cooper	Mineral Point, Wis	Jan. 24, 1871	111, 109
Sleigh-brake	A. Derby	Viroqua, Wis	Oct. 22, 1872	132, 359
Sleigh-brake	G. C. Fuller	Marcy, N. Y	May 9, 1871	114, 663
Sleigh-brake	C. Gardiner	Esperance, N. Y	Nov. 12, 1867	70, 827
Sleigh-brake	A. Ingalls	Hartwich Township, N. Y	Apr. 21, 1868	77, 045
Sleigh-brake	F. A. Kirch	Mansfield, Pa	Mar. 18, 1873	136, 839
Sleigh-brake	M. B. and S. J. Lord	Ellsworth, Me	Mar. 12, 1861	31, 671
Sleigh-brake	E. S. Maynard	Hancock, N. Y	Dec. 9, 1862	37, 141
Sleigh-brake	J. R. McAllister	Richville, N. Y	Oct. 30, 1866	59, 244
Sleigh-brake	J. J. Moore	Little York, N. Y	June 12, 1866	55, 522
Sleigh-brake	H. F. Morton	West Sumner, Me	Aug. 27, 1867	68, 226
Sleigh-brake	J. Myers	Camden, Pa	July 23, 1867	67, 132
Sleigh-brake	W. A. Niver	Scott, N. Y	Aug. 6, 1867	67, 570
Sleigh-brake	W. D. Rowlstone	Butternuts, N. Y	Feb. 18, 1868	74, 602
Sleigh-brake	M. Satterlee	Richland Centre, Wis	Nov. 24, 1868	84, 379
Sleigh-brake	J. W. Scott	Broad Top City, Pa	May 16, 1871	114, 976
Sleigh-brake	H. Sipe	Sipesville, Pa	May 21, 1867	65, 021
Sleigh-brake	W. Sloan	Highland, Iowa	June 11, 1867	65, 700
Sleigh-brake	H. W. Smith	Rainsburgh, Pa	Dec. 6, 1870	109, 957
Sleigh-brake	H. W. and B. C. Smith	Rainsburgh, Pa., and Tolleston, Ind.	Oct. 8, 1867	69, 717
Sleigh-brake	G. B. Stevens	Pluckemin, N. J	July 7, 1868	79, 785
Sleigh-brake	F. Teelin and J. A. Swift	Blossvale, N. Y	Oct. 8, 1867	69, 724
Sleigh-brake	C. F. Wheeler	Calais, Vt	July 21, 1868	80, 256
Sleigh-brake	J. and W. Wolfe	Harveyville, Pa	Nov. 2, 1869	96, 529
Sleigh-brake, Self-acting	J. Dutcher	Gibson, Pa	July 24, 1860	29, 251
Sleigh, Child's	A. H. Glose	Philadelphia, Pa	Mar. 5, 1867	62, 541
Sleigh-coupling	W. E. Van Schaick	Delavan, Wis	Oct. 26, 1869	96, 169
Sleigh, Cutter	A. Arneman	Guttenberg, Iowa	Oct. 31, 1865	50, 672
Sleigh-heater	A. Norton	Kokomo, Ind	May 2, 1871	114, 466
Sleigh horse-holder	H. A. Sprague	Charlotte, Me	Oct. 3, 1871	119, 662
Sleigh, Ice	J. Rancevan	Carthage, Ohio	Jan. 7, 1868	73, 198
Sleigh in descending inclinations, Apparatus for retarding.	J. Du Bois, jr	Cascade, Pa	June 13, 1846	4, 566
Sleigh-knee	I. Dan	Sanford, N. Y	Nov. 5, 1867	70, 535
Sleigh-knee	I. Dan	Deposit, N. Y	Nov. 5, 1867	70, 536
Sleigh-knee	J. P. Dorman	Galesburgh, Ill	Aug. 20, 1872	130, 625
Sleigh-knee	H. Francisco	Lake Mills, Wis	July 10, 1866	56, 334
Sleigh-knee	J. P. Garland	Newbury, Vt	Feb. 15, 1870	99, 770
Sleigh-knee	O. Johnson	Lassellsville, N. Y	Sept. 6, 1870	107, 055
Sleigh-knee	G. Larson	Lake Mills, Wis	Nov. 19, 1867	71, 025
Sleigh-knee, bench, and brace, Bent	G. and H. Ives	Detroit, Mich	June 13, 1871	115, 860
Sleigh-knee, Cast-iron	B. Knapp	Bloomville, Ohio	Sept. 24, 1867	69, 104
Sleigh-knee, Metal	W. D. Baughn	Milford, Mich	Sept. 24, 1867	69, 064
Sleigh, Lock	F. Talbot	Cleveland, Minn	Oct. 11, 1870	108, 206
Sleigh or cutter, Iron	A. Burchard	Sylvan Township, Washtenaw County, Mich.	Jan. 21, 1862	34, 196
Sleigh-runner	C. Chenette	Manchester, N. H	Jan. 21, 1873	134, 977
Sleigh-runner	G. W. Hatch	Parkman, Ohio	May 4, 1869	89, 658
Sleigh-runner	J. W. and E. W. Karn	Watkins, N. Y	May 27, 1873	139, 396
Sleigh-runner	J. Laux	Cleveland, Ohio	Nov. 10, 1868	83, 864
Sleigh-runner	J. Logan	Waterloo, Iowa	Nov. 1, 1870	108, 917
Sleigh-runner	J. G. Micler	Plymouth, Mich	Jan. 7, 1868	73, 025
Sleigh-runner	C. Stoddard	Hancock, N. Y	Apr. 2, 1867	63, 576
Sleigh-runner	W. H. Stroup	Philadelphia, Pa	Oct. 1, 1867	69, 508
Sleigh-runner	B. F. Watson	Farmington, Me	Apr. 16, 1872	125, 865
Sleigh-runner	T. A. Whiting	Catlett Station, Va	July 23, 1872	129, 772
Sleigh-runner and mode of attaching to axles of vehicles.	J. C. Moore	Madison, Ind	Apr. 7, 1868	76, 498
Sleigh-runner attachment to wheeled vehicles	Z. I. Pratt	Chicago, Ill	Apr. 18, 1871	113, 924
Sleigh-runner, Cast-iron	A. and N. Benedict, jr., and A. A. Hotchkiss.	Sharon, Conn	Feb. 10, 1834	....
Sleigh-runner, Cast-iron	E. W. Lockwood and B. T. Frederick.	Marshalltown, Iowa	Feb. 18, 1868	74, 556
Sleigh-runner for buggy	J. S. McIntire	Chicago, Ill	July 2, 1867	66, 373
Sleigh-runner, Metal	D. Holdiman	Waterloo, Iowa	June 14, 1870	104, 309
Sleigh-runners and wheel-tires, Facing iron and steel for.	W. Johnson	Newark, Del	May 30, 1838	760
Sleigh-runners, Attaching	W. W. St. John	Lima, N. Y	July 13, 1858	20, 903
Sleigh-runners, Attaching shoes to	G. Budd and G. T. Daved	Phillipsport, N. Y	Apr. 16, 1872	125, 718
Sleigh-runners, Construction of metallic	A. Spear	Braintree, Vt	May 25, 1840	1, 618
Sleigh-runners, Manufacture of	H. Lovelace	Chatfield, Minn	July 5, 1864	43, 418
Sleigh-runners to street-cars, Attaching	B. Auerbach	New York, N. Y	Apr. 6, 1869	88, 601

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Sleigh-runners to vehicles, Mode of attaching	A. Gregg	Anderson, Ind	Jan. 2, 1872	122, 454
Sleigh, Self-propelling	C. H. Hudson	New York, N. Y	June 20, 1871	116, 191
Sleigh-shaft	C and D. Bock	Drum's, Pa	Sept. 5, 1871	118, 682
Sleigh-shaft	C. H. Butterfield	Westborough, Mass	Jan. 26, 1869	86, 131
Sleigh-shoe	H. C. Overman	Chicago, Ill	Sept. 7, 1869	94, 505
Sleigh-shoe	T. B. Titus	Phelps, N. Y	Jan. 4, 1870	98, 530
Sleigh-shoe, Cast-iron	J. Arnold	Oswegatchie, N. Y	Mar. 12, 1828	......
Sleigh-shoe, Cast-iron	E. Trask	Sangerfield, N. Y	Oct. 6, 1827	......
Sleigh-shoe and miter-lock, Cast-iron double-grooved	L. and E. Brocs	Luzerne County, Pa	Feb. 10, 1834	......
Sleigh-shoe on wrought-iron rod, Cast-iron	S. Trousley	Manlius, N. Y	Feb. 7, 1815	......
Sleigh-shoes, Making steel-plated	S. Hunt	Canaan, Conn	Dec. 30, 1813	......
Sleigh-shoes, Ma nufacture of	S. Pettee	Salisbury, Conn	Oct. 1, 1822	......
Sleigh-shoes, Mold for casting	J. W. Dryer	Macedon, N. Y	Feb. 9, 1869	86, 655
Sleigh-shoes, Mold for casting	N. W. Russell	Cedar Falls, Iowa	Sept. 22, 1868	82, 353
Sleigh-shoes, Mold for casting	C. Sthoro	Montana, Iowa	Aug. 25, 1868	81, 554
Sleigh-shoes, Mold for casting and chilling	V. S. Butman	Ironton, Wis	June 11, 1872	127, 738
Sleigh, Traverse	B. Markham	Burlington, Vt	July 10, 1834	......
Sleigh, Traverse	L. Rogers	Berwick, Mass	Feb. 4, 1807	......
Sleigh, Velocipede	D. M. Anderson	Twinsburgh, Ohio	Jan. 11, 1870	98, 657
Sleigh, Velocipede	W. Erd	New Ulm, Minn	May 16, 1871	114, 783
Sleigh-warming	F. D. Kennedy	Albany, N. Y	Jan. 19, 1869	85, 937
Sleighs and sledges, Runner and bow for	A. Wilder	......	Dec. 14, 1799	......
Sleighs, Attaching wheels to	J. Stonebanks	College Point, N. Y	Dec. 29, 1868	85, 408
Sleighs, Bent knee and beam for	D. O. Card	Rawsonville, Ohio	Nov. 5, 1867	70, 408
Sleighs, Bunk for logging	J. P. Davis	Stiles, Wis	Oct. 29, 1867	70, 174
Sleighs, Combined rave and fender for	S. M. Stowart	Rochester, N. Y	Apr. 15, 1873	137, 804
Sleighs, Connecting body with runners of	T. R. Timby	Auburn, N. Y	May 7, 1842	2, 613
Sleighs, Coupling-r each for bob	A. S. Smith	Marengo, Mich	July 23, 1867	67, 142
Sleighs, Propelling	C. H. Hudson	New York, N. Y	June 27, 1871	116, 313
Sleighs, Shifting-bar for	A. J. Spencer	Middletown, Conn	Feb. 22, 1870	100, 206
Slicer and corer, Apple	N. Thomas	Dixfield, Me	Apr. 6, 1869	88, 755
Slicer and grater, Vegetable	T. G. Höfer	Saint Louis, Mo	Sept. 17, 1867	68, 877
Slicer and stripper, Vegetable	F. A. Sawyer and G. Goodriche	Portland, Me	Oct. 1, 1872	131, 787
Slicer, Apple	H. and J. S. B. Norton	Farmington, Me	Jan. 14, 1868	73, 373
Slicer, Apple	N. Thomas	East Dixfield, Me	Oct. 20, 1857	18, 476
Slicer, Bread	L. W. Baker	Marlborough, Mass	Aug. 14, 1860	29, 558
Slicer, Bread	H. F. Bond	Hudson, Wis	July 26, 1859	24, 851
Slicer, Bread	H. F. Bond	Waltham, Mass	Feb. 21, 1860	27, 199
Slicer, Bread	A. Dick	Buffalo, N. Y	Mar. 26, 1861	31, 789
Slicer, Bread	G. Hall	Morgantown, W. Va	May 16, 1865	47, 716
Slicer, Bread	G. W. Hildreth	Lockport, N. Y	Dec. 13, 1864	45, 409
Slicer, Bread	J. Stilley	Cincinnati, Ohio	Feb. 28, 1860	27, 318
Slicer, Bread	J. Taylor	Hudson, N. J	Dec. 7, 1869	97, 728
Slicer, Bread and meat	J. E. Dow	Boston, Mass	Feb. 7, 1865	46, 224
Slicer, Bread and meat	J. Ensinger and L. Fortig	Dauphin, Pa	Jan. 4, 1870	98, 576
Slicer, Bread and meat	J. D. Hall	Philadelphia, Pa	Feb. 14, 1865	46, 350
Slicer, Bread and meat	H. M. Shaw and C. B. Stilwell	Tremont, Ohio	Jan. 31, 1865	46, 150
Slicer, Bread and vegetable	S. E. Blake	Worcester, Mass	Jan. 3, 1865	45, 689
Slicer, Bread and vegetable	J. and S. A. Davies	Muskegon, Mich	Oct. 4, 1859	25, 633
Slicer, Fruit	J. H. Reed	Kent County, Del	Dec. 12, 1865	51, 479
Slicer, Fruit	F. C. Vibert	Hockanum, Conn	Nov. 30, 1869	97, 462
Slicer, Fruit and vegetable	W. A. Mayhew	Peabody, Mass	Sept. 20, 1870	107, 516
Slicer, Meat	B. Dean	Clayville, N. Y	Nov. 1, 1859	25, 954
Slicer, Meat	A. M. Force	Norwich, Conn	Mar. 26, 1867	63, 236
Slicer, Meat	W. Vine	Hartford, Conn	May 10, 1859	23, 966
Slicer, Meat and vegetable	G. B. Bullinger	Germantown, Pa	Jan. 3, 1865	45, 751
Slicer, Meat and vegetable	T. Carpenter	Battle Creek, Mich	Oct. 18, 1864	44, 705
Slicer, Meat and vegetable	P. H. Lindsey	Lockport, N. Y	Oct. 4, 1870	107, 932
Slicer, Potato	C. B. King	Gallatin, Tenn	Aug. 25, 1868	81, 570
Slicer, Vegetable	N. Botsford	Lockport, N. Y	Nov. 18, 1873	144, 596
Slicer, Vegetable	I. Bullard	Dedham, Mass	Apr. 28, 1868	77, 250
Slicer, Vegetable	G. W. Jacobs	Quincy, Ohio	May 26, 1868	78, 290
Slicer, Vegetable	R. James and J. W. Currier	Lockport, N. Y., and Springfield, Mass.	Sept. 12, 1871	118, 944
Slicer, Vegetable	G. Leman and G. W. Beals	Springfield, Mass	May 11, 1869	89, 873
Slicer, Vegetable	H. Liebmann	Mascontah, Ill	Sept. 24, 1867	69, 228
Slicer, Vegetable	S. Markel	Roseburgh, Pa	Jan. 5, 1869	85, 509
Slicer, Vegetable	T. Mason	Boston, Mass	July 11, 1865	48, 700
Slicer, Vegetable	B. Morahan	South Brooklyn, N. Y	Oct. 4, 1864	44, 547
Slicer, Vegetable	C. Parmelee	Wilmington, Vt	Dec. 13, 1859	26, 443
Slicer, Vegetable	G. B. Peets	Farmington, Mo	Feb. 23, 1869	87, 195
Slicer, Vegetable	J. C. Plumer	Boston, Mass	May 22, 1866	54, 949
Slicer, Vegetable	C. Rosenberry and W. Tanner	Chicago, Ill	Apr. 10, 1866	53, 882
Slicer, Vegetable	S. T. Sanford	Fall River, Mass	May 22, 1860	28, 412
Slicer, Vegetable	S. Walker	New York, N. Y	June 6, 1865	48, 118
Slicer, Vegetable and fruit	E. Holmes	Lynn, Mass	May 26, 1868	78, 373
Slicing device, Apple	H. and J. S. B. Norton	Farmington, Me	May 18, 1858	20, 295
Slicing dried beef, Machine for	A. Iske	Lancaster, Pa	Nov. 4, 1873	144, 206
Slicing machine, Apple	D. Davis, 2d	Stafford, Conn	Mar. 13, 1834	......
Slicing machine, Apple	E. L. Pratt	Philadelphia, Pa	Nov. 11, 1856	16, 067
Slide-bolt	J. Decker	Sparta, N. J	Aug. 14, 1866	57, 249
Slide-rest	A. V. Hill	Hinsdale, N. Y	Apr. 1, 1856	14, 563
Slide-wrench	B. F. Joslyn	Worcester, Mass	July 10, 1855	13, 221
Slide-wrench, Adjustable	T. Cooper and O. W. Cutler	Warwick, R. I	Oct. 8, 1872	132, 057
Slides and ways from dust, Protecting	E. H. Foote	Hartford, Conn	Jan. 2, 1855	12, 147
Sliding and swinging gate	W. Snyder	Wooster, Ohio	Apr. 17, 1866	54, 032
Sliding-gate	G. Motter, jr	Henry, Ill	Sept. 1, 1868	81, 813
Sliding-gate for fences, Balance	A. Baker	Western, N. Y	Apr. 10, 1845	3, 989
Sliding-hill, Artificial	C. De Bodisco and P. D. De Rivers.	St. Petersburg, Russia, and Madrid, Spain.	Sept. 21, 1869	95, 095
Sliding holder and gage	F. E. Kropf	Joliet, Ill	Oct. 15, 1872	132, 159
Sliding-switch for railways	H. N. Rhodes	Richmond, Vt	Aug. 28, 1860	29, 820
Sliding-wrench	D. H. Chamberlain	Boston, Mass	Mar. 20, 1849	6, 210
Slipper	C. R. Broadbent	Boston, Mass	Apr. 30, 1867	64, 277
Slipper, Carpet	D. Bowker	Boston, Mass	July 18, 1865	48, 788
Slipper, Webb	L. K. Washburn	Worcester, Mass	Jan. 30, 1872	123, 313
Slitting-boards, Tool for	J. Langham, jr	Philadelphia, Pa	Sept. 1, 1868	81, 632
Slitting-gage	J. Ballard	Ashtabula, Ohio	Apr. 18, 1854	10, 799
Slitting-gage	J. W. Van Deventer	Dundee, Mich	Mar. 1, 1864	41, 797

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Slitting-machine	J. J. Kents	Newtown, Pa	Nov. 19, 1867	71, 020
Slitting-machine	M. H. Merriam and E. L. Norton.	Charlestown, Mass	June 5, 1866	55, 330
Slitting-mills, Machinery attached to	T. Allen	Plymouth, Mass	Apr. 5, 1826	....
Slivering-machine	H. L. Nichols	New York, N. Y	Oct. 16, 1860	30, 418
Slop-hopper	J. G. Ils	San Francisco, Cal	Aug. 1, 1871	117, 635
Slop-hopper	J. Marquis	San Francisco, Cal	Sept. 4, 1866	57, 742
Slop-jar	J. C. Jewett	Buffalo, N. Y	Jan. 1, 1867	60, 738
Slop-jar	W. S. Potwin	Chicago, Ill	Feb. 18, 1873	135, 937
Slotting and cutting metal, Machine for	S. W. Putnam, jr	Fitchburgh, Mass	Mar. 14, 1871	112, 737
Slotting and key-seat machine	J. H. Cranston	Norwich, Conn	Jan. 14, 1873	134, 857
Slotting and shaping machine	W. H. Warren	Worcester, Mass	Aug. 6, 1872	130, 258
Slotting-machine	J. W. Moore	Cambridgeport, Mass	Dec. 17, 1867	72, 218
Slotting-machine	E. Shopbell	Ashland, Ohio	Oct. 22, 1867	70, 033
Slotting-machine	W. H. Warren	Worcester, Mass	June 6, 1871	115, 795
*Slotting-machine	P. Williams, 2d	Barre, Mass	May 2, 1854	10, 873
Slotting-tool holder	W. Seaton	Putnam, Conn	Jan. 25, 1870	99, 113
Slotting-tool holder	T. L. Webster	Brooklyn, N. Y	Apr. 30, 1867	64, 388
Slubbing-machine	C. Atwood	Middletown, Conn	Mar. 10, 1830	....
Slubbing-machine	C. Atwood	Middletown, Conn	Nov. 1, 1830	....
Slug-heating furnace for tailors, hatters, &c	R. Wildman	Charlestown, Mass	Feb. 19, 1856	19, 298
Sluice-blanket	A. Block	San Francisco, Cal	Jan. 7, 1868	73, 160
Sluice-box	R. E. Washburn	San Francisco, Cal	Feb. 20, 1866	52, 775
Sluice-box for gold-mining	J. H. Whitney	Helena, Mont	Mar. 15, 1870	100, 829
Sluice for saving metals, Revolving	T. D. and W. A. Hedger	Meadow Lake, Cal	Jan. 22, 1867	61, 426
Sluice for saving sulphurets, Mining	O. Jennings	North San Juan, Cal	June 22, 1869	91, 638
Sluice for washing ores, Rotating blanket	W. H. Patton	Oakland, Cal	Aug. 26, 1873	142, 271
Sluice-gate	J. S. Wilson	Harveysburgh, Ohio	Dec. 15, 1868	85, 048
Sluice-gate, Automatic	J. Kiplinger	Farmersville, Ohio	July 12, 1870	105, 220
Sluice-gate, Canal-lock	G. Heath	Little Falls, N. Y	Dec. 14, 1841	2, 393
Sluice-gate for dam or lock	F. R. Brunot	Allegheny, Pa	Sept. 24, 1867	69, 070
Sluice-gate for lock	W. A. Peters and J. C. Carpenter.	Clifton Park, N. Y	May 30, 1848	5, 611
Sluice to convey water to horizontal wheels and forming wheels of cast iron, &c.	J. Hermiston, jr	Wallingford, Conn	May 10, 1805	....
Small-coal or culm furnace	A. Dart	Carbondale, Pa	Jan. 24, 1871	111, 182
Smelting-furnace	C. C. Alger	Newburgh, N. Y	June 30, 1857	17, 659
Smelting-furnace	R. Boehm	Chicago, Ill	May 18, 1869	90, 228
Smelting-furnace	J. L. Gill, jr	Columbus, Ohio	Sept. 4, 1866	57, 701
Smelting-furnace	E. Hall	Moriah, N. Y	Apr. 26, 1864	42, 470
Smelting-furnace	F. C. Kropff	Bedford, Pa	Jan. 17, 1842	2, 422
Smelting-furnace	W. A. Madara	Spang's Mills, Pa	Sept. 14, 1869	94, 833
Smelting-furnace	J. A. Rost and I. N. Bertram	East Canaan and Sharon, Conn.	May 14, 1867	64, 709
Smelting-furnace	B. M. Smith	Topeka, Kans	Apr. 1, 1873	137, 493
Smelting-furnace	C. H. Swain	Brooklyn, N. Y	June 15, 1869	91, 493
Smelting-furnace	J. Thomas	Middlesborough, England	Mar. 8, 1870	100, 566
Smelting-furnace	A. Tiers	Kensington, Pa	Apr. 11, 1836	....
Smelting-furnace	P. M. Wilson	Brooklyn, N. Y	Mar. 12, 1872	124, 467
Smelting furnace, Copper	J. Davies	Baltimore, Md	July 31, 1866	56, 725
Smelting-furnace for iron and other ores	S. W. Harris	Hudson, N. Y	Feb. 20, 1872	123, 894
Smelting-furnace for ores of lead and other metals	R. H. Hall	Taunton, Mass	Mar. 10, 1868	75, 415
Smelting-furnace for precious metals	H. G. Hubert	New York, N. Y	Dec. 17, 1867	72, 201
Smelting-furnace, Iron	J. Bauchmand and J. Guiteau	Herford Township and Mauch Chunk, Pa.	Mar. 21, 1838	646
Smelting furnace, Iron	L. Bradley	Sharon, Conn	Nov. 18, 1844	3, 834
Smelting furnace, Iron	J. V. Hunter	Rockland, Pa	July 23, 1842	2, 737
Smelting furnace, Iron	T. H. Powers	Wyocena, Wis	May 6, 1856	14, 827
Smelting furnace, Iron	R. W. Siever	Upper Halloway, England	June 21, 1859	24, 525
Smelting furnace, Iron-ore	S. Broadmeadow	New York, N. Y	Apr. 5, 1837	175
Smelting furnace, Iron-ore	C. Sanderson	Sheffield, England	Feb. 9, 1841	1, 968
Smelting furnace, Iron-ore	G. E. Sellers	Philadelphia, Pa	Apr. 20, 1837	170
Smelting furnace, Lead	R. A. Drummond and G. W. Fuller.	Galena, Ill	May 30, 1838	757
Smelting furnace, Lead, &c	W. S. Keyes and A. Arents	Eureka, Nev	Nov. 28, 1871	121, 385
Smelting furnace, Ore	T. S. R. Scheuner	Salt Lake City, Utah	Apr. 9, 1872	125, 621
Smelting furnace, Ore	C. H. Swain	Brooklyn, N. Y	Mar. 9, 1869	87, 725
Smelting furnace, Silver-ore	A. H. Richardson	Denver, Colo	Sept. 17, 1867	69, 025
Smelting-furnace-slag pot	R. A. Fisher	Eureka, Nev	Oct. 1, 1872	131, 868
Smelting-furnace-slag spout	R. A. Fisher	Eureka, Nev	Oct. 1, 1872	131, 867
Smelting-furnaces, Blast-heating apparatus for	J. C. Kent	Phillipsburgh, N. J	Apr. 13, 1869	88, 964
Smelting-furnaces for iron-ore, Construction of	A. Roth	Pottsville, Pa	Oct. 31, 1839	1, 396
Smelting furnaces, Mode of heating the blast for	W. H. Phillips	Brooklyn, N. Y	Aug. 28, 1840	1, 740
Smelting, fusing, and roasting furnace for ores	J. M. Reid	Allegheny City, Pa	Apr. 2, 1872	125, 143
Smelting or blast furnace	W. Ferrie	Monkland, Great Britain	July 4, 1871	116, 698
Smith's striker	M. Scott	Claysville, Pa	Sept. 10, 1850	7, 662
Smoke and drying house	H. A. Amelung	New York, N. Y	July 31, 1866	56, 690
Smoke and spark arrester and consumer	C. F. Pike	Providence, R. I	Nov. 7, 1871	120, 666
Smoke and spark conduit for railway-trains	T. De Codezo	New York, N. Y	Oct. 21, 1873	143, 812
Smoke and spark deflector	A. Eames	Springfield, Mass	June 8, 1852	8, 998
Smoke-burning furnace	S. A. Ford	Chicago, Ill	Feb. 4, 1873	135, 420
Smoke-burning furnace	S. A. Ford	Chicago, Ill	Sept. 23, 1873	143, 004
Smoke-burning furnace	C. McGinniss and W. Naylor	Chicago, Ill	Aug. 5, 1873	141, 574
Smoke-burning furnace	F. A. Woodson	Anna, Ill	Feb. 2, 1869	86, 620
Smoke-conductor	J. C. Teale	New York	Sept. 11, 1810	....
Smoke conductor for railways, Locomotive	J. Greacen, jr	New York, N. Y	July 16, 1867	66, 703
Smoke-consumer	C. Plumb	Montreal, Canada	Oct. 10, 1871	119, 881
Smoke consumer, Furnace	B. H. Dear	Des Moines, Iowa	June 25, 1872	128, 213
Smoke, Consuming	J. Ecoff	Wheeling County, Va	Mar. 5, 1818	....
Smoke, Consuming	N. Lockling	Sparta, N. Y	Mar. 4, 1836	....
Smoke-consuming apparatus	F. P. Dimpfel	Philadelphia, Pa	Mar. 13, 1849	6, 182
Smoke-consuming apparatus	W. R. W. Smith	Glasgow, North Britain	Nov. 25, 1873	145, 0[illegible]2
Smoke-consuming furnace	J. C. Baum	Cincinnati, Ohio	July 2, 1872	128, 525
Smoke-consuming furnace	J. Case and I. Soules	Amsterdam, N. Y	Dec. 23, 1856	16, 317
Smoke-consuming heater	G. W. Fair	Dayton, Ohio	May 15, 1866	54, 705
Smoke-furnace for curing meat	J. I. Baringer	Germantown, N. Y	Nov. 20, 1866	59, 809
Smoke-house	C. Good	Arcanum, Ohio	Sept. 8, 1868	81, 995
Smoke-house	W. Hamilton	Saint Louis, Mo	Apr. 18, 1865	47, 355
Smoke-house	M. W. S. Kendall	Cincinnati, Ohio	Jan. 1, 1856	14, 021

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Invention.	Inventor.	Residence.	Date.	No.
Smoke-house	A. S. Kennedy	Saint Louis, Mo	Dec. 13, 1864	45, 415
Smoke-house	L. W. Shaeffer	Union Township, Ohio	Aug. 24, 1869	94, 138
Smoke-house	J. W. Story	Louisville, Ky	June 18, 1872	127, 994
Smoke-house	A. Waterman	Providence, R. I	Apr. 4, 1871	113, 602
Smoke-house, Portable metallic	L. S. Stevens	Waltham, Mass	Nov. 20, 1866	59, 931
Smoke-stack	T. F. Conklin	Fond du Lac, Wis	Dec. 9, 1873	145, 279
Smoke-stack	H. R. Gillingham	Jersey City, N. J	Sept. 1, 1863	39, 727
Smoke-stack	G. Holton	Chicago, Ill	Sept. 8, 1868	82, 003
Smoke-stack	H. Mackinnon	Cleveland, Ohio	Apr. 19, 1870	102, 020
Smoke-stack	W. H. Parker	Memphis, Tenn	Aug. 4, 1868	80, 659
Smoke-stack	T. P. Peck	Savannah, Ga	Oct. 29, 1867	70, 254
Smoke-stack	T. P. Peck	Savannah, Ga	Sept. 15, 1868	82, 158
Smoke stack	W. Toepfer	Milwaukee, Wis	May 16, 1871	114, 883
Smoke-stack, Locomotive	K. J. Duggan	Montgomery, Ala	July 16, 1872	129, 272
Smoke-stack, Locomotive-engine	J. Atkins	Washington, D. C	Mar. 17, 1868	75, 511
Smoke-ventilator	S. Smith	Hamilton, Ohio	Mar. 17, 1832	......
Smokers, Apparatus for the use of	M. and M. Myers and W. Hill	Birmingham, England	Jan. 15, 1867	61, 234
Smoking-pipe	J. P. Baxter	Portland, Me	Mar. 21, 1865	46, 870
Smoking-pipe	G. H. Chinnock	New York, N. Y	Oct. 30, 1866	59, 184
Smoking-pipe	E. Cattam	Wimbledon, England	July 12, 1870	105, 309
Smoking-pipe	F. Fickey, jr	Baltimore, Md	Jan. 17, 1865	45, 916
Smoking-pipe	H. J. Hale	New York, N. Y	Nov. 1, 1864	44, 863
Smoking-pipe	C. F. Hitselberger	Libertytown, Md	Sept. 20, 1870	107, 495
Smoking-pipe	F. J. Kallenburg	New York, N. Y	May 25, 1869	90, 554
Smoking-pipe	W. H. Morris	Brooklyn, N. Y	July 15, 1873	140, 940
Smoking-pipe	R. Norwood	Baltimore, Md	Nov. 1, 1864	44, 882
Smoking-pipe	R. Norwood	Baltimore, Md	Aug. 7, 1866	56, 997
Smoking-pipe	F. Saunders	New York, N. Y	Mar. 24, 1868	75, 799
Smoking-pipe	W. T. Slocum	Philadelphia, Pa	May 16, 1865	47, 752
Smoking-pipe	J. Statz	Washington, D. C	July 5, 1864	43, 437
Smoking-pipe	J. T. Stewart	Baltimore, Md	Feb. 28, 1865	46, 598
Smoking-pipe	C. Tollner	Pulaski, N. Y	Sept. 1, 1868	81, 844
Smoking-pipe and cigar-holder	A. Sappe	Johnstown, N. Y	Mar. 2, 1869	87, 441
Smoking pipe, Tobacco	H. Kurth	East New York, N. Y	Sept. 8, 1863	39, 819
Smoking-pipes for finishing, Clamp for holding	W. Kerr, jr	Boston, Mass	Jan. 1, 1867	60, 742
Smoking-pipes, Machine for molding clay	H. E. Merrill	Akron, Ohio	July 29, 1873	141, 2 0
Smoking-pipes, Mouth-piece for	J. P. Courtney and W. H. Kelagher.	Brooklyn, N. Y	Jan. 12, 1869	85, 795
Smoking-pipes, Oil-cup on	J. G. Gehring	Baltimore, Md	Aug. 30, 1864	43, 984
Smoking-pipes, Stem for	C. Hingher	New Brunswick, N. J	Aug. 6, 1861	33, 017
Smoking-stand	J. Holmes	New York, N. Y	Jan. 15, 1867	61, 197
Smoking-tube	R. Boeklen and W. Staehlen	New York, N. Y	Apr. 2, 1861	31, 863
Smoking-tube	A. Brear	Saugatuck, Conn	Mar. 11, 1873	136, 695
Smoking-tube	W. M. Bryant	Washington, D. C	Oct. 18, 1859	25, 803
Smoking-tube	A. Gedies	New York, N. Y	July 1, 1873	140, 360
Smoking-tube	W. A. Ludden	Brooklyn, N. Y	Feb. 19, 1861	31, 468
Smoking-tube	C. Mathews	New York, N. Y	Nov. 2, 1858	21, 973
Smoking-tube	A. Woodworth, 3d	New York, N. Y	July 1, 1862	35, 804
Smoothing and fluting iron	A. S. Mann	Saint Louis, Mo	Oct. 1, 1872	131, 763
Smoothing and fluting iron and holder	J. Hewitt	Albany, N. Y	Jan. 28, 1873	135, 335
Smoothing and polishing iron	F. A. Cannon	Brooklyn, N. Y	Apr. 20, 1858	20, 018
Smoothing and rufiling iron	A. R. Armstrong and C. S. Dudley.	Nashua, N. H	Apr. 18, 1871	113, 720
Smoothing-iron	F. C. Adams	Aberdeen, Ohio	Sept. 7, 1852	9, 241
Smoothing-iron	W. A. Andrews	Columbus, Ohio	June 6, 1871	115, 558
Smoothing-iron	L. W. Boynton	Worcester, Mass	June 24, 1856	15, 165
Smoothing-iron	J. Christy	Baltic, Conn	Feb. 25, 1862	34, 481
Smoothing-iron	M. A. B. Cook	Boston, Mass	Dec. 5, 1848	5, 950
Smoothing-iron	J. W. Currier	Holyoke, Mass	July 4, 1865	48, 526
Smoothing-iron	A. Ellison	Boston, Mass	May 10, 1859	23, 910
Smoothing-iron	J. Frasr	Dowagiac, Mich	Aug. 27, 1867	68, 178
Smoothing-iron	J. Goodin, jr	Cincinnati, Ohio	Oct. 3, 1857	18, 543
Smoothing-iron	J. Jones	Newark, N. J	Feb. 11, 1868	74, 372
Smoothing-iron	R. Kuhfs	Saint Louis, Mo	Aug. 11, 1863	39, 484
Smoothing-iron	G. W. C. Lovell	Clarksville, Tenn	Mar. 1, 1870	100, 423
Smoothing-iron	A. S. Mann	Pittsburgh, Pa	Aug. 19, 1873	141, 880
Smoothing-iron	G. R. McClain	Bath, Me	Apr. 21, 1857	17, 105
Smoothing-iron	L. L. Mivelar	Louisville, Ky	Feb. 25, 1873	136, 170
Smoothing-iron	T. C. Moore	Wilmington, Ohio	Jan. 1, 1867	60, 775
Smoothing-iron	O. F. Morrill	Boston, Mass	June 17, 1856	15, 143
Smoothing-iron	E. B. Robinson	Portland, Me	Mar. 5, 1872	124, 219
Smoothing-iron	A. Rudisill	York, Pa	June 1, 1858	20, 445
Smoothing-iron	W. F. Shaw	Boston, Mass	Sept. 1, 1857	18, 108
Smoothing-iron	N. Taliaferro and W. D. Cummings.	Augusta and Murphysville, Ky.	Mar. 30, 1852	8, 848
Smoothing-iron	J. L. Tarbox	Wyoming, Pa	May 19, 1863	38, 613
Smoothing-iron	A. B. Wimpenny	Haytield, Great Britain	Mar. 4, 1873	136, 401
Smoothing-iron and lamp, Combination of	L. Bricker	Springfield, Ill	Sept. 11, 1860	29, 949
Smoothing-iron, Furnace	J. Taggart	Roxbury, Mass	Sept. 9, 1856	15, 723
Smoothing-iron handle	H. C. Brown	Buffalo, N. Y	Nov. 8, 1859	26, 067
Smoothing-iron handle	R. W. Towle	Searsport, Me	May 5, 1868	77, 681
Smoothing-iron handle	T. Van Tassell and R. S. Pollock.	San Francisco, Cal	Jan. 25, 1870	99, 265
Smoothing-iron heater	N. Cleveland and J. J. Johnston.	Allegheny, Pa	Sept. 18, 1855	13, 566
Smoothing-iron heater	J. J. Johnston	Allegheny City, Pa	Jan. 10, 1854	10, 408
Smoothing-iron-heating device	J. E. Johnson	Brockport, N. Y	July 31, 1860	29, 379
Smoothing-iron, Rotary	J. W. Brown	Hartford, Conn	Mar. 21, 1854	10, 686
Smoothing-iron, Self-heating	E. O. Ball	Greensburgh, Ohio	July 10, 1860	29, 048
Smoothing-iron, Self-heating	G. W. Bishup	Brooklyn, N. Y	May 6, 1856	14, 796
Smoothing-iron, Self-heating	W. D. Cummings	Washington, Ky	Sept. 30, 1856	15, 801
Smoothing-iron, Self-heating	P. S. Howes	Boston, Mass	May 16, 1854	10, 938
Smoothing-iron, Self-heating	J. Johnston	Allegheny City, Pa	Jan. 10, 1854	10, 409
Smoothing-iron, Self-heating	C. A. Read	Waterloo, N. Y	May 16, 1854	10, 907
Smoothing-iron, Self-heating	W. Wickersham	Boston, Mass	Aug. 8, 1854	11, 503
Smoothing-iron shield	W. J. Keep	Buffalo, N. Y	May 12, 1868	77, 886
Smoothing-iron stand	C. W. Allen	Newport, Ky	Mar. 12, 1867	62, 800
Smoothing-iron, Chill for casting	J. F. Bless	Newark, N. J	Dec. 24, 1872	134, 193

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Invention.	Inventor.	Residence.	Date.	No.
Smoothing stone or implement	J. E. Tucker	Boston, Mass	Sept. 12, 1865	49, 956
Smut and garlic machine	W. Delaney	Cornwall, N. Y	Oct. 6, 1843	3, 293
Smut and garlic machine	A. Hurst	Allen Township, Pa	Jan. 23, 1835	....
Smut and garlic machine	T. J. Sands and B. Kendig	Washington Township, Pa.	Mar. 18, 1835	....
Smut and grain-cleaning machine	A. E. Teal and W. Ransom	Cicero, Ind	Aug. 26, 1862	36, 311
Smut and grain-cleaning machine	J. Tobin	Newark, N. J	Apr. 27, 1859	20, 104
Smut and hulling machine	S. Richardson	Elmira, N. Y	Feb. 5, 1836	....
Smut and scouring machine	J. White	Cleveland, Ohio	Sept. 25, 1860	30, 171
Smut and scouring machine	F. Woodward	Butternuts, N. Y	Aug. 10, 1821	....
Smut and separator machine	C. McGinniss	Chicago, Ill	Oct. 28, 1862	36, 798
Smut and wheat separating machine	W. H. Wash	Howardsville, Va	Feb. 14, 1871	111, 794
Smut-fanning mill	T. Pierce	....	Feb. 21, 1804	....
Smut-fanning mill	T. Pierce	Fishkill, N. Y	May 24, 1805	....
Smut-machine	A. Adams	Port Henry, N. Y	Aug. 3, 1840	1, 712
Smut-machine	Z. G. Allen and G. W. Marshall.	Buffalo, N. Y	Apr. 2, 1867	63, 355
Smut-machine	T. R. Bailey and E. Rich	Weybridge and Shoreham, Vt.	July 16, 1841	2, 172
Smut-machine	D. Baldwin	Whitehall, N. Y	Dec. 14, 1841	2, 390
Smut-machine	L. B. Ball	Putnam, Ohio	Nov. 14, 1854	11, 923
Smut-machine	E. Barnhart	Shippensburgh, Pa	May 24, 1859	24, 086
Smut-machine	J. Bean and B. Wright	Hudson, Mich	Feb. 6, 1855	12, 341
Smut-machine	J. D. Bedwell	Uhricksville, Ohio	Oct. 24, 1854	11, 823
Smut-machine	J. Benner	Liberty, Pa	Sept. 11, 1847	5, 289
Smut-machine	J. Benner	Allegheny, Pa	Apr. 12, 1859	23, 547
Smut-machine	T. Bookman	Lexington District, S. C	June 3, 1843	3, 118
Smut-machine	J. W. Brower	Mount Airy, N. C	Feb. 28, 1844	3, 455
Smut-machine	T. Brown	Rome, N. Y	Aug. 4, 1843	3, 207
Smut-machine	H. A. Buck	Fredonia, N. Y	July 10, 1841	2, 162
Smut-machine	H. A. Buck	Fredonia, N. Y	May 26, 1843	3, 108
Smut-machine	A. Buell and T. Brown	Louisville, Ky	July 17, 1849	6, 598
Smut-machine	J. Burch	Mill Port, N. Y	Aug. 22, 1840	1, 725
Smut-machine	T. Carpenter	Elmira County, N. Y	Dec. 24, 1828	....
Smut-machine	J. Case	Sodus, N. Y	Oct. 1, 1830	....
Smut-machine	E. M. Clark	Lancaster, Pa	July 28, 1857	17, 869
Smut-machine	E. M. Clark	Lancaster, Pa	Jan. 4, 1859	22, 490
Smut-machine	J. M. Clarke	Strasburgh, Pa	Mar. 20, 1844	3, 499
Smut-machine	J. Coleman	Blacklegs, Pa	Nov. 15, 1843	3, 337
Smut-machine	W. W. Conner	Nobleville, Ind	Oct. 8, 1867	69, 634
Smut-machine	S. Cook	Brockport, N. Y	Apr. 26, 1853	9, 682
Smut-machine	J. Coppuck	Mount Holly, N. J	Apr. 24, 1841	2, 066
Smut-machine	R. M. Dempsey	Indianapolis, Ind	July 8, 1856	15, 284
Smut-machine	J. Demuth, B. Bowman, and L. Beck.	Lancaster and Lampeter, Pa.	May 11, 1841	2, 087
Smut-machine	R. Dennison	Wilton, Me	July 2, 1836	....
Smut-machine	L. Drake and E. Hewitt	Marshall, Mich	July 31, 1860	29, 367
Smut-machine	W. Dumant	Seneca Falls, N. Y	Feb. 24, 1843	2, 971
Smut-machine	A. Duncan	York, Pa	Aug. 26, 1862	36, 285
Smut-machine	J. M. Earls	Troy, N. Y	Apr. 27, 1852	8, 904
Smut-machine	P. T. Elting	Buffalo, N. Y	Aug. 6, 1867	67, 423
Smut-machine	R. Engle	Burlington County, N. J	June 2, 1836	....
Smut-machine	W. Engle and M. G. Kinney	Conyngham, Pa	May 19, 1843	3, 088
Smut-machine	L. Fagin	Cincinnati, Ohio	Mar. 14, 1854	10, 650
Smut-machine	S. Favinger	Philadelphia, Pa	July 17, 1860	29, 215
Smut-machine	E. P. Fitzpatrick	Mount Morris, N. Y	Nov. 14, 1835	....
Smut-machine	S. W. Foster	Scio, Mich	Dec. 21, 1839	1, 436
Smut-machine	G. Freymoyer	Chichester, Pa	June 24, 1843	3, 149
Smut-machine	H. L. Fulton	Chicago, Ill	Apr. 12, 1853	9, 659
Smut-machine	J. German, jr., and S. R. Perkins.	Southfield and Pontiac, Mich.	June 1, 1858	20, 420
Smut-machine	J. Getz	Buffalo, N. Y	June 29, 1869	92, 038
Smut-machine	J. Gillaspie	Middletown, Md	Aug. 23, 1820	....
Smut-machine	C. D. Gordon and S. D. Gouldthrite.	West Martinsburgh and Lowville, N. Y.	May 28, 1850	7, 396
Smut-machine	J. G. Goshon	Shirleysburgh, Pa	Jan. 8, 1850	7, 000
Smut-machine	G. W. Grant	Middleport, Ohio	Oct. 22, 1872	132, 394
Smut-machine	L. Greene	Tiffin, Seneca County, Ohio	Oct. 9, 1841	2, 291
Smut-machine	W. G Grimes	York, Pa	Mar. 25, 1839	1, 110
Smut-machine	J. Groat	Troy, N. Y	Nov. 9, 1844	3, 817
Smut-machine	L. Hayward	Phelps, N. Y	Apr. 12, 1831	....
Smut-machine	H. Helm	Wheeling, Va	May 8, 1843	3, 078
Smut-machine	J. Heygel	Salisbury, Pa	Jan. 16, 1843	2, 914
Smut-machine	J. Heygel	Baltimore, Md	Jan. 26, 1847	4, 944
Smut-machine	J. Heygel	Cumberland, Md	June 5, 1849	6, 505
Smut-machine	J. Hollingsworth	Zanesville, Ohio	Apr. 22, 1851	8, 061
Smut-machine	H. Hopkins	Evansville, Ind	Sept. 14, 1858	21, 503
Smut-machine	E. Howard	Fredonia, N. Y	Oct. 12, 1843	3, 361
Smut-machine	J. W. Howlet and F. M. Walker	Greensborough, N. C	May 9, 1846	4, 512
Smut-machine	F. Ihlenfeldt	Le Roy, Ill	May 17, 1870	103, 049
Smut-machine	H. B. Ingham	Camptown, Pa	Oct. 28, 1856	15, 978
Smut-machine	H. B. James	Mount Holly, N. J	May 17, 1844	3, 588
Smut-machine	H. B. James	Trenton, N. J	June 27, 1854	11, 135
Smut-machine	J. Johnston	Wilmington, Del	Nov. 8, 1845	4, 264
Smut-machine	C. and J. Keeler	Union, N. Y	Sept. 14, 1852	9, 261
Smut-machine	I. Kepler	Milton, Pa	Apr. 7, 1857	16, 980
Smut-machine	S. Ketchum	Lancaster, Ohio	Mar. 28, 1854	10, 677
Smut-machine	W. H. Kite and G. S. Newmen	Liberty Mills, Va	Dec. 27, 1870	110, 475
Smut-machine	J. Klein	Lowhill, Pa	July 26, 1843	3, 196
Smut-machine	J. Lantz	Wheeling, W. Va	June 6, 1871	115, 620
Smut-machine	F. L. Lee	Washington, N. Y	Mar. 10, 1843	2, 969
Smut-machine	J. N. Lester	Oswego, N. Y	Aug. 17, 1858	21, 202
Smut-machine	O. Lull	McConnellsville, Ohio	Apr. 6, 1843	3, 033
Smut-machine	M. Mallory	Mount Morris, N. Y	Jan. 20, 1844	3, 407
Smut-machine	S. B. Manning	Allegheny, Pa	Apr. 6, 1858	19, 880
Smut-machine	H. Marshman and C. F. Foulke	Carlisle, Iowa	Nov. 23, 1858	22, 128
Smut-machine	T. H. McCrary	Madisonville, Tenn	Mar. 23, 1852	8, 827
Smut-machine	E. McLane	Young America, Ill	July 28, 1868	80, 361

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Smut-machine	C. Millar	Sandoval, Ill	June 23, 1868	79, 077
Smut-machine	R. Mohler	Lancaster, Pa	July 24, 1860	29, 297
Smut-machine	R. Mohler	Lancaster, Pa	Mar. 18, 1862	34, 691
Smut-machine	A. Mudge	Canajoharie, N. Y	Feb. 25, 1836	....
Smut-machine	T. A. Noble, E. Coy, and J. B. Angell.	Akron, Ohio, and Allegheny, Pa.	May 24, 1859	24, 140
Smut-machine	J. Pagin	Michigan City, Ind	Aug. 14, 1844	3, 705
Smut-machine	W. B. Palmer	Rochester, N. Y	Apr. 19, 1841	2, 057
Smut-machine	D. Pease, jr	Winfield, N. Y	Feb. 27, 1823	....
Smut-machine	D. Pease, jr	Floyd, N. Y	Oct. 2, 1847	5, 314
Smut-machine	D. Pease, jr	Floyd, N. Y	Jan. 11, 1853	9, 539
Smut-machine	G. S. Peck	East Smithfield, Pa	June 1, 1852	8, 983
Smut-machine	P. Pettis	Tallmadge, Ohio	Aug. 12, 1824	....
Smut-machine	R. P. Phenix	Black River Falls, Wis	Sept. 1, 1863	39, 774
Smut-machine	I. Phillips	Burlington, Iowa	Nov. 17, 1863	40, 639
Smut-machine	H. L. Pierce	Millport, N. Y	Oct. 30, 1860	30, 538
Smut-machine	N. Platt	Ottawa, Ill	May 20, 1851	8, 097
Smut-machine	J. S. Poultney	Akron, Ohio	Nov. 26, 1872	133, 480
Smut-machine	J. Pratt	Otsego, N. Y	July 2, 1836	....
Smut-machine	H. D. Reynolds	Mill Hall, Pa	July 28, 1846	4, 663
Smut-machine	M. R. Ruble	Nineveh, Ind	June 1, 1869	90, 875
Smut-machine	J. Russell	Jenner, Pa	Apr. 24, 1840	1, 569
Smut-machine	B. Rutter and H. Rowzer	Piqua, Ohio	Oct. 4, 1853	10, 074
Smut-machine	W. B. Ryan	Mount Morris, N. Y	Apr. 28, 1836	....
Smut-machine	S. Scamman and R. Nason	Waterville, Me	Apr. 10, 1844	3, 532
Smut-machine	D. Shaw	Cheshire, Ohio	Apr. 6, 1852	8, 861
Smut-machine	D. P. Shaw and F. C. Brown	Rochester, Ind	Mar. 1, 1859	23, 119
Smut-machine	H. W. Shipley	Mount Vernon, Ohio	Sept. 11, 1860	30, 002
Smut-machine	A. and G. Smith	Flint, Ind	Aug. 7, 1866	57, 601
Smut-machine	B. M. Smith	Rochester, N. Y	Sept. 8, 1837	375
Smut-machine	H. Smith	Bethany, N. Y	July 31, 1840	1, 706
Smut-machine	L. Smith	Plattsburgh, N. Y	Oct. 18, 1839	1, 373
Smut-machine	L. Smith	Troy, N. Y	Feb. 12, 1850	7, 090
Smut-machine	E. S. Snyder	Charlestown, Va	Apr. 30, 1844	3, 569
Smut-machine	M. B. Spafford	Gainesville, N. Y	Mar. 8, 1836	....
Smut-machine	W. P. Springer	Oswego, N. Y	Mar. 2, 1869	87, 441
Smut-machine	H. Stanley	Saint Johnsbury, Vt	Aug. 25, 1868	81, 428
Smut-machine	G. H. Starbuck and L. D. Gilman.	Troy, N. Y	July 29, 1856	15, 442
Smut-machine	H. Staub	Martinsburgh, Va	May 16, 1846	4, 524
Smut-machine	A. Straub	Milton, Pa	May 17, 1844	3, 592
Smut-machine	R. Summers	Seneca Falls, N. Y	Jan. 27, 1843	2, 927
Smut-machine	R. C. Swann	Brownsville, Ind	June 19, 1866	55, 788
Smut-machine	J. Taylor	Auburn, N. Y	Apr. 11, 1848	5, 503
Smut-machine	R. Thompson	East Davenport, Iowa	Dec. 18, 1860	30, 994
Smut-machine	W. E. Tickler and E. T. and D. M. Marshall.	Pierceton, Ind	Feb. 12, 1867	62, 088
Smut-machine	J. Tompkins	Liberty, Pa	June 16, 1857	17, 526
Smut-machine	J. Turk	Columbus, Pa	Nov. 7, 1835	....
Smut-machine	G. B. Turner	Cuyahoga Falls, Ohio	May 23, 1854	10, 949
Smut-machine	G. B. Turner	Cuyahoga Falls, Ohio	May 8, 1855	12, 839
Smut-machine	G. B. Turner	Cuyahoga, Ohio	May 1, 1860	28, 117
Smut-machine	R. Tyhurst	Shaverstown, Pa	June 13, 1848	5, 627
Smut-machine	D. Ulam	Mount Pleasant, Pa	Apr. 23, 1850	7, 312
Smut-machine	D. M. Vance	Urbana, Ohio	June 8, 1858	20, 521
Smut-machine	G. D. Waldo	Lockport, N. Y	Jan. 17, 1842	2, 421
Smut-machine	L. B. Walker	Orangeville, N. Y	Oct. 18, 1839	1, 375
Smut-machine	T. Wallace and J. W. Hyde	Chicago and Joliet, Ill	May 30, 1871	115, 397
Smut-machine	R. Ward	Edinburgh, Ind	Sept. 27, 1859	25, 594
Smut-machine	R. Waskey	Mill Creek, Va	Sept. 27, 1853	10, 052
Smut-machine	J. W. Webster	Luray, Va	June 5, 1844	3, 617
Smut-machine	W. G. Wilcox	Waterloo, Wis	Nov. 6, 1866	59, 493
Smut-machine	S. B. Williams	Baresville, Ohio	Sept. 23, 1862	36, 545
Smut-machine	S. B. Williams	Wheeling, W. Va	Apr. 3, 1866	53, 720
Smut-machine	J. Wilson	Gentsville, S. C	June 22, 1842	2, 684
Smut-machine	N. Winslow	Poughkeepsie, N. Y	Oct. 25, 1832	....
Smut-machine	J. A. Woodward	Burlington, Iowa	Oct. 20, 1857	18, 484
Smut-machine	J. A. Woodward	Burlington, Iowa	Dec. 21, 1858	22, 395
Smut-machine	T. B. Woodward	Kensington, Pa	Oct. 10, 1854	11, 800
Smut-machine	J. E. Wratten	Rush, N. Y	May 15, 1847	5, 122
Smut-machine	J. B. Yates	Sherryville, Va	Oct. 12, 1839	1, 363
Smut-machine	E. W. Young and T. H. Wilson	Parkman, Ohio, and Harrisburgh, Pa.	June 5, 1844	3, 610
Smut-machine	W. Zimmerman	Quincy, Ill	Sept. 27, 1853	10, 053
Smut-machine	W. Zimmerman	Quincy, Ill	Mar. 24, 1857	16, 897
Smut-machine and separator, Combined	J. Routh	Grayville, Ill	Apr. 7, 1863	38, 128
Smut-machine for cleaning grain	J. Parker	Sunbury, Ohio	Aug. 23, 1838	890
Smut-machine for cleaning rice, wheat, and other kinds of small grain.	H. H. Southworth	Little Falls, N. Y	Aug. 23, 1838	892
Smut-machine for mills	H. Weed and S. Fellows	Sandwich, N. H	Aug. 23, 1831	....
Smut-machine grindstone	B. Smith	Bethlehem, N. Y	Jan. 9, 1834	....
Smut-machine rubber	F. Wright	Indianapolis, Ind	Apr. 30, 1850	7, 333
Smut-machine, scouring grain, and hulling rice and barley, &c.	B. Wing and O. Root	Verona and Amsterdam, N. Y.	Mar. 12, 1834	....
Smut-machines and hullers, Scouring-case for	N. C. Page	Washington, D. C	Jan. 2, 1872	122, 329
Smut-machines, Beatcr for	Z. Durkee	Alden, N. Y	July 26, 1853	9, 884
Smut-machines, Composition-stone for	J. S. Elliott and J. F. Wood	Chelsea and Everett, Mass	Apr. 9, 1872	125, 385
Smut-machines, Separator for	G. P. Jordan	Burlington, Iowa	May 24, 1859	24, 126
Smut-mill	A. D. Ash	Wayne County, N. C	Mar. 4, 1873	136, 356
Smut-mill	H. A. Barnard	Moline, Ill	Oct. 28, 1873	144, 050
Smut-mill	J. A. Benzing	Oswego, N. Y	Dec. 20, 1870	110, 191
Smut-mill	S. D. Broad	Bedford, Pa	Oct. 13, 1863	40, 238
Smut-mill	J. Card	Gainesville, N. Y	June 20, 1835	....
Smut-mill	C. D. Childs	Mount Morris, N. Y	Aug. 15, 1837	354
Smut-mill	C. D. Childs	York, N. Y	July 8, 1841	2, 150
Smut-mill	J. W. Cormack	Quincy, Ill	Oct. 7, 1856	15, 841
Smut-mill	J. F. Ewan and J. R. Glenn	Hillsborough, Ill	June 23, 1868	79, 218
Smut-mill	S. Fellows	Sandwich, N. H	May 24, 1832	....

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Smut-mill	C. Frank	Cleveland, Ohio	Jan. 25, 1859	22, 720
Smut-mill	R. Heneage	Buffalo, N. Y	July 24, 1866	56, 672
Smut-mill	J. Hinzey	Peoria, Ill	Sept. 2, 1873	142, 465
Smut-mill	S. Howes and A. Babcock	Silver Creek, N. Y	Feb. 23, 1864	41, 703
Smut-mill	J. C. Kelly and A. Frost	Edinburgh, Ind	May 4, 1858	20, 161
Smut-mill	C. Küderli	Waumandee, Wis	Dec. 17, 1872	133, 993
Smut-mill	D. W. Marmon	Richmond, Ind	Mar. 15, 1870	100, 913
Smut-mill	C. E. McNeal	Silver Creek, N. Y	Nov. 19, 1872	133, 240
Smut-mill	D. Pease	Floyd, N. Y	Sept. 22, 1863	40, 060
Smut-mill	D. Pease	Floyd, N. Y	Apr. 23, 1867	64, 027
Smut-mill	D. Pease	Floyd, N. Y	Nov. 2, 1869	96, 476
Smut-mill	D. Pease	Floyd, N. Y	Aug. 15, 1871	118, 048
Smut-mill	C. T. Phillips	Jordan, N. Y	Nov. 3, 1868	83, 658
Smut-mill	R. and J. H. Redfield	Salem, Ind	July 28, 1868	80, 306
Smut-mill	J. Russell	Cumberland, Md	Oct. 25, 1864	44, 825
Smut-mill	G. H. Starbuck and L. D. Gilman.	Troy, N. Y	Mar. 29, 1859	23, 405
Smut-mill	W. C. Thompson	Williamson County, Tenn	Aug. 2, 1870	105, 969
Smut-mill	J. T. Town	Mount Morris, N. Y	June 16, 1836	....
Smut-mill	B. T. Trimmer	Rochester, N. Y	Aug. 18, 1863	39, 598
Smut-mill	J. C. Waggoner	Saint Louis, Mo	Oct. 6, 1868	82, 898
Smut-mill	R. Ward	Edinburgh, Ind	July 7, 1868	79, 791
Smut-mill	J. Wernwag	Harper's Ferry, W. Va	Jan. 9, 1872	122, 691
Smut-mill	A. Wolze	Saint Louis, Mo	Feb. 14, 1860	27, 182
Smut-mill and separator	J. Mills and A. G. Waldo	Milwaukee, Wis	Feb. 22, 1870	100, 054
Smut-mill and grain-cleaner	B. T. Trimmer	Rochester, N. Y	Oct. 17, 1871	120, 012
Smut-mill case, Metallic fabric for	H. S. Jewell	Brooklyn, N. Y	June 24, 1873	140, 199
Snag-boat	E. M. Shield	Cincinnati, Ohio	Oct. 5, 1869	95, 609
Snag sawing or cutting machine	J. Hamilton	New York	June 27, 1840	1, 663
Snail-wheel lock, Combined	S. Andrews	Perth Amboy, N. J	Feb. 12, 1841	1, 977
Snap	P. Dolan	Carbondale, Pa	Jan. 5, 1869	85, 646
Snap and buckle, Combined	P. A. Snyder	Butlerville, Ohio	Nov. 14, 1871	121, 015
Snap-dragon	J. Osterling	Wheeling, Va	Sept. 2, 1862	36, 364
Snap-hook	C. H. Alsop	Middletown, Conn	Aug. 28, 1866	57, 456
Snap-hook	W. Armstrong	Newark, Ohio	Mar. 20, 1866	53, 255
Snap-hook	E. A. Andrews	New Britain, Conn	June 5, 1866	55, 219
Snap-hook	C. H. Atwood	New Britain, Conn	Nov. 5, 1867	70, 499
Snap-hook	S. Babcock	Middletown, Conn	Dec. 8, 1863	40, 806
Snap-hook	J. Bailey	East Troy, Wis	May 16, 1865	47, 690
Snap-hook	F. Beals	New Haven, Conn	Sept. 11, 1866	57, 847
Snap-hook	W. Bellairs and O. D. Barto	Atkinson, Ill	June 5, 1866	55, 229
Snap-hook	D. J. Blasir	Western, N. Y	Oct. 4, 1870	107, 859
Snap-hook	W. H. Bouser	Paris, Ill	July 14, 1868	79, 944
Snap-hook	H. Bradbury	Berlin, Conn	July 24, 1866	56, 666
Snap-hook	C. B. Bristol	New Haven, Conn	May 16, 1865	47, 764
Snap-hook	C. B. Bristol	New Haven, Conn	May 29, 1866	55, 050
Snap-hook	C. B. Bristol	New Haven, Conn	July 23, 1867	67, 020
Snap-hook	G. A. Brown	Kalamazoo, Mich	June 28, 1870	104, 702
Snap-hook	H. Burdict and A. Guild	Middletown, Conn	Oct. 15, 1872	132, 247
Snap-hook	E. A. Cooper	Buffalo, N. Y	June 27, 1865	48, 482
Snap-hook	E. A. Cooper	Buffalo, N. Y	Oct. 20, 1868	83, 134
Snap-hook	W. Cooper, jr., and W. D Rumsey.	Howell, Mich	July 7, 1868	79, 638
Snap-hook	E. Covert	Farmer Village, N. Y	Sept. 10, 1867	68, 710
Snap-hook	J. C. Covert	Newark, N. J	Feb. 25, 1868	74, 897
Snap-hook	J. C. Covert	Farmer Village, N. Y	Sept. 30, 1873	143, 332
Snap-hook	E. S. Dawson	Syracuse, N. Y	Mar. 13, 1866	53, 122
Snap-hook	G. R. Dunn	Newark, N. J	Apr. 19, 1864	42, 357
Snap-hook	L. Flagg	Peru, Ind	July 30, 1872	130, 031
Snap-hook	J. A. Fletcher	Eyota, Minn	Aug. 2, 1870	106, 043
Snap-hook	E. B. Forbush and J. Letchworth.	Buffalo, N. Y	Nov. 6, 1866	59, 505
Snap-hook	R. L. Fraser	Westernville, N. Y	Nov. 2, 1869	96, 417
Snap-hook	R. L. Fraser	Westernville, N. Y	Nov. 2, 1869	96, 418
Snap-hook	K. Frazer	Syracuse, N. Y	Sept. 24, 1867	69, 087
Snap-hook	W. S. Thurlow	Geneseo, Ill	Aug. 13, 1867	67, 746
Snap-hook	R. A. Goodyear	New York, N. Y	July 22, 1862	35, 941
Snap-hook	R. A. Goodyear	New Haven, Conn	Mar. 7, 1865	46, 659
Snap-hook	R. E. and A. Gorton	Franklinton, N. Y	Apr. 19, 1864	42, 366
Snap-hook	A. Hagny	Keokuk, Iowa	June 19, 1866	55, 648
Snap-hook	E. Hamilton	Chicago, Ill	June 20, 1865	48, 275
Snap-hook	G. Havell	Newark, N. J	Sept. 10, 1872	131, 271
Snap-hook	W. L. Heberling and J. U. Fiester.	Mount Pleasant and Winchester, Ohio.	Aug. 29, 1871	118, 611
Snap-hook	H. Hise	Ottawa, Ill	Jan. 3, 1865	45, 714
Snap-hook	A. A. Hotchkiss	Sharon, Conn	Oct. 4, 1870	108, 024
Snap-hook	A. A. Hotchkiss	Sharon, Conn	May 28, 1872	127, 347
Snap-hook	B. B. Hotchkiss	New York, N. Y	Feb. 5, 1867	61, 737
Snap-hook	G. M. Hubbard	New Haven, Conn	Mar. 11, 1873	136, 728
Snap-hook	O. S. Judd	New Britain, Conn	Aug. 25, 1863	39, 659
Snap-hook	O. S. Judd	New Britain, Conn	Dec. 13, 1864	45, 414
Snap-hook	O. S. Judd	New Britain, Conn	Aug. 7, 1866	56, 951
Snap-hook	O. S. Judd	New Britain, Conn	Jan. 1, 1867	60, 9 2
Snap-hook	E. M. Kinne	Cuba, N. Y	Oct. 31, 1871	120, 386
Snap-hook	W. W. Kitch	Crestline, Ohio	Jan. 28, 1873	135, 344
Snap-hook	H. W. Knowlton	Saratoga Springs, N. Y	Oct. 31, 1865	50, 720
Snap-hook	J. Letchworth	Buffalo, N. Y	Nov. 6, 1866	59, 511
Snap-hook	B. B. Lewis	New York, N. Y	Aug. 14, 1866	57, 156
Snap-hook	D. W. Lewis	Janesville, Wis	July 21, 1863	39, 295
Snap-hook	C. Marsh	Bridgeport, Conn	Aug. 8, 1865	49, 350
Snap-hook	W. McGregor	Jersey City, N. J	July 2, 1872	128, 646
Snap-hook	J. McKibben	Lima, Ohio	Feb. 4, 1868	74, 111
Snap-hook	A. McManus	New Britain, Conn	Sept. 25, 1866	58, 350
Snap-hook	C. Miller	Buffalo, N. Y	Aug. 27, 1867	68, 223
Snap-hook	C. H. Miller	Buffalo, N. Y	Nov. 19, 1867	71, 201
Snap-hook	M. F. Mitchel and W. B. Chapman.	Waukau, Wis	Aug. 13, 1867	67, 789
Snap-hook	C. E. Mitchell	New Britain, Conn	May 28, 1867	65, 107

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Snap-hook	L. Morse	Attleborough, Mass	Dec. 26, 1871	122, 127
Snap-hook	H. Mund	Chicago, Ill	May 30, 1865	47, 972
Snap-hook	H. S. North	Middletown, Conn	Sept. 10, 1867	68, 781
Snap-hook	N. North	Middletown, Conn	Aug. 25, 1863	39, 670
Snap-hook	O. B. North	New Haven, Conn	July 1, 1873	140, 531
Snap-hook	F. Palmer	Janesville, Wis	July 28, 1863	39, 351
Snap-hook	J. Quinn and C. Summers	Columbus, Ohio	July 10, 1866	56, 265
Snap-hook	S. Reynolds	Allegheny, Pa	May 13, 1873	138, 935
Snap-hook	I. C. Richmond	West Meriden, Conn	Feb. 11, 1868	74, 426
Snap-hook	J. Robbins	Auburn, N. Y	June 13, 1871	115, 897
Snap-hook	C. W. Saladee	Newark, Ohio	June 6, 1865	48, 100
Snap-hook	C. W. Saladee	Newark, Ohio	Aug. 29, 1865	49, 654
Snap-hook	C. W. Saladee	Newark, Ohio	Aug. 29, 1865	49, 655
Snap-hook	L. A. Sanford	Wolcott, Conn	Sept. 29, 1868	82, 644
Snap-hook	J. B. Sargent	New Haven, Conn	Nov. 12, 1867	70, 750
Snap-hook	W. W. Sly	South Haven, Mich	June 8, 1869	90, 964
Snap-hook	W. E. Sparks	New Haven, Conn	Aug. 11, 1868	81, 026
Snap-hook	O. O. Storle	North Cape, Wis	May 2, 1871	114, 487
Snap-hook	F. Valentine	Buffalo, N. Y	June 1, 1869	90, 896
Snap-hook	R. L. Webb	New Britain, Conn	June 12, 1866	55, 563
Snap-hook and buckle	J. C. and J. H. Brady	Corsica Borough, Pa	Mar. 1, 1870	100, 364
Snap-hook and buckle	L. B. Jackson	Delaware, Ohio	Mar. 12, 1872	124, 580
Snap-hook for harness	J. North	Middletown, Conn	Sept. 18, 1860	30, 084
Snap-hook, Lock	W. F. Arnold	New Britain, Conn	May 26, 1868	78, 175
Snap-hook, Spring	J. Johnson	Brooklyn, N. Y	Mar. 20, 1849	6, 207
Snap-hook, Whiffletree	C. W. Saladee	Newark, Ohio	Nov. 21, 1865	51, 069
Snap-hook, Wire	S. W. Perkins	Geneseo, Ill	Sept. 3, 1867	68, 558
Snapper-cleat	J. T. Thomson	Southport, Me	Sept. 27, 1870	107, 738
Snatch-block	J. Evans	Charlestown, Mass	Dec. 6, 1828	......
Snatch-block	P. Rhodes, jr	Pittsburgh, Pa	Feb. 18, 1851	7, 941
Snatch-block	H. O. Winsor	Duxbury, Mass	May 18, 1869	90, 213
Snow and ice guard for roofs of buildings	S. R. Hathorn	Castleton, Vt	Oct. 2, 1866	58, 411
Snow-clearer	R. D. Chatterton	Bath, England	Aug. 25, 1868	81, 343
Snow-clearer	S. Lewis	Brooklyn, N. Y	Mar. 3, 1868	75, 028
Snow-gate	A. B. Murray	Henderson, Pa	July 28, 1868	80, 423
Snow-melting apparatus	N. H. Borgfeldt	New York, N. Y	Apr. 6, 1869	88, 693
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	136, 853
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	136, 854
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	136, 931
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	136, 932
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	137, 018
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	137, 019
Snow-melting machine	J. Mullaly	New York, N. Y	Mar. 18, 1873	137, 020
Snow-melting machine	J. Mullaly	New York, N. Y	Oct. 21, 1873	143, 831
Snow or ice to convert it into large blocks, Treatment of.	H. Morse	Columbia, Cal	May 15, 1860	28, 292
Snow-shovel	A. Q. Adams	Wallingford, Vt	Jan. 10, 1871	110, 886
Snow-shovel	G. W. Brown	Providence, R. I	Nov. 16, 1869	96, 879
Snow-shovel	H. C. Cole	Wallingford, Vt	Apr. 22, 1873	138, 076
Snow-shovel	E. Hunter	Norwich, Conn	Mar. 18, 1873	137, 001
Snow-shovel	J. P. Spangle	Canandaigua, N. Y	Aug. 25, 1868	81, 549
Snow-shovel	D. N. Thayer	Mayville, N. Y	Sept. 19, 1865	50, 050
Snow-shovel	W. P. Wentworth	Seneca Falls, N. Y	Sept. 13, 1870	107, 314
Snow-shovel	J. E. Wheat	Rochester, N. Y	Feb. 5, 1867	61, 784
Snow-shovel, Railway	J. W. Elliott	Toronto, Canada	Nov. 1, 1870	108, 894
Snow-shovel tip	E. Hubbard	Seneca Falls, N. Y	Feb. 21, 1871	111, 939
Snub-post for rafts, &c	E. Phillips, E. A. Dunham, and A. Winans.	Albany, Ill	Jan. 5, 1869	85, 612
Snuff cutter and grater	J. B. Partarrieu	New York, N. Y	Nov. 30, 1812	......
Snuff, Machine for manufacturing	T. Baldwin	New Castle, Del	June 22, 1819	......
Snuff-packing apparatus	A. H. Pflock	Philadelphia, Pa	Apr. 29, 1873	138, 285
Soap	G. Baker and I. Bullock	Lime, Pa	Aug. 8, 1871	117, 722
Soap	I. D. Balch	Cambridge, Mass	June 20, 1871	116, 008
Soap	S. J. Beeler	Wales, Ill	Sept. 4, 1866	57, 663
Soap	S. J. Beeler	Wales, Ill	Dec. 11, 1866	60, 328
Soap	S. J. Beeler	Wales, Ill	May 7, 1867	64, 473
Soap	J. T. and P. S. Bever	Lathrop, Mo	May 2, 1871	114, 393
Soap	L. Brockett	West Haven, Conn	June 21, 1870	104, 549
Soap	J. Brucker	Chicago, Ill	Feb. 12, 1867	61, 995
Soap	J. Burke	Sullivan, Ind	Apr. 2, 1872	125, 265
Soap	D. B. Chapman	Hopedale, Mass	Aug. 9, 1864	43, 758
Soap	W. Dawes	Washington County, Tenn	May 17, 1859	24, 011
Soap	W. L. Dawson	Lynchburgh, Va	Apr. 9, 1861	31, 959
Soap	F. M. Ellis	Brooklyn, N. Y	July 11, 1871	116, 821
Soap	H. L. Guldin	Robeson Township, Pa	Oct. 12, 1869	95, 679
Soap	H. Huntington	Chicago, Ill	Aug. 16, 1864	43, 852
Soap	C. R. Kicherer	Brooklyn, N. Y	Oct. 10, 1871	119, 772
Soap	C. C. Lewis	Whitewater, Wis	May 6, 1862	35, 161
Soap	D. C. Lincoln	North Vassalborough, Me	May 26, 1868	78, 214
Soap	O. E. Loomis	Ellenburgh, N. Y	June 2, 1868	78, 530
Soap	G. W. Love	Jackson County, Mo	Mar. 31, 1868	76, 213
Soap	N. R. E. Mayer	Chester Court-House, S. C	Apr. 10, 1866	53, 847
Soap	W. McCord	New York, N. Y	July 27, 1852	9, 152
Soap	C. P. McGimsey	Memphis, Tenn	Dec. 21, 1869	98, 179
Soap	T. W. Nichols	Trout Creek, N. Y	July 23, 1867	66, 987
Soap	W. Nyce	Three Rivers, Mich	Nov. 21, 1865	51, 119
Soap	D. F. Packer	Reading, Conn	Mar. 14, 1865	46, 817
Soap	C. C. Parsons	Boston, Mass	July 10, 1866	56, 259
Soap	E. Patrie	Livingston, N. Y	Jan. 3, 1860	26, 703
Soap	A. H. Platt	Cincinnati, Ohio	Jan. 17, 1860	26, 862
Soap	L. Reid and J. Rogers	New York and Brooklyn, N. Y.	Sept. 27, 1864	44, 457
Soap	G. Rose	Philadelphia, Pa	Feb. 19, 1867	62, 157
Soap	C. E. Silsbee	Detroit, Mich	Aug. 9, 1864	43, 800
Soap	G. W. Slagle, J. L. Miller, and H. C. Hoy.	Washington, D. C	June 9, 1868	78, 840
Soap	A. Warfield	Alexandria, Va	Mar. 22, 1870	101, 193
Soap	H. Warren	Goshen, Ind	Sept. 3, 1861	33, 221

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Soap	A. J. Woodworth	Henrico County, Va.	Mar. 13, 1860	27, 496
Soap and detergent compound	H. W. Weeden	High Point, N. C	Sept. 22, 1868	82, 459
Soap and "foots," Bleaching dark	O. Loen	New York, N. Y	June 21, 1870	104, 470
Soap and for other purposes, Silicated liquids for manufacture of.	J. T. Ryan	Brooklyn, N. Y	Sept. 25, 1866	58, 303
Soap and forming the same in bars, Cooling	S. R. Divine	New York, N. Y	Aug. 24, 1869	93, 972
Soap and oils, Purifying	A. Dunn	Rotherhithe, England	Dec. 4, 1844	3, 844
Soap and other materials, Apparatus for mixing	C. J. Schultze	Vienna, Austria	Jan. 7, 1873	134, 706
Soap, Apparatus and process for the manufacture of.	M. and E. F. Hyde	Baltimore, Md	June 28, 1870	104, 739
Soap, Apparatus for cooling and mixing	J. D. Sturges	Chicago, Ill	Apr. 25, 1871	114, 063
Soap, Apparatus for crutching	J. Gallipo	Cohoes, N. Y	May 7, 1867	64, 517
Soap, Apparatus for cutting and stamping	H. and A. Phelps	Albany, N. Y	Oct. 2, 1866	58, 473
Soap, Apparatus for manufacture of	C. H. Hardy	Charlestown, Mass	Apr. 23, 1867	64, 099
Soap, Apparatus for manufacturing	E. H. Gibbs	New York, N. Y	Feb. 6, 1872	123, 473
Soap, Apparatus for marbling	F. Moreau and F. Robert	New York, N. Y	Nov. 22, 1864	45, 164
Soap, Apparatus for slabbing	H. and A. Phelps	Albany, N. Y	Sept. 3, 1867	68, 325
Soap, Apparatus for stirring and mixing	C. Schmann	New York, N. Y	Sept. 10, 1872	131, 283
Soap, Arsenical	H. Jennings	Boston, Mass	July 12, 1864	43, 506
Soap-bars, Apparatus for separating	H. and A. Phelps	Albany, N. Y	Feb. 4, 1868	73, 994
Soap-bars, Die for forming	T. Wersley and G. W. Dorsey	Philadelphia, Pa	Sept. 1, 1863	39, 784
Soap, Benzole	R. Grow	Galesburgh, Ill	May 27, 1862	35, 372
Soap, Bleaching	A. Watt	Wadsworth, England	Sept. 1, 1868	81, 851
Soap boilers, Construction of	J. R. St. John	New York, N. Y	June 8, 1852	9, 008
Soap-boiling apparatus	B. T. Babbitt	New York, N. Y	Oct. 8, 1872	132, 043
Soap-boiling apparatus	C. Morfit	Baltimore, Md	July 29, 1856	15, 432
Soap by steam, Manufacturing	J. Kennedy	Baltimore, Md	Oct. 1, 1830	....
Soap by steam, Manufacturing	B. Zoll and J. Doyle	Baltimore, Md	July 19, 1830	....
Soap, Chemical olive	G. Sanger	Beloit, Wis	July 13, 1869	92, 652
Soap, clay, paste, &c., Apparatus for mixing	J. Atkins	Brooklyn, N. Y	Dec. 31, 1872	134, 415
Soap, colors, &c., Apparatus for stirring and mixing	H. Hungerford	New York, N. Y	Apr. 14, 1863	38, 167
Soap, Combined scouring and fulling	G. Sanger	Beloit, Wis	July 13, 1869	92, 653
Soap-composition	M. A. Butler	Mariana, Fla	Nov. 6, 1860	30, 561
Soap-composition	E. De Mortimer	Cincinnati, Ohio	Nov. 22, 1864	45, 141
Soap-composition	W. Dennis	Providence, R. I	Sept. 24, 1861	33, 339
Soap-composition	J. B. Rand	Fisherville, N. H	Apr. 19, 1864	42, 444
Soap-composition	E. Sprague	Schenectady, N. Y	Sept. 26, 1865	50, 180
Soap-composition	H. N. Wilbur	Keokuk, Iowa	Nov. 20, 1860	30, 699
Soap, Composition for	J. E. Dotch	Washington, D. C	Nov. 21, 1871	121, 044
Soap, Composition for	C. J. Eames and C. A. Seely	New York, N. Y	May 28, 1867	65, 186
Soap, Composition for	R. Eastman	Media, Pa	Aug. 29, 1871	118, 440
Soap, Composition for	E. E. Lee	Cambridge, N. Y	May 26, 1863	38, 685
Soap, Composition for	N. Orcutt	Binghamton, N. Y	Oct. 4, 1859	25, 668
Soap, Composition for liquid	J. M. Rall	Saint Louis, Mo	Dec. 26, 1871	122, 281
Soap, Composition for making	N. Orcutt	Binghamton, N. Y	Nov. 27, 1866	60, 041
Soap, Composition for making	G. W. Tolhurst	Liverpool, Ohio	Nov. 29, 1859	26, 306
Soap, Composition of castor-oil	T. D. Mathews	Saint Peter's Parish, S. C	Jan. 1, 1861	31, 025
Soap, Composition to be used in the manufacture of	R. P. Thomas	San Francisco, Cal	Jan. 5, 1869	85, 623
Soap-compound	H. Loos	Lawrence, Kans	Feb. 28, 1871	112, 259
Soap-compound	T. C. Taylor	Camden, N. J	June 13, 1854	11, 097
Soap-compound	J. C. Tilton	Pittsburgh, Pa	May 17, 1864	42, 866
Soap, Compound	A. Warfield	Alexandria, Va	Nov. 16, 1869	97, 007
Soap-compound for cleaning and scouring wool, silk, &c.	D. Shattuck	Buffalo, N. Y	Mar. 26, 1867	63, 314
Soap-cooler	J. D. Sturges	Chicago, Ill	Mar. 12, 1872	124, 457
Soap-crutching apparatus	G. M. Leslie	Newburgh, N. Y	Sept. 6, 1864	44, 142
Soap-crutching machine	S. Strunz	Birmingham, Pa	May 13, 1873	138, 953
Soap-cup	J. G. Harrison	New York, N. Y	July 28, 1868	80, 408
Soap-cup	D. Reed	Derby, Conn	Mar. 22, 1864	42, 021
Soap-cup for wash-stands, &c	J. H. Mead	New York, N. Y	May 20, 1862	35, 321
Soap-cutting and beading-machine	J. B. Ultsch	Cambridge, Mass	Aug. 22, 1871	118, 304
Soap-cutting machine	D. S. Brown, jr	New York, N. Y	June 23, 1868	79, 102
Soap-cutting machine	J. B. Duff	New York, N. Y	Aug. 23, 1853	9, 9.3
Soap-cutting machine	J. Hadfield	New York, N. Y	Jan. 28, 1868	73, 714
Soap cutting machine	C. H. Hardy	Charlestown, Mass	Oct. 29, 1867	70, 265
Soap-cutting machine	W. and H. N. Humiston	Troy, N. Y	July 19, 1870	105, 4.8
Soap-cutting machine	R. Johnson	Urbana, Md	Oct. 25, 1864	44, 8.6
Soap-cutting machine	W. H. Manning	Owego, N. Y	Dec. 14, 1858	22, 330
Soap-cutting machine	P. B. McKelvey	Albany, N. Y	Oct. 13, 1868	82, 971
Soap-cutting machine	C. S. Murphy and D. McGregor	Detroit, Mich	Oct. 19, 1869	95, 926
Soap-cutting machine	J. G. Perry	South Kingston, R. I	Jan. 3, 1865	45, 746
Soap-cutting machine	H. Sargent	Chelsea, Mass	June 30, 1868	79, 402
Soap-cutting machine	J. Seibert	New York, N. Y	Nov. 11, 1873	144, 4-1
Soap-cutting machine	J. B. Uitsch	Cambridge, Mass	Dec. 9, 1873	145, 319
Soap-cutting machine	A. Van Haagen	Cincinnati, Ohio	July 31, 1855	13, 367
Soap-cutting machine	A. Van Haagen	Cincinnati, Ohio	July 31, 1855	13, 368
Soap, Detersive	G. Sanger	Beloit, Wis	July 13, 1869	92, 654
Soap-dish	C. Adams	Pittsburgh, Pa	July 16, 1867	66, 7.9
Soap-dish	J. M. Thatcher	Bergen, N. J	Mar. 21, 1871	112, 783
Soap-dish and brush-rack	A. Crawford	Albany, N. Y	Nov. 1, 1870	108, 765
Soap for cleaning and polishing wood, metal, and other material.	J. T. Greenwood and J. Wilson	Beloit, Wis	June 4, 1867	65, 485
Soap for cleaning harness	J. E. Powell	Troy, N. Y	Dec. 6, 1864	45, 358
Soap for medicinal and other purposes, Manufacture of.	L. W. Smith	Boston, Mass	Oct. 5, 1869	95, 527
Soap for polishing and cleaning, Emery	D. D. W. Abbot	Boston, Mass	June 28, 1870	104, 812
Soap for polishing metals	E. A. Johnson	Philadelphia, Pa	Apr. 4, 1871	113, 3.6
Soap-frame	M. H. Howell	New York, N. Y	Apr. 16, 1867	63, 818
Soap, Frame for manufacture of	R. P. Thomas	Syracuse, N. Y	June 28, 1859	24, 5.3
Soap-frames, Construction of	J. R. Doe	London, England	Mar. 31, 1840	1, 539
Soap-frames, Construction of	D. Whitaker	Roxbury, Mass	July 11, 1865	48, 754
Soap, Fulling	G. Sanger	Beloit, Wis	July 13, 1869	92, 6.5
Soap, German erasive	G. Sanger	Beloit, Wis	July 13, 1869	92, 651
Soap-holder	R. Bush	South Brooklyn, N. Y	Aug. 6, 1867	67, 468
Soap-holder	J. A. Camp	Sandusky, Ohio	May 7, 1872	126, 518
Soap-holder	M. Safford	Boston, Mass	May 5, 1868	77, 536
Soap, Indigo	H. C. Borgner	Lebanon, Pa	Feb. 15, 1870	99, 823
Soap-ingredient	I. F. Payson	New York, N. Y	Dec. 6, 1853	10, 296
Soap into balls, Apparatus to form	S. Smith and R. French	North East, Pa., and Keokuk, Iowa.	Aug. 13, 1861	33, 055

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Soap into slabs, Machine for cutting	J. Gallipo	Cohoes, N. Y	Feb. 22, 1870	100, 135
Soap into slabs, Machine for cutting	G. T. Palmer and P. P. Bush	Brooklyn, N. Y., and New Haven, Conn.	Aug. 18, 1868	81, 200
Soap-kettle, rendering-apparatus, &c., Apparatus for preventing the escape of gases from.	W. H. Pinner	New York, N. Y	Oct. 30, 1866	59, 260
Soap, Liquid	D. Cardtllo	Titusville, Pa	Dec 19, 1871	121, 930
Soap, Liquid	W. Sheppard	New York, N. Y	Aug. 22, 1865	49, 561
Soap-liquor, Method of recovering grease from waste.	W. Koehler	Norwalk, Conn	Oct. 26, 1869	96, 241
Soap, Machine for cutting and stamping	J. S. Pierson	Brooklyn, N. Y	May 19, 1868	78, 127
Soap, Machine for cutting, stamping, and packing	L. and L. L. Beach, jr	Lawrence, Mass	May 10, 1870	102, 907
Soap, Machine for cutting, stamping, and packing	C. Lehmann	Hartford, Conn	May 10, 1870	102, 949
Soap-making	G. H. Doney and M. Clay	Lockport, Ill	Mar. 12, 1867	62, 828
Soap-making	J. L. Klein	New York, N. Y	June 30, 1868	79, 358
Soap-making	A. Miller	Grafton, Ohio	Sept. 20, 1859	25, 517
Soap, Making	J. Nazro	....	Jan. 6, 1797	....
Soap, Making	D. E. Stilwell	Utica, N. Y	July 17, 1837	278
Soap making apparatus	R. Freeland	Montreal, Canada	May 14, 1872	126, 798
Soap-manufacture	W. T. Bush	Obion County, Tenn	Aug. 24, 1869	94, 073
Soap-manufacture	D. B. Chapman	Milford, Mass	Oct. 14, 1862	36, 693
Soap-manufacture	D. B. Chapman	Milford, Mass	Jan. 20, 1863	37, 471
Soap-manufacture	D. Crawford	Toronto, Canada	Mar. 30, 1858	19, 754
Soap-manufacture	A. K. Eaton	New York, N. Y	Aug. 26, 1862	36, 286
Soap-manufacture	R. Grow	Galesburgh, Ill	Sept. 23, 1862	36, 516
Soap-manufacture	I. M. Harshbarger	Brandonville, Va	Apr. 15, 1862	34, 956
Soap-manufacture	N. W. Hunter	Elizabeth City, N. C	Oct. 22, 1867	70, 092
Soap-manufacture	F. Kunkel	Chicago, Ill	Nov. 7, 1865	50, 877
Soap manufacture	F. Moreau and T. Robert	New York, N. Y	Nov. 22, 1864	45, 166
Soap-manufacture	F. M. Pleins	Dubuque, Iowa	July 15, 1873	140, 789
Soap-manufacture	J. B. Rand	Fisherville, N. H	Dec. 6, 1864	45, 342
Soap-manufacture	L. M. T. Riot	Paris, France	Oct. 21, 1862	36, 731
Soap-manufacture	G. W. Rodgers	Lancaster, N. Y	Jan. 22, 1867	61, 466
Soap-manufacture	J. T. Ryan	Brooklyn, N. Y	Sept. 25, 1866	58, 302
Soap-manufacture	S. A. Sealey	Brooklyn, N. Y	Jan. 26, 1864	41, 400
Soap manufacture	D. Shattuck and C. K. Daniels	Chicago, Ill	July 12, 1864	43, 527
Soap-manufacture	G. W. N. Yost	Yellow Springs, Ohio	Mar. 20, 1860	27, 605
Soap, Manufacture of	D. F. Albert	Manchester, England	Mar. 7, 1846	4, 400
Soap, Manufacture of	B. T. Babbitt	New York, N. Y	June 11, 1872	127, 828
Soap, Manufacture of	H. M. Baker	Washington, D. C	May 10, 1870	102, 906
Soap, Manufacture of	J. B. Bennett and J. S. Gibbs	Buffalo, N. Y	Apr. 25, 1865	47, 385
Soap, Manufacture of	D. E. Breinig	Brooklyn, N. Y	May 7, 1872	126, 375
Soap, Manufacture of	J. Chilcott	Brooklyn, N. Y	July 2, 1867	66, 218
Soap, Manufacture of	A. A. Constantine	New Providence, N. J	Mar. 12, 1867	62, 820
Soap, Manufacture of	L. Groux	New York, N. Y	July 26, 1870	105, 670
Soap, Manufacture of	C. W. Hermance	Albany, N. Y	Jan. 1, 1867	60, 890
Soap, Manufacture of	J. Hoagland and I. C. McDonald	Columbus, Ohio	Jan. 31, 1871	111, 454
Soap, Manufacture of	C. W. Hull	New York, N. Y	May 3, 1870	102, 546
Soap, Manufacture of	W. Johnson	New York, N. Y	Dec. 12, 1871	121, 787
Soap, Manufacture of	J. L. Klein	New York, N. Y	Mar. 3, 1868	75, 170
Soap, Manufacture of	W. B. Milne	Chicago, Ill	Nov. 13, 1866	59, 724
Soap, Manufacture of	P. B. Mowgeot	Paris, France	May 7, 1867	64, 555
Soap, Manufacture of	J. K. Naughan and E. H. Everman.	Philadelphia, Pa	Mar. 7, 1846	4, 404
Soap, Manufacture of	N. Orcutt	Syracuse, N. Y	Nov. 23, 1869	97, 220
Soap, Manufacture of	H. A. Pease	Hartford, Conn	Sept. 29, 1868	82, 635
Soap, Manufacture of	H. A. Pease	Hartford, Conn	Nov. 10, 1868	83, 996
Soap, Manufacture of	H. A. Pease	Hartford, Conn	Feb. 1, 1870	99, 468
Soap, Manufacture of	H. Pemberton	Allegheny, Pa	Apr. 30, 1867	64, 250
Soap, Manufacture of	W. P. Pugh	High Point, N. C	Dec. 7, 1869	97, 692
Soap, Manufacture of	J. Ryan	Waukegan, Ill	Feb. 5, 1867	61, 876
Soap, Manufacture of	J. Shugert	Elizabeth, Pa	Sept. 4, 1847	5, 269
Soap, Manufacture of	R. P. Thomas	San Francisco, Cal	May 6, 1873	138, 712
Soap, Manufacture of	J. Treat	New York, N. Y	June 28, 1870	104, 796
Soap, Manufacture of	L. H. Van Spanckeren	Muscatine, Iowa	Oct. 16, 1866	58, 919
Soap, Manufacture of	T. R. Waeker	Tymochtee, Ohio	May 7, 1872	126, 569
Soap, Manufacture of	A. Warfield	Philadelphia, Pa	Oct. 18, 1870	108, 540
Soap, Manufacture of	D. H. Warren	Montreal, Canada	July 11, 1871	116, 897
Soap, Manufacture of petroleum	S. K. Kane	Allegheny, Pa	Apr. 2, 1867	63, 528
Soap, Manufacture of resin	D. B. Chapman	New London, Conn	Aug. 16, 1870	106, 322
Soap, Manufacture of resin	S. Strunz	Birmingham, Pa	Apr. 5, 1859	23, 510
Soap, Manufacture of shaving, toilet, &c	W. T. Bush	Union City, Tenn	July 16, 1872	129, 525
Soap, Manufacture of silicated	D. B. Chapman	Milford, Mass	Apr. 28, 1863	38, 354
Soap-manufacturing process	T. C. Taylor	Camden, N. J	June 13, 1854	11, 098
Soap, Medicated	W. P. Pugh	High Point, N. C	Sept. 28, 1869	95, 377
Soap, Medicated	T. F. Smith	New York, N. Y	May 10, 1870	102, 981
Soap-mixing apparatus	H. N. Humiston	Troy, N. Y	Apr. 16, 1872	125, 736
Soap-mixing machine	C. Elling	Cleveland, Ohio	Sept. 19, 1871	119, 018
Soap-mixture	J. M. Austin	York, Pa	Feb. 15, 1870	99, 811
Soap-mixture	G. C. Lawrence	Winchester, Mass	Oct. 28, 1856	15, 980
Soap-mixture	I. Roraback	Caddo Parish, La	Mar. 3, 1857	16, 750
Soap, Mode of putting up caustic soda for the manufacture of.	T. C. Taylor	Philadelphia, Pa	May 4, 1869	89, 704
Soap-mold	J. McRoberts	New Orleans, La	Apr. 3, 1866	53, 645
Soap or detergent compound	E. R. Breed	Farmington, Ill	Sept. 28, 1869	95, 312
Soap or detergent compound, Liquid	J. Leetch	London, England	June 11, 1872	127, 904
Soap or washing-fluid, Soft	J. Blinder	Brooklyn, N. Y	June 14, 1870	104, 104
Soap, paint, paste, &c., Machine for mixing	J Stainthorp	New York, N. Y	Oct. 12, 1869	95, 741
Soap-pressing machine	J. H. Keller	New Orleans, La	Nov. 17, 1863	40, 627
Soap, Process for making	C. Moffit	Baltimore, Md	Mar. 16, 1858	19, 667
Soap, Process for making	G. Robbins	Watertown, Mass	July 19, 1864	43, 605
Soap, Process for making	R. A. Tilghman	Philadelphia, Pa	Jan. 2, 1855	12, 142
Soap, Process for making transparent	M. W. Brown	New York, N. Y	May 26, 1868	78, 182
Soap, Process for the manufacture of fuller's	J. F. Rich	Chatham Run, Pa	Jan. 31, 1865	46, 143
Soap, Process of manufacturing	A. Dunn	Stamford Hill, Great Britain.	Aug. 23, 1839	1, 300
Soap products from glue residuum	A. Van Haagen and W. Adamson.	Philadelphia, Pa	Feb. 15, 1870	99, 979
Soap, Putting up	W. F. George	New York, N. Y	Oct. 25, 1870	108, 584

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Soap-rest	J. Whittemore	South Reading, Mass	Dec. 17, 1867	72, 252
Soap, Silicated	W. H. Holbrook	New York, N. Y	Mar. 4, 1862	34, 576
Soap, Silicated	G. E. Vanderburgh	New York, N. Y	Mar. 5, 1861	31, 648
Soap-stand	J. D. Blake	Laconia, N. H	May 5, 1868	77, 442
Soapstone, talc, &c., Method of hardening and bleaching articles made of.	H. J. Smith	Boston, Mass	Dec. 10, 1867	71, 919
Soap substitute for scouring woolens	L. Wilman	Worcester, Mass	May 12, 1857	17, 303
Soap, Surface-coating to hard	W. V. Wallace	Boston, Mass	Oct. 14, 1873	143, 601
Sock, Columbian	J. Mason	Cunnington, Mass	Feb. 8, 1816	....
Socket-coupling	E. P. Gleason	Providence, R. I	Oct. 16, 1860	30, 400
Socket-wrench	J. T. Arnold and W. D. Wilcox	Warwick, R. I	Oct. 29, 1872	132, 516
Socket-wrench	J. M. Seymour	Newark, N. J	Feb. 4, 1868	74, 156
Sockets, Machine for bending	M. Blakey	Etna, Pa	Dec. 31, 1872	134, 349
Sod-carrier	C. D. and M. C. Meigs	Romney, Ind	Aug. 6, 1872	130, 231
Sod-cutter	W. A. L. Kirk	Hamilton, Ohio	Jan. 17, 1865	55, 926
Sod-cutter	S. A. Moody	San Francisco, Cal	Oct. 16, 1866	58, 951
Sod-cutter	N. Newman	Springfield, Ill	Oct. 6, 1857	18, 351
Sod-cutter	C. E. Steller	Genesee, Wis	Aug. 19, 1862	36, 245
Sod-cutter and land-roller, Combined	C. Leavitt	Cleveland, Ohio	Feb. 11, 1873	135, 719
Sod-cutter, Rotary	W. B. Hyde	Oakland, Cal	Sept. 17, 1872	131, 401
Sod-cutter, Rotary	J. Pool	Rio Vista, Cal	July 4, 1871	116, 748
Sod-trimmer	A. Tournier	Barnville, N. Y	July 25, 1871	117, 485
Soda and alumina, Process of manufacturing	G. A. Hagemann	Natrona, Pa	Feb. 16, 1869	87, 042
Soda and mineral water stand	C. M. Whelden	Pittsfield, Mass	June 25, 1867	66, 060
Soda and mineral waters, Apparatus for dispensing	W. Gee	New York, N. Y	Oct. 28, 1873	144, 066
Soda and other chemicals, Manufacture of carbonate of.	I. Walz and J. M. Pendleton	New York, N. Y	May 18, 1869	90, 140
Soda and potash, Manufacture of	A. G. Hunter	Flint, Wales	Jan. 28, 1868	73, 722
Soda and potash, Manufacture of	A. G. Hunter	Flint, Great Britain	May 26, 1868	78, 375
Soda and potash, Manufacture of carbonates of	A. G. Hunter	Flint, Wales	Apr. 28, 1868	77, 381
Soda and sulphuric acid, Manufacture of	H. W. Baker	Rochester, N. Y	Jan. 28, 1868	73, 629
Soda-apparatus	M. S. Andrews	Somerville, Mass	Feb. 11, 1873	135, 617
Soda-apparatus and ice-cutter, Combined	G. D. Dows	Boston, Mass	Dec. 10, 1861	33, 880
Soda, Apparatus for extracting nitrate of	R. F. Fairlie	London, England	July 15, 1873	140, 908
Soda, Apparatus for the manufacture of bicarbonate of.	A. P. Von Pörnhoff	Brooklyn, N. Y	July 23, 1867	67, 087
Soda-ash and carbonates of soda, Making	H. Pemberton	Philadelphia, Pa	Oct. 19, 1852	9, 346
Soda-fountain	R. Boston and T. Bryant	New York, N. Y	Apr. 11, 1836	....
Soda-fountain	J. F. Boynton	Syracuse, N. Y	Oct. 7, 1856	15, 838
Soda-fountain	J. W. Cahill	Madison, Ind	Oct. 2, 1866	58, 375
Soda-fountain	C. B. Chamness	Martinsville, Ind	Aug. 27, 1872	130, 897
Soda-fountain	F. J. Chapman	Huron, Ind	Sept. 5, 1865	49, 719
Soda-fountain	J. W. Chapman	Madison, Ind	June 29, 1869	92, 015
Soda-fountain	W. Coughlan	Baltimore, Md	Oct. 25, 1853	10, 167
Soda-fountain	W. Coughlan	Baltimore, Md	Oct. 9, 1866	58, 608
Soda-fountain	G. D. Dows	Boston, Mass	Jan. 25, 1870	99, 170
Soda-fountain	J. Ebert and G. Dulty	Wheeling, Va	Apr. 24, 1833	....
Soda-fountain	E. D. Finch	Stanton, Mich	June 4, 1867	65, 366
Soda-fountain	E. M. Fowler	Washington, D. C	Aug. 2, 1870	105, 933
Soda-fountain	W. Gee	New York, N. Y	Aug. 17, 1869	93, 700
Soda-fountain	N. T. Hamilton	Cedar Falls, Iowa	May 24, 1870	103, 453
Soda-fountain	J. S. Hull	Cincinnati, Ohio	Jan. 14, 1868	73, 249
Soda-fountain	J. C. Johnson	Philadelphia, Pa	Jan. 28, 1868	73, 726
Soda-fountain	J. C. Kennedy	Chicago, Ill	Sept. 29, 1868	82, 622
Soda-fountain	T. A. Long	Meadville, Pa	Apr. 2, 1867	63, 537
Soda-fountain	J. Matthews	New York, N. Y	Apr. 9, 1872	125, 591
Soda-fountain	J. Matthews	New York, N. Y	June 25, 1872	128, 410
Soda-fountain	J. Matthews, jr	New York, N. Y	May 3, 1864	42, 587
Soda-fountain	J. W. Milroy, J. Vaughn, and J. Turley.	Galveston, Ind	Feb. 18, 1868	74, 708
Soda-fountain	E. B. Myers	Handsborough, Miss	Sept. 12, 1871	118, 876
Soda-fountain	D. Neff	Henry County, Ind	Mar. 16, 1869	87, 962
Soda-fountain	A. D. Puffer	Somerville, Mass	Nov. 26, 1861	33, 796
Soda-fountain	A. D. Puffer	Boston, Mass	June 28, 1870	104, 881
Soda-fountain	W. H. Russell	Sedalia, Mo	Feb. 18, 1873	135, 940
Soda-fountain	A. D. Schnackenberg and O. Rosenkranz.	Brooklyn, N. Y	Feb. 9, 1869	86, 782
Soda-fountain	C. Schultz and T. Warker	New York, N. Y	Aug. 9, 1864	43, 798
Soda-fountain	B. E. Sperry	Aurora, Ill	Aug. 3, 1869	93, 363
Soda-fountain	S. B. Spring	Geneva, Ohio	Apr. 5, 1870	101, 534
Soda-fountain	C. D. Van Allen and S. Avery	Baldwinsville, N. Y	Apr. 13, 1858	19, 960
Soda-fountain	D. C. Wade	Holly, Mich	Aug. 2, 1864	43, 726
Soda-fountain	E. B. Wright	Cincinnati, Ohio	Sept. 11, 1866	58, 033
Soda-fountain attachment	O. F. Stedman	Westfield, N. Y	Nov. 4, 1873	144, 234
Soda-fountain-charging apparatus	J. C. Kennedy	Toledo, Ohio	Dec. 16, 1873	145, 503
Soda-fountain draft-cock	W. P. Clark	Medford, Mass	May 6, 1873	138, 615
Soda-fountain draft-tube	G. D. Dows	Boston, Mass	Mar. 29, 1864	42, 078
Soda-fountain draft-tube	R. B. Robbins	Adrian, Mich	Jan. 21, 1873	135, 010
Soda-fountain draft-tube	R. B. Robbins	Adrian, Mich	Sept. 2, 1873	142, 513
Soda-fountain jet-attachment	J. C. Wharton	Nashville, Tenn	Oct. 20, 1868	83, 346
Soda-fountain lining	W. Gee	New York, N. Y	Oct. 22, 1867	69, 986
Soda-fountain, Portable	A. J. Ohmer	Hamilton, Ohio	Jan. 16, 1866	52, 069
Soda-fountain, Portable	A. D. Schnackenberg	Brooklyn, N. Y	Apr. 9, 1867	63, 756
Soda-fountain, Portable	L. B. White	Cincinnati, Ohio	Aug. 9, 1859	1, 278
Soda-fountain sirup-jars, Pipe-connection with	A. D. Puffer	Boston, Mass	July 2, 1872	128, 506
Soda-fountain sirup-stand	C. M. Berry and C. C. Sheldrake	Philadelphia, Pa	Aug. 8, 1865	49, 335
Soda-fountains, Apparatus for charging	D. Needham	Groton, Mass	June 4, 1867	65, 500
Soda-fountains, Apparatus for containing and dispensing sirup for.	J. R. Nichols	Haverhill, Mass	Feb. 3, 1857	16, 549
Soda-fountains, Combination of an air-chamber, water-cooler, and force-pump in.	N. D. Robbins	Edinburgh, Ind	Mar. 6, 1855	12, 489
Soda-fountains, Combined caster and cooler for	T. Larter	Cleveland, Ohio	Dec. 20, 1864	45, 504
Soda-fountains, Nozzle for	W. Gee	New York, N. Y	Jan. 16, 1872	122, 718
Soda-fountains, Sirup-device for	W. Gee	New York, N. Y	Jan. 14, 1873	134, 880
Soda-fountains, Sirup-holder for	A. J. Morse	Boston, Mass	June 29, 1869	91, 960
Soda-fountains, Sirup-reservoir for	J. Matthews, jr	New York, N. Y	Dec. 21, 1869	98, 178

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Soda, hydrochloric acid, &c., Process for the manufacture of carbonate of.	H. M. Baker	Washington, D. C	Oct. 11, 1870	108, 088
Soda, Manufacture of alluminate of	H. M. Baker	Brooklyn, E. D., N. Y	Oct. 11, 1870	108, 089
Soda, Manufacture of bicarbonate of	W. H. Balmain	Saint Helen's, Great Britain	July 4, 1871	116, 664
Soda, Manufacture of carbonate and other salts of	J. M. Gattman	New York, N. Y	Aug. 11, 1868	80, 940
Soda, &c., Manufacture of carbonate of	H. M. Baker	Rochester, N. Y	June 19, 1866	55, 600
Soda, Manufacture of carbonate of	H. M. Baker	New York, N. Y	Nov. 24, 1868	84, 250
Soda, Manufacture of carbonate of	O. Wuth	Pittsburgh, Pa	Nov. 2, 1869	96, 374
Soda, Manufacture of caustic	H. Lowe	Baltimore, Md	June 11, 1861	32, 523
Soda, Manufacture of chromate of	J. Swindells	Manchester, England	Dec. 21, 1852	9, 491
Soda, &c., Manufacture of phosphate of	C. P. Williams	Philadelphia, Pa	Nov. 19, 1867	71, 256
Soda, Mode of manufacturing carbonate of	J. Hemming and H. G. Dyar	England and United States	June 24, 1839	1, 191
Soda or alkali, Package for caustic	H. B. Hall	New York, N. Y	June 17, 1873	139, 955
Soda, potash, and hydrochloric acid, Manufacture of bicarbonate of.	H. M. Baker	Rochester, N. Y.	Aug. 28, 1866	57, 458
Soda, Process and apparatus for the manufacture of carbonate of.	E. Solway	Brussels, Belgium	Mar. 4, 1873	136, 463
Soda, Process and apparatus for the manufacture of carbonate of.	J. Young	Kelly, North Britain	Aug. 6, 1872	130, 174
Soda, Process in the manufacture of bicarbonate	A. P. Von Pohrnhoff	Brooklyn, N. Y	Apr. 30, 1867	64, 385
Soda-water and for aërating liquids, Apparatus for the manufacture of.	J. Matthews, jr	New York, N. Y	Sept. 3, 1867	68, 375
Soda-water apparatus	J. Ambler, jr	New Berlin, N. Y	June 13, 1831	....
Soda-water apparatus	E. Bigelow	Springfield, Mass	Jan. 25, 1859	22, 697
Soda-water apparatus	J. H. Blaisdell	Boston, Mass	Dec. 8, 1863	40, 811
Soda-water apparatus	J. R. Brown	New Haven, Conn	Aug. 17, 1869	93, 802
Soda-water apparatus	A. Church	Canandaigua, N. Y	July 20, 1831	....
Soda-water apparatus	N. H. Coleman	Mentz, N. Y	July 20, 1831	....
Soda-water apparatus	T. Daniels	Toledo, Ohio	Jan. 11, 1859	22, 549
Soda-water apparatus	W. Gee	New York, N. Y	Apr. 1, 1862	34, 826
Soda-water apparatus	M. F. Hyde	Burlington, N. J	Mar. 6, 1855	12, 485
Soda-water apparatus	J. H. Laning	Philadelphia, Pa	June 22, 1832	....
Soda-water apparatus	J. D. Lynde	Philadelphia, Pa	Oct. 20, 1863	40, 347
Soda-water apparatus	J. D. Lynde	Philadelphia, Pa	Nov. 1, 1864	44, 873
Soda-water apparatus	J. Mathews	New York, N. Y	Apr. 8, 1873	137, 702
Soda-water apparatus	J. Matthews, jr	New York, N. Y	Oct. 3, 1865	50, 255
Soda-water apparatus	A. J. Morse	Ambrose, Mass	Oct. 11, 1864	44, 645
Soda-water apparatus	F. Nichols	New London, Conn	July 2, 1861	32, 709
Soda-water apparatus	G. Ott	Norfolk, Va	June 18, 1830	....
Soda-water apparatus	C. C. Sheldrake and J. Bready	Philadelphia, Pa	Mar. 27, 1866	53, 494
Soda-water apparatus	A. L. Smith	Brutus, N. Y	June 13, 1831	....
Soda-water apparatus	J. W. Tufts	Medford, Mass	Dec. 28, 1869	98, 445
Soda-water apparatus	J. W. Tufts	Medford, Mass	Feb. 25, 1873	136, 345
Soda-water apparatus	F. A. Weber and W. H. Greene	Woonsocket, R. I	Feb. 7, 1865	46, 283
Soda-water apparatus	E. Wyckoff	Elmira, N. Y	June 21, 1864	43, 251
Soda-water apparatus, Attachment for	M. S. Andrews	Somerville, Mass	May 21, 1872	126, 917
Soda-water apparatus, Beer-attachment for	W. R. Cady	Lowell, Mass	Apr. 22, 1873	138, 002
Soda-water apparatus, Device for dispensing sirup in.	J. Matthews	New York, N. Y	July 29, 1873	141, 229
Soda-water apparatus, Draft-faucet for	J. Patterson	Philadelphia, Pa	Apr. 8, 1873	137, 620
Soda-water apparatus, Draft-tube for	F. A. Weber and W. H. Greene	Woonsocket, R. I	Feb. 7, 1865	46, 284
Soda-water, Apparatus for charging	J. D. Lynde	Philadelphia, Pa	Nov. 19, 1867	71, 028
Soda-water, &c., Apparatus for dispensing	J. Matthews	New York, N. Y	July 22, 1873	141, 154
Soda-water, Apparatus for drawing	W. Gee	New York, N. Y	May 19, 1863	38, 577
Soda-water, Apparatus for drawing	J. Perkins	Brutus, N. Y	May 3, 1831	....
Soda-water, Apparatus for making	S. Andrews and J. F. Halsey	Perth Amboy, N. J	Apr. 17, 1849	6, 333
Soda-water apparatus, Method of constructing the acid-chambers of.	W. Gee	New York, N. Y	Sept. 12, 1865	49, 871
Soda-water apparatus, Portable	E. D. Wheeler	Murfreesborough, Tenn	May 25, 1858	20, 382
Soda-water bottle	W. W. Timmons	Rahway, N. J	Feb. 11, 1868	74, 453
Soda-water bottles, Apparatus for removing wire from.	C. M. Dedrick	Temperanceville, Pa	Oct. 6, 1866	58, 388
Soda-water, Composition for the manufacture of	J. B. Wood	Richmond, Va	May 2, 1871	114, 502
Soda-water cooler	E. Bigelow	Springfield, Mass	Nov. 28, 1865	51, 130
Soda-water, &c., cooler	W. Gee	New York, N. Y	July 22, 1873	141, 133
Soda-water, &c., cooler	J. Matthews	New York, N. Y	Apr. 2, 1872	125, 139
Soda-water cooler	A. D. Puffer	Somerville, Mass	Aug. 18, 1863	39, 587
Soda-water cooler	A. D. Puffer	Boston, Mass	Dec. 6, 1870	109, 942
Soda-water cooler and draft-pedestal	G. T. Palmer	Brooklyn, N. Y	Feb. 28, 1865	46, 581
Soda-water-dispensing apparatus	W. Gee	New York, N. Y	Mar. 25, 1873	137, 195
Soda-water draft-apparatus	J. Matthews, jr	New York, N. Y	Nov. 16, 1869	96, 823
Soda-water, Draft-apparatus for dispensing	W. Gee	New York, N. Y	Dec. 10, 1872	133, 848
Soda-water draft-tube	D. Fergus	Philadelphia, Pa	Mar. 26, 1872	124, 892
Soda-water draft-tube	O. Zwietusch	Milwaukee, Wis	Nov. 18, 1873	144, 646
Soda-water fountain	J. Fraley and A. Kirkpatrick	Urbana, Ohio	May 9, 1832	....
Soda-water fountain	A. Frankenberg	Columbus, Ohio	Dec. 20, 1853	10, 337
Soda-water fountain	J. Matthews	New York, N. Y	June 25, 1872	128, 411
Soda-water fountain	T. Ogden and J. Hindermyer	Philadelphia, Pa	Nov. 3, 1863	40, 496
Soda-water fountain	A. D. Puffer	Boston, Mass	June 10, 1873	139, 734
Soda-water fountain	S. R. Sylvester	Washington, D. C	July 21, 1863	39, 331
Soda-water fountain	A. Tumler	New York, N. Y	Jan. 3, 1871	110, 804
Soda-water fountain	M. W. Warne	Saint Louis, Mo	Sept. 15, 1863	39, 976
Soda-water, &c., fountain	F. W. Wiesebrock	New York, N. Y	Dec. 2, 1873	145, 139
Soda-water fountain	D. and T. Williams	San José, Cal	June 30, 1863	39, 086
Soda-water fountain, Atmospheric	L. B. Swan	Rochester, N. Y	Nov. 3, 1838	995
Soda-water fountain, Portable	J. R. Nichols	Haverhill, Mass	July 25, 1854	11, 384
Soda-water fountains, Faucet for	A. M. White and E. G. Burnham	Bridgeport, Conn	Mar. 24, 1868	76, 017
Soda-water fountains, Wagon for	J. Matthews	New York, N. Y	Apr. 9, 1872	125, 592
Soda-water generator	W. Gee	New York, N. Y	June 12, 1855	13, 057
Soda-water, Machine for drawing	G. H. Duffey	Alexandria, D. C	Apr. 19, 1832	....
Soda-water sirup, Apparatus for dispensing	J. Matthews, jr	New York, N. Y	Dec. 21, 1869	98, 176
Soda-water stand	A. Van Winkle	Newark, N. J	Feb. 12, 1867	62, 099
Soda-water tumblers, Holder for	J. Matthews	New York, N. Y	Nov. 25, 1873	144, 913
Soda-water under pressure, Bottling	H. Carse	Pittsburgh, Pa	May 3, 1864	42, 559
Sodium, Manufacture of sulphide of	A. K. Eaton	Brooklyn, N. Y	Apr. 30, 1872	126, 275
Sofa	J. Cicsor	Davenport, Iowa	Sept. 13, 1870	107, 224
Sofa	W. C. Conger	Newark, N. J	May 13, 1873	138, 860
Sofa	C. Johnson	Albany, N. Y	Feb. 24, 1827	....

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Sofa	J. W. Moyer	Cherry Valley, N. Y	Jan. 24, 1865	46, 014
Sofa	J. Q. Rand and J. F. McSheny	Baltimore, Md	June 24, 1873	140, 306
Sofa, Adjustable	E. Deetz	Philadelphia, Pa	May 12, 1868	77, 872
Sofa and bathing-tub, Combination of	S. A. Baldwin	Waterbury, Conn	May 20, 1862	35, 289
Sofa and bed	J. B. Keith	New York, N. Y	Aug. 4, 1868	80, 767
Sofa and bed	H. Schultz	Chicago, Ill	Aug. 13, 1867	67, 809
Sofa and bed bottom	C. Martino	Trenton, N. J	Sept. 17, 1867	69, 006
Sofa and bedstead	C. J. McAlister	Chicago, Ill	June 14, 1870	104, 176
Sofa and bedstead	S. Pearson	Boston, Mass	Nov. 27, 1860	30, 754
Sofa and bedstead	W. H. Schwalbe	New York, N. Y	Sept. 21, 1869	95, 048
Sofa and bedstead, Combined rocking	W. McArthur	Philadelphia, Pa	Jan. 31, 1870	111, 365
Sofa and chair sprin g	E. Cherrington	Boston, Mass	Nov. 23, 1835	....
Sofa and chair sprin g	E. Cherrington	Boston, Mass	Nov. 23, 1836	....
Sofa and crib	E. E. Everitt	Philadelphia, Pa	June 5, 1866	55, 265
Sofa and table	W. Reichenbach and F. Roschdiantzky.	Chicago, Ill	Dec. 28, 1869	98, 298
Sofa and vessel-berth, Combination of	J. Sutton	New York, N. Y	Sept. 9, 1862	36, 442
Sofa-attachment	H. C. Grube	Plaquemine, La	Oct. 26, 1869	96, 103
Sofa-bed	A. Morris	New York, N. Y	Sept. 12, 1871	118, 966
Sofa, &c., bottom	I. Mason	Brooklyn, N. Y	Apr. 15, 1873	137, 784
Sofa, chair, &c	A. S. Newhouse	Hamburgh, S. C	Dec. 23, 1873	145, 811
Sofa convertible into a table, trunk, cot, &c	J. C. Hall	Cincinnati, Ohio	June 10, 1862	35, 517
Sofa, crib-bedstead, &c	T. W. Currier	Lawrence, Mass	July 4, 1854	11, 212
Sofa, &c., Elastic-spring	S. Blair	New Haven, Conn	Feb. 2, 1822	....
Sofa, Folding	J. W. McDonough	Chicago, Ill	July 11, 1871	116, 850
Sofa, Folding	R. Stewart	Chicago, Ill	Dec. 3, 1872	133, 548
Sofa-frame	P. Born	New York, N. Y	Jan. 18, 1859	22, 619
Sofa, Invalid	M. Engel	Easton, Pa	May 12, 1840	1, 604
Sofa-lounge	C. Kurfiss	Louisville, Ky	Feb. 15, 1870	99, 778
Sofa, lounge, and table	W. B. Jones	Cincinnati, Ohio	May 4, 1869	89, 776
Sofa or lounge	E. Smith	New York, N. Y	Oct. 10, 1865	50, 397
Sofa-table	C. Briggs	Roxbury, Mass	Dec. 11, 1847	5, 390
Soil, Machine for breaking and pulverizing the	R. J. Gatling	Indianapolis, Ind	May 29, 1860	28, 465
Soil, Machine for paring and pulverizing	R. J. Gatling	Indianapolis, Ind	June 18, 1861	32, 600
Soil-tilling device	W. Wadsworth	Sacramento, Cal	Aug. 9, 1864	43, 808
Soil-tilling machine	S. Woodbridge	Benicia, Cal	Aug. 14, 1866	57, 242
Solar and transit instruments	W. Schmolz	San Francisco, Cal	Dec. 24, 1867	72, 687
Solar camera	L. G. Bigelow	Albion, Mich	Nov. 5, 1867	70, 509
Solar camera	J. B. Blair	Philadelphia, Pa	Dec. 4, 1866	60, 129
Solar camera	N. Bryan	Thomaston, Ga	Sept. 20, 1870	107, 441
Solar camera	J. H. Dille and E. W. Poston	Fort Wayne, Ind	Mar. 26, 1872	125, 030
Solar camera	W. H. Masters	Princeton, Ill	Nov. 20, 1866	59, 917
Solar camera	I. and C. Paxson	New York, N. Y	Dec. 28, 1869	98, 404
Solar camera	H. Roettger	Philadelphia, Pa	May 23, 1865	47, 862
Solar camera	D. A. Woodward	Baltimore, Md	Feb. 24, 1857	16, 700
Solar camera, Vertical	L. F. Morawetz	Baltimore, Md	Nov. 6, 1866	59, 438
Solar cameras, Mode of operating the reflectors of	D. A. Woodward	Baltimore, Md	Mar. 5, 1861	31, 639
Solder	L. Brandeis	Brooklyn, N. Y	Dec. 22, 1868	85, 057
Solder	W. S. Deeds	Baltimore, Md	Sept. 19, 1871	119, 080
Solder and printer's lead, Machine for preparing metal for.	R. Painter	Baltimore, Md	Aug. 29, 1871	118, 550
Solder, Casting bar	A. Schoenberg	New York, N. Y	Jan. 3, 1871	110, 684
Solder-casting machine	E. M. Lang	Portland, Me	Oct. 9, 1866	58, 728
Solder-casting mold	J. Fanning	Brooklyn, N. Y	June 15, 1869	91, 426
Solder-casting mold	A. Schoenberg	New York, N. Y	Mar. 29, 1870	101, 318
Solder, Compressed rod	L. and R. Crooke	New York, N. Y	Apr. 24, 1866	54, 120
Solder, Drop-plate for casting	J. Cartwright	South Reading, Mass	Dec. 27, 1864	45, 668
Solder-flux	C. E. Yager	Hudson, N. Y	June 3, 1873	139, 490
Solder for aluminum	A. Starr	New York, N. Y	Mar. 10, 1868	75, 312
Solder for aluminum	A. Starr	New York, N. Y	May 19, 1868	78, 023
Solder for sealing oyster and fruit-cans, Preparation of.	E. Morris	Burlington, N. J	July 15, 1873	140, 840
Solder, Machine for the manufacture of rod	L. and R. Crooke	New York, N. Y	Apr. 24, 1866	54, 121
Solder, Manufacture of rod	F. Deming	Waterbury, Conn	Apr. 16, 1872	125, 666
Solder, Melting and molding tinner's	D. Hagerty	Baltimore, Md	Oct. 2, 1866	58, 408
Solder, Preparation of	C. D. Blinn	Port Huron, Mich	Mar. 2, 1869	87, 391
Solder, Ready	D. H. Priest	Watertown, Mass	Apr. 28, 1868	77, 404
Solder-wire, Casting	E. M. Lang	Portland, Me	Feb. 21, 1871	112, 054
Solder-wire, Mandrel for gaging and cutting	L. Cutting	San Francisco, Cal	Feb. 21, 1871	111, 912
Soldered tubing, Machine for finishing	E. Jordan	Waterbury, Conn	June 8, 1858	20, 529
Soldering-apparatus	W. D. Brooks	Baltimore, Md	Sept. 24, 1872	131, 656
Soldering-apparatus	A. J. Burke	Baltimore, Md	June 27, 1871	116, 410
Soldering-apparatus	J. Gracie	Pittsburgh, Pa	Nov. 28, 1871	121, 360
Soldering-apparatus	W. T. Gregg	Brooklyn, N. Y	Oct. 29, 1872	132, 658
Soldering-apparatus	J. Gulden	Keyport, N. J	May 31, 1870	103, 603
Soldering-apparatus	J. Gulden	Keyport, N. J	May 30, 1871	115, 308
Soldering-apparatus	J. Gulden	Keyport, N. J	Aug. 8, 1871	117, 770
Soldering-apparatus	J. Gulden	Keyport, N. J	July 16, 1872	129, 473
Soldering-apparatus	I. Kaylar	Jersey City, N. J	June 6, 1871	115, 617
Soldering-apparatus	C. B. Koons	Philadelphia, Pa	Mar. 25, 1873	137, 217
Soldering-apparatus	F. L. Miller	Brooklyn, N. Y	Nov. 14, 1871	120, 991
Soldering-apparatus	D. Porteous	Baltimore, Md	Dec. 26, 1871	122, 132
Soldering-apparatus	C. Pratt and C. Seimel	New York and Green Point, N. Y.	Mar. 30, 1869	88, 410
Soldering-apparatus	C. Pratt and C. Seimel	Green Point, N. Y	Apr. 27, 1869	89, 431
Soldering-apparatus	L. A. Smith	Kansas City, Mo	Oct. 31, 1871	120, 466
Soldering-apparatus, Regulating the flow of gas to	T. H. Snyder	Camden, N. J	Mar. 31, 1863	38, 083
Soldering cans, Device for	M. M. Shur	Delaware, Ohio	Aug. 25, 1868	81, 420
Soldering cans, Device for	J. C. Underwood and P. Johnson.	Richmond, Ind	Aug. 20, 1867	67, 931
Soldering-compound	C. Cox	Covington, Ga	May 27, 1873	139, 297
Soldering-compound	W. J. Kent	Detroit, Mich	Feb. 2, 1869	86, 414
Soldering cutlery-handles	E. A. Godfrey	Hartford, Conn	June 12, 1860	28, 714
Soldering cutlery-handles	E. A. Godfrey	Hartford, Conn	June 12, 1860	28, 715
Soldering, Device for holding bib during the operation of.	A. Hicinbothem	New York, N. Y	June 25, 1872	128, 226
Soldering eave-troughs, Apparatus for	C. and G. Fisher	Tecumseh, Mich	Aug. 20, 1867	67, 969
Soldering eave-troughs, Device for	D. Asire	Ada, Ohio	Jan. 18, 1870	98, 835

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Soldering eave-troughs, Machine for	H. C. Hatten and J. P. Anglebergor.	New Carlisle, Ohio	Jan. 15, 1867	61, 191
Soldering fire-pot	E. W. Kimball	Hudson, N. Y	May 3, 1870	102, 555
Soldering fire-pot	W. F. Rossman	Hudson, N. Y	Nov. 22, 1864	45, 179
Soldering fruit-cans, Expanding frame for	J. H. Cook	Richmond, Ind	July 24, 1866	56, 531
Soldering-furnace	L. Boore	Buffalo, N. Y	Nov. 22, 1864	45, 134
Soldering-furnace	J. G. Borden and W. Power	Brewster Station, N. Y	June 8, 1869	90, 987
Soldering-furnace	P. Brown	Waterbury, Conn	Jan. 1, 1856	14, 008
Soldering-furnace	L. Cutting	San Francisco, Cal	Nov. 19, 1867	71, 141
Soldering-furnace	J. Day	Holley, N. Y	Sept. 23, 1873	143, 126
Soldering-furnace	S. A. Ewalt and J. A. Tillery	Baltimore, Md	Oct. 29, 1872	132, 647
Soldering-furnace	J. A. Frey	Jersey City, N. J	May 6, 1873	138, 626
Soldering-furnace	J. McPherson	Baltimore, Md	Feb. 22, 1870	100, 174
Soldering-furnace	W. S. Potwin	Chicago, Ill	Aug. 19, 1873	141, 889
Soldering-furnace	G. O. Sanderson	Boston, Mass	May 12, 1868	77, 921
Soldering-furnace	C. Seimel	Green Point, N. Y	Mar. 30, 1869	88, 419
Soldering-furnace	C. Seimel	Green Point, N. Y	Apr. 18, 1871	113, 803
Soldering-furnace	W. J. Stevenson	New York, N. Y	Oct. 31, 1854	11, 876
Soldering-furnace	G. A. Townsend	Columbus, Ohio	May 7, 1872	126, 590
Soldering-furnace, Portable	J. Burgess	Zanesville, Ohio	June 1, 1869	90, 724
Soldering galvanized iron, Mode of	P. B. Bonner	New York, N. Y	Oct. 27, 1868	83, 451
Soldering, Gas-cock for	W. L. Walker and I. M. Jones	Providence, R. I	Feb. 20, 1872	123, 956
Soldering, Holding knife-handles for	A. Cooley	Hartford, Conn	Nov. 29, 1859	26, 322
Soldering, Holding knife-handles for	A. Cooley	Hartford, Conn	Nov. 29, 1859	26, 323
Soldering in a vacuum, Apparatus for	J. B. and J. R. Horne	Xenia, Ohio	May 11, 1852	8, 940
Soldering-iron	T. Beardsley	Springfield, Mass	Feb. 25, 1868	74, 881
Soldering-iron	H. I. Behrens	New York, N. Y	July 20, 1858	20, 975
Soldering-iron	G. F. Blaisse and J. Brannen	Philadelphia, Pa	June 3, 1873	139, 537
Soldering-iron	J. A. Bostwick	New York, N. Y	June 21, 1870	104, 412
Soldering-iron	C. Brombacher	Tarrytown, N. Y	June 18, 1872	128, 106
Soldering-iron	A. Burbank	Brooklyn, N. Y	Feb. 14, 1860	27, 185
Soldering-iron	A. H. Burnham	Bridgeton, Me	May 13, 1873	138, 732
Soldering-iron	C. O. Crosby	New Haven, Conn	Mar. 19, 1867	62, 941
Soldering-iron	D. Dod	Brooklyn, N. Y	Jan. 29, 1856	14, 176
Soldering-iron	W. H. Frissler	Cleveland, Ohio	Mar. 9, 1869	87, 604
Soldering-iron	J. W. Hoard	Providence, R. I	Apr. 23, 1872	125, 893
Soldering-iron	W. K. Lewis	Boston, Mass	May 30, 1865	47, 965
Soldering-iron	L. McMurray and R. J. Hollingworth.	Baltimore, Md	June 4, 1872	127, 499
Soldering-iron	J. D. Norton	Saint Louis, Mo	Jan. 14, 1873	134, 923
Soldering-iron	N. G. Numsen	Baltimore, Md	June 11, 1872	127, 914
Soldering-iron	L. Patee	Peoria, Ill	July 3, 1860	29, 039
Soldering-iron	J. C. Reynolds	Taunton, Mass	Oct. 24, 1871	120, 166
Soldering-iron	H. S. Scaroni	Cincinnati, Ohio	May 21, 1872	126, 905
Soldering-iron	J. H. Trowbridge	New Haven, Conn	Mar. 27, 1866	53, 545
Soldering-iron	J. Williams	Jefferson, Tex	Dec. 19, 1871	122, 092
Soldering-iron	A. Wilson	Frankford, Pa	Mar. 25, 1862	34, 799
Soldering-iron	J. D. Wyman	Fitchburgh, Mass	Mar. 16, 1869	87, 897
Soldering-irons, Construction of	J. Gleason	Whitestone, N. Y	Jan. 28, 1868	73, 798
Soldering-irons, Furnace for heating	J. Burgess	Zanesville, Ohio	Dec. 23, 1873	145, 784
Soldering-irons, Furnace for heating	W. Hatch	Plainfield, Ill	Nov. 3, 1868	83, 629
Soldering-irons, Furnace for heating	J. Wilson	Brandywine, Del	May 13, 1856	14, 892
Soldering-irons, Gas-heater or blow-pipe for heating	E. A. Leland	New York, N. Y	Feb. 21, 1865	46, 527
Soldering-irons, Heater for	R. Brady	New York, N. Y	Nov. 20, 1866	59, 815
Soldering-irons, Stove for heating	I. Cressman	Philadelphia, Pa	Jan. 12, 1864	41, 200
Soldering-kit	M. D. Kelly	Cadiz, Ky	July 12, 1870	105, 219
Soldering-lamp	W. H. Sallman	Amsterdam, N. Y	Aug. 29, 1871	118, 653
Soldering-lamp and blow-pipe	J. S. Hull	Cincinnati, Ohio	July 3, 1866	56, 051
Soldering lids of cans, Device for	F. W. Brown	Philadelphia, Pa	May 5, 1868	77, 447
Soldering-machine	E. W. Bliss	New York, N. Y	Aug. 20, 1872	130, 693
Soldering-machine	W. D. Brooks	Baltimore, Md	Apr. 15, 1873	137, 888
Soldering-machine	W. D. Brooks	Baltimore, Md	June 3, 1873	139, 539
Soldering-machine	W. D. Brooks	Baltimore, Md	June 10, 1873	139, 763
Soldering-machine	W. D. Brooks	Baltimore, Md	July 8, 1873	140, 679
Soldering-machine	E. T. Covell	Brooklyn, N. Y	Feb. 1, 1870	99, 410
Soldering-machine	E. T. Covell	Brooklyn, N. Y	June 21, 1870	104, 431
Soldering-machine	E. T. Covell	Brooklyn, N. Y	Sept. 20, 1870	107, 458
Soldering-machine	V. and P. Fath and J. Frielingsdorf.	Saint Louis, Mo	Dec. 15, 1868	85, 003
Soldering-machine	J. L. Gray	Baltimore, Md	Apr. 2, 1867	63, 504
Soldering-machine	J. Hildreth, jr.	Philadelphia, Pa	Oct. 15, 1872	132, 286
Soldering-machine	J. Le Comte	Brooklyn, N. Y	Feb. 22, 1870	100, 160
Soldering-machine	E. Manley	Marion, N. Y	Nov. 2, 1858	21, 972
Soldering-machine	E. Morris and W. H. Kimball	Burlington, N. J	Mar. 11, 1873	136, 748
Soldering-machine	D. P. Newell	Chicago, Ill	Jan. 25, 1870	99, 103
Soldering-machine	C. Pratt and C. Seimel	New York and Green Point, N. Y.	Mar. 9, 1869	87, 704
Soldering-machine	J. F. Spence	Williamsburgh, N. Y	Sept. 16, 1873	142, 956
Soldering-machine for can-caps	W. B. Bishop	Brooklyn, N. Y	Nov. 29, 1870	109, 577
Soldering-machine for can-caps	W. B. Bishop	Brooklyn, N. Y	Mar. 26, 1872	124, 930
Soldering-machine for metallic vessels	E. T. Covell	Brooklyn, N. Y	Aug. 6, 1870	106, 257
Soldering metal cans, Machine for	E. T. Covell	Brooklyn, N. Y	Mar. 26, 1867	63, 220
Soldering metal vessels	H. P. Dennis	Peoria, Ill	Nov. 22, 1864	45, 143
Soldering-rod	W. M. Neill	Bridgeport, Conn	July 9, 1872	128, 809
Soldering sheet-metal boxes, Machine for	C. L. Rohn	Philadelphia, Pa	Oct. 20, 1873	83, 208
Soldering sheet-metal cans	H. Miller	New York, N. Y	Aug. 18, 1863	39, 616
Soldering sheet-metal cans, Device for	P. Rees	Bridgewater, Pa	Dec. 31, 1867	72, 904
Soldering sheet-metal eave-troughs	E. H. Camp	Jackson, Mich	Mar. 24, 1863	37, 950
Soldering spiral bands	E. H. Russell	Providence, R. I	Mar. 28, 1871	113, 099
Soldering the joints and seams of metallic vessels, Process for.	S. D. Brooks	Baltimore, Md	July 6, 1869	92, 258
Soldering tin cans	R. J. Hollingsworth	Cincinnati, Ohio	Sept. 12, 1865	49, 880
Soldering tin cans, Apparatus for	J. F. Merrill	Cincinnati, Ohio	Jan. 2, 1872	122, 477
Soldering tin cans, Apparatus for	W. J. Stevenson	New York, N. Y	Jan. 9, 1855	12, 219
Soldering tin cans, Device for	W. H. Henderson	Franklin, Ind	Mar. 2, 1869	87, 494
Soldering tin cans, Device for	W. Serviss	Sidney, Ohio	Mar. 24, 1868	75, 985
Soldering tin cans, Device for	W. Serviss	Sidney, Ohio	Aug. 4, 1868	80, 673
Soldering tin cans, Furnace for	G. W. Fisher	Baltimore, Md	May 14, 1872	126, 685

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Invention.	Inventor.	Residence.	Date.	No.
Soldering tin cans, Machine for	J. G. Borden	Brewster Station, N. Y	Feb. 11, 1868	74, 290
Soldering tin cans, Machine for	J. G. Borden	Brewster Station, N. Y	Oct. 5, 1869	95, 418
Soldering tin cans, Machine for	P. H. Niles	Boston, Mass	Apr. 24, 1866	54, 195
Soldering tin cans, Machine for	J. Redheffer	Philadelphia, Pa	Feb. 11, 1873	135, 847
Soldering tinned plate	W. G. Warden	Philadelphia, Pa	Oct. 15, 1872	131, 338
Soldering-tool	L. Cutting	San Francisco, Cal	Mar. 4, 1873	136, 367
Soldering-tool	L. Cutting	San Francisco, Cal	Dec. 2, 1873	145, 156
Soldering-tool	R. J. Hollingsworth	Baltimore, Md	June 17 1873	140, 042
Soldering-tool	L. McMurray	Baltimore, Md	Jan. 30, 1872	123, 276
Soldering-tool	L. McMurray and R. J. Hollingsworth.	Baltimore, Md	June 6, 1871	115, 760
Soldering-tool	L. McMurray and R. J. Hollingsworth.	Baltimore, Md	Apr. 23, 1872	126, 071
Soldering-tool	S. D. Stiffey	Blairsville, Pa	Dec. 31, 1872	134, 403
Soldering-tool	J. C. Tauber	Ridgeville, Ind	Aug. 6, 1872	130, 332
Soldering-tool	J. A. Tillery	Baltimore, Md	May 21, 1872	127, 119
Soldering-tool	J. A. Tillery and S. A. Ewalt	Baltimore, Md	May 14, 1872	126, 852
Soldering-tool	J. A. Tillery and S. A. Ewalt	Baltimore, Md	May 21, 1872	127, 120
Soldering-tool	W. H. Wight	Princess Anne County, Va.	Jan. 21, 1873	135, 025
Soldering-tools by gas, Heating	J. H. Stimpson	Boston, Mass	May 12, 1857	17, 301
Soldering-tools, Gas-furnace for heating	J. H. Stimpson	Boston, Mass	Oct. 13, 1868	83, 104
Soldering-tools, Heating-plates for heating	L. McMurray	Baltimore, Md	May 21, 1872	127, 084
Soldering-vessel	C. Seimel	Green Point, N. Y	Oct. 13, 1868	83, 100
Soldering wire ferrules	A. Pierpont	New Haven, Conn	Apr. 1, 1856	14, 573
Sole and heel burnishing machine	V. K. Spear	Lynn, Mass	Sept. 26, 1871	119, 422
Sole and heel for boots and shoes	J. Gibson, jr	Albany, N. Y	Feb. 27, 1872	124, 127
Sole and heel for boots and shoes, Water-proof	B. D. Godfrey	Milford, Mass	Nov. 10, 1857	18, 583
Sole and heel trimming-machinery, Rotary cutter-head for.	S. H. Hodges	Lynn, Mass	July 9, 1872	128, 728
Sole and mold for the same, Composition	P. Ware, jr	Boston, Mass	Apr. 19, 1864	42, 423
Sole and shoe heating apparatus	F. Winslow	Marblehead, Mass	Nov. 7, 1865	50, 866
Sole, Boot	B. Van Ausdall	Keokuk, Iowa	July 14, 1868	80, 037
Sole, Boot and shoe	F. Ashley	New York, N. Y	July 9, 1867	66, 548
Sole, Boot and shoe	A. J. Bassett	Philadelphia, Pa	Aug. 18, 1868	81, 061
Sole, Boot and shoe	J. Chilcott	Brooklyn, N. Y	May 30, 1865	47, 930
Sole, Boot and shoe	W. H. Elsegood	Philadelphia, Pa	Dec. 20, 1843	3, 385
Sole, Boot and shoe	B. D. Godfrey	Milford, Mass	Jan. 31, 1871	111, 448
Sole, Boot and shoe	C. Goodyear, jr	New York, N. Y	Jan. 6, 1863	37, 287
Sole, Boot and shoe	C. Goodyear, jr., and J. Da Silva.	New Rochelle and Williamsburgh, N. Y.	Apr. 4, 1871	113, 420
Sole, Boot and shoe	J. B. Hayden	Easton, N. Y	Jan. 24, 1860	26, 903
Sole, Boot and shoe	W. Hunt	New York	Aug. 17, 1843	3, 227
Sole, Boot and shoe	S. W. Huntington	Augusta, Me	Aug. 6, 1867	67, 432
Sole, Boot and shoe	A. A. Moss	Philadelphia, Pa	June 6, 1871	115, 631
Sole, Boot and shoe	H. Riggs	Oxford, Conn	Feb. 25, 1868	74, 851
Sole, Boot and shoe	S. J. Seely	New York, N. Y	Sept. 5, 1865	49, 795
Sole, Boot and shoe	S. J. Shaw	Marlborough, Mass	July 23, 1872	129, 757
Sole, Boot and shoe	S. J. Shaw	Marlborough, Mass	Aug. 27, 1872	130, 947
Sole-buffing machines, Cylinder for	J. Howe	Milford, Mass	Mar. 11, 1873	136, 727
Sole-burnishing machine	A. C. Carey	Malden, Mass	Aug. 20, 1872	130, 567
Sole-burnishing machine	A. C. Carey	Malden, Mass	Nov. 5, 1872	132, 749
Sole burnishing machine, Boot and shoe	J. C. Hawkins	Boston, Mass	Feb. 25, 1873	136, 322
Sole chamfering machine, Boot and shoe	W. Johnson	Hampstead, N. H	Apr. 12, 1859	23, 585
Sole chamfering tool, Boot and shoe	W. Johnson	Hampstead, N. H	Oct. 12, 1858	21, 760
Sole, Channeled	G. McKay	Boston, Mass	June 13, 1865	48, 238
Sole-channeler	E. D. Howard	Lynn, Mass	Feb. 27, 1872	124, 063
Sole channeling and beveling machine for boots and shoes.	J. G. Ross	Philadelphia, Pa	Apr. 4, 1871	113, 350
Sole channeling and edging machine, Boot and shoe	M. Wesson	Springfield, Mass	May 24, 1859	24, 182
Sole-channeling and feather-edging machine	H. S. Vrooman	Boston, Mass	May 4, 1869	89, 818
Sole channeling, Boot and shoe	L. R. Blake	Fort Wayne, Ind	July 11, 1871	116, 921
Sole-channeling machine	C. C. Ballou	Albany, N. Y	July 22, 1873	141, 025
Sole-channeling machine	H. S. Vrooman	Boston, Mass	June 3, 1873	139, 637
Sole channeling machine, Boot and shoe	L. R. Blake	Fort Wayne, Ind	Aug. 8, 1871	117, 856
Sole channeling machine, Boot and shoe	E. P. Pierce	Boston, Mass	July 16, 1872	129, 588
Sole channeling machine, Boot and shoe	M. J. Stein	New York, N. Y	Dec. 29, 1868	85, 486
Sole-channeling tool	A. Allen	North Brookfield, Mass	May 3, 1864	42, 546
Sole-channeling tool	J. Dillon	Lynn, Mass	Oct. 28, 1862	36, 880
Sole cutter, Boot and shoe	E. F. Shaw	Boston, Mass	May 17, 1870	103, 244
Sole cutter, Boot and shoe	P. Wells	Middleton, Mass	Sept. 15, 1857	18, 227
Sole-cutter, Hand	E. W. French	South Scituate, Mass	Aug. 6, 1872	130, 291
Sole-cutting apparatus	J. Woodley	Quebec, Canada	June 25, 1872	128, 270
Sole cutting device, Boot and shoe	A. M. Howe	Worcester, Mass	Jan. 3, 1871	110, 762
Sole-cutting machine	J. Batchelder	Salem, Mass	May 10, 1859	23, 889
Sole-cutting machine	T. A. Curtis	Brookfield, Mass	Feb. 12, 1867	62, 015
Sole-cutting machine	T. A. Curtis	Brookfield, Mass	Apr. 7, 1868	76, 408
Sole-cutting machine	M. Hobbs	Natick, Mass	Oct. 6, 1868	82, 716
Sole-cutting machine	A. P. Howard and A. Rowe, jr	Stoneham, Mass	Feb. 8, 1859	22, 873
Sole-cutting machine	D. Knox and T. Ditchburn	Lynn, Mass	Mar. 13, 1860	27, 453
Sole-cutting machine	W. Munroe	West Auburn, Me	Oct. 11, 1859	25, 758
Sole-cutting machine	G. W. Parrott	Lynn, Mass	Feb. 28, 1860	27, 306
Sole-cutting machine	J. S. Shattuck	Malden, Mass	May 24, 1859	24, 141
Sole-cutting machine	J. Thompson	Marblehead, Mass	May 24, 1859	24, 165
Sole-cutting machine	J. H. Walker	Worcester, Mass	Jan. 22, 1867	61, 489
Sole-cutting machine	S. S. Weed	Stoneham, Mass	Aug. 4, 1863	39, 437
Sole cutting machine, Boot and shoe	J. H. Bean	Marietta, Ohio	Oct. 18, 1870	108, 435
Sole cutting machine, Boot and shoe	L. S. Graves	Rochester, N. Y	Sept. 18, 1860	30, 060
Sole cutting machine, Boot and shoe	C. H. Griffin	Lynn, Mass	Oct. 23, 1860	30, 520
Sole cutting machine, Boot and shoe	J. W. Hatch	Rochester, N. Y	Dec. 4, 1855	13, 875
Sole cutting machine, Boot and shoe	E. D. Johnson, jr	Augusta, Me	Nov. 15, 1864	45, 046
Sole cutting machine, Boot and shoe	G W. Parrott and C. K. Bradford.	Lynn, Mass	Nov. 8, 1859	26, 049
Sole cutting machine, Boot and shoe	L. and P. G. Ross	Worcester, Mass	Aug. 8, 1854	11, 495
Sole cutting machine, Boot and shoe	J. Steger	Roxbury, Mass	Nov. 11, 1851	8, 507
Sole cutting machine, Boot and shoe	E. M. Stevens	Boston, Mass	Nov. 5, 1867	70, 481
Sole cutting machine, Boot and shoe	J. Thompson and A. S. Moore	Marblehead and Lynn, Mass.	Aug. 8, 1854	11, 500
Sole cutting machine, Boot and shoe	A. Warren	Jefferson, Ohio	Apr. 5, 1859	23, 516

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Sole cutting machine, Boot and shoe	J. W. Wilder	Boston, Mass	July 29, 1856	15, 451
Sole-cutting machine, Shoe	J. Downing	Philadelphia, Pa	Apr. 24, 1866	54, 131
Sole cutting machinery, Boot and shoe	A. D. Boynton	Haverhill, Mass	May 8, 1849	6, 444
Sole cutting machinery, Boot and shoe	J. W. Maloy	Charlestown, Mass	May 12, 1863	38, 496
Sole-drying apparatus, Shoe	A. F. Smith	Lynn, Mass	Feb. 13, 1872	123, 585
Sole-edge and heel shave	O. B. Parker	Hopkinton, Mass	Apr. 12, 1864	42, 306
Sole edge binding machinery, Boot and shoe	B. H. Hadley	Brooklyn, N. Y	June 17, 1873	140, 035
Sole edge burnishing and trimming machine, Boot and shoe.	J. W. Maloy	Boston, Mass	Jan. 28, 1873	135, 229
Sole edge burnishing machine, Boot and shoe	J. and J. Beasley, jr	Lynn, Mass	Aug. 19, 1873	141, 984
Sole edge burnishing machine, Boot and shoe	E. B. Cushing	Boston, Mass	Sept. 10, 1867	68, 611
Sole edge burnishing machine, Boot and shoe	E. T. Ingalls	Haverhill, Mass	May 8, 1860	28, 181
Sole edge burnishing machine, Boot and shoe	J. W. Maloy	Boston, Mass	June 11, 1872	127, 904
Sole-edge-burnishing machine, Shoe	N. S. Thompson	Stoneham, Mass	Nov. 7, 1865	50, 856
Sole edge burnishing machinery, Boot and shoe	J. and J. Beasley, jr	Lynn, Mass	Aug. 19, 1873	141, 983
Sole-edge-chamfering instrument, Shoe	O. R. Dinsmore and L. J. Bartlett.	Salisbury, N. H	Dec. 4, 1855	13, 867
Sole edge cutting machine, Boot and shoe	J. P. Molliere	Lyons, France	June 12, 1855	13, 063
Sole edge finishing machine, Boot and shoe	C. W. Palmer	Lynn, Mass	Jan. 21, 1868	73, 638
Sole edge finishing machinery, Boot and shoe	C. M. Chase	Boston, Mass	Aug. 19, 1873	141, 997
Sole edge finishing machinery, Boot and shoe	H. P. Fairfield and W. W. Messer, jr.	Boston, Mass	Oct. 14, 1873	143, 682
Sole edge finishing machinery, Boot and shoe	H. F. Wheeler	Boston, Mass	Aug. 12, 1873	141, 843
Sole edge planing and finishing tool, Boot and shoe	H. Sauerbier	Newark, N. J	June 21, 1859	24, 494
Sole edge polishing machine, Boot and shoe	R. F. Burns	Albany, N. Y	Dec. 14, 1869	97, 758
Sole-edge trimmer	W. Webster	East Jaffrey, N. H	Dec. 30, 1873	145, 036
Sole-edge-trimming implement	A. P. Hazard	North Bridgewater, Mass	Oct. 21, 1873	143, 823
Sole edge trimming instrument, Boot and shoe	I. Rich	Manchester, Conn	Nov. 16, 1858	22, 102
Sole edge trimming machine, Boot and shoe	J. W. Maloy	Boston, Mass	Feb. 18, 1873	136, 080
Sole edge trimming machinery, Boot and shoe	R. C. Lambart	Quincy, Mass	Aug. 19, 1873	142, 029
Sole-fastening machine	C. H. Helms	Poughkeepsie, N. Y	Sept. 13, 1870	107, 369
Sole-finishing tool	O. P. Pettengill	Topsfield, Mass	Aug. 6, 1867	67, 579
Sole, Flexible	E. G. Kinsley	Stoughton, Mass	Oct. 8, 1861	33, 436
Sole for boots, &c	J. M. Hunter	Morristown, N. J	June 16, 1868	78, 970
Sole for boots and shoes, Cork	H. Lyon	Brooklyn, N. Y	Feb. 18, 1862	34, 437
Sole for boots and shoes, In-	J. Brackett	Lynn, Mass	July 2, 1872	128, 583
Sole for boots and shoes, India-rubber	J. Chilcott and R. Snell	Brooklyn, N. Y	Sept. 13, 1853	10, 008
Sole for boots and shoes, India-rubber	C. McBurney	Roxbury, Mass	Apr. 5, 1859	23, 479
Sole for boots and shoes, India-rubber	T. C. Weeks	Boston, Mass	May 19, 1863	38, 615
Sole for boots and shoes, Inner	W. M. Belcher	Philadelphia, Pa	Feb. 13, 1872	123, 665
Sole for boots and shoes, Inner	D. Bowker	Boston, Mass	Sept. 1, 1863	39, 713
Sole for boots and shoes, Inner	E. Chesterman	Tremont, N. Y	May 25, 1869	90, 499
Sole for boots and shoes, Inner	P. M. Ernst	New York, N. Y	June 7, 1870	103, 857
Sole for boots and shoes, Inner	J. Gascoigne	Rochester, N. Y	Sept. 2, 1873	142, 332
Sole for boots and shoes, Inner	J. K. Gittens	Brooklyn, N. Y	Sept. 12, 1865	49, 874
Sole for boots and shoes, Inner	A. N. Hadley	Richmond, Ind	Feb. 25, 1868	74, 912
Sole for boots and shoes, Inner	R. Heneage	Buffalo, N. Y	July 21, 1868	80, 071
Sole for boots and shoes, Inner	C. P. Johnson	Jamaica Plain, Mass	Apr. 18, 1871	113, 773
Sole for boots and shoes, Inner	M. A. Johnson	Lowell, Mass	Feb. 5, 1867	61, 742
Sole for boots and shoes, Inner	C. A. Leonard	Rochester, N. Y	Dec. 21, 1869	98, 170
Sole for boots and shoes, Inner	J. Luttenchlager	New York, N. Y	Sept. 5, 1871	118, 733
Sole for boots and shoes, Inner	E. W. Parish	Boston, Mass	May 31, 1871	103, 770
Sole for boots and shoes, Inner	J. Sloan	Philadelphia, Pa	Mar. 18, 1862	34, 702
Sole for boots and shoes, Inner	R. A. Webster	Sandisfield, Mass	June 23, 1868	79, 090
Sole for boots and shoes, Inner	G. H. Whitaker	Pittsfield, Mass	Nov. 5, 1872	132, 881
Sole for boots and shoes, Inner	W. Williams	Rochester, N. Y	Apr. 20, 1869	89, 105
Sole for boots and shoes, Inside	W. E. Prall	Washington, D. C	Sept. 20, 1870	107, 537
Sole for boots and shoes, Machine-made channeled and pierced.	J. H. Brown	Watertown, Mass	Dec. 22, 1868	85, 207
Sole for boots and shoes, Metallic	J. Punderford	New Haven, Conn	June 21, 1870	104, 643
Sole for boots and shoes, Over	E. W. Woodruff	Washington, D. C	Sept. 10, 1867	68, 822
Sole for boots and shoes, Wooden	A. Hanvey	Steubenville, Ohio	May 1, 1860	28, 077
Sole for boots and shoes, Wooden	J. J. Johnston	Allegheny City, Pa	Oct. 21, 1862	36, 715
Sole for boots, Inner	C. P. Johnson and F. K. Sibley.	Jamaica Plain and Auburndale, Mass.	Mar. 16, 1869	87, 942
Sole for rubber boots and shoes, Tap	A. O. Bourn and I. F. Williams.	Providence and Bristol, R. I.	Aug. 15, 1871	118, 099
Sole for shoes, Inner	J. E. McIlhenney	Philadelphia, Pa	June 18, 1872	128, 055
Sole, Galvanic	S. Nowlan	New York, N. Y	June 18, 1861	32, 603
Sole, Galvanic shoe	J. Fanyon	Bridgeport, Conn	Apr. 5, 1870	101, 602
Sole, India-rubber	R. S. Pickett	New Haven, Conn	Jan. 28, 1868	73, 924
Sole, India-rubber and leather	L. Elliott, jr	New Haven, Conn	Oct. 9, 1866	58, 623
Sole, Inner	L. Daggett	Boston, Mass	June 5, 1866	55, 247
Sole, Inner	R. O. Lowrey	Salem, N. Y	Mar. 30, 1869	88, 494
Sole, Inner	I. Newhall	Lynn, Mass	Feb. 20, 1866	52, 737
Sole, Inner	R. A. Webster	Sandisfield, Mass	Feb. 18, 1868	74, 645
Sole, Leather	C. O. Crosby	New Haven, Conn	Feb. 26, 1867	62, 480
Sole, Metal-plated	E. Blakeslee	Plymouth, Conn	Dec. 18, 1866	60, 466
Sole-nailing machine	H. S. Libby	Lawrence, Mass	May 6, 1873	138, 666
Sole nailing machine, Boot and shoe	G. W. Parrott	Lynn, Mass	Sept. 16, 1862	36, 476
Sole-nailing machine, Shoe	L. Goddu	Boston, Mass	Oct. 24, 1871	120, 155
Sole, &c., nailing machine, Shoe	L. Goddu	Boston, Mass	Jan. 2, 1872	122, 377
Sole-nailing machines, Nail-carrier for	A. S. Libby	Lawrence, Mass	Feb. 11, 1873	135, 824
Sole-nailing machines, Wire-feed mechanism for	A. S. Libby	Lawrence, Mass	July 16, 1872	129, 572
Sole-pattern	A. B. and J. Davis	Athens, Ohio	Nov. 19, 1872	133, 144
Sole plate for boots and shoes, Metallic	F. W. Bacon and S. Dike	Jersey City, N. J., and New York, N. Y.	July 12, 1864	43, 469
Sole-pressing machine	F. W. Coy	East Cambridge, Mass	Mar. 11, 1873	136, 706
Sole-pressing machine	C. M. Hayden	Hanover, Mass	June 3, 1873	139, 577
Sole pressing machine, Boot and shoe	G. F. Seaver, E. W. Southworth, and J. M. Anthony.	Ashland, Mass	Mar. 25, 1873	137, 245
Sole rounding, channeling, and stamping machine	A. Jeffers	Lynn, Mass	Feb. 8, 1870	99, 682
Sole, Rubber boot and shoe	F. Flynn	Woonsocket, R. I	Nov. 2, 1869	96, 412
Sole, Rubber boot and shoe	D. E. Hayward	Malden, Mass	Aug. 26, 1873	142, 161
Sole, Rubber boot and shoe	F. M. Shepard	New York, N. Y	Mar. 8, 1870	100, 678
Sole shaping machine, Boot and shoe	S. D. Tripp	Lynn, Mass	Nov. 9, 1869	96, 638
Sole-shaping machine, Shoe	E. Blaney	Marblehead, Mass	Aug. 22, 1871	118, 185

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Invention.	Inventor.	Residence.	Date.	No.
Sole-shaping machine, Shoe	J. B. Johnson	Lynn, Mass	Mar. 10, 1868	75,428
Sole-shaping machine, Shoe	W. A. Perkins and E. Blaney	Salem and Marblehead, Mass.	Aug. 6, 1872	130,150
Sole shaping machinery, Boot and shoe	J. B. Johnson	Lynn, Mass	July 22, 1873	141,058
Sole, Shoe	J. M. Hunter	New York, N. Y	Apr. 25, 1871	114,145
Sole, Shoe	C. B. Loveland	Elizabethport, N. J	May 28, 1867	65,247
Sole, Shoe	W. J. Lyman	East Hampton, Mass	June 7, 1859	24,317
Sole skiving and channeling machine	J. B. Sias	Beverly, Mass	May 4, 1869	89,798
Sole skiving and feather-edging machine, Boot and shoe.	E. P. Pierce	Boston, Mass	Sept. 2, 1873	142,507
Sole skiving machine, Boot and shoe	W. F. Trowbridge	Feltonville, Mass	June 25, 1861	32,671
Sole skiving machine, Boot and shoe	H. S. Vrooman	Boston, Mass	May 16, 1871	114,994
Sole stamps, Boot and shoe	A. M. Burnham	Lynn, Mass	Mar. 18, 1873	136,901
Sole stuff, Cork	W. Johnston	Brooklyn, N. Y	Sept. 29, 1857	18,286
Sole to lasts, Application of inner	C. Buffum	Lynn, Mass	Mar. 31, 1868	76,048
Sole trimming and burnishing machine	C. W. Glidden	Lynn, Mass	Aug. 6, 1872	130,212
Sole trimming and burnishing machine	S. H. Hodges	Lynn, Mass	July 25, 1871	117,287
Sole trimming and burnishing machine, Boot and shoe.	L. Coté	Hyacinthe, Canada	Feb. 11, 1873	135,694
Sole trimming and burnishing machine, Shoe	B. J. Tayman	Philadelphia, Pa	July 8, 1873	140,601
Sole trimming knife, Boot and shoe	J. C. Ratelle	Rochester, N. Y	Sept. 16, 1873	142,942
Sole-trimming machine	B. Gallagher and J. Coyle	Saint John's, Canada, and Belfast, Great Britain.	Mar. 25, 1873	137,066
Sole trimming machine, Boot and shoe	S. H. Hodges	Lynn, Mass	July 23, 1872	129,824
Sole trimming machine, Boot and shoe	D. McLaughlin	Baltimore, Md	Apr. 4, 1871	113,546
Sole trimming machine, Boot and shoe	B. J. Tayman	Philadelphia, Pa	Mar. 11, 1873	136,790
Sole trimming machine, Boot and shoe	J. H., J. M., and H. Q. Thompson.	Holderness, N. H	Nov. 15, 1853	10,239
Sole-trimming machine, Shoe	C. A. Smith	Lynn, Mass	July 30, 1872	129,995
Sole-trimming machine, Rotary cutter for	S. H. Hodges	Lynn, Mass	Feb. 6, 1872	123,478
Sole, Voltaic shoe	T. Hall	Boston, Mass	Feb. 7, 1865	46,234
Sole, Water-proof	O. F. Case	New Haven, Conn	Nov. 6, 1866	59,357
Sole, Water-proof	J. W. Coburn	New Haven, Conn	June 27, 1865	48,481
Sole, Water-proof	J. W. Coburn	New Haven, Conn	Mar. 27, 1866	53,523
Sole, Water-proof	J. W. Smith	Washington, D. C	May 24, 1859	24,180
Soles and heels of boots and shoes, Composition for	N. Jenkins	Boston, Mass	Nov. 3, 1868	83,637
Soles and heels of boots and shoes, Cutter for	S. G. Brown	San Francisco, Cal	Aug. 13, 1872	130,358
Soles and heels for boots and shoes from hide, Manufacture of.	C. H. Dedrick	Philadelphia, Pa	June 18, 1872	127,964
Soles and heels of boots and shoes, Machine for cutting out, punching, and stamping.	J. P. Molliere	Lyons, France	Dec. 11, 1855	13,914
Soles and heels of boots and shoes, Machine for polishing and burnishing the edges of.	J. P. Molliere	Lyons, France	Dec. 18, 1855	13,950
Shoes and heels of boots and shoes, Machine for screwing on.	L. J. Sellier	Paris, France	Dec. 16, 1862	37,201
Soles and heels of boots and shoes, Wear-plate for the.	J. Gray	East Aurora, N. Y	Jan. 1, 1867	60,719
Soles and heels of shoes and boots, veneers, packing, and other purposes, Composition for.	H. G. Tyer	Andover, Mass	Nov. 29, 1859	26,309
Soles and heels of shoes, Screw for	L. H. Whitney	Washington, D. C	Sept. 6, 1870	107,143
Soles and uppers, Machine for uniting boot and shoe	G. McKay	Cambridge, Mass	Nov. 5, 1872	132,847
Soles and uppers of boots and shoes, Fastening together the.	F. L. Senour and H. L. Trapbagan.	Eaton, Ohio	June 22, 1869	91,674
Soles and uppers of boots and shoes, Machine for sewing.	J. Cutlan	Moorestown, N. J	Dec. 7, 1869	97,611
Soles and uppers of boots and shoes, Machine for uniting the.	T. R. Reed	East Bridgewater, Mass	Feb. 2, 1869	86,590
Soles and vamps, Stitch for	L. R. Blake	Quincy, Mass	Sept. 20, 1864	44,275
Soles, Apparatus for forming edges of water-proof	J. H. Greenleaf	New Haven, Conn	May 28, 1867	65,071
Soles, Apparatus for making boot and shoe	L. Coté	Saint Hyacinthe, Canada	Nov. 7, 1871	120,628
Soles, Crimping boot	B. and L. Stevens	Stoughton, Mass	Nov. 30, 1858	22,205
Soles, Cutting	J. Hill	Billerica, Mass	Mar. 31, 1836	....
Soles, Cutting	R. Richards	Lynn, Mass	Dec. 16, 1844	13,857
Soles, Cutting boot and shoe	G. James	Montreal, Canada	May 14, 1872	126,812
Soles, Cutting boot and shoe	S. J. Shaw	Marlborough, Mass	Dec. 19, 1871	121,969
Soles, Cutting boot and shoe	J. H. Walker	Worcester, Mass	Aug. 22, 1865	49,572
Soles, Cutting leather into	E. T. Ingalls	Haverhill, Mass	Apr. 11, 1842	2,549
Soles, Die for cutting beveled boot and shoe	L. G. Graves	Rochester, N. Y	July 15, 1862	35,874
Soles, Die for molding shoe	S. B. Fuller	Lynn, Mass	July 29, 1873	141,216
Soles, Fabric for inner	S. M. Allen	Woburn, Mass	Nov. 17, 1863	40,593
Soles, Finishing shoe	B. S. Bryant	Hanson, Mass	June 24, 1873	140,241
Soles for packs, Press for forming	W. G. Slater	Hart, Mich	Dec. 20, 1870	110,299
Soles for shoes, Machine for rabbeting wooden	J. Kimball	Boston, Mass	Nov. 15, 1859	26,113
Soles, Forming boot and shoe	C. H. Brigham	Marlborough, Mass	Sept. 16, 1873	142,893
Soles, Forming the edge of water-proof	J. H. Greenleaf	New Haven, Conn	May 28, 1867	65,070
Soles from sides of leather, Method of cutting	S. Boyd	Marlborough, Mass	May 21, 1872	127,020
Soles from sides of leather, Mode of cutting	J. Woodley	Quebec, Canada	June 25, 1872	128,271
Soles, Instrument for testing shoe	F. T. Andrew	Charlottesville, Va	June 23, 1868	79,181
Soles, Machine for brushing boot and shoe	N. B. Briggs and C. T. Stetson	East Abington and West Hanover, Mass.	Oct. 22, 1872	132,435
Soles, Machine for cutting India-rubber, gutta-percha, and other boot and shoe.	S. Thurston	Newark, N. J	May 26, 1857	17,408
Soles, Machine for cutting out boot	L. Hill	Stoneham, Mass	June 20, 1854	11,147
Soles, Machine for cutting out boot and shoe	C. H. Griffin	Lynn, Mass	June 12, 1855	13,072
Soles, Machine for cutting out boot and shoe	J. W. Hatch and H. Churchill	Rochester, N. Y	Jan. 2, 1855	12,128
Soles, Machine for hardening taps for boot and shoe	S. Knowlton	Athol, Mass	Oct. 25, 1832	....
Soles, Machine for molding boot and shoe	D. J. Tapley	Danvers Centre, Mass	Nov. 16, 1858	22,095
Soles, Machine for molding, rounding, and channeling boot and shoe.	W. Duchemin	Boston, Mass	Nov. 22, 1870	109,500
Soles, Machine for molding, rounding, and channeling boot and shoe.	A. Jeffers	Lynn, Mass	Oct. 20, 1868	83,172
Soles, Machine for punching rubber inner	E. A. Hill	Quincy, Ill	Dec. 24, 1867	72,492
Soles, Machine for rounding-up	W. H. N. Kimball	Lynn, Mass	Nov. 26, 1867	71,497
Soles, Machine for rounding-up boot and shoe	E. M. Stevens	Chelsea, Mass	June 15, 1869	91,281
Soles, Machine for slitting boot and shoe	W. Wickersham	Boston, Mass	Dec. 10, 1872	133,734
Soles, Manufacture of boot and shoe	E. Ibos	Paris, France	Aug. 16, 1870	106,366
Soles, Manufacture of boot and shoe	L. Stratton	Feltonville, Mass	Mar. 11, 1856	14,432
Soles, Mold for boot and shoe	W. J. B. Mills	Philadelphia, Pa	May 14, 1872	126,823

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Soles, Mold for vulcanizing rubber boot and shoe	C. McBurney	Roxbury, Mass	May 26, 1863	38,688
Soles of boots and shoes, and also for cutting the rands therein, Machine for cutting out and skinning the.	W. Wells and M. Bray	Turner, Me	Mar. 11, 1856	14,426
Soles of boots and shoes, Composition for	J. L. Newton	Boston, Mass	Jan. 28, 1868	73,919
Soles of boots and shoes, Cutting	J. H. Walker	Worcester, Mass	Aug. 1, 1865	49,181
Soles of boots and shoes, Device for molding	S. D. Tripp	Lynn, Mass	Nov. 9, 1869	96,639
Soles of boots and shoes, Device for protecting	F. Vester	Pforzheim, Baden	Sept. 2, 1862	36,385
Soles of boots and shoes, Fastening the lining to	D. H. Priest and H. S. Walcott	Boston, Mass	July 7, 1868	79,774
Soles of boots and shoes, Filling for the	E. N. Foote	Saratoga Springs, N. Y	May 15, 1860	28,265
Soles of boots and shoes, Machine for cutting out	J. Crawshaw	Rochester, N. Y	July 20, 1858	20,936
Soles of boots and shoes, Machine for polishing	J. H., J. W., and H. Q. Thompson.	Holderness, N. H	May 15, 1855	12,877
Soles of boots and shoes, Machine for smoothing	O. Gilmore	Raynham, Mass	Apr. 19, 1859	23,674
Soles of boots and shoes, Machine for uniting	A. A. Reed	North Bridgewater, Mass	Oct. 22, 1872	132,493
Soles of boots and shoes, Machinery for cutting leather into.	C. H. Griffin	Lynn, Mass	Dec. 6, 1859	26,350
Soles of boots and shoes, Metal plate for protecting	G. Sickles	Roxbury, Mass	May 20, 1862	35,329
Soles of boots and shoes, Mode of finishing	B. S. Bryant	Hanson, Mass	Feb. 6, 1872	123,450
Soles of boots and shoes, Mode of finishing	J. Purinton, jr	Lynn, Mass	Jan. 26, 1864	41,394
Soles of boots and shoes, Nailing on	J. Bedford	Philadelphia, Pa	June 2, 1818	....
Soles of boots and shoes, Polishing	O. Gilmore	Raynham, Mass	Nov. 8, 1864	44,946
Soles of boots and shoes, Sand-paper holder for finishing the.	H. L. Willis	South Easton, Mass	Feb. 22, 1870	100,229
Soles of boots and shoes, Shaping	J. B. Johnson	Lynn, Mass	Nov. 26, 1867	71,495
Soles of boots and shoes, Shoulder-stick for finishing.	S. C. Chamberlin	Berlin, Mass	Aug. 26, 1862	36,275
Soles of boots and shoes, Tool for marking edges of	J. W. Dodge	Malden, Mass	Nov. 11, 1873	144,515
Soles of boots and shoes, Wire for riveting	H. H. Bigelow	Worcester, Mass	Nov. 19, 1872	133,191
Soles of gutta-percha or India rubber, Manufacture of boot and shoe.	E. C. Hyatt and C. Meyer	Milltown, N. J	Jan. 17, 1854	10,429
Soles of pumps, shoes, &c., Mode of channeling and scarfing the.	L. Baker	Fort Plain, N. Y	Sept. 2, 1840	1,752
Soles to boots and shoes, Apparatus for applying	J. Jenkins	Charlestown, Mass	Sept. 7, 1858	21,424
Soles to boots and shoes, Apparatus for applying	J. Jenkins	Charlestown, Mass	Sept. 14, 1858	21,564
Soles to boots and shoes, Attaching	F. H. Hawks	Saint Louis, Mo	Aug. 25, 1868	81,366
Soles to boots and shoes, Attaching gutta-percha	J. M. Wimley	Philadelphia, Pa	June 12, 1855	13,073
Soles to boots and shoes, Attaching rubber	D. E. Hayward	Melrose, Mass	Dec. 1, 1863	40,802
Soles to boots and shoes by means of caoutchouc, Attaching.	S. D. Breed	Philadelphia, Pa	Apr. 4, 1833	....
Soles to boots and shoes by means of pressure and gutta-percha or other cement, Application of.	S. H. Whorf and C. Rice	Roxbury and Boston, Mass	Mar. 4, 1856	14,380
Soles to boots and shoes, Device for attaching over.	B. H. Camp	Washington, D. C	Dec. 17, 1867	72,164
Soles to boots and shoes, Machine for securing	J. Blackeney	Philadelphia, Pa	Apr. 4, 1865	47,085
Soles to boots and shoes, Machine for sewing	H. Dunham, jr	Abington, Mass	Sept. 9, 1862	36,396
Soles to boots and shoes, Means of attaching the	W. Wickersham	Boston, Mass	Aug. 2, 1870	106,010
Soles to boots and shoes, Method of attaching India-rubber.	A. T. Merwin	New Haven, Conn	Feb. 9, 1858	19,305
Soles to boots and shoes, Method of attaching metal.	H. Riggs	Washington, D. C	June 11, 1867	65,766
Soles to boots and shoes, Method of securing	C. S. Chaffee and A. Whalig	Birmingham, Conn	Mar. 15, 1870	100,723
Soles to boots and shoes, Mode of attaching composition.	J. M. Wimley	Philadelphia, Pa	Feb. 5, 1856	14,216
Soles to boots and shoes, Nail for attaching	W. Wickersham	Boston, Mass	Feb. 18, 1873	136,014
Soles to boots and shoes, Nailing wooden	L. Alcan	Newport, Ky	May 24, 1864	42,825
Soles to boots and shoes, Wire for attaching	W. Wickersham	Boston, Mass	Aug. 9, 1870	106,241
Soles to gum-elastic boots or shoes, Attaching	N. Ruggles	Bridgeport, Conn	Feb. 20, 1833	....
Soles to gum-elastic boots and shoes, Attaching	W. Webster	New York	May 19, 1832	....
Soles to shoes, Lasting and applying	C. Rice and S. H. Wharf	Boston and Roxbury, Mass	Nov. 13, 1855	13,798
Soles to shoes, &c., Wire for fastening	W. Wickersham	Boston, Mass	Nov. 23, 1869	97,260
Soles to uppers in boots and shoes, Machine for uniting.	J. P. Tirrell	Charlestown, Mass	Oct. 8, 1872	132,118
Soles to uppers, Machine for uniting boot and shoe.	T. K. Reed	East Bridgewater, Mass	Apr. 19, 1870	102,155
Soles to uppers, Mode of uniting boot and shoe	W. Strasser	Taylorsville, Ohio	July 15, 1873	140,964
Soles to uppers of boots and shoes, Machine for nailing.	J. F. Sargent	Melrose, Mass	Sept. 7, 1869	94,653
Soles with wire, Machine for nailing shoe	L. Goddu	Boston, Mass	Nov. 23, 1869	97,190
Soles with wire, Machine for nailing shoe	L. Goddu	Boston, Mass	Nov. 23, 1869	97,191
Soles with wire, Machine for nailing shoe	L. Goddu	Boston, Mass	Nov. 23, 1869	97,192
Soles with wire, Machine for nailing shoe	L. Goddu	Boston, Mass	Feb. 14, 1871	111,837
Soles with wire, Machine for nailing shoe	E. Townsend and L. Goddu	Boston and Lowell, Mass	Nov. 23, 1869	97,249
Solid substances, Mode of uniting	D. D. Parmelee	New York, N. Y	Aug. 9, 1859	25,040
Soling and heeling boots and shoes with wooden or metal pegs.	W. Tileston	Charlemont, Mass	Aug. 18, 1831	....
Soling, Leather and rubber	G. F. Udell and H. Mayell	Albany, N. Y	Jan. 12, 1864	41,246
Soling machine, Boot	T. Cabourg	Paris, France	July 28, 1868	80,273
Soling machines, Spool for boot and shoe	L. Goddu	Boston, Mass	Sept. 23, 1873	143,137
Soling shoes, Mode of	L. A. Favre	Geneva, Switzerland	Feb. 4, 1868	74,066
Sonnette	G. W. Sherman	Brooklyn, N. Y	Mar. 26, 1872	125,091
Soot and spark arrester	W. A. Peaslee	Indianapolis, Ind	Feb. 8, 1859	22,887
Sorghum and other plants, Machine for separating the bark from the pith of.	R. N. Eagle and W. F. Goodwin	Washington, D. C	Oct. 8, 1867	69,551
Sorghum, Apparatus for manufacturing sugar, wine, and oil from.	I. Myers	Pisgah, Ohio	Apr. 18, 1865	47,321
Sorghum-cane stripper	H. B. Wolf	Truro, Ill	Jan. 23, 1866	52,237
Sorghum-curing	W. Nevins	Lyons, N. Y	Feb. 13, 1866	52,588
Sorghum-evaporator	C. Bond	Richmond, Ind	July 12, 1864	43,472
Sorghum-evaporator	J. Brockway	Oswego, Ill	May 30, 1865	47,921
Sorghum-evaporator	R. Bullard	Litchfield, Mich	Sept. 19, 1865	49,974
Sorghum-evaporator	N. Clouse	Buffalo Village, Pa	Dec. 17, 1867	72,267
Sorghum-evaporator	T. Cole	Cedar Hill, Ohio	Sept. 18, 1866	58,230
Sorghum-evaporator	A. L. Folger	Sumner, Ind	June 11, 1867	65,738
Sorghum-evaporator	T. Gillespie	Paulding County, Ohio	Mar. 31, 1868	76,074
Sorghum-evaporator	S. Heaton	Kingston, Iowa	June 27, 1865	48,397
Sorghum-evaporator	W. H. Henderson	Litchfield, Ill	July 16, 1867	66,708
Sorghum-evaporator	W. Hanson	Willoughby, Ohio	June 25, 1867	66,019
Sorghum-evaporator	B. R. Hawley	Normal, Ill	July 2, 1867	66,334

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Sorghum-evaporator	D. H. Iseminger	Heyworth, Ill	Mar. 28, 1865	47, 020
Sorghum-evaporator	A. A. Johnson	Louisville, Ky	Nov. 23, 1869	97, 199
Sorghum-evaporator	J. E. Kendall	Plymouth, Ind	Sept. 13, 1864	44, 199
Sorghum-evaporator	J. Kindley	Oskaloosa, Iowa	Aug. 22, 1865	49, 534
Sorghum-evaporator	T. T. Kneeland	Tecumseh, Mich	May 1, 1866	54, 366
Sorghum-evaporator	S. McWorter	Barry, Ill	Nov. 5, 1867	70, 451
Sorghum-evaporator	J. H. Merrill	Quasqueton, Iowa	May 30, 1865	47, 970
Sorghum-evaporator	D. T. Miller	Dayton, Ohio	Oct. 16, 1866	58, 869
Sorghum-evaporator	C. T. and E. W. Moreman	Jamestown, Ohio	Mar. 6, 1866	53, 028
Sorghum-evaporator	L. N. Myers	Wilmington, Ohio	Oct. 31, 1865	50, 726
Sorghum-evaporator	D. B. Neal	Indianapolis, Ind	Dec. 27, 1864	45, 624
Sorghum-evaporator	H. P. Ninde	Oskaloosa, Iowa	Apr. 24, 1866	54, 196
Sorghum-evaporator	E. W. Skinner	Madison, Wis	Oct. 10, 1865	50, 424
Sorghum-evaporator	E. Sperry	Miami Village, Kans	Sept. 10, 1867	68, 665
Sorghum-evaporator	P. C. Van Slyke	Bloomfield, Ill	Aug. 14, 1866	57, 224
Sorghum-evaporator	N. H. Whisemand	Independence, Iowa	May 7, 1867	64, 606
Sorghum-evaporator	L. Wright	Wapello, Ill	Sept. 6, 1864	44, 135
Sorghum-evaporator and feed-cooking apparatus	T. J. Nowby	Richmond, Ind	Oct. 11, 1870	108, 169
Sorghum-evaporator, Self-skimming	L. D. Peny	Laura, Ohio	Jan. 29, 1867	61, 562
Sorghum-evaporator, Skimmer for	J. B. Lewis	Lincoln, Ohio	Sept. 22, 1868	82, 330
Sorghum, Implement for stripping and cutting	J. Guckian	Camden, Ohio	July 17, 1866	56, 406
Sorghum-juice and other liquids, Apparatus for defecating.	D. B. Neal	Mount Gilead, Ohio	Mar. 5, 1867	62, 558
Sorghum-juice and sugar, Refining	J. F. Shelden	Pope Creek, Ill	Nov. 3, 1863	40, 544
Sorghum-juice, Apparatus for defecating and evaporating.	D. B. Neal	Mount Gilead, Ohio	Aug. 13, 1867	67, 668
Sorghum-juice evaporator	H. B. Avery	Bethel Township, Mich	Feb. 25, 1868	74, 875
Sorghum-juice evaporator	H. Fowler	Bronson, Mich	July 9, 1867	66, 480
Sorghum-juice evaporator	D. J. Powers	Madison, Wis	Dec. 13, 1864	45, 433
Sorghum-juice evaporator	H. Ramey	Louisville, Ky	Feb. 23, 1869	87, 288
Sorghum-juice evaporator	D. S. Stewart	Wapello, Iowa	Dec. 8, 1863	40, 862
Sorghum-juice evaporating and defecating apparatus.	H. McClinten	Morrow County, Ohio	Sept. 16, 1862	36, 471
Sorghum-juice, Purifying	W. Mathews	Troy Township, Ohio	May 12, 1868	77, 746
Sorghum-mill	R. Conarroe	Camden, Ohio	July 10, 1866	56, 185
Sorghum-pan skimmer	G. B. Fitts	Louisville, Ky	Aug. 31, 1869	94, 407
Sorghum-sirup, Composition for granulating	S. Griffith	Aurora, Ill	Aug. 13, 1867	67, 750
Sorghum-sirup, &c., Kettle for evaporating	E. Woodruff	Grand Rapids, Mich	Oct. 3, 1865	50, 295
Sorghum-skimmer	W. B. Seward	Bloomington, Ind	Nov. 13, 1866	59, 665
Sorghum-stripper	A. Bean	Canaansville, Ohio	Jan. 22, 1867	61, 385
Sorghum-stripper	J. Goodrich	Muscoda, Wis	Dec. 2, 1862	37, 041
Sorghum-stripper	D. Hain, H. A. Gross, and M. Hain.	Gasconade County, Mo	June 18, 1867	65, 806
Sorghum-stripper	J. D. and I. Hess	Union, Ohio	Oct. 30, 1866	59, 220
Sorghum-stripper	A. D. and L. D. Huff	Clinton, Iowa	Feb. 12, 1867	61, 940
Sorghum-stripper	D. H. Nichols	New Richmond, Ohio	Aug. 28, 1866	57, 557
Sorghum-stripper	D. A. Reid	Wayne Township, Ind	June 28, 1870	104, 882
Sorghum-stripper	F. Roux	Stryker, Ohio	Sept. 12, 1871	118, 881
Sorghum-stripper	D. W. Shares	Hamden, Conn	Sept. 11, 1866	57, 979
Sorghum-stripper	A. P. Stephenson	Equality, Ill	May 15, 1866	54, 791
Sorghum-stripper	G. Tollinger	Wrightsdale, Pa	June 18, 1867	65, 966
Sorghum stripper and cutter	C. L. Hart	Mattoon, Ill	July 31, 1866	56, 747
Sorghum-stripping apparatus	R. C. Wilcox	Guilford, Conn	Aug. 22, 1865	49, 576
Sorghum-stripping machine	S. A Rankin	Fair Haven, Ohio	Sept. 3, 1867	68, 458
Sorghum-stripping machine	J. M. Spencer	Ottawa, Ill	Apr. 3, 1866	53, 696
Sorghum-sugar evaporator	A. B. Smith	Clinton, Pa	Aug. 27, 1867	68, 125
Sorting-machine	M. H. Merriam and E. L. Norton.	Charlestown, Mass	June 5, 1866	55, 331
Sound, Apparatus for deadening	F. Fearon	London, England	June 20, 1865	48, 350
Sound-conveying tube	R. G. Hatfield	Mount Vernon, N. Y	Aug. 3, 1858	21, 071
Sound in fogs, &c., Instrument for ascertaining the direction of.	B. R. Smith	Philadelphia, Pa	Apr. 19, 1859	23, 718
Sound-indicator, Mariner's	J. Cochrane	New York, N. Y	Jan. 10, 1871	110, 827
Sounding and method of conveying and paying out the line and for other purposes, Apparatus for deep-sea.	W. P. Trowbridge	Washington, D. C	Apr. 19, 1859	23, 726
Sounding-apparatus	R. F. Bridwell	Saint Louis, Mo	May 25, 1858	28, 321
Sounding-apparatus	S. E. and G. L. Morse	Harrison, N. J	July 17, 1866	56, 436
Sounding-apparatus	J. B. Van Deusen	New York, N. Y	Nov. 27, 1860	30, 778
Sounding-apparatus, Automatic	H. M. Nagle	San Francisco, Cal	July 7, 1863	39, 161
Sounding apparatus, Deep-sea	H. Flad	Saint Louis, Mo	May 14, 1872	126, 795
Sounding apparatus, Deep-sea	A. Jonan	San Francisco, Cal	Feb. 8, 1859	22, 877
Sounding apparatus, Deep-sea	G. W. McCord	Centralia, Ill	Sept. 20, 1859	25, 547
Sounding-guard for vessels	J. Guest	United States Navy	July 8, 1856	15, 319
Sounding-instrument	H. S. Stellwagen	United States Navy	Dec. 31, 1842	2, 899
Sounding-instrument	W. P. Trowbridge	New York, N. Y	Aug. 12, 1862	36, 182
Sounding-instrument for seas, rivers, &c	F. B. Ogden and J. Ericsson	New Jersey and Sweden	July 19, 1837	287
Sounding meter, Deep-sea	J. M. Brooke	United States Navy	Aug. 7, 1860	29, 454
Sounding, Specimen-cup for deep-sea	W. P. Trowbridge	Washington, D. C	Apr. 16, 1861	32, 095
Soundings, Apparatus for taking	T. and T. F. Walker	Birmingham, England	Apr. 7, 1868	76, 361
Soundings, Instrument for taking	J. Ericsson	New York, N. Y	Sept. 22, 1863	40, 028
Soundings, Instrument for taking deep-sea	C. F. Brown	Warren, R. I	June 6, 1854	11, 001
Soup, Tomato	J. H. W. Huckins	Boston, Mass	May 2, 1865	47, 545
Sower and corn-plow, Seed	P. Hackett	New Genesee, Ill	Sept. 3, 1867	68, 563
Sower and cultivator, Combined	H. C. Kellogg	Quasqueton, Iowa	Jan. 19, 1869	86, 019
Sower and cultivator, Combined	M. Woodard	Des Moines, Iowa	Mar. 23, 1869	88, 253
Sower and cultivator, Combined seed	H. L. Hall	Woodbridge, Iowa	Nov. 29, 1870	109, 613
Sower and cultivator, Seed	T. L. Whitbeck	Kenosha, Wis	Feb. 5, 1867	61, 904
Sower and cultivater, Seed	G. Bradley	Rockford, Ill	July 5, 1870	104, 926
Sower and cultivator, Seed	C. G. Curtis	Plano, Ill	Apr. 7, 1868	76, 306
Sower and drill, Combined	G. W. Hall	Augusta, Mich	Sept. 4, 1866	57, 707
Sower and harrow, Combined seed	C. Curtis	Galesburgh, Ill	Sept. 22, 1868	82, 387
Sower and harrow, Combined seed	A. D. Gray	Chariton, Iowa	Dec. 28, 1869	98, 252
Sower and harrow, Combined seed	A. Hallam	Monmouth, Ill	Dec. 29, 1868	85, 443
Sower and harrow, Seed	A. Walker	Claremont, N. H	July 28, 1868	80, 522
Sower and planter, Seed	E. G. Matthews	Newton, Mass	Apr. 13, 1869	88, 971
Sower and roller, Combined plaster and seed	H. S. Babcock and S. H. Jenks	Ionia, Mich	Jan. 3, 1865	45, 686
Sower and roller, Combined seed	H. Zellner	Columbia, Tenn	July 16, 1867	66, 768

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Invention.	Inventor.	Residence.	Date.	No.
Sower and stalk-cutter, Combined seed	B. A. Grant	Mount Pleasant, Iowa	Sept. 19, 1865	49,997
Sower, Broadcast	A. B. Beaumont	Grand Rapids, Mich	June 30, 1868	79,301
Sower, Broadcast	C. M. Clark	Cincinnati, Ohio	Aug. 5, 1862	36,073
Sower, Broadcast	F. G. and E. A. Floyd	Macomb, Ill	Apr. 2, 1867	63,378
Sower, Broadcast	J. Price, B. Johnson, I. J. Truman, and R. M. Hamilton.	San Leandro and San Francisco, Cal.	Jan. 2, 1872	122,405
Sower, Broadcast	C. L. Story	Calhoun, Ky	Feb. 27, 1872	124,096
Sower, Broadcast seed	F. G. and E. A. Floyd	Macomb, Ill	Apr. 21, 1868	76,903
Sower, Broadcast seed	W. H. and J. F. Mitchell	Macomb, Ill	Oct. 6, 1868	82,862
Sower, Broadcast seed	J. R. Rogers	Berlin, Wis	Jan. 19, 1864	41,321
Sower, Broadcast seed and manure	N. Foster	Palmyra, N. Y	Jan. 13, 1863	37,393
Sower, Combined fertilizer and seed	H. M. Keith	West Bloomfield, Mich	July 23, 1867	67,122
Sower, Combined plaster and seed	G. S. Conkling	Goshen, N. Y	Oct. 25, 1864	44,785
Sower, Cotton-seed	J. Shearer	Timberville, Ill	June 28, 1870	104,893
Sower, Fertilizer	W. H. and J. S. Lakin	Lander, Md	Jan. 30, 1866	52,295
Sower, Fertilizer	T. J. West	Alfred Centre, N. Y	Mar. 8, 1870	100,573
Sower, Fertilizing-attachment to seed	H. Springer	Brady, Mich	Aug. 5, 1873	141,606
Sower, Grass-seed	D. G. Pickett	Stockton, N. Y	Sept. 8, 1868	81,942
Sower, Grass-seed	H. Springer	Brady, Mich	Mar. 30, 1869	88,525
Sower, Hand seed	O. Dann	Janesville, Wis	Oct. 23, 1866	58,993
Sower, Hand seed	G. C. Franckboner	Schoolcraft, Mich	Nov. 29, 1864	45,232
Sower, Hand seed	G. Hall	Morgantown, W. Va	Aug. 24, 1869	94,105
Sower, Hand seed	G. Hall	Morgantown, W. Va	June 10, 1873	139,785
Sower, Hand seed	T. Howell	Morgantown, W. Va	Apr. 18, 1871	113,887
Sower, Hand seed	J. N. Matlock	Augusta, Iowa	Feb. 2, 1869	86,563
Sower, Hand seed	E. W. Sanderson and W. A. Shattuck.	Hillsborough County, N. H	May 26, 1868	78,396
Sower, Hand seed	M. D. Wells	Morgantown, Va	Dec. 4, 1855	13,893
Sower, harrow, and roller, Combined seed	E. A. Barton	Boonville, Ind	June 29, 1869	92,001
Sower, planter, and cultivator	S. D. Hopkins	Milford, Kans	Oct. 28, 1873	144,099
Sower, planter, and cultivator, Combined	D. Duncan and E. R. Ridgley	Olney, Ill	June 18, 1867	65,889
Sower, planter, cultivator, scraper, and gang-plow, Combined.	J. P. Eddleman	Pilot Point, Tex	June 7, 1870	103,855
Sower, Plaster	F. P. Cullom	Dowagiac, Mich	June 4, 1867	65,350
Sower, Plaster	C. E. Gladding	Towanda, Pa	Mar. 14, 1871	112,583
Sower, Plaster	E. J. Gordon	Greenville, Mich	July 13, 1869	92,440
Sower, Plaster	G. Jessup	Shortsville, N. Y	June 4, 1867	65,390
Sower, Plaster	H. Rodes	Clarence Centre, N. Y	Aug. 25, 1868	81,410
Sower, Plaster	G. Sweet	Dansville, N. Y	June 24, 1873	140,317
Sower, Plaster	T. J. West	Alfred Centre, N. Y	Mar. 7, 1871	112,519
Sower, Plaster, grass, seed, and grain	A. W. McKay	Elkhart, Ind	Aug. 17, 1869	93,729
Sower, Seed	G. A. Carman	Deer Park, N. Y	Feb. 14, 1871	111,726
Sower, Seed	S. S. Clark and J. G. Whitney	Independence, Iowa	Jan. 19, 1869	85,907
Sower, Seed	J. R. Gilbert	Starkville, Ga	Jan. 30, 1872	123,257
Sower, Seed	S. Grenell	Mokena, Ill	Apr. 30, 1867	64,217
Sower, Seed	W. D. Guseman, J. A. Davis, and H. D. McGeorge.	Morgantown, W. Va	June 14, 1870	104,302
Sower, Seed	T. G. Hall	Hume, N. Y	Jan. 5, 1869	85,524
Sower, Seed	J. M. Harshbarger	Brandonville, W. Va	Jan. 17, 1865	45,923
Sower, Seed	A. Hathaway	Independence, Iowa	Mar. 2, 1869	87,490
Sower, Seed	J. House	Turin, N. Y	Dec. 29, 1868	85,383
Sower, Seed	T. Howell	Morgantown, W. Va	May 24, 1870	103,464
Sower, Seed	J. L. Linderman	Rockford, Ill	Feb. 2, 1869	86,559
Sower, Seed	J. L. Linderman	Rockford, Ill	Mar. 16, 1869	87,947
Sower, Seed	W. F. Lowth and T. J. Howe	Owatonna, Minn	Feb. 2, 1869	86,561
Sower, Seed	F. H. Manny	Rockford, Ill	Mar. 9, 1869	87,576
Sower, Seed	F. H. Manny	Rockford, Ill	May 31, 1870	103,760
Sower, Seed	B. Morse	Ithaca, N. Y	Dec. 16, 1873	145,520
Sower, Seed	S. W. Paine	Rochester, N. Y	Apr. 2, 1872	125,324
Sower, Seed	W. Painter	Baltimore, Md	July 5, 1870	104,992
Sower, Seed	J. B. Perkins and A. Colburn	Hollis, N. H	June 2, 1868	78,538
Sower, Seed	T. J. Price	Macomb, Ill	Nov. 2, 1869	96,347
Sower, Seed	D. R. Prindle	East Bethany, N. Y	Feb. 19, 1867	62,286
Sower, Seed	A. Raffensparger and D. G. S. Gochnauer.	Mulberry, Pa	Dec. 28, 1869	98,413
Sower, Seed	G. Rank	Greenleaf, Minn	Nov. 24, 1868	84,375
Sower, Seed	G. H. Reister	Washington, Iowa	June 29, 1869	91,867
Sower, Seed	E. D. and O. B. Reynolds	North Bridgewater, Mass	Jan. 21, 1868	73,463
Sower, Seed	A. Rowe, W. H. Mitchell, and E. B. Hamill.	Macomb, Ill	Jan. 21, 1868	73,548
Sower, Seed	S. A. Scott	Griffin, Ga	May 31, 1870	103,666
Sower, Seed	J. Scovil	Hamburgh, N. Y	Sept. 27, 1864	44,462
Sower, Seed	E. W. Scoville	Manlius, N. Y	May 21, 1867	64,912
Sower, Seed	S. H. Sheplar and W. G. Conklin.	San Francisco, Cal., and Portland, Oreg.	Dec. 27, 1870	110,595
Sower, Seed	H. R. Swank	West Jersey, Ill	Mar. 9, 1869	87,726
Sower, Seed	J. H. Thomas	Springfield, Ohio	Feb. 1, 1870	99,498
Sower, Seed	J. G. Thompson	Stockton, N. Y	July 6, 1869	92,401
Sower, Seed	J. G. Thompson and F. M. Briggs.	Stockton, N. Y	Nov. 22, 1870	109,470
Sower, Seed	F. W. Tilton	Bristol Station, Ill	Mar. 17, 1868	75,601
Sower, Seed	T. Vreeland	Wataga, Ill	June 22, 1869	91,799
Sower, Seed	H. Zurbrick	Elizabethtown, Ohio	July 23, 1867	67,152
Sower, Seed and fertilizer	E. H. Cook	Clarendon, Mich	Dec. 29, 1868	85,284
Sower, Seed and plaster	G. Jessup and D. P. Sharp	Shortsville and Ithaca, N. Y	July 25, 1871	117,295
Sower, Stirrer for seed	F. G. and E. A. Floyd	Macomb, Ill	Aug. 18, 1868	81,156
Sower, Wheel-carriage seed	J. H. Cole	Vacaville, Cal	May 31, 1870	103,719
Sowing and planting machine, Ruta-baga and other seed.	N. R. Merchant	Guilford, N. Y	Jan. 20, 1838	573
Sowing and planting seed, Drill-machine for	G. A. Hoyet	Albany, N. Y	Apr. 21, 1838	704
Sowing fertilizers in drills, Machine for	C. B. Davis	Lawrenceburgh, Tenn	June 28, 1859	24,542
Sowing grain	W. C. Greenleaf	Andover, Me	July 1, 1836	
Sowing grain and fertilizers, Machine for	J. C. Gaston	Reading, Ohio	Feb. 3, 1857	16,539
Sowing grain, &c., broadcast, Hopper of machine for.	J. H. Brinton	West Chester, Pa	July 22, 1862	35,920
Sowing grain, &c., broadcast, Machine for	W. J. Jones and H. C. Smith	Fairfield, Conn	Feb. 20, 1846	4,385
Sowing grain in drills, Machine for	F. Moehlmann	Belleville, Ill	June 16, 1857	17,581
Sowing guano and other fertilizers, Machine for	J. H. Leach	Oakville, Md	Jan. 4, 1859	22,505

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Invention.	Inventor.	Residence.	Date.	No.
Sowing-machine	R. Chapman	Darlington District, S. C	Oct. 16, 1860	30,388
Sowing-machine	P. D. Cummings	Portland, Me	Feb. 26, 1861	31,572
Sowing-machine	E. Fisk	Fayette, Me	Nov. 18, 1844	3,828
Sowing-machine	J. L. Garlington	Snapping Shoals, Ga	Sept. 25, 1860	30,139
Sowing-machine	S. P. Hubbell	Unadilla, N. Y	June 14, 1859	24,391
Sowing-machine	W. D. Mason	Jarratt's Depot, Va	Sept. 4, 1860	29,897
Sowing-machine	P. Seymour	East Bloomfield, N. J	May 7, 1845	4,036
Sowing-machine	D. C. Teller	Beaver Dam, Wis	Oct. 16, 1860	30,433
Sowing-machine	W. W. Williams	Elizabeth City, N. C	Apr. 3, 1860	27,754
Sowing machine, Cotton-seed	S. Miner and N. Felts	Yanceyville, N. C	July 18, 1840	1,696
Sowing machine, Fertilizer	W. S. Bartle	Newark, N. Y	Apr. 22, 1856	14,708
Sowing machine, Fertilizer	L. Bickford	Macedon, N. Y	Aug. 17, 1858	21,181
Sowing machine, Fertilizer	E. J. Burrall	Geneva, N. Y	May 10, 1859	23,899
Sowing machine, Fertilizer	R. J. Hill	Americus, Ga	May 8, 1860	28,173
Sowing machine, Fertilizer	W. D. Mason	Jarratt's Depot, Va	Apr. 3, 1860	27,729
Sowing machine, Fertilizer	W. H. May and C. W. Coontz	Alexandria and Winchester, Va.	Feb. 23, 1858	19,431
Sowing machine, Fertilizer	J. Peeler	Tallahassee, Fla	June 21, 1859	24,485
Sowing machine, Fertilizer	B. Picquet	Augusta, Ga	Dec. 11, 1860	30,887
Sowing machine, Fertilizer	L. Tyler	Havana, N. Y	Aug. 9, 1859	25,064
Sowing machine, Fertilizer and seed	D. Caine	Battle Creek, Mich	June 2, 1868	78,423
Sowing machine, Grain and plaster	S. Hoffer	Londonderry, Pa	July 17, 1839	1,245
Sowing machine, Guano	S. B. Blake	Harrisburgh, Pa	May 28, 1861	*32,406
Sowing machine, Plaster, &c	S. Wheelock	Richland, Mich	Oct. 30, 1866	59,300
Sowing machine, Plaster, lime, &c	J. Hatch	Great Bend, Pa	Aug. 17, 1835	....
Sowing machine, Rice	T. D. Dotterer	Charleston, S. C	Jan. 5, 1869	85,574
Sowing machine, Seed	R. J. Gatling	Murfreesborough, N. C	Aug. 10, 1848	5,703
Sowing machine, Seed	M. and S. L. Seward	Guilford, Conn	July 27, 1839	1,264
Sowing machine, Seed	W. C. Squier	Rockford, Ill	Oct. 6, 1857	18,360
Sowing machine, Seed	A. Webster	White River Junction, Vt	Aug. 6, 1861	33,013
Sowing machine, Wheat, &c	C. C. Carter	Exeter, Ill	Sept. 11, 1866	57,862
Sowing pulverulent manure, Machine for	N. G. Swift	Hart's Village, N. Y	June 20, 1871	116,116
Sowing seed broadcast, Machine for	E. F. Berry	Hudson, N. H	Feb. 19, 1856	14,274
Sowing seed broadcast, Machine for	J. Boyers and D. S. Greer	Granville, Va	Oct. 27, 1857	18,495
Sowing seed broadcast, Machine for	W. A. Chapin	Saint Johnsbury, Vt	Oct. 20, 1857	18,439
Sowing seed broadcast, Machine for	D. Haldeman	Morgantown, Va	June 2, 1857	17,429
Sowing seed broadcast, Machine for	G. Hall	Morgantown, Va	Feb. 3, 1857	16,542
Sowing seed broadcast, Machine for	E. K. Haynes	Hanover, N. H	Dec. 23, 1856	16,322
Sowing seed broadcast, Machine for	P. Lawrenson	New York, N. Y	Apr. 8, 1856	14,630
Sowing seed broadcast, Machine for	J. Lincoln	Uniontown, Pa	Apr. 8, 1856	14,629
Sowing seed broadcast, Machine for	A. C. Miller	Morgantown, Va	June 2, 1857	17,440
Sowing seed broadcast, Machine for	E. Stimson	North Craftsbury, Vt	May 6, 1856	14,837
Sowing seed in grain-drills, Device for	P. Seymour	East Bloomfield, N. Y	Sept. 25, 1849	6,750
Spacing and boring machine	J. M. Seymour	Newark, N. J	Feb. 18, 1868	74,724
Spade	M. Connolly	Newark, N. J	Dec. 8, 1868	84,797
Spade	J. Lake and A. W. Elliott	North Easton, Mass	May 7, 1872	126,465
Spade	J. Linnemann	Copenhagen, Denmark	Oct. 13, 1868	83,071
Spade	H. Parkman	Philadelphia, Pa	Jan. 24, 1871	111,240
Spade and fork, Combined	L. Duvall	Big Spring, Ky	Mar. 13, 1866	53,127
Spade and fork, Combined	H. Stone	Galveston, Tex	July 15, 1873	140,855
Spade and shovel	J. Caylor	Half Way, Ind	Aug. 30, 1870	102,779
Spade and shovel	J. W. Pearce	Suisun, Cal	July 26, 1870	105,838
Spade, Ditching	D. Stouder	New Burlington, Ind	July 25, 1854	11,301
Spade for digging post-holes	M. L. Roberts	Smithville, Canada	Sept. 17, 1867	68,903
Spade, fork, hoe, and rake	T. Goodrem	Providence, R. I	June 23, 1863	39,012
Spade-handle	C. Dimmick	Brockport, N. Y	Dec. 4, 1866	60,152
Spade, Prong	W. B. Horton	Middletown, Conn	June 15, 1829	....
Spade, Rotary	J. Chenoweth	Shelbyville, Mo	Apr. 12, 1870	101,710
Spade, Rotary	C. Comstock	Milwaukee, Wis	Mar. 28, 1865	46,995
Spade, Rotary	B. E. Sivertsen	Pittsburgh, Pa	Aug. 3, 1869	93,238
Spade-socket	C. Richmond and S. Caswell, jr	Taunton, Mass	July 13, 1832	....
Spade, Steam	G. M. Ramsay	New York, N. Y	Mar. 10, 1857	16,807
Spade-steps, Cutting and punching	S. Chesnut	Philadelphia, Pa	Oct. 10, 1865	50,416
Spades and shovels, and handles for the same	H. Risley	Glastonbury, Conn	May 1, 1829	....
Spades and shovels by machinery, Making	C. Richmond and S. Caswell, jr	Taunton, Mass	Apr. 7, 1831	....
Spades and shovels, Method of making	L. D. Clift	Philadelphia, Pa	May 23, 1871	115,166
Spading forks and shovels, Attachment for	H. W. Parsons and L. L. Wooster	Whitney's Point, N. Y	June 25, 1867	66,169
Spading-forks, &c., Construction of	E. C. Denio and G. K. Babcock	New Hartford, N. Y	July 20, 1869	92,709
Spading-machine	J. L. Cole	Chariton, Iowa	Jan. 5, 1864	41,138
Spading-machine	F. C. Cone	San Francisco, Cal	Mar. 30, 1869	88,368
Spading-machine	I. C. Crane	Bronson, Mich	Aug. 6, 1861	32,981
Spading-machine	O. C. Evans	Staunton, Ohio	Nov. 4, 1856	16,007
Spading-machine	G. B. Field	Saint Louis, Mo	Jan. 4, 1859	22,496
Spading-machine	S. Gwynn	New York, N. Y	Aug. 28, 1860	29,782
Spading-machine	J. G. Jones	Falmouth, Mass	Dec. 23, 1873	145,737
Spading-machine	W. R. Mears	Grafton, Ill	Aug. 29, 1865	49,642
Spading-machine	L. Moody	Malden, Mass	Dec. 15, 1868	85,019
Spading-machine	L. Sherwood	Springfield, Ill	July 20, 1869	92,756
Spading-machine	J. Stevens	Marengo, N. Y	Oct. 12, 1858	21,803
Spading machine, Power	S. G. Reynolds	Bristol, R. I	May 13, 1862	35,261
Spading-machine, Rotary	E. J. Fraser	Erie, Pa	Oct. 2, 1866	58,543
Spading-machine, Rotary	G. W. B. Gedney	New York, N. Y	Feb. 8, 1859	22,867
Spading-machine, Rotary	L. H. Gibbs	Brooklyn, N. Y	June 27, 1871	116,297
Spading-machine, Rotary	E. H. Kent	Portland, Oreg	Nov. 3, 1868	83,639
Spading-machine, Rotary	D. Mann	Rochester, N. Y	Apr. 23, 1861	32,137
Spading-machine, Rotary	W. Wadsworth	Sacramento, N. Y	Sept. 15, 1863	39,975
Spading machine, Steam	J. W. Goodell	East Wallingford, Vt	Apr. 26, 1859	23,767
Spark and dust arrester for locomotive steam-engines, &c.	W. W. Hubbell	Moyamensing, Pa	June 26, 1841	2,143
Spark and gas consumer	D. Matthew	Baltimore, Md	Feb. 20, 1849	6,116
Spark-arrester	C. Abos	New Brunswick, N. J	June 13, 1854	11,057
Spark-arrester	T. A. Andrews, jr	Philadelphia, Pa	Feb. 7, 1871	111,507
Spark-arrester	T. A. Andrews, jr	Philadelphia, Pa	June 18, 1872	128,095
Spark-arrester	R. Ash	Saint Louis, Mo	July 29, 1873	141,195
Spark-arrester	W. Ballard	Caroline, N. Y	June 14, 1870	104,099
Spark-arrester	J. Bardsley	Akron, Ohio	Oct. 28, 1873	144,049
Spark-arrester	D. Beach	Oshkosh, Wis	Jan. 10, 1871	110,890

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Invention.	Inventor.	Residence.	Date.	No.
Spark-arrester	J. W. Bowker	Sacramento City, Cal	Oct. 19, 1869	95,975
Spark-arrester	S. G. Brown	Henrietta, N. Y	Sept. 23, 1842	2,789
Spark-arrester	L. Chevrier	Brooklyn, N. Y	Feb. 21, 1842	2,461
Spark-arrester	P. Connelley	Cincinnati, Ohio	Apr. 25, 1848	5,538
Spark-arrester	A. W. Cram	Litchfield, Ill	June 10, 1873	139,659
Spark-arrester	J. Cummings, sr	Cannonsburgh, Pa	Aug. 1, 1848	5,690
Spark-arrester	J. A. Cutting	Boston, Mass	June 26, 1849	6,559
Spark-arrester	J. A. Cutting	Philadelphia, Pa	May 6, 1851	8,077
Spark-arrester	J. A. Cutting and G. Butterfield.	Boston, Mass	June 19, 1847	5,163
Spark-arrester	D. B. Dennison	Ottumwa, Iowa	Dec. 24, 1872	134,261
Spark-arrester	D. Deshon, 2d	Whitestown, N. Y	July 10, 1855	13,216
Spark-arrester	W. Duff	Baltimore, Md	Sept. 30, 1845	4,217
Spark-arrester	J. E. Dustin	Whitefield, N. H	Sept. 16, 1873	142,904
Spark-arrester	L. Eberhart	New Pittsburgh, Ohio	Aug. 4, 1868	80,615
Spark-arrester	J. Eckler	Catskill, N. Y	Oct. 7, 1842	2,808
Spark-arrester	W. W. Elliott	Elliott's Mills, Miss	Apr. 25, 1871	114,117
Spark-arrester	W. D. Farrand	New York, N. Y	Aug. 19, 1873	141,869
Spark-arrester	J. L. Ferris	South Brunswick, N. J	July 16, 1872	129,274
Spark-arrester	J. L. Ferris	South Brunswick, N. J	Oct. 28, 1873	144,081
Spark-arrester	R. Fish	New York	Oct. 14, 1840	1,822
Spark-arrester	E. Fontaine	Fort Wayne, Ind	May 20, 1873	139,053
Spark-arrester	B. P. Freeman and P. Payton	Macon, Ga	May 31, 1870	103,731
Spark-arrester	R. French	Philadelphia, Pa	June 16, 1841	2,131
Spark-arrester	E. H. Garrigues	Saint Louis, Mo	Mar. 2, 1869	87,406
Spark-arrester	S. Gibson	Manayunk, Pa	May 22, 1847	5,123
Spark-arrester	M. A. Glynn	Matanzas, Cuba	Sept. 5, 1871	118,711
Spark-arrester	J., jr., and S. Graecen	New York, N. Y	Oct. 17, 1871	120,059
Spark-arrester	H. H. Graham	Paterson, N. J	July 28, 1857	17,875
Spark-arrester	W. F. Grassler	Muncy, Pa	Jan. 9, 1872	122,600
Spark-arrester	W. F. Grassler	Muncy, Pa	Apr. 2, 1872	125,287
Spark-arrester, &c	W. F. Grassler	Muncy, Pa	Nov. 26, 1872	133,436
Spark-arrester	W. F. Grassler	Muncy, Pa	Apr. 1, 1873	137,438
Spark-arrester	I. H. Graves	Sacramento, Cal	Oct. 12, 1869	95,794
Spark-arrester	W. C. Grimes	York, Pa	Feb. 12, 1842	2,455
Spark-arrester	W. C. Grimes	Baltimore, Md	May 13, 1845	4,046
Spark-arrester	W. C. Grimes	Philadelphia, Pa	June 7, 1845	4,069
Spark-arrester	W. C. Grimes	Philadelphia, Pa	Sept. 23, 1845	4,205
Spark-arrester	A. Hamann	Washington, D. C	Sept. 10, 1846	4,752
Spark-arrester	A. Hamann	Washington, D. C	Oct. 10, 1848	5,835
Spark-arrester	R. Hawkes and H. J. Paine	Providence, R. I	Mar. 19, 1872	124,738
Spark-arrester	W. E. Hayes	Durand, Wis	Dec. 7, 1869	97,636
Spark-arrester	J. Hovey	Cleveland, Ohio	Apr. 7, 1863	38,111
Spark-arrester	J. V. L. Hoagland	Jersey City, N. J	Mar. 18, 1842	2,496
Spark-arrester	J. Hodges	Taunton, Mass	June 22, 1842	2,685
Spark-arrester	J. Hughes	Scranton, Pa	Nov. 4, 1873	144,275
Spark-arrester	C. F. Jauriet	Aurora, Ill	Jan. 30, 1866	52,362
Spark-arrester	J. C. Johnston	Catskill, N. Y	Feb. 28, 1842	2,475
Spark-arrester	A. C. Jones	Portsmouth, Va	Aug. 27, 1835	......
Spark-arrester	I. E. Jones	Cincinnati, Ohio	Oct. 4, 1859	25,650
Spark-arrester	A. Keagy and M. Shimer	Woodbury, Pa	Apr. 29, 1842	2,588
Spark-arrester	P. Kelly	Nashville, Tenn	Oct. 15, 1867	69,817
Spark-arrester	T. D. Kendrick	Boston, Mass	June 3, 1873	139,509
Spark-arrester	C. B. Keys	Washington, D. C	June 19, 1866	55,669
Spark-arrester	V. P. and B. Kimball	Watertown, N. Y	Oct. 5, 1852	9,299
Spark-arrester	W. Knight	Chambersburgh, Pa	Oct. 26, 1839	1,378
Spark-arrester	J. S. Lafitte	Baltimore, Md	Feb. 1, 1848	5,422
Spark-arrester	E. Lannay	Lima, Ohio	May 27, 1873	139,399
Spark-arrester	J. Leeds, G. H., jr., and A. A. Oat.	Philadelphia, Pa	Aug. 17, 1852	9,196
Spark-arrester	J. Lewis	Saratoga, N. Y	Feb. 21, 1842	2,463
Spark-arrester	S. Lutz	Philadelphia, Pa	Apr. 1, 1856	14,567
Spark-arrester	J. Marks	Boston, Mass	Oct. 5, 1858	21,687
Spark-arrester	J. Marks and R. Eaton	Hamilton, Canada	Oct. 7, 1862	36,619
Spark-arrester	D. Matthew	Schenectady, N. Y	Dec. 31, 1840	1,920
Spark-arrester	D. Matthew	Philadelphia, Pa	May 15, 1855	12,865
Spark-arrester	D. Matthew	Philadelphia, Pa	May 22, 1855	12,915
Spark-arrester	E. May	Boston, Mass	July 28, 1857	17,884
Spark-arrester	A. McCleary	Philadelphia, Pa	May 2, 1848	5,541
Spark-arrester	W. J. Mehary	Philadelphia, Pa	Apr. 2, 1867	63,411
Spark-arrester	N. M. Mendenhall	Dublin, Ind	Dec. 24, 1872	134,301
Spark-arrester	J. R. Moffitt	Chelsea, Mass	May 21, 1872	127,091
Spark-arrester	J. Montgomery	Memphis, Tenn	Jan. 7, 1847	4,921
Spark-arrester	E. J. Newell	Beardstown, Ill	July 30, 1872	130,065
Spark-arrester	M. O'Connor	Bangor, Mich	May 16, 1871	114,[illegible]
Spark-arrester	J. F. Page	Philadelphia, Pa	July 21, 1857	17,859
Spark-arrester	J. F. Page	Philadelphia, Pa	Apr. 12, 1859	23,609
Spark-arrester	H. C. Parmalee and S. M. Johns	Cleveland, Ohio	Dec. 2, 1873	145,232
Spark-arrester	A. Pearsall	Atlanta, Ga	Oct. 15, 1867	69,931
Spark-arrester	L. Phleger	Philadelphia, Pa	Nov. 25, 1839	1,417
Spark-arrester	L. Phleger	Philadelphia, Pa	Sept. 10, 1840	1,778
Spark-arrester	L. Phleger	Philadelphia, Pa	Dec. 28, 1840	1,912
Spark-arrester	L. Phleger	Philadelphia, Pa	May 17, 1864	42,792
Spark-arrester	C. L. Pierpont	Durand, Wis	Jan. 3, 1871	110,676
Spark-arrester	D. R. Proctor	Gloucester, Mass	Dec. 19, 1871	122,058
Spark-arrester	A. Prusmann	Lingen, Hanover	Feb. 7, 1865	46,307
Spark-arrester	A. Prusmann	Lingen, Hanover	Feb. 7, 1865	46,308
Spark-arrester	J. Radley and J. W. Hunter	New York, N. Y	Jan. 22, 1850	7,040
Spark-arrester	T. Reaney	Philadelphia, Pa	Dec. 28, 1839	1,447
Spark-arrester	E. Rehling	Fort Wayne, Ind	July 23, 1872	129,863
Spark-arrester	H. F. Reiner	Blairsville, Pa	Feb. 6, 1872	123,420
Spark-arrester	G. Richards	Cummington, Mass	May 8, 1855	12,829
Spark-arrester	J. Richards and J. Meehl	Philadelphia, Pa	Oct. 21, 1873	143,931
Spark-arrester	A. M. Rodgers	Brooklyn, N. Y	Apr. 30, 1873	126,234
Spark-arrester	J. A. Roebling	Saxonburgh, Pa	Feb. 16, 1843	2,958
Spark-arrester	J. W. Seigh	Johnstown, Pa	Dec. 16, 1873	145,596
Spark-arrester	G. B. Simonds and A. Brear	New Haven and Saugatuck, Conn.	June 13, 1854	11,094

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Spark-arrester	A. F. Smith	Ellsworth, Me	July 21, 1868	80, 229
Spark-arrester	J. Smith	Altoona, Pa	Aug. 16, 1870	106, 515
Spark-arrester	J. Smith	Altoona, Pa	Mar. 7, 1871	112, 506
Spark-arrester	C. B. Street	Blairsville, Pa	Aug. 27, 1872	130, 827
Spark-arrester	S. Sweet	New York, N. Y	Oct. 25, 1853	10, 172
Spark-arrester	G. Swenson	Hackensack, N. J	Nov. 25, 1873	144, 932
Spark-arrester	S. Swett, jr	New York, N. Y	May 13, 1845	4, 048
Spark-arrester	S. Swett, jr	Boston, Mass	Aug. 26, 1846	4, 715
Spark-arrester	S. Swett	New York, N. Y	Nov. 19, 1850	7, 790
Spark-arrester	W. M. K. Thornton	Saint Louis, Mo	Oct. 3, 1871	119, 544
Spark arrester	R. M. Wade	Summit Point, Va	Apr. 24, 1847	5, 081
Spark-arrester	E. Wand	Eugene City, Oreg	Feb. 18, 1870	99, 378
Spark-arrester	J. Weidman, J. Major, and J. J. Sample.	Pittsburgh, Pa	Dec. 20, 1870	110, 315
Spark-arrester	W. A. West	Bellefontaine, Ohio	July 25, 1871	117, 492
Spark-arrester	J. White	South Amboy, N. J	Aug. 26, 1873	142, 308
Spark-arrester	H. C. Wiatt	Weldon, N. C	Oct. 15, 1835	....
Spark-arrester	Z. Wilbar	Allegheny, Pa	Jan. 10, 1843	2, 901
Spark-arrester	R. N. Williams	Lewistown, Pa	July 2, 1872	128, 693
Spark-arrester	R. Woodworth	Underhill, Vt	July 26, 1864	43, 653
Spark-arrester	M. Zech	Pittsburgh, Pa	Aug. 5, 1873	141, 531
Spark arrester and conductor	E. Shoemaker	Helmore, Ohio	Nov. 18, 1873	144, 637
Spark arrester and consumer, Locomotive	G. H. Griggs	Worcester, Mass	Nov. 7, 1871	120, 638
Spark arrester and consumer, Locomotive	R. Hawkes and H. J. Paine	Providence, R. I	Dec. 17, 1872	133, 984
Spark arrester and consumer, Locomotive, &c	C. F. Pike	Providence, R. I	Aug. 27, 1872	130, 820
Spark arrester and depositor, Locomotive steam-engine.	W. W. Hubbell	Moyamensing, Pa	June 26, 1841	2, 141
Spark arrester and extinguisher, Locomotive	J. W. Gray	Harrisburgh, Pa	May 20, 1873	139, 002
Spark-arrester and smoke-conductor, Locomotive	J. F. Flagg	Boston, Mass	Aug. 7, 1849	6, 637
Spark-arrester, chimney, &c	W. F. Grassler	Muncy, Pa	July 30, 1872	130, 034
Spark-arrester, Horizontal	W. W. Hubbell	Moyamensing, Pa	June 26, 1841	2, 144
Spark-arrester, Horizontal	T. W. Pratt	Springfield, Mass	Mar. 13, 1849	6, 168
Spark-arrester, Locomotive	J. G. Armstrong	New Brunswick, N. J	Mar. 7, 1871	112, 310
Spark-arrester, Locomotive	W. D. Arnett	Denver, Colo	July 9, 1872	128, 841
Spark-arrester, Locomotive	A. Ayres	Hicksville, N. Y	Feb. 28, 1842	2, 472
Spark-arrester, Locomotive, &c	B. Briscoe	Detroit, Mich	Dec. 15, 1838	1, 037
Spark-arrester, Locomotive	I. Choate	Exeter, N. H	Sept. 1, 1868	81, 602
Spark-arrester, Locomotive	W. Duff	Baltimore, Md	Dec. 20, 1837	521
Spark-arrester, Locomotive	B. P. Freeman and P. Payton	Macon, Ga	Mar. 28, 1870	113, 155
Spark-arrester, Locomotive	B. Garvin	Oshkosh, Wis	Oct. 17, 1871	119, 928
Spark-arrester, Locomotive	J. Gibbs	Opelousas, La	Mar. 25, 1873	137, 134
Spark-arrester, Locomotive	R. D. Grant	Beardstown, Ill	Dec. 17, 1872	133, 981
Spark-arrester, Locomotive	E. H. Haggens	Woburn, Mass	Sept. 24, 1872	131, 514
Spark-arrester, Locomotive	G. Holbrook	Boston, Mass	Nov. 23, 1835	....
Spark-arrester, Locomotive, &c	W. W. Hubbell	Moyamensing, Pa	June 26, 1841	2, 142
Spark-arrester, Locomotive	F. Kearney and L. F. Tronson	Newark, N. J	Apr. 4, 1871	113, 528
Spark-arrester, Locomotive	E. Lannay	Mowrystown, Ohio	Mar. 19, 1872	124, 830
Spark-arrester, Locomotive	W. Martien	Baltimore, Md	Dec. 3, 1872	133, 655
Spark-arrester, Locomotive	W. Martien	Baltimore, Md	Dec. 3, 1872	133, 656
Spark-arrester, Locomotive	N. B. Mason	Kansas City, Mo	Aug. 26, 1873	142, 251
Spark-arrester, Locomotive	J. Radley	Brooklyn, N. Y	June 18, 1872	127, 988
Spark-arrester, Locomotive	J. Radley	Brooklyn, N. Y	Oct. 15, 1872	132, 179
Spark-arrester, Locomotive, &c	J. Stimpson	Baltimore, Md	Apr. 17, 1837	161
Spark-arrester, Locomotive-engine	W. M. Thornton and T. A. Buckland.	Saint Louis, Mo	Nov. 5, 1872	132, 877
Spark-arrester, Spiral	A. McCleary	Philadelphia, Pa	Mar. 13, 1849	6, 187
Spark-arrester, Steam-boiler	J. Gates	Portland, Oreg	Oct. 31, 1871	120, 428
Spark-arrester, Steam-engine-pipe	J. W. Wapples	Wilmington, Del	Nov. 30, 1835	....
Spark-arrester, Steam-generator	W. C. Benn	San Francisco, Cal	Sept. 22, 1868	82, 277
Spark-arresters, Deflector for	S. Swett	New York, N. Y	July 24, 1849	6, 600
Spark-arresters for heating feed-water, Arrangement in.	R. A. Wilder	Schuylkill Haven, Pa	Oct. 31, 1854	11, 880
Spark-arresting flue, Locomotive, &c	I. Oberhauser	Charleston, S. C	Feb. 24, 1838	618
Spark-burner and water-heater for locomotives	D. Matthew	Philadelphia, Pa	Dec. 6, 1853	10, 295
Spark-catcher	A. McDonough	Philadelphia, Pa	Feb. 17, 1836	....
Spark-catcher	F. Milo	New York, N. Y	Feb. 25, 1836	....
Spark-catcher	W. Shultz	Philadelphia, Pa	Mar. 31, 1836	....
Spark-catcher	T. L. Smith and W. I. Van Lone	Newark, N. J	June 20, 1838	793
Spark-catcher	N. Turbutt	Fredericktown, Md	Dec. 7, 1839	1, 425
Spark-catcher	H. Wilton	Wrightsville, Pa	Aug. 17, 1839	1, 292
Spark catcher and consumer	D. Beach	Oshkosh, Wis	Nov. 8, 1870	108, 958
Spark-conductor for locomotive-trains	P. C. Guion	Cincinnati, Ohio	Mar. 11, 1856	14, 398
Spark-conductor for railway-trains	R. Wright	Houston, Tex	Apr. 27, 1869	89, 371
Spark-conveying device	J. G. Breslin	Lancaster, Ohio	May 11, 1869	89, 846
Spark-extinguisher	J. F. Curtis	Boston, Mass	Apr. 13, 1836	....
Spark-extinguisher	J. P. Fairlamb	Philadelphia, Pa	Mar. 3, 1838	624
Spark-extinguisher	J. Keniston	Cincinnati, Ohio	Mar. 15, 1859	23, 232
Spark-extinguisher	W. P. McConnell	Washington, D. C	Dec. 10, 1840	1, 892
Spark-extinguisher	W. S. Montgomery	Baltimore, Md	July 28, 1838	858
Spark-extinguisher	D. Ritter	New Haven, Conn	Nov. 26, 1840	1, 861
Spark-extinguisher	A. Whitney and L. S. Burr	Albany, N. Y	May 23, 1836	....
Spark-extinguisher	G. Winter	Donaldsonville, La	July 1, 1836	....
Spark-extinguisher for chimneys of steam-boilers for locomotives, steamboats, &c.	T. Newhall, jr	Lynn, Mass	Jan. 27, 1838	585
Spark-extinguishing apparatus	W. T. James	New York, N. Y	Apr. 13, 1838	688
Spark-extinguishing apparatus for the funnel of locomotive and other steam engines.	S. Leonard	Bridgewater, Mass	Dec. 15, 1838	1, 038
Sparks and arresting cinders in chimneys of locomotives, &c., Apparatus for extinguishing.	J. Finley	Baltimore, Md	Dec. 28, 1838	1, 042
Spattling-machine	M. Wilcox	Middleburgh, Ohio	Mar. 31, 1863	38, 075
Spawning-screen	A. S. Collins	Caledonia, N. Y	July 12, 1870	105, 176
Speaking-trumpet	F. J. Miller	Brooklyn, N. Y	Aug. 4, 1868	80, 557
Speaking-tube	C. A. Frederick	New York, N. Y	Feb. 4, 1873	135, 421
Speaking-tube	A. Rankin	Philadelphia, Pa	July 1, 1873	140, 539
Speaking-tube	J. B. Shannon	Philadelphia, Pa	Aug. 20, 1867	67, 918
Speaking-tube	F. A. Will and J. Finck	San Francisco, Cal	Dec. 3, 1872	133, 610
Speaking-tube	T. J. Woolcocks and W. Ostrander.	New York, N. Y	May 4, 1852	8, 932

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Speaking-tube for ships	D. S. Neal	Lynn, Mass	Mar. 15, 1859	23, 261
Speaking-tube signal	J. R. Creighton	Boston, Mass	June 29, 1869	91, 827
Speaking-tube whistle	T. J. Woolcocks	New York, N. Y	May 24, 1870	103, 406
Spears, Casing	V. Gretter	Richland Township, Pa	Sept. 23, 1873	143, 141
Spectacle-bow joint	H. O. Ammidown	Southbridge, Mass	May 1, 1866	54, 273
Spectacle-bows, Machine for expanding	G. N. Cummings	Hartford, Conn	Sept. 15, 1857	18, 194
Spectacle-bows, Manufacture of	H. Want and J. Lundgren	New Haven, Conn	Dec. 29, 1868	85, 495
Spectacle-case	C. Buckley	Meriden, Conn	Oct. 15, 1872	132, 246
Spectacle-cases, Catch for	G. N. Cummings	Meriden, Conn	Jan. 24, 1860	26, 891
Spectacle-frame	C. Buckley	Meriden, Conn	Apr. 12, 1870	101, 820
Spectacle-frame	J. J. Low	Philadelphia, Pa	Apr. 17, 1849	6, 315
Spectacle-frame	T. Noel	Memphis, Tenn	Jan. 11, 1859	22, 572
Spectacle-frame	J. P. Paine	Worcester, Mass	July 1, 1851	8, 191
Spectacle-frame	W. H. Peckham	Hoboken, N. J	Dec. 13, 1859	26, 444
Spectacle-frame	M. Reisley	Springfield, Mass	June 20, 1871	116, 222
Spectacle-frame	J. Shaw, jr	Hinckley, Ohio	Apr. 3, 1849	6, 246
Spectacle-frames, Forming joints on the end-pieces of	T. Eltonhead	Baltimore, Md	Apr. 2, 1841	2, 034
Spectacle-frames, Joint for	G. N. Cummings	Hartford, Conn	Apr. 27, 1858	20, 046
Spectacle-frames, Machine for forming	C. Buckley	Meriden, Conn	June 25, 1867	65, 998
Spectacle-frames, Manufacture of	H. Hammond	Hartford, Conn	Sept. 11, 1866	57, 896
Spectacle-frames, Manufacture of	J. E. Spencer and E. Want	New Haven, Conn	Sept. 12, 1865	49, 954
Spectacle-glasses	D. Hotchkiss and B. R. Norton	Syracuse, N. Y	Apr. 17, 1849	6, 369
Spectacle-glasses	I. Schnaitman	Philadelphia, Pa	Feb. 20, 1836	....
Spectacle-lenses, Manufacture of	C. Buckley	West Meriden, Conn	Dec. 26, 1865	51, 776
Spectacle-temple	E. W. Gordon and W. H. Peckham.	New York, N. Y., and Hoboken, N. J.	Mar. 6, 1860	27, 359
Spectacle-temple	G. W. Meigs	Hartford, Conn	June 17, 1873	139, 909
Spectacles	L. Black	Detroit, Mich	Nov. 2, 1869	96, 387
Spectacles	C. C. St. Clair	Detroit, Mich	June 21, 1870	104, 656
Spectacles	E. S. Clapp	Montague, Mass	July 14, 1868	79, 898
Spectacles	G. D. Edmondson	Detroit, Mich	June 18, 1867	65, 800
Spectacles	S. Gregg	Boston, Mass	Nov. 27, 1866	59, 995
Spectacles	E. Hunter	Philadelphia, Pa	Apr. 28, 1868	77, 287
Spectacles	J. Jennings	Birmingham, England	Apr. 21, 1863	38, 262
Spectacles	J. King	Warren, Ohio	Jan. 14, 1873	134, 897
Spectacles	C. H. Smith	Niagara Falls, N. Y	June 29, 1839	1, 212
Spectacles	D. Thaxter	Hingham, Mass	June 18, 1839	1, 174
Spectacles and eye-glasses, Mounting	C. N. Dunham	Philadelphia, Pa	Oct. 13, 1868	82, 930
Spectacles and single eye-glasses	S. Newton	Washington, D. C	Dec. 22, 1827	....
Spectacles, Clamp for soldering	G. N. Cummings	Hartford, Conn	Jan. 27, 1857	16, 470
Spectacles, Constructing	J. Richards	New York	Dec. 16, 1833	....
Spectacles, Construction of	J. Burt and W. W. Willard	Hartford, Conn., and Syracuse, N. Y.	Jan. 4, 1859	22, 485
Spectacles, Construction of	C. H. Smith	Niagara, N. Y	Nov. 12, 1841	2, 352
Spectacles, Galvanic	J. Moses	Hartford, Conn	June 2, 1868	78, 534
Spectacles, Glass for the manufacture of	T. A. Willson	Reading, Pa	Mar. 21, 1871	112, 877
Spectacles, Mode of preparing glasses and constructing frames of.	C. H. L. Jackson	New York, N. Y	Apr. 20, 1839	1, 130
Spectacles, Tinted glass for	T. A. Willson	Reading, Pa	Mar. 28, 1871	113, 124
Spectacles with spiral springs	S. Babcock	Middletown, Conn	Apr. 3, 1829	....
Specula for uterine diseases	E. M. Bartlett	Louisiana, Mo	Jan. 16, 1866	52, 014
Speculum	C. Lentz	Philadelphia, Pa	June 12, 1866	55, 511
Speculum	T. D. Worrall	Central City, Colo	Oct. 9, 1866	58, 709
Speculum-attachment	J. D. Bruce	Newberry, S. C	Sept. 5, 1871	118, 682
Speculum, Vaginal	B. H. Aylworth	Oxford, N. Y	May 18, 1869	90, 217
Speed and depth indicator of vessels	D. Hinman and F. B. Tournier	Berea, Ohio	May 19, 1857	17, 349
Speed and distance register for railway-trains by electro-galvanic battery.	L. Troost	Mobile, Ala	Jan. 19, 1858	19, 176
Speed, Device for changing	J. H. Wait	Portsmouth, Ohio	Mar. 13, 1866	53, 202
Speed-gage	J. W. Osborne	Washington, D. C	May 20, 1873	139, 184
Speed, Gearing for regulating	H. Elliot	Manchester, N. H	Apr. 30, 1850	7, 322
Speed-indicator	J. M. Benckert	Philadelphia, Pa	Dec. 1, 1857	18, 727
Speed-indicator	H. Bilgram	Philadelphia, Pa	Aug. 22, 1871	118, 332
Speed indicator and recorder for railway-cars	J. D. Steele and W. Lorenz	Pottstown, Pa	Nov. 2, 1858	21, 992
Speed-indicator for ships	A. Banaré	Paris, France	Aug. 10, 1869	93, 513
Speed-indicator for vessels	H. Metcalf	Washington, D. C	June 29, 1869	92, 078
Speed-indicator for vessels	L. F. Pierce	Boston, Mass	June 25, 1872	128, 324
Speed-indicator for vessels	T. Walker	Birmingham, England	Sept. 18, 1866	58, 189
Speed, Mechanism for varying	J. A. Stoddard	Milford, Mass	May 24, 1859	24, 159
Speed of machinery, Apparatus for changing	A. Gauntt	Chagrin Falls, Ohio	June 29, 1869	91, 929
Speed of machinery, Apparatus for regulating	W. L. Gebby	New Richmond, Ohio	Oct. 31, 1871	120, 376
Speed of machinery, Device for changing	A. Betts	Wilmington, Del	Nov. 11, 1873	144, 499
Speed of machinery, Device for changing	H. V. Butler and J. C. Hoadley	New York, N. Y., and Lawrence, Mass.	June 24, 1862	35, 729
Speed of machinery, Device for changing	T. C. Hargrave	Boston, Mass	Oct. 13, 1868	82, 941
Speed of machinery, Device for changing	W. Heckert	New Castle, Pa	Apr. 16, 1872	125, 677
Speed of machinery, Mode of changing	W. H. Wilson	Easton, Md	July 8, 1873	140, 751
Speed of machinery, Mode of regulating	L. H. Olmsted	Brooklyn, N. Y	Sept. 2, 1873	142, 504
Speed of railway-trains, Method of registering	C. T. Liernur	Mobile, Ala	Nov. 16, 1858	22, 081
Speed of ships and velocity of the tides, Machine for ascertaining.	J. D. Woodside	Washington, D. C	Mar. 17, 1829	....
Speed of steam-engines, Regulating the	L. R. Faught	Macon, Ga	Nov. 1, 1853	10, 185
Speed of vehicles moved by mechanical power, Mode of regulating.	J. Griffin	Louisville, Ky	Mar. 5, 1861	31, 595
Speed of vessels, Increasing	R. L. and F. B. Stevens	New York, N. Y., and Hoboken, N. J.	June 20, 1848	5, 644
Speed of vessels by a center-board, Increasing	G. Fountain	Staten Island, N. Y	Mar. 15, 1825	....
Speed-recorder	E. F. Sheltman	Christiansburgh, Va	Aug. 15, 1871	118, 160
Speed-register	J. D. Billings	Rutland, Vt	Mar. 27, 1860	27, 664
Speed-regulator	G. W. Parker	Gardner, Mass	May 6, 1873	138, 522
Speed regulator, Engine	H. A. Luttgens	New York, N. Y	Oct. 21, 1851	8, 447
Speed-signal for railway trains	W. L. Needham	Cleveland, Ohio	Jan. 30, 1872	123, 184
Speeder	J. S. Brown	Pawtucket, Mass	Jan. 27, 1857	16, 463
Speeder	G. W. Olney	Lincoln, R. I	June 3, 1873	139, 603
Speeder and stretcher flyer	J. N. Sawtell	Chicopee, Mass	June 14, 1859	24, 406
Speeder, Combination double	J. Fiske	Medway, Mass	Dec. 7, 1820	....
Speeder-cop	T. Estes and W. Dutcher	Bennington, Vt	July 26, 1839	1, 259
Speeder for spinning cotton roping	S. P. Mason	Leesville, Conn	June 24, 1830	....

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Speeder, Counter-twist	J. Whitehead	Manchester, Va	July 30, 1850	7,540
Speeder, Counter-twist	J. Whitehead	Manchester, Va	Aug. 29, 1854	11,627
Speeder, Counter-twisting	G. Danforth	Norton, Mass	Sept. 2, 1824	....
Speeder, Double	W. Field	North Providence, R. I	Oct. 6, 1835	....
Speeder, Double	J. Fiske	Medway, Mass	Dec. 7, 1820	....
Speeder, Double	J. Fiske	Medway, Mass	Dec. 7, 1820	....
Speeder, Double	J. Fiske	Medway, Mass	Dec. 8, 1820	....
Speeder, Double	J. Fiske	Medway, Mass	Dec. 8, 1820	....
Speeder, Double	J. Fiske	Medway, Mass	Dec. 8, 1820	....
Speeder, Double	P. Moody	Weltham, Mass	Dec. 30, 1820	....
Speeder, double speeder, or fly-frame used in roving cotton, &c.	W. C. Davoll	Fall River, Mass	May 19, 1843	3,089
Speeder-flyer	T. T. Abbot	Manchester, N. H	May 22, 1849	6,461
Speeder-flyer	J. H. Aldrich	Northbridge, Mass	Oct. 27, 1868	83,436
Speeder-flyer	P. Arnold	Killingly Centre, Conn	Oct. 6, 1834	....
Speeder-flyer	E. B. Bigelow	Boston, Mass	Feb. 24, 1845	3,926
Speeder flyer, Double	O. Pettee	Newton, Mass	Mar. 26, 1834	....
Speeder flyers, Machine for forming the groove on the inside of double.	I. S. Brown	Pawtucket, Mass	July 9, 1838	829
Speeder for spinning and twisting roving	T. Mayor	Providence, R. I	July 20, 1869	92,859
Speeder in spinning wool, Propelling	B. Phelps	Andover, Mass	Dec. 31, 1830	....
Speeder, Machine for roving cotton called double	P. Moody	Boston, Mass	Feb. 19, 1821	....
Speeder stop-motion	L. Cutting	Lowell, Mass	Aug. 8, 1854	11,475
Speeder, Twisting	J. C. Dyer	Manchester, England	Oct. 1, 1830	....
Spelling-block	S. L. Hill	New York, N. Y	Oct. 12, 1858	21,798
Spelling-box	D. F. Dunham	Brook, Ind	Nov. 13, 1860	30,622
Spelling-box	A. P. M. Jeffers	Allegan, Mich	Jan. 11, 1870	98,773
Spelter, Process and apparatus for the manufacture of.	J. E. Burrows	Newark, N. J	July 4, 1871	116,551
Spermatic-ring	D. Gibbons	Rochester, N. Y	Feb. 1, 1859	22,796
Spermatorrhœa, Apparatus for the cure of	I. L. G. Rice	Cambridge, Mass	June 14, 1870	104,204
Spermatorrhœa-instrument	H. H. Reynolds	Buffalo, N. Y	Aug. 27, 1861	33,162
Spermatorrhœa, Instrument for the cure of	H. H. Reynolds	Buffalo, N. Y	July 16, 1861	32,842
Spermatorrhœa-ring	L. Sunderland	Boston, Mass	Dec. 9, 1862	37,116
Spermatorrhœal ring	J. F. Townsend	Cambridgeport, Mass	Aug. 26, 1862	36,314
Spherical seats, Device for boring	W. E. Cooper	Hornellsville, N. Y	May 7, 1872	126,522
Spherometer for ascertaining the relative bearing of places, &c.	C. Johnson	Southington, Conn	Jan. 9, 1838	568
Spice and coffee mill	C. R. Edwards	Suspension Bridge, N. Y	Mar. 1, 1859	23,082
Spice-box	W. E. Andrews	Cambridge, Mass	Aug. 13, 1867	67,625
Spice-box	E. S. Kennedy	Birmingham, Pa	Dec. 27, 1870	110,473
Spice-box	W. A. Miles	Meriden, Conn	Oct. 2, 1866	58,455
Spice-box	E. Morton	Chicago, Ill	June 10, 1873	139,688
Spice-box	C. T. Palmer	Norwich, Conn	Sept. 8, 1868	82,024
Spice-box	J. Sears	Chicago, Ill	Aug. 13, 1872	130,455
Spice-box	J. Sears	Chicago, Ill	Aug. 5, 1873	141,595
Spice-box	H. E. Smyser	Philadelphia, Pa	June 22, 1869	91,782
Spice-can	E. Norton	Brooklyn, N. Y	July 13, 1869	92,538
Spice-can	C. T. Palmer	Norwich, Conn	June 23, 1868	79,144
Spice-case	J. T. Carter and J. Park	Lowell, Mass	Dec. 10, 1867	71,977
Spice-holder	A. J. Walker	Lowell, Mass	Aug. 21, 1866	57,414
Spice-mill	E. Heath	San Francisco, Cal	Sept. 23, 1862	36,517
Spices, Packing and pressing	G. D. Jones	New York, N. Y	June 27, 1846	4,610
Spider	N. Lewis	Troy, N. Y	Aug. 11, 1868	80,978
Spider	J. Mull and A. D. Reed	Troy, N. Y	Oct. 2, 1866	58,460
Spider	E. Nashold	Rockford, Ill	Dec. 28, 1869	98,291
Spider or frying-pan	A. B. Fales	Troy, N. Y	Aug. 6, 1867	67,517
Spider, skillet, and gridiron, Combined	T. F. Hamilton	Geneseo, Ill	Mar. 1, 1870	100,397
Spiegeleisen, Manufacture of	E. Baker	Millstone, N. J	June 10, 1873	139,649
Spigot and faucet, Morrison's	J. Bliss	Philadelphia, Pa	June 4, 1821	....
Spigot or cock	J. Bright	Sunbury, Pa	June 22, 1832	....
Spike	J. H. Champlin	Essex, Conn	Feb. 18, 1868	74,501
Spike	L. Kirkup	Brooklyn, N. Y	Jan. 2, 1867	51,897
Spike	W. W. Martin	Allegheny City, Pa	Jan. 28, 1868	73,908
Spike	G. W. McGill	Washington, D. C	Apr. 9, 1867	63,737
Spike	G. W. McGill	Washington, D. C	June 4, 1867	65,497
Spike	J. McMurtry	Lexington, Ky	June 25, 1867	66,100
Spike	J. Merlett	Bound Brook, N. J	Apr. 9, 1867	63,738
Spike	H. Merrill	Brooklyn, N. Y	Nov. 6, 1866	59,434
Spike	O. Newton	Pittsburgh, Pa	Sept. 29, 1857	18,294
Spike	D. R. Pratt	Worcester, Mass	Nov. 28, 1865	51,265
Spike	S. Redfern	Churchville, N. Y	June 17, 1873	139,972
Spike	G. N. Sanders, jr	New York, N. Y	Aug. 26, 1873	142,284
Spike	G. N. and G. N. Sanders, jr	New York, N. Y	July 15, 1873	140,814
Spike	H. Stibbs	Baltimore, Md	Nov. 12, 1872	132,934
Spike	W. V. Wallace	New York, N. Y	Oct. 19, 1869	96,060
Spike	R. K. Walton	Clarington, Ohio	Oct. 6, 1868	82,900
Spike	J. A. Whitney	Jersey City, N. J	Oct. 1, 1867	69,521
Spike	S. Winkley	New York, N. Y	Mar. 16, 1869	87,998
Spike	J. H. Wygant	Hackensack, N. J	May 22, 1855	12,931
Spike and nail	A. Prentiss	Prentiss Vale, Pa	Apr. 2, 1867	63,558
Spike and nail	W. Watts, T. Willcox, and D. F. Tompkins.	Newark, N. J	Mar. 22, 1864	42,054
Spike and nail machine	W. Hatch	Medford, Mass	July 28, 1846	4,668
Spike-bar	G. Douglass	Bridgeport, Conn	Oct. 28, 1873	144,074
Spike, bolt, and rivet machine	M. Decelle	Newburgh, Ohio	May 17, 1870	103,025
Spike, bolt, &c., Cut and wrought	W. T. Steiger	Washington, D. C	Jan. 8, 1842	2,417
Spike-drawer	S. Hurt and J. Douglass	Prentice, Ill	Sept. 11, 1866	57,911
Spike-drawer	I. W. Mead	Bridgeport, Conn	July 7, 1868	79,587
Spike-drawer	P. C. Parkinson	Marquette, Mich	Apr. 2, 1872	125,325
Spike-drawer	B. F. Wood	Negaunee, Mich	Aug. 2, 1870	106,015
Spike-drawing instrument	P. Bryant	Chesterfield, Mass	Apr. 10, 1849	6,283
Spike-drawing machine	N. Adams	Altoona, Pa	Sept. 5, 1865	49,690
Spike-drawing machine	N. Adams	Altoona, Pa	Nov. 13, 1866	59,535
Spike-drawing machine	D. Hale	Hinsdale, N. Y	Apr. 20, 1852	8,889
Spike-drawing tool	G. Stone	Boston, Mass	Jan. 31, 1865	46,154
Spike-drawing tool	C. T. Webber and P. Iverson	Janesville, Wis	Mar. 8, 1864	41,880
Spike-extractor	N. Adams	Altoona, Pa	July 16, 1872	128,996

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Invention.	Inventor.	Residence.	Date.	No.
Spike-extractor	M. E. Bishop	Southborough, Mass	Jan. 16, 1866	52, 017
Spike-extractor	J. A. Borgort	Jersey City, N. J	May 30, 1871	115, 421
Spike-extractor	J. W. Butler	Quincy, Ill	Sept. 3, 1872	131, 050
Spike-extractor	W. S. Hough	Johnstown, Pa	Feb. 14, 1871	111, 845
Spike-extractor	W. S. Hough	Johnstown, Pa	July 25, 1871	117, 420
Spike-extractor	W. H. Ives	Luzerne, N. Y	Oct. 10, 1871	119, 770
Spike-extractor	A. F. Jackson	Minneapolis, Minn	July 1, 1873	140, 371
Spike-extractor	W. Kegg	Lasellsville, N. Y	Jan. 18, 1870	98, 977
Spike-extractor	L. Lehman	Buffalo, N. Y	July 5, 1870	104, 966
Spike-extractor	G. A. Prescott and J. Barsaloux.	Sandy Hill, N. Y	Feb. 18, 1873	136, 093
Spike-extractor	W. Ward	Mount Holly, N. J	July 5, 1870	105, 016
Spike-extracting machine	J. Barsalouse and R. Graham	Kingsbury, N. Y	May 20, 1873	138, 988
Spike-heading machine	R. S. Harris	Wilmington, Del	Jan. 25, 1841	1, 948
Spike-heading machine	W. Thomas	Hingham, Mass	Mar. 14, 1840	1, 513
Spike-heads, Die for forming	R. Blackwood	Philadelphia, Pa	Feb. 12, 1867	61, 920
Spike, Hook-headed	G. W. R. Bayley	Brashear, La	Dec. 6, 1859	26, 343
Spike-machine	M. Belknap	Boston, Mass	Aug. 5, 1856	15, 468
Spike-machine	M. Belknap	Philadelphia, Pa	Oct. 10, 1871	119, 689
Spike-machine	W. Blake	Boston, Mass	Sept. 17, 1850	7, 645
Spike-machine	W. A. D. Bowman	Poughkeepsie, N. Y	Aug. 12, 1873	141, 754
Spike-machine	F. Iruso	Buffalo, N. Y	Aug. 29, 1871	118, 429
Spike-machine	J. D. Bryson and A. Potter	Newcastle, Pa	June 30, 1868	79, 442
Spike-machine	S. Cameron	Pittsburgh, Pa	June 4, 1861	32, 466
Spike-machine	D. Eynon	Richmond, Va	Jan. 3, 1871	110, 755
Spike-machine	D. Eynon	Richmond, Va	Jan. 3, 1871	110, 756
Spike-machine	A. M. George	Nashua, N. H	June 18, 1850	7, 440
Spike-machine	A. M. George	New York, N. Y	Dec. 18, 1855	13, 945
Spike-machine	M. Hardaway	Troy, N. Y	July 16, 1850	7, 508
Spike-machine	F. Humphrey	Boonton, N. J	July 4, 1854	11, 225
Spike-machine	M. M. Ison	Etowah, Ga	Aug. 12, 1851	8, 289
Spike-machine	W. Koplin	Newcastle, Pa	Jan. 15, 1867	61, 214
Spike-machine	W. Koplin	Newcastle, Pa	Apr. 28, 1868	77, 199
Spike-machine	M. Loughran	Pittsburgh, Pa	Apr. 27, 1858	20, 076
Spike-machine	W. W. Martin	Allegheny City, Pa	Mar. 5, 1867	62, 553
Spike-machine	M. Maxim	Newcastle, Pa	Mar. 10, 1849	6, 160
Spike-machine	C. A. McPhetridge	Saint Louis, Mo	Oct. 21, 1856	15, 928
Spike-machine	T. O'Connor	Saint Louis, Mo	Apr. 8, 1873	137, 709
Spike-machine	D. R. Pratt	Worcester, Mass	Feb. 5, 1867	61, 864
Spike-machine	S. G. Reynolds	Bristol, R. I	July 26, 1844	3, 681
Spike-machine	L. Shearer	Duncannon, Pa	Feb. 23, 1858	19, 452
Spike-machine	W. H. Shoenberger	Cincinnati, Ohio	Aug. 25, 1868	81, 546
Spike-machine	J. H. Swett	Pittsburgh, Pa	Apr. 30, 1861	32, 213
Spike-machine	H. N. Swift	Boonton, N. J	Oct. 29, 1850	7, 749
Spike-machine	L. Thomas	Allegheny City, Pa	Sept. 22, 1868	82, 452
Spike-machine	P. P. Trayser	Baltimore, Md	Dec. 14, 1852	9, 474
Spike-machine	P. P. Trayser	Baltimore, Md	July 19, 1853	9, 866
Spike-machine	A. Whittemore	Cambridgeport, Mass	Sept. 4, 1855	13, 535
Spike-machine die	S. Cameron	Pittsburgh, Pa	May 30, 1865	47, 928
Spike-machine, Double-cylinder	E. B. White	Nashua, N. H	Oct. 16, 1849	6, 803
Spike-machine, Revolving-die	A. M. George and E. Brown	Nashua, N. H., and Lowell, Mass.	May 18, 1849	6, 325
Spike-machine, Rotating	E. B. White	Nashua, N. H	Aug. 28, 1849	6, 666
Spike-machines, Adjustable heading-lever in	J. C. Cary	Richmond, Va	Feb. 15, 1853	9, 585
Spike-machines, Arrangement of the die-roller in	J. H. Swett	Boston, Mass	Mar. 29, 1853	9, 639
Spike-machines, Gaging and heading movement for	P. Jefferson	Bridgeton, N. J	May 20, 1851	8, 107
Spike-machines, Hook-heading motion for	M. Hardaway	Troy, N. Y	Sept. 9, 1851	8, 342
Spike-machines, Movement of the pointing-die in	E. Sawyer	Boston, Mass	Mar. 19, 1850	7, 200
Spike-machines, Operating the hammer of	H. A. Wills	Keeseville, N. Y	Dec. 11, 1849	6, 950
Spike-machinery	J. H. Swett	Concord, N. H	Aug. 26, 1851	8, 328
Spike-making die	E. T. Henry	Scranton, Pa	Jan. 20, 1857	16, 440
Spike-making machine	F. Davison	Liberty, Va	Mar. 2, 1869	87, 474
Spike-making machine	D. Eynon	Saint Louis, Mo	Apr. 1, 1873	137, 427
Spike-making machine	M. Foster	Cleveland, Ohio	Oct. 17, 1871	119, 925
Spike-making machine	F. J. Kimball	Philadelphia, Pa	Aug. 29, 1871	118, 539
Spike-making machine	R. G. McKay	Cleveland, Ohio	Aug. 27, 1867	68, 222
Spike-making machine	J. O. Reilley	Baltimore, Md	Oct. 16, 1866	58, 886
Spike-making machine	J. R. Richardson, J. Westerman, and E. Wilder.	Newcastle, Pa	Aug. 2, 1853	9, 902
Spike-making machine	A. J. Rogers and W. D. Rinehart.	Pittsburgh, Pa	Oct. 2, 1866	58, 483
Spike-making machine	S. Severance	Pittsburgh, Pa	Aug. 2, 1864	43, 712
Spike-making machine	A. St. Louis	Keeseville, N. Y	July 16, 1867	66, 906
Spike-making machine	J. H. Swett	Concord, N. H	Oct. 10, 1848	5, 843
Spike-making machine	J. H. Swett	Pittsburgh, Pa	Jan. 17, 1871	111, 013
Spike-making machine	J. H. Swett	Pittsburgh, Pa	Apr. 9, 1872	125, 629
Spike-making machine	O. A. Wadsworth	Allegheny City, Pa	July 18, 1871	117, 128
Spike-making tool	G. W. Wait	Wayland, Mich	May 15, 1866	54, 825
Spike, Marline	F. Fisher	Rockland, Me	July 6, 1869	92, 296
Spike, Marline	A. Warth	Stapleton, N. Y	May 19, 1863	38, 634
Spike, Molder's draw	R. A. Thompson	Beaver Falls, Pa	Apr. 8, 1883	137, 637
Spike-pointing	L. Thomas	Allegheny City, Pa	Dec. 22, 1868	85, 146
Spike-pointing machine	J. Waldron and D. G. Moore	Elizabethport, N. J	Apr. 22, 1873	138, 058
Spike-pointing machine	A. Whittemore	Cambridgeport, Mass	Apr. 12, 1864	42, 314
Spike-puller	R. A. Fish	Worcester, Mass	Oct. 9, 1866	58, 626
Spike, Railway	H. Torstrick and R. Boeklen	New York and Brooklyn, N. Y.	Jan. 17, 1871	111, 096
Spike, Self-clinching	J. Balmer	Brooklyn, N. Y	May 26, 1868	78, 354
Spike with screw-threads	A. C. and I. L. Dunn	New York, N. Y	Nov. 3, 1868	83, 699
Spikes and nails, Forming	W. Ballard	New York	July 17, 1841	2, 182
Spikes and nails, Machine for heading	R. Dare	Bridgeton, N. J	Jan. 27, 1838	584
Spikes and nails, Machine for making wrought	R. Savary	Pittsburgh, Pa	Apr. 2, 1838	664
Spikes, Art of Manufacturing	D. Eynon	Richmond, Va	Sept. 20, 1870	107, 602
Spikes, brads, and nails, Manner of clinching	J. Buckelew	Spottswood, N. J	Sept. 3, 1842	2, 771
Spikes, butt-bolts, and other hinges, Pattern for molding and casting composition.	J. and C. Sewell	Bath, Me	Mar. 25, 1829	....
Spikes by one motion, Machine for hook-heading	J. Beardsley	Trenton, N. J	Jan. 9, 1849	6, 005
Spikes, Device and in furnace for manufacturing	D. Eynon	Saint Louis, Mo	Oct. 21, 1871	120, 254

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Invention.	Inventor.	Residence.	Date.	No.
Spikes, Heading	E. H. Collier	Scituate, Mass	Jan. 15, 1856	14,088
Spikes, Machine for making hook-headed	J. H. Snyder	Troy, N. Y	May 10, 1853	9,714
Spikes, Machine for making hook or brad-headed	J. F. Winslow and I. Blanchard	Troy, N. Y	May 10, 1845	4,043
Spikes, Machine for making railway, boat, and other	M. Foster	Cleveland, Ohio	June 9, 1863	38,818
Spikes, &c., Machine for making wrought-iron	H. A. Wills	Keeseville, N. Y	Mar. 21, 1843	3,012
Spikes, Machine for rolling	A. J. Rogers	Kittanning, Pa	May 8, 1866	54,605
Spikes, Machinery for making hook or brad headed	H. Burden	Troy, N. Y	Sept. 2, 1840	1,757
Spikes, Manufacture of	J. H. Swett	Pittsburgh, Pa	Apr. 2, 1872	125,349
Spikes, Mode of clinching	H. Bates	New York, N. Y	Apr. 7, 1857	16,958
Spinal brace	L. B. Wright	New York, N. Y	Nov. 6, 1860	30,601
Spinal curvature, Apparatus for reducing	C. F. Taylor	New York, N. Y	Apr. 9, 1861	32,013
Spinal curvature, Apparatus for reducing	C. F. Taylor	New York, N. Y	Apr. 9, 1861	32,014
Spinal curvature, Apparatus for reducing	C. F. Taylor	New York, N. Y	Apr. 9, 1861	32,015
Spinal curvature, Apparatus for relieving	C. F. Taylor	New York, N. Y	Dec. 27, 1859	26,628
Spinal elevator	C. Knapp	Cincinnati, Ohio	Feb. 13, 1847	4,968
Spinal supporter	H. G. Davis	Millbury, Mass	Aug. 28, 1849	6,680
Spinal supporter	J. L. Sullivan	New York, N. Y	May 16, 1846	4,518
Spine, Dormant-balance for the	J. K. Casey	New York	June 23, 1828	....
Spine, Apparatus for cure of crooked or inflected	J. K. Casey	New York	Jan. 21, 1829	....
Spine, hernia, &c., Apparatus for cure of curved	E. Crain	Springfield, Vt	Jan. 16, 1843	2,913
Spine, Corselet for curved	A. Abbé	Roxbury, Mass	Aug. 7, 1844	3,691
Spine, Instrument for correcting lateral deviations of the.	A. Abbé	Boston, Mass	July 5, 1853	9,826
Spine, Machine for treating curved	C. F. Taylor	New York, N. Y	Feb. 9, 1864	41,548
Spino-abdominal supporter	J. W. Phelps	Boston, Mass	Sept. 19, 1848	5,783
Spindle: *See* Axle-spindle. Bolster-spindle. Bolt-spindle. Core-spindle. Cotton-spindle. Dead-spindle. Friction-spindle. Grinding-mill spindle. Grist-mill spindle. Iron spindle. Knob-spindle. Live-spindle. Lock-spindle. Lock and bolt spindle. Mill-spindle. Millstone-spindle. Press-spindle. Rotary and stationary spindle. Safe-lock spindle. Self-oiling spindle. Ship-spindle. Shuttle-spindle. Spinning and twisting spindle. Spinning-frame spindle. Spinning-machine spindle. Step-spindle. Throstle-spindle.				
Spindle	E. Atwood	Mansfield, Conn	May 5, 1868	77,566
Spindle	S. C. Crocker	Hopedale, Mass	Oct. 28, 1873	144,067
Spindle and flyer	C. E. Brown	Millbury, Mass	Dec. 27, 1859	27,636
Spindle and flyer	W. T. Eddy	Ithaca, N. Y	Feb. 10, 1836	....
Spindle and flyer	J. J. J. Pierrard	Reims, France	Sept. 7, 1869	94,640
Spindle and shaft bearing	S. W. Putnam, jr	Fitchburgh, Mass	June 1, 1869	90,781
Spindle-bearing	B. H. Jenks	Bridesburgh, Pa	June 25, 1867	66,091
Spindle-bearing	J. Richards	Cincinnati, Ohio	May 19, 1868	78,013
Spindle-bearing	J. Taylor, jr., and J. Prest	Sheffield, England	Jan. 28, 1873	135,295
Spindle-bearing	C. F. Wilson	Brooklyn, N. Y	Apr. 4, 1871	113,380
Spindle-bolster	J. Barnes	Holyoke, Mass	Feb. 18, 1873	135,960
Spindle-bolster	J. E. Brown	Fitchburgh, Mass	Nov. 19, 1867	71,127
Spindle-bolster	W. F. Draper	Hopedale, Mass	Aug. 23, 1870	106,567
Spindle-bolster	G. H. Noble	Lowell, Mass	Apr. 21, 1868	76,937
Spindle-bolster	I. P. Richards	Whitinsville, Mass	Aug. 23, 1870	106,621
Spindle-bolster	G. Richardson	Lowell, Mass	Mar. 25, 1873	137,239
Spindle-bolster	G. Richardson	Lowell, Mass	Oct. 21, 1873	143,785
Spindle-bolster	E. N. Steere	Providence, R. I	Jan. 21, 1862	34,221
Spindle-bolster	F. A. Sterry	Canton, Mass	Dec. 3, 1867	71,809
Spindle, flyer, and bobbin	T. Godden	Saddle River Township, N. J.	Feb. 11, 1833	....
Spindle-lubricating device	A. A. Davis and B. F. Walker	Lowell, Mass	July 13, 1869	92,586
Spindle-lubricating device	T. Marsh	Central Falls, Smithfield, R. I.	Apr. 2, 1867	63,543
Spindle-lubricator	J. Eaton	Boston, Mass	Mar. 24, 1863	40,678
Spindle-lubricator	J. Goulding	Worcester, Mass	Mar. 4, 1873	136,504
Spindle-lubricator	R. P. Underwood	Brooklyn, N. Y	Aug. 13, 1867	67,821
Spindle or vertical shaft	G. Richardson	Lowell, Mass	Apr. 23, 1872	126,089
Spindle-step	J. B. Bancroft	Milford, Mass	Sept. 1, 1868	81,732
Spindle-step	W. C. Cross	Boston, Mass	Mar. 5, 1872	124,255
Spindle-step	G. Draper	Hopedale, Mass	May 9, 1871	114,536
Spindle-step	C. E. Griffin and T. Marsh	Smithfield, R. I	Apr. 10, 1866	53,813
Spindle-step	J. J. Henry	Baltimore, Md	Apr. 1, 1873	137,443
Spindle-step	W. P. Hopkins	Lawrence, Mass	Feb. 2, 1869	86,399
Spindle-step	A. P. Kinney	South Carver, Mass	Oct. 23, 1866	59,037
Spindle-step	G. W. Knight and G. Draper	Hopedale, Mass	May 9, 1871	114,570
Spindle-step	E. D. Murfey	New York, N. Y	Nov. 15, 1870	109,238
Spindle-step	G. H. Noble	Lowell, Mass	Dec. 24, 1867	72,531
Spindle-step	S. B. Parmenter	Lewiston, Me	Aug. 6, 1872	130,148
Spindle-step	S. L. Pattee	Northbridge, Mass	Aug. 18, 1868	81,201
Spindle-step	F. A. Sterry	Canton, Mass	July 23, 1867	67,081
Spindle-step box	L. Maish	Minneapolis, Minn	May 2, 1871	114,455
Spindle-step cap	W. F. Draper and J. B. Bancroft	Hopedale, Mass	May 3, 1870	102,514
Spindle-steps, Lubricating	J. Welsh	Philadelphia, Pa	Dec. 23, 1856	16,298
Spindle stile and can roping machine	J. Irwin	Coventry, R. I	Mar. 26, 1830	....
Spindle-wrench	J. B. Fink	Freeport, Ill	Mar. 16, 1869	87,833
Spindles, Diminishing the friction of	R. R. Livingston	....	Aug. 4, 1791	....
Spindles, Machine for applying cop-tubes to	J. Marland	Lawrence, Mass	May 18, 1858	20,285
Spindles, Preventing friction in	J. G. Sholze	Pickaway Township, Ohio	July 6, 1827	....
Spindles, Oiling	E. N. Steere	Providence, R. I	Dec. 18, 1860	30,937
Spindles, Self-packing bush for	C. Miller	Sandoval, Ill	May 10, 1870	102,848
Spinner	W. Allen	New Haven, N. Y	Aug. 15, 1829	....
Spinner, Accelerated	L. Norcross	Dixfield, Me	June 15, 1835	....
Spinner and twister, Whirling and rotary ring and revolving hook.	J. Thorp	North Wrentham, Mass	Sept. 27, 1844	3,766
Spinner, Brown's vertical	J. R. and J. B. Wheeler	Kingsbury, N. Y	May 26, 1825	....

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Spinner, Can	J. Thorp	Providence, R. I	Apr. 3, 1829	
Spinner, Cap	C. Danforth	Paterson, N. J	May 4, 1841	2,077
Spinner, Cap	J. Peter	Kensington, Pa	June 6, 1846	4,562
Spinner, Cap	J. Thorp	Providence, R. I	Jan. 23, 1829	
Spinner, Cap	J. Thorp	Providence, R. I	June 13, 1829	
Spinner, Domestic	E. Hearrick	Albany, N. Y	Aug. 17, 1810	
Spinner, Domestic	J. Nelson	Jefferson, Ohio	Jan. 27, 1841	1,954
Spinner, Domestic	E. Penny	Adams, N. Y	June 27, 1828	
Spinner, Domestic	L. Totten	Schoharie, N. Y	Nov. 22, 1826	
Spinner, Domestic wool	L. Totten	Schoharie, N. Y	Nov. 13, 1824	
Spinner, Domestic wool	H. F. Wheeler	Springville, Pa	Apr. 25, 1838	710
Spinner, Drawing-head	W. Wright	Cincinnati, Ohio	Dec. 12, 1848	5,964
Spinner, Driving power	M. G. Hubbard	Syracuse, N. Y	Sept. 17, 1861	33,305
Spinner, Driving power	M. G. Hubbard and A. J. Smith	Syracuse, N. Y	Feb. 24, 1863	37,757
Spinner, Family	J. Brown	Providence, R. I	Feb. 24, 1815	
Spinner, Family	W. W. Jones	Thornville, Ohio	July 27, 1827	
Spinner, Family and factory	R. Woolsey	Kortright, N. Y	May 13, 1825	
"Spinner, Fancy"	J. R. and J. B. Wheeler	Galway, N. Y	Mar. 3, 1826	
Spinner" for rope-yarn, "Effeminate	J. Pitman	Medford, Mass	Mar. 14, 1817	
Spinner, Hand	D. Current	Crittenden, Ky	Sept. 3, 1850	7,614
Spinner, Horizontal	B. Hunt and S. Wheelock	Knox, N. Y	May 2, 1826	
Spinner, Horizontal	C. Merrill, C. Batchellor, and S. King, jr.	Lowville, N. Y	July 3, 1824	
Spinner, Horizontal wool and cotton	J. S. and B. J. Billings	Moreau, N. Y	Jan. 16, 1826	
Spinner, Linen	S. Baldwin and E. Town	Vermont	May 6, 1812	
Spinner, Linen	A. Webster	Green County, N. Y	Dec. 21, 1812	
Spinner, Perpetual wool	B. Allison	Burlington, N. J	Mar. 3, 1813	
Spinner, Ring	G. H. Dodge	Attleborough, Mass	Jan. 27, 1852	8,683
Spinner, Ring	D. Hunter	Laurel Factory, Md	July 23, 1841	2,184
Spinner, Ring-groove	J. Thorp	Providence, R. I	Dec. 31, 1828	
Spinner, Silk	H. Holland	Northampton, Mass	Oct. 10, 1838	977
Spinner, Throttle	B. Brundred	Paterson, N. J	Sept. 9, 1845	4,179
Spinner, Throstle cotton	B. Brundred	Mamaroneck, N. Y	Jan. 17, 1824	
Spinner, Vertical	J. Brown	Providence, R. I	Aug. 11, 1821	
Spinner, Vertical	S. Slater	Middletown, Conn	Apr. 4, 1825	
Spinner, Wool	J. Brown	Providence, R. I	May 12, 1813	
Spinner, Wool and cotton	F. Price	New York	Oct. 5, 1824	
Spinners, Machinery for making guards for cap	H. Cundell	Paterson, N. J	Nov. 10, 1846	4,841
Spinners, Mode of driving bobbins in	W. Baxter	Paterson, N. J	Sept. 20, 1845	4,215
Spinners, Mode of driving bobbins in cap	C. Danforth	Paterson, N. J	Apr. 21, 1842	2,576
Spinners, Mode of oiling spindles and tubes of cap	C. Danforth	Paterson, N. J	Apr. 21, 1842	2,575
Spinners, Operating the copping-rail of cop	W. Rouse	Taunton, Mass	Nov. 5, 1850	7,759
Spinning	S. Whiting	Wrentham, Mass	Dec. 31, 1821	
Spinning and doubling silk, &c., Machine for	T. N. Dale, jr., and G. Kraink	Paterson, N. J	Nov. 15, 1870	109,185
Spinning and drawing frame	H. M. Ward	Ballymaconaghy, Ireland	Dec. 10, 1872	133,816
Spinning and other machines, Device for lubricating spindles, &c., in.	M. J. Roberts	Pendarren House, Wales	Apr. 12, 1864	42,308
Spinning and other machines, Stopping-mechanism for.	S. B. Westcott	River Point, R. I	Aug. 9, 1870	106,299
Spinning and quilling machine, Wool and cotton	J. Richardson	Scipio, N. Y	Oct. 16, 1816	
Spinning and reeling machine	G. Albright	Oskaloosa, Iowa	July 12, 1864	43,467
Spinning and reeling machine	C. Shillideay and G. McCaslon	Shelbyville, Ky	Oct. 24, 1816	
Spinning and reeling machine, Combined hand	W. P. Hatch	Lincoln Centre, Me	May 30, 1871	115,465
Spinning and reeling machine, Wool	J. Woodhull	Chester, N. Y	Nov. 14, 1826	
Spinning and roping cotton and wool	J. B. Wheeler	Galway, N. Y	Dec. 30, 1829	
Spinning and roping machine, Cotton and wool	J. W. Wheeler	Galway, N. Y	Oct. 11, 1828	
Spinning and roping machine, Wool, &c	H. Wilson	Pomfret, N. Y	July 13, 1827	
Spinning and roving machine	S. Comstock and M. Pike	Harrisburgh, Pa	Apr. 15, 1813	
Spinning and twisting	J. Thorp	Providence, R. I	Nov. 20, 1828	
Spinning and twisting cotton, &c., Flyer and spindle for.	J. Howarth and N. F. Jones	Andover, Mass	Dec. 28, 1838	1,043
Spinning and twisting head	J. W. Chappell	Berlin, Mich	May 30, 1871	115,435
Spinning and twisting machine	H. A. Chapin	Bridgeport, Conn	Nov. 4, 1873	144,191
Spinning and twisting spindle	E. Osgood	Boston, Mass	Aug. 27, 1872	130,869
Spinning and twisting thread	O. Herbert		Jan. 28, 1792	
Spinning, Billy and jenny for	E. Smith	Paris, N. Y	Mar. 23, 1814	
Spinning-bobbin	J. H. Crowell	Providence, R. I	July 20, 1869	92,940
Spinning-bobbin	J. Goulding	Worcester, Mass	Sept. 26, 1865	50,116
Spinning-bobbin	C. B. Morse	Rhinebeck, N. Y	Feb. 11, 1868	74,402
Spinning-bobbin	W. Murdock	Winchendon, Mass	Dec. 5, 1865	51,340
Spinning-bobbin	A. E. Nichols	Lowell, Mass	Mar. 16, 1858	19,647
Spinning-bobbin	O. Pearl	Lawrence, Mass	May 3, 1870	102,587
Spinning-bobbins, Mechanism for filling or building	S. Goodwin	Biddeford, Me	June 28, 1864	43,367
Spinning-bobbins on spindles, Device for holding	G. Draper	Hopedale, Mass	June 20, 1871	116,168
Spinning, &c., Cot or covering for rolls for	E. L. Perry	New York, N. Y	Jan. 22, 1867	61,452
Spinning cotton	J. W. Adams	Thompsonville, Conn	May 2, 1854	10,851
Spinning cotton	L. Bissel, L. C. Hinman, and S. Wilson.	Otsego, N. Y	July 17, 1815	
Spinning cotton	W. P. Brayton	New York, N. Y	June 25, 1836	
Spinning cotton, &c	J. Brown	Stonington, Conn	June 13, 1831	
Spinning cotton	W. Bryant	Mill Creek, Tenn	Sept. 30, 1823	
Spinning cotton	N. Giles	Fitchburgh, Mass	Nov. 19, 1812	
Spinning cotton, &c	A. M. Laupher	Killingly, Conn	Mar. 19, 1834	
Spinning cotton	W. A. Potter	Cranston, R. I	Mar. 28, 1834	
Spinning cotton and bagging, Machine for	J. C. Dewees	Mason County, Ky	Dec. 28, 1827	
Spinning cotton and building cops on bare spindles	J. L. Eddy	Killingly, Conn	Nov. 19, 1833	
Spinning cotton and flax, Machine for	J. Bogardus	New York	May 25, 1830	
Spinning cotton and silk	S. P. Mason	Killingly, Conn	Jan. 17, 1834	
Spinning cotton and wool	J. Hathaway	Poultney, N. Y	July 24, 1826	
Spinning cotton and wool	L. Rice	Milburn, Mass	Nov. 14, 1831	
Spinning cotton and wool, Machine for	J. Sprinkel	Wythe, Va	Aug. 23, 1816	
Spinning cotton and wool, Machine for	A. N. Wilcox	Milton, N. Y	May 8, 1843	3,075
Spinning cotton, Bobbin and flyer for	C. Danforth	Ramapo, N. Y	Sept. 2, 1828	
Spinning cotton, Bobbin-tube for	B. Hutchinson	Philadelphia, Pa	Oct. 18, 1827	
Spinning cotton, Bobbin-tube for	J. Manchester	Warwick, R. I	Dec. 13, 1824	
Spinning cotton, Can for	W. A. Crocker	Taunton, Mass	June 3, 1834	
Spinning cotton, Flyer for	J. Morse	Newton, Mass	June 25, 1836	
Spinning cotton, Flyer for	M. Newton	Fitchburgh, Mass	Sept. 28, 1812	

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Invention.	Inventor.	Residence.	Date.	No.
Spinning cotton, Machine for	J. G. Baxter	Philadelphia, Pa	June 22, 1811	....
Spinning cotton, Machine for	L. Bissell, J. and L. C. Hinman, and B. Gains.	Hartwick, N. Y	June 19, 1813	....
Spinning cotton, Machine for	W. Pollard	....	Dec. 30, 1791	....
Spinning cotton, Machinery for	W. Haworth	Providence Township, Pa	June 2, 1824	....
Spinning cotton, Machinery for	E. Leigh	Manchester, England	Oct. 18, 1859	25, 839
Spinning cotton, Machinery for	C. R. Tisdale and J. and T. Keane.	Cornwall, N. Y	July 17, 1819	6, 590
Spinning cotton, Mule-carriage for	W. Haworth	Providence Township, Pa	June 2, 1824	....
Spinning cotton, Revolving spinner for	W. A. Potter	Cranston, R. I	Dec. 16, 1833	....
Spinning cotton, &c., Self-acting mule for	I. Smith	Perth County, Scotland	June 27, 1838	808
Spinning cotton, &c., Spindle and bobbin for	W. B. Leonard	Fishkill, N. Y	Jan. 9, 1819	....
Spinning cotton, &c., Spindle and flyer for	R. E. Jerkes	Philadelphia, Pa	July 12, 1838	781
Spinning cotton, &c., Spindle for	B. Brundred	Oldham, N. J	July 14, 1827	....
Spinning cotton, Throstle for	S. Bludenburgh	New York	Nov. 10, 1829	....
Spinning cotton, Throstle for	C. Danforth	Paterson, N. J	Dec. 12, 1854	12, 055
Spinning cotton, Throstle-frame for	S. Simmons	Providence, R. I	Jan. 16, 1832	....
Spinning cotton, wool, flax, and tow, Machine for	G. Brewster, G. Trumbull, and J. Mathes.	Barre, Vt	Jan. 16, 1812	....
Spinning cotton yarn	P. Arnold	Coventry, Conn	Aug. 1, 1818	....
Spinning cotton yarn	J. Thorp	Providence, R. I	Nov. 11, 1830	....
Spinning cotton yarn and manufacturing roping	I. Chesters	Cumberland, R. I	Apr. 16, 1834	....
Spinning cotton yarn and thread	J. A. Bradshaw	Foxborough, Mass	Jan. 18, 1833	....
Spinning cotton yarn, Flyer for	A. Walton	Keene, N. H	Jan. 6, 1812	....
Spinning cotton yarn, Machine for	W. Bald, jr	Providence, R. I	Oct. 4, 1820	....
Spinning cotton yarn, Machine for	E. Fuller	Attleborough, Mass	Feb. 6, 1823	....
Spinning, Counter-twist tube for	B. H. Jenks	Bridesburgh, Pa	Oct. 29, 1872	132, 582
Spinning, Drawing and twisting head for	A. L. Houghtaling	Philmont, N. Y	June 16, 1868	78, 968
Spinning, Drawing and twisting heads for	T. Nutting	Georgiaville, R. I	June 25, 1872	128, 418
Spinning, Drawing and twisting head for	F. Spineux	Liege, Belgium	Oct. 15, 1867	69, 944
Spinning flax	A. Webster	Green County, N. Y	Mar. 31, 1810	....
Spinning flax and hemp, Machine for	M. Day	Roxbury, Mass	June 24, 1839	1, 189
Spinning flax and hemp, Machine for	W. Hunt and W. Hoskins	Martinsburgh, N. Y	June 22, 1826	....
Spinning flax and hemp, Machine for	G. Parkinson	....	Mar. 17, 1791	....
Spinning flax and hemp, Machinery for	M. D. Whipple	Charlestown, Mass	Oct. 27, 1857	18, 529
Spinning flax, hemp, &c., Machinery for	H. A. Chapin	Bridgeport, Conn	Aug. 16, 1870	106, 466
Spinning flax, hemp, Manila, &c., Flyer for	H. Evans and B. Churchill	Plymouth, Mass	Sept. 26, 1838	948
Spinning flax, hemp, &c., Whirl and regulator for	C. Crafts	Woodbury, Conn	Feb. 10, 1812	....
Spinning flax, Machine for	C. S. Davis	Lancaster, Pa	Apr. 11, 1865	47, 190
Spinning flax, &c., Machinery for	C. Clark	West Troy, N. Y	Oct. 2, 1849	6, 753
Spinning-flyer	S. A. B. Abbott and E. F. Field	Boston, Mass., and Lewiston, Me.	Aug. 3, 1869	93, 156
Spinning-flyer	R. A. Bailey	Lewiston, Me	Aug. 14, 1866	57, 065
Spinning-flyer	W. La Banister and C. W. Ricker.	Charlestown, Mass	Nov. 23, 1869	97, 203
Spinning-flyer	S. Blood	Manchester, N. H	Sept. 23, 1862	36, 502
Spinning-flyer	J. S. Brown	Pawtucket, R. I	May 9, 1871	114, 524
Spinning-flyer	N. Giles	Fitchburgh, Mass	Nov. 19, 1812	....
Spinning-flyer	S. Ladd	Waltham, Mass	Feb. 20, 1836	....
Spinning-flyer	S. Ladd	Waltham, Mass	May 6, 1836	....
Spinning-flyer	I. F. Maynard	Nashua, N. H	Sept. 9, 1862	36, 415
Spinning-flyer	T. Mayor	Providence, R. I	Dec. 20, 1870	110, 260
Spinning-flyer	G. Richardson	Lowell, Mass	Apr. 10, 1866	53, 874
Spinning-flyer	A. W. Smith	Manchester, N. H	Oct. 28, 1862	36, 864
Spinning-flyer	D. F. Smith	Manchester, N. H	May 3, 1859	23, 868
Spinning-flyer	T. Stibbs	Wooster, Ohio	July 11, 1871	116, 881
Spinning-flyer	T. Westley and T. R. Beaumont	Preston, England	Feb. 19, 1867	62, 173
Spinning-flyer and dead-spindle	P. Stevens	Nashua, N. H	Apr. 20, 1844	3, 553
Spinning-flyers, Manufacturing	J. N. Sawtell	Lowell, Mass	Feb. 17, 1857	16, 657
Spinning-frame	H. B. Briggs	Clarksburgh, Mass	Apr. 20, 1869	89, 017
Spinning-frame	J. E. Crowell	Chelsea, Mass	June 11, 1867	65, 650
Spinning-frame	G. Draper	Hopedale, Mass	Jan. 14, 1873	134, 864
Spinning-frame	F. Haythorn	Philadelphia, Pa	May 19, 1868	78, 085
Spinning-frame	A. Houghton	Putnam, Conn	July 13, 1858	20, 920
Spinning-frame	C. B. Morse	Rhinebeck, N. Y	Apr. 14, 1868	76, 798
Spinning-frame	S. B. Parmenter	Lewiston, Me	May 4, 1869	89, 507
Spinning-frame	W. Perry	Graniteville, S. C	Nov. 21, 1854	11, 972
Spinning-frame	W. Rouse	Thompson, Conn	Jan. 25, 1848	5, 416
Spinning-frame	F. S. Stoddard	Litchfield, Conn	Apr. 23, 1861	32, 166
Spinning-frame	T. W. Taylor	Cannelton, Ind	Aug. 12, 1856	15, 535
Spinning-frame bolster	S. S. Bartlett	Providence, R. I	Nov. 25, 1862	36, 986
Spinning frame, Cap	G. Bradley	Paterson, N. J	Jan. 10, 1860	26, 812
Spinning frame, Cop	G. H. Dodge	Attleborough, Mass	June 8, 1852	8, 997
Spinning frame, Cotton	J. Alricks	Wilmington, Del	Oct. 11, 1809	....
Spinning frame, Cotton	P. Moody	Boston, Mass	May 6, 1819	....
Spinning frame, Cotton	P. Moody	Boston, Mass	Feb. 19, 1821	....
Spinning-frame cylinder	R. Plows	Smithfield, R. I	Dec. 18, 1860	30, 931
Spinning-frame driving band	N. H. Slade and J. N. Scranton	Bennington, Vt	Aug. 7, 1860	29, 527
Spinning-frame flyer	J. H. Aldrich and S. L. Pattee	Northbridge, Mass	Aug. 30, 1864	43, 961
Spinning-frame flyer-board	O. Pearl	Lawrence, Mass	Jan. 23, 1866	52, 193
Spinning-frame, Ring	J. Ashworth	North Andover, Mass	Aug. 11, 1868	80, 849
Spinning-frame, Ring	W. Darker, jr	West Philadelphia, Pa	June 5, 1855	13, 024
Spinning-frame, Ring	W. Jenckes	Manchester, N. H	Aug. 25, 1863	39, 657
Spinning-frame, Ring	B. H. Jenks	Bridesburgh, Pa	Jan. 25, 1870	99, 203
Spinning-frame, Ring	J. W. Wattles	Canton, Mass	June 18, 1867	65, 971
Spinning-frame, Ring	M. P. Wilmarth	Pawtucket, R. I	Jan. 10, 1860	26, 805
Spinning-frame ring	W. T. Carroll	Medway, Mass	Apr. 20, 1869	89, 025
Spinning-frame rings, Tool for grooving	C. E. Trowbridge	Whitinsville, Mass	May 21, 1872	127, 121
Spinning-frame, Ring and traveler	J. C. Dodge	Brooklyn, N. Y	June 21, 1864	43, 187
Spinning-frame, Ring and traveler	H. Luther	Providence, R. I	Oct. 30, 1855	13, 726
Spinning-frame, Ring-traveler	J. W. Wattles	Canton, Mass	May 24, 1859	24, 169
Spinning-frame spindle	J. E. Atwood	Mansfield, Conn	Sept. 18, 1866	58, 046
Spinning-frame spindle	B. H. Jenks	Bridesburgh, Pa	Dec. 17, 1872	134, 067
Spinning-frame spindle and bearing	C. L. Austin	Lawrence, Mass	Aug. 29, 1871	118, 422
Spinning-frame spindle and bobbin	R. Garsed	Philadelphia, Pa	Jan. 7, 1873	134, 535
Spinning-frame-spindle bolster	J. D. Cottrell	Milford, Mass	Jan. 29, 1867	61, 518
Spinning-frame-spindle bolster and step	G. Draper	Hopedale, Mass	Jan. 14, 1873	134, 863
Spinning-frame-spindle step	B. J. Watson and A. W. Thurber	Jewett City, Conn	Sept. 13, 1864	44, 265

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Invention.	Inventor.	Residence.	Date.	No.
Spinning-frame spindles, Device for stopping	H. T. Potter	Norwich, Conn	May 13, 1873	138, 929
Spinning-frame spindles, Mode of driving	J. Sutherland	East Hampton, Mass	May 29, 1866	55, 211
Spinning-frame spindles, Upper bearings or bolsters for spindles of.	M. D. Drake	Providence, R. I	Apr. 11, 1865	47, 195
Spinning-frame tube	D. D. Allen	South Adams, Mass	Aug. 7, 1860	29, 451
Spinning-frames, Device for regulating the twist in.	C. Martin	Verviers, Belgium	June 17, 1873	140, 056
Spinning-frames, Drawing-mechanism for	R. Ackroyd and W. Cockroft	Philadelphia and Chester, Pa.	Feb. 11, 1873	135, 616
Spinning-frames, Mode of adjusting ring and ring-rail in ring and traveler.	J. Birkenhead	Ilion, N. Y	May 24, 1864	42, 829
Spinning-frames, Mode of lubricating the bearing of.	A. H. Gilman	Biddeford, Me	June 14, 1864	43, 153
Spinning-frames, Self-lubricating bolster and step for.	B. H. Jenks	Bridesburgh, Pa	Jan. 8, 1867	61, 010
Spinning-frames, Self-lubricating spindle-bolster of.	S. S. Bartlett	Providence, R. I	Apr. 18, 1865	47, 271
Spinning-frames, Self-oiling spindle-bolster for	W. F. Rippon and T. R. Robinson.	Providence, R. I	Jan. 3, 1865	45, 752
Spinning-frames, Self-oiling spindle-bolster for	E. N. Sterre	Providence, R. I	Nov. 8, 1864	44, 988
Spinning hemp, &c	M. Day	Roxbury, Mass	June 2, 1836	....
Spinning hemp	J. McCully	Salem, Mass	July 14, 1846	4, 638
Spinning hemp and flax	A. Caldwell	Lexington, Ky	Aug. 20, 1835	....
Spinning hemp and flax	J. F. Chappins	New York	Nov. 8, 1814	....
Spinning hemp and flax, Apparatus for	E. Bazin	Paris, France	Oct. 11, 1870	108, 233
Spinning hemp and flax, Machine for	N. Foster	Flamingsburgh, Ky	June 28, 1809	....
Spinning hemp, flax, &c	D. Treadwell	Boston, Mass	Oct. 11, 1831	....
Spinning hemp, flax, &c., Drawing-roller for	H. Hall	Lambertville, N. J	Jan. 2, 1866	51, 895
Spinning hemp, Machine for	C. W. Brown	Roxbury, Mass	July 16, 1839	1, 242
Spinning hemp, Machinery for	W. Pedrick and T. M. Melvin	Charlestown, Mass	Feb. 6, 1849	6, 084
Spinning hemp, Machinery for	G. Van Piper	Jersey City, N. J	Dec. 4, 1849	6, 928
Spinning-jack	H. B. Briggs	Clarksburgh, Mass	Nov. 5, 1867	70, 402
Spinning-jack	O. Brothers	Naugatuck, Conn	Feb. 23, 1869	87, 138
Spinning-jack	W. H. Brothers	Winooski, Vt	Aug. 31, 1869	94, 278
Spinning-jack	G. Dawson	Rockville, Conn	July 24, 1866	56, 532
Spinning-jack	E. Dews	South Britain, Conn	Oct. 3, 1865	50, 230
Spinning-jack	J. Jackson	Lawrence, Mass	July 19, 1853	9, 858
Spinning-jack	H. L. Moulton	Camden, N. J	Sept. 19, 1865	50, 024
Spinning-jack	T. Netherwood and J. P. Babcock.	Westerly, R. I	Feb. 18, 1868	74, 714
Spinning-jack	F. Nowell	Lowell, Mass	Sept. 25, 1849	6, 732
Spinning-jack	F. R. Pearson	Germantown, Pa	Mar. 19, 1867	63, 085
Spinning-jack	J. Sands	Waterloo, N. Y	Nov. 17, 1868	84, 218
Spinning-jack	A. and G. Simpson	Woonsocket Falls, R. I	Sept. 19, 1865	50, 044
Spinning-jack	F. C. Werner	Beacon Falls, Pa	Dec. 20, 1864	45, 547
Spinning-jack	J. H. Winterbottom and J. Lord.	Philadelphia, Pa	Sept. 3, 1867	68, 476
Spinning-jack	A. B. Woodbury	Ashuelot, N. H	Sept. 3, 1867	68, 541
Spinning-jack-belt shifter	A. Fox	Edinburgh, Ind	Dec. 12, 1871	121, 861
Spinning-jack-belt-shifting mechanism	J. Baron	Millbury, Mass	Mar. 15, 1870	100, 842
Spinning-jack register	H. Greenwood	Gilbertsville, Mass	Dec. 28, 1869	98, 254
Spinning-jack, Self-acting	J. E. Knight	Hyde Park, Mass	Apr. 15, 1873	137, 777
Spinning-jack, Self-acting	P. McGovern	Lawrence, Mass	Apr. 18, 1871	113, 784
Spinning-jack, Self-acting	A. Paul	Cohoes, N. Y	Apa. 1, 1873	137, 386
Spinning-jack, Self-acting	P. Keane	Cohoes, N. Y	Aug. 8, 1871	117, 893
Spinning-jack, Self-acting	J. Shaw	Ballardvale, Mass	Jan. 7, 1873	134, 567
Spinning-jack winding-mechanism	J. Shaw	Ballardvale, Mass	Feb. 11, 1873	135, 852
Spinning-jenny for unfurling condensed woolen roping.	C. Greenwood	Winchester, N. Y	Feb. 25, 1830	....
Spinning-jenny, Vertical	J. Matthews	Schenectady, N. Y	May 2, 1826	....
Spinning-machine	G. Addison and S. H. Stephens	New York	Oct. 10, 1829	....
Spinning-machine	H. Ashworth	Walsden, England	June 10, 1873	139, 755
Spinning-machine	R. Atherton and G. Singleton	Paterson, N. J	June 30, 1868	79, 297
Spinning-machine	S. Baldwin	Boston, Mass	Aug. 18, 1815	....
Spinning-machine	S. R. and G. W. Ballard	Cold Water, Mich	June 6, 1871	115, 676
Spinning-machine	W. La Banister and L. V. Daggett.	Pacific, Wis	July 26, 1870	105, 815
Spinning-machine	G. Bernhardt	Radcliffe, Great Britain	Jan. 30, 1872	123, 221
Spinning-machine	P. and W. C. Bramwell	Arrow Rock and Independence, Mo.	Jan. 25, 1870	99, 055
Spinning-machine	J. E. Burdge	Cincinnati, Ohio	Apr. 7, 1868	76, 299
Spinning-machine	W. Clark	Pultney, N. Y	Oct. 1, 1830	....
Spinning-machine	E. C. Cleveland	Worcester, Mass	Sept. 20, 1864	44, 283
Spinning-machine	J. Crowfoot	Worcester, Mass	Nov. 27, 1866	59, 973
Spinning-machine	G. Draper	Hopedale, Mass	June 11, 1872	127, 748
Spinning-machine	W. Duffner	Petersburgh, Ind	Aug. 23, 1870	106, 675
Spinning-machine	J. Eaton	Boston, Mass	Sept. 19, 1865	49, 988
Spinning-machine	W. Eberhard	Sigourney, Iowa	July 25, 1865	48, 917
Spinning-machine	W. Eberhard	Sharon Centre, Ohio	May 15, 1866	54, 704
Spinning-machine	L. W. Felt	Keene, N. H	June 7, 1870	103, 858
Spinning-machine	N. Foster	Feming, Ky	July 8, 1813	....
Spinning-machine	A. H. Gilman and J. S. Berry	Biddeford, Me	Aug. 16, 1864	43, 846
Spinning-machine	J. Goulding	Worcester, Mass	Oct. 27, 1868	83, 375
Spinning-machine	J. Goulding	Worcester, Mass	May 23, 1871	115, 191
Spinning-machine	P. W., T. H., and A. Greenwood	Philadelphia, Pa	June 21, 1864	43, 198
Spinning-machine	C. J. Harris	Warren, R. I	Aug. 11, 1868	80, 949
Spinning-machine	J. and L. Hart and J. Reesman	Farmington, Iowa	Sept. 17, 1867	68, 872
Spinning-machine	G. H. Hathorn	Bangor, Me	Dec. 5, 1871	121, 517
Spinning-machine	J. Higgins and T. S. Whitworth	Salford, England	Mar. 26, 1861	31, 857
Spinning-machine	C. B. Hoard	Watertown, N. Y	Sept. 18, 1866	58, 101
Spinning-machine	J. E. Hooper and B. Arnold	Woodbury, Md., and East Greenwich, R. I.	Aug. 11, 1868	80, 863
Spinning-machine	G. Hoover and A. N. Hadley	Richmond, Ind	Sept. 24, 1867	69, 211
Spinning-machine	M. Hulings	Indianapolis, Ind	Nov. 21, 1865	51, 054
Spinning-machine	W. D. Huse	Gilford, N. H	Oct. 18, 1870	108, 356
Spinning-machine	J. Lazier	Belleville, Canada	Sept. 17, 1867	69, 002
Spinning-machine	J. McCune	Auburn, Ind	Jan. 28, 1868	73, 910
Spinning-machine	J. Morgan	Manayunk, Pa	May 14, 1836	....

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Spinning-machine	R. Moxley	Muscatine, Iowa	Jan. 14, 1868	73, 371
Spinning-machine	J. Pearce	Yorkshire, N. Y	June 30, 1830	....
Spinning-machine	J. M. L. and E. Pusey	Wilmington, Del	July 21, 1868	80, 216
Spinning-machine	T. Pye	New Hartford, N. Y	Feb. 14, 1865	46, 386
Spinning-machine	N. Remington	Geneva, N. Y	Apr. 21, 1827	....
Spinning-machine	J. Rich	Conway, Mass	Feb. 28, 1865	46, 588
Spinning-machine	J. Rich	Worcester, Mass	Jan. 8, 1867	61, 104
Spinning-machine	M. J. Roberts	Pendarren House, Wales	Apr. 12, 1864	42, 307
Spinning-machine	A. L. Sayles	Pascoag, R. I	Mar. 16, 1869	87, 377
Spinning-machine	W. W. Spafford	Peterborough, N. H	Jan. 19, 1858	19, 161
Spinning-machine	J. Speight	Bradford, England	Mar. 2, 1869	87, 377
Spinning-machine	M. Stell	Bradford, England	Nov. 12, 1872	133, 065
Spinning-machine	F. Voegtli	Montgomery City, Mo	Oct. 8, 1867	69, 728
Spinning-machine	Z. Wheeler	Richmond, N. H	July 18, 1816	....
Spinning-machine	C., S. M., and H. M. Williams	Cold Water, Mich	Dec. 9, 1873	145, 322
Spinning-machine	S. M. and H. M. Williams	Cold Water, Mich	Apr. 25, 1871	114, 674
Spinning-machine	D. C. Wolf	South English, Iowa	Mar. 3, 1868	75, 232
Spinning-machine bobbin	J. A. Bazin	Canton, Mass	Apr. 9, 1861	31, 945
Spinning-machine bobbin	W. M. Brisben	Philadelphia, Pa	Mar. 30, 1869	88, 268
Spinning-machine bobbin	P. Laflin	Warren, Mass	Aug. 26, 1873	142, 245
Spinning-machine bobbin	C. T. Smith	Utica, N. Y	Oct. 16, 1866	58, 903
Spinning-machine bobbin and thread holder	T. L. Luders	Olney, Ill	Oct. 20, 1868	83, 354
Spinning-machine-bobbin holder	W. L. Soungman	Williamsport, Pa	Aug. 27, 1872	130, 966
Spinning-machine, Double spinner	E. Bowen	Providence, R. I	July 13, 1830	....
Spinning-machine, Universal spinner	J. Brown	Providence, R. I	May 20, 1830	....
Spinning-machine cap	J. Smith	Loth, Belgium	May 28, 1867	65, 291
Spinning-machine condensing-tube	J. Good	Williamsburgh, N. Y	Oct. 7, 1873	143, 508
Spinning-machine, Domestic	E. Wood	Lowville, N. Y	Sept. 3, 1824	....
Spinning-machine, Family	J. Watt, F. A. Priest, and G. Freeborn.	Jefferson County, Ohio	May 20, 1826	....
Spinning-machine flyer	T. T. Abbott and J. A. V. Smith	Manchester, N. H	Jan. 3, 1871	110, 617
Spinning-machine flyer	J. H. Aldrich	Holyoke, Mass	Jan. 19, 1864	41, 268
Spinning-machine flyer	D. Hussey	Nashua, N. H	Oct. 6, 1863	40, 169
Spinning-machine flyer	O. Pearl	Lawrence, Mass	Feb. 17, 1863	37, 702
Spinning-machine flyer	H. Silver	Lowell, Mass	June 2, 1868	78, 489
Spinning-machine flyer	A. W. Smith	Manchester, N. H	Mar. 2, 1869	87, 374
Spinning-machine flyers, Bearing for	J. Brown	Pawtucket, R. I	Aug. 18, 1868	81, 064
Spinning-machine flyers, Bearing for	B. E. Sampson	Boston, Mass	Nov. 29, 1864	45, 300
Spinning-machine flyers, Compressor for	S. Goodwin and J. A. Emery	Biddeford, Me	May 3, 1864	42, 620
Spinning-machine feed-regulator	C. Herrschaft	Brooklyn, N. Y	Sept. 10, 1867	68, 741
Spinning-machine guide-board	O. Pearl	Lawrence, Mass	May 23, 1871	115, 095
Spinning machine, Hand	T. Barns	Greensburgh, Ind	Oct. 1, 1867	69, 387
Spinning machine, Hand	J. Blackwood and T. C. Wilson	Cincinnati, Ohio	Sept. 24, 1867	69, 167
Spinning machine, Hand	J. W. Burkhart	Cameron, Mo	Sept. 1, 1868	81, 504
Spinning machine, Hand	J. Byrkit	Fairfield, Iowa	Sept. 26, 1865	50, 094
Spinning machine, Hand	T. Evans	Paris, Iowa	Apr. 18, 1865	47, 285
Spinning machine, Hand	B. A. Grant	Mount Pleasant, Iowa	Sept. 11, 1866	58, 023
Spinning machine, Hand	B. A. Grant	Lockport, Ill	May 11, 1869	89, 984
Spinning machine, Hand	J. M. Hart	Des Moines, Iowa	Oct. 22, 1867	69, 920
Spinning machine, Hand	J. L. Johnson and J. W. Foust	Evansburgh, Pa	Nov. 10, 1868	83, 970
Spinning machine, Hand	H. Koeller	Camp Point, Ill	Aug. 21, 1866	57, 336
Spinning machine, Hand	W. and J. Leach	Stewartsville, Ind	Dec. 4, 1866	60, 202
Spinning machine, Hand	W. H. Main	Marietta, Wis	June 7, 1870	103, 966
Spinning machine, Hand	C. Matheny	Greensburgh, Ind	Feb. 26, 1867	62, 351
Spinning machine, Hand	C. Matheny	Greensburgh, Ind	Nov. 16, 1869	96, 937
Spinning machine, Hand	N. M. Mendenhall and J. Judd	Terre Haute, Ind	May 7, 1867	64, 438
Spinning machine, Hand	F. D. Moore	Edray, W. Va	Feb. 4, 1868	74, 115
Spinning machine, Hand	C. A. Moorehead	Quincy, Ill	June 28, 1864	43, 327
Spinning machine, Hand	F. M. Nixon	Lena, Ill	Mar. 23, 1869	88, 065
Spinning machine, Hand	T. G. Odell and B. Glover	Camp Point, Ill	July 24, 1866	56, 600
Spinning machine, Hand	J. Rice	Prairie Creek, Ind	Nov. 9, 1869	96, 619
Spinning machine, Hand	A. W. Silvis	Birmingham, Iowa	Mar. 3, 1868	75, 063
Spinning machine, Hand	W. A. Stevenson	Athens, Mo	Aug. 4, 1868	80, 572
Spinning machine, Hand	D. Wilson and H. Fairbanks	Adams County, Ill	Sept. 11, 1866	58, 015
Spinning-machine, Jack	A. B. Woodbury	Ashuelot, N. H	Sept. 24, 1867	69, 149
Spinning-machine-jack center	F. R. Pearson	Germantown, Pa	Nov. 26, 1867	71, 409
Spinning machine, Long-band	J. Church, jr	Hartford, Conn	May 22, 1830	....
Spinning-machine lubricator	J. B. Bancroft	Hopedale, Mass	June 11, 1867	65, 530
Spinning-machine, Portable	B. Allison	Philadelphia, Pa	Apr. 27, 1812	....
Spinning-machine, Portable	B. Allison	Burlington, N. J	June 28, 1814	....
Spinning-machine, Quill-bobbin	D. Bass, jr	Woonsocket, R. I	June 10, 1873	139, 652
Spinning-machine, Ring	J. H. Sawyer	Lowell, Mass	Apr. 4, 1871	113, 575
Spinning-machine, Ring and traveler	J. W. Wattles	Canton, Mass	Mar. 17, 1868	75, 610
Spinning-machine ring	J. Booth	Smithfield, R. I	Apr. 13, 1869	88, 849
Spinning-machine ring	W. T. Carroll	Medway, Mass	June 2, 1868	78, 427
Spinning-machine ring	J. W. Wattles	Canton, Mass	Oct. 27, 1868	83, 426
Spinning-machine ring	H. L. Peirce	Taunton, Mass	Jan. 8, 1869	90, 956
Spinning-machine-ring clearer	J. W. Wattles	Canton, Mass	Mar. 17, 1868	75, 609
Spinning-machine ring, Ring and traveler	J. Higgins	Manchester, Great Britain	Nov. 6, 1866	59, 523
Spinning-machine rings, Machine for manufacturing	C. E. Trowbridge	Whitinsville, Mass	Nov. 26, 1872	133, 344
Spinning-machine roller	J. B. Fuller	Norwich, Conn	Apr. 17, 1866	54, 067
Spinning-machine-roller clearer	C. B. Brown	Lewiston, Me	July 22, 1873	114, 031
Spinning-machine-roller clearer	L. Cheetham	Lewiston, Me	Oct. 17, 1871	120, 037
Spinning-machine-roller cleaner	H. Wells	Hopkinton, R. I	Mar. 23, 1869	88, 247
Spinning-machine rollers, Lubricating	F. C. Fuller	Lowell, Mass	Nov. 26, 1867	71, 477
Spinning-machine saddle	J. S. Casey	Voluntown, Conn	Sept. 27, 1870	107, 758
Spinning-machine, Self-acting	H. Holcroft, F. R. Pearson, and R. Shore.	Philadelphia, Pa	Jan. 26, 1869	86, 156
Spinning machine, Silk	A. Brooks	Scituate, Mass	June 29, 1833	....
Spinning-machine spindle	W. T. Carroll	Woonsocket, R. I	Nov. 18, 1873	144, 601
Spinning-machine spindle	G. W. Daugherty	Wilmington, Del	June 7, 1870	103, 996
Spinning-machine spindle	G. Draper	Hopedale, Mass	May 28, 1872	127, 159
Spinning-machine spindle	J. Eaton	Boston, Mass	Aug. 18, 1863	39, 557
Spinning-machine spindle	T. H. Gray	Walpole, Mass	Mar. 12, 1872	124, 488
Spinning-machine spindle	D. Hussey	Lowell, Mass	Sept. 19, 1871	119, 032
Spinning-machine spindle	W. G. Perry	Manchester, N. H	Mar. 25, 1873	137, 236
Spinning-machine spindle	W. G. Perry	Manchester, N. H	Nov. 25, 1873	145, 009
Spinning-machine spindle	D. H. Rice	Lowell, Mass	Sept. 24, 1872	131, 705

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Spinning-machine spindle	D. H. Rice	Lowell, Mass	Nov. 19, 1872	133, 254
Spinning-machine spindle	D. H. Rice	Lowell, Mass	Jan. 14, 1873	134, 771
Spinning-machine spindle	D. H. Rice	Lowell, Mass	Feb. 18, 1873	135, 939
Spinning-machine spindle	J. M. Ryo-Catteau	Paris, France	May 14, 1867	64, 800
Spinning-machine spindle	J. H. Sawyer	Lowell, Mass	Mar. 5, 1872	124, 290
Spinning-machine spindle and bobbin	J. Roper	Lawrence, Mass	Nov. 12, 1872	132, 986
Spinning-machine spindle and bobbin-tube	A. McFarland and C. W. Pack	Paterson, N. J	Aug. 10, 1869	93, 633
Spinning-machine spindle and bolster	G. Draper	Milford, Mass	Jan. 1, 1867	60, 704
Spinning-machine spindle and whirl	W. T. Carroll	Woonsocket, R. I	Feb. 20, 1872	123, 867
Spinning-machine-spindle bearing	L. Cheetham	Lewiston, Me	Jan. 16, 1872	122, 705
Spinning-machine-spindle bearing	J. B. Fuller	Norwich, Conn	Oct. 5, 1869	95, 456
Spinning-machine-spindle bearing	B. H. Jenks	Bridesburgh, Pa	July 16, 1872	129, 413
Spinning-machine-spindle bearing	H. L. Peirce	Taunton, Mass	Feb. 6, 1872	123, 358
Spinning-machine-spindle bearing, &c	F. H. Perry	Niagara Falls, N. Y	Apr. 16, 1872	125, 687
Spinning-machine-spindle bearing	G. Richardson	Lowell, Mass	July 30, 1872	129, 903
Spinning-machine-spindle bearing	J. H. Sawyer	Lowell, Mass	Aug. 22, 1871	118, 282
Spinning-machine-spindle bearings	J. H. Sawyer	Lowell, Mass	Sept. 26, 1871	119, 283
Spinning-machine-spindle bolster	J. Birkenhead	Mansfield, Mass	Aug. 20, 1872	130, 559
Spinning-machine-spindle bolster	J. Birkenhead	Mansfield, Mass	Aug. 12, 1873	141, 751
Spinning-machine-spindle bolster	R. Fethney	Manchester, England	Dec. 15, 1863	40, 980
Spinning-machine-spindle bolster	B. H. Jenks	Bridesburgh, Pa	Aug. 5, 1873	141, 440
Spinning-machine-spindle bolster	B. H. Jenks	Bridesburgh, Pa	Aug. 5, 1873	141, 441
Spinning-machine-spindle bolster	J. C. Whitin	Northbridge, Mass	June 7, 1864	43, 059
Spinning-machine-spindle bolster	C. F. Wilson	Northbridge, Mass	Jan. 21, 1873	135, 190
Spinning-machine-spindle lubricator	J. Eaton	Boston, Mass	May 3, 1864	42, 569
Spinning-machine-spindle step	E. Blake	Chicopee Falls, Mass	May 4, 1869	89, 548
Spinning-machine-spindle step	G. Draper	Hopedale, Mass	Apr. 6, 1869	88, 556
Spinning-machine-spindle step	J. P. Hillard	Fall River, Mass	Jan. 25, 1870	99, 087
Spinning-machine-spindle step	A. A. Westcott	North Scituate, R. I	Sept. 5, 1871	118, 763
Spinning-machine-spindle step	C. F. Wilson	Northbridge, Mass	Jan. 21, 1873	135, 189
Spinning-machine-spindle step and cover	O. Pearl	Lawrence, Mass	July 23, 1871	115, 233
Spinning-machine-spindle step rail	H. O. Lothrop	Boston, Mass	Feb. 13, 1872	123, 568
Spinning-machine-spindle whirl	M. A. Furbush	Philadelphia, Pa	Dec. 30, 1873	146, 059
Spinning-machine spindles, Apparatus for applying adhesive and lubricating material to.	J. Marshall	Stockport, Great Britain	Nov. 15, 1864	45, 108
Spinning-machine, &c., spindles, Device for stopping	E. Huret and F. L. De Bruyn	Condette, Pas-de-Calaise, France.	July 20, 1869	92, 830
Spinning-machine stop-motion	L. Cutting	San Francisco, Cal	Sept. 18, 1866	58, 226
Spinning-machine thread	J. and A. Gay	Dunstable, N. H	Apr. 10, 1829	
Spinning-machine thread-guide	D. D. Hurst	Lancaster, Pa	Jan. 3, 1865	45, 718
Spinning-machine, Throstle	C. H. Hunt	Lawrence, Mass	Sept. 28, 1852	9, 283
Spinning-machine, Throstle	J. Smith	Northbridge, Mass	Nov. 4, 1856	16, 028
Spinning-machine throstle-bobbin	J. C. Stanley	Lawrence, Mass	Aug. 12, 1862	36, 177
Spinning-machine top-roller	C. Greene	Salem, Mass	Aug. 31, 1858	21, 333
Spinning-machine top-roller	S. S. Potter	Cranston, R. I	Jan. 16, 1872	122, 779
Spinning-machine trumpet	G. Draper	Hopedale, Mass	Dec. 13, 1870	110, 021
Spinning-machine twisting-tube	C. Roberts	Lake Village, N. H	Apr. 20, 1869	89, 170
Spinning machine, Vertical band	J. Blaney	Lowell, Iowa	May 8, 1866	54, 493
Spinning-machines, Apparatus for sizing the initial coils of cops in.	A. Pearson	Assonett, Mass	June 27, 1871	116, 481
Spinning-machines, Cleaner for ring-traveler	W. Jencks	Manchester, N. H	June 19, 1866	55, 662
Spinning-machines, Connecting washers with spindles in.	H. T. Robbins	Lowell, Mass	Mar. 16, 1852	8, 807
Spinning-machines, Device for holding thread while doffing in.	T. L. Luders	Olney, Ill	July 6, 1869	92, 328
Spinning-machines, Drawing and twisting head for	S. W. Lawrence, P. Walden, and J. W. Huntoon.	West Eaton, N. Y	Oct. 25, 1870	108, 709
Spinning-machines, Drawing and twisting head for	T. Nutting	Smithfield, R. I	Apr. 16, 1872	125, 686
Spinning-machines, Drawing-head for	J. E. Crowell	Chelsea, Mass	May 17, 1859	24, 010
Spinning-machines, Drawing-regulator for	N. Wyllys	South Glastenbury, Conn	Jan. 28, 1851	7, 919
Spinning-machines, Drawing-roll for	D. R. Pratt	Worcester, Mass	Feb. 8, 1848	5, 434
Spinning-machines, Machine for making paper cop tubes for.	W. J. Innis	Providence, R. I	Sept. 26, 1865	50, 204
Spinning-machines, Machine for regulating the supply of roving to.	J. B. Winslow	New Bedford, Mass	Mar. 2, 1858	19, 531
Spinning-machines, Mechanism for adjusting roller-stands in.	W. T. Carroll	Woonsocket, R. I	Apr. 16, 1872	125, 661
Spinning-machines, Mechanism for delivering roving in.	L. W. Felt	Keene, N. H	Oct. 24, 1871	120, 256
Spinning-machines, Mechanism for doffing and applying bobbins in.	G. Bernhardt	Radcliffe, Great Britain	Jan. 30, 1872	123, 222
Spinning-machines, Mechanism for holding bolster in.	P. S. Burlingame	Uxbridge, Mass	Sept. 7, 1869	94, 470
Spinning-machines, Mechanism for raising top-roller weights in.	G. W. Prentice	Whitinsville, Mass	Nov. 16, 1869	96, 935
Spinning-machines, Mechanism for stopping the delivery-roller of.	H. Bottomley and P. Greenwood.	Camden, N. J	Jan. 4, 1870	98, 549
Spinning machines, Mode of adjusting band on band.	D. B. Tetter	Batavia Station, Iowa	May 9, 1865	47, 685
Spinning-machines, Preventing fibers from winding on drawing-rollers in.	J. C. Dodge	Dodgeville, Mass	May 14, 1850	7, 364
Spinning-machines, Self-lubricating bolster for	W. F. Rippon	Providence, R. I	July 5, 1864	43, 430
Spinning-machines, Self-lubricating bolster for	M. P. Wilmarth	Smithfield, R. I	July 7, 1863	39, 190
Spinning-machines, Self-oiling spindle of	F. J. Rabbeth and J. E. Atwood.	Ilion, N.Y., and Willimantic, Conn.	Apr. 2, 1867	63, 561
Spinning-machines, Yarn-guide for	E. Lord	Taunton, Mass	Feb. 9, 1864	41, 582
Spinning-machines, Twisting and drawing head for.	C. Chabot	Philadelphia, Pa	Apr. 27, 1869	89, 290
Spinning-machinery	G. H. Dodge	Attleborough, Mass	Nov. 27, 1847	5, 378
Spinning-machinery	G. Draper	Milford, Mass	Mar. 13, 1860	27, 434
Spinning-machinery	G. Goulding	Watertown, N. Y	Apr. 16, 1861	32, 059
Spinning-machinery	M. W. Obenchain	Springfield, Ohio	Sept. 11, 1847	5, 280
Spinning-machinery	J. H. Partridge	New York, N. Y	July 30, 1861	32, 923
Spinning-machinery	O. Pearl and H. P. Chandler	Lawrence, Mass	Jan. 20, 1852	8, 675
Spinning-machinery	J. Turner	Kensington, Pa	Feb. 22, 1848	5, 455
Spinning-machinery	A. S. Wolcott and J. Johnson	New York	Aug. 8, 1846	4, 683
Spinning-machinery	A. Woodworth, 3d	Boston, Mass	May 15, 1855	12, 889
Spinning-machinery, Drawing and twisting heads for.	H. T. Potter	Norwich Town, Conn	Feb. 26, 1867	62, 498

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Spinning-machinery, Electrical stop for	H. A. Chapin	Bridgeport, Conn	May 20, 1873	138, 993
Spinning-machinery, Flyer for	C. Hyde	North Chelmsford, Mass	Mar. 27, 1866	53, 449
Spinning-machinery, Flyer for	I. F. Maynard	Nashua, N. H	Sept. 24, 1861	33, 356
Spinning-machinery, Lubricator for	C. Hardy	Biddeford, Me	Apr. 9, 1861	31, 972
Spinning-machinery, Stop-motion in	J. P. Hillard	Fall River, Mass	Aug. 13, 1861	33, 037
Spinning, Machinery for preparing fibrous substances for.	J. Aperly and W. Clissold	Dudbridge, England	Dec. 22, 1857	18, 888
Spinning-mechanism, Ring and traveler	J. W. Wattles	Canton, Mass	July 5, 1859	24, 681
Spinning metal, Machine for	J. J. Marcy	West Meriden, Conn	Apr. 27, 1869	89, 491
Spinning metal, Machine for	C. F. Spaulding	Saint Johnsbury, Vt	May 8, 1866	54, 621
Spinning metal, Machine for	C. F. Spaulding	Saint Johnsbury, Vt	Oct. 29, 1867	70, 281
Spinning metallic hollow-ware, Machine for	J. Grey	Pittsburgh, Pa	May 1, 1860	28, 075
Spinning-mule	J. H. Brickill	Taunton, Mass	Aug. 24, 1858	21, 242
Spinning-mule	B. C. Coldwell	Wyoming, Pa	Mar. 30, 1869	88, 450
Spinning-mule	G. Crowther	Philadelphia, Pa	Feb. 5, 1867	61, 723
Spinning-mule	J. Cumnock	Salmon Falls, N. H	Mar. 31, 1868	76, 056
Spinning-mule	W. C. Davol	Fall River, Mass	May 15, 1866	54, 699
Spinning-mule	J. J. Dewey	Queechee, Vt	May 20, 1873	139, 051
Spinning-mule	T. Houlding	Ipswich, Mass	Dec. 16, 1873	145, 569
Spinning-mule	H. H. Goff	Cumberland, R. I	Apr. 12, 1864	42, 390
Spinning-mule	C. J. Green	Olneyville, R. I	July 27, 1869	92, 958
Spinning-mule, &c	P. W. Greenwood	Landenburgh, Pa	May 2, 1871	114, 288
Spinning-mule	W. Lees	Coatesville, Pa	Jan. 23, 1872	123, 029
Spinning-mule	M. Moffatt	Watertown, Mass	July 8, 1873	140, 587
Spinning-mule	J. Paley and T. Rawsthorn	Preston, Great Britain	Feb. 18, 1868	74, 585
Spinning-mule	S. D. Paul	Lawrence, Mass	Mar. 6, 1866	53, 036
Spinning-mule	T. H. Rushton and R. Tonge	Bolton, England	June 10, 1873	139, 737
Spinning-mule	J. B. Smith	Cohoes, N. Y	July 6, 1869	92, 382
Spinning-mule	A. Stockwell	Providence, R. I	May 4, 1869	89, 807
Spinning-mule	R. Wilde	Philadelphia, Pa	July 3, 1866	56, 133
Spinning mule and jack	J. Goulding	Worcester, Mass	Aug. 7, 1866	56, 922
Spinning-mule brake	J. W. Whitehead	Saco, Me	Jan. 14, 1873	134, 960
Spinning-mule-carriage tops, Cleaning	R. Greaves	Philadelphia, Pa	June 7, 1859	24, 297
Spinning mule, Cotton	T. Walker	Chester County, Pa	June 26, 1828	....
Spinning-mule faller	J. Smith	Preston, England	Apr. 25, 1871	114, 059
Spinning-mule registering-apparatus	H. P. Gregory	Plattsburgh, N. Y	Aug. 17, 1869	93, 709
Spinning-mule, Self-acting	H. S. Bartlett	Smithfield, R. I	Apr. 12, 1864	42, 267
Spinning-mule, Self-acting	A. G. Cumnock	Lowell, Mass	Sept. 12, 1865	49, 861
Spinning-mule, Self-acting	J. Cumnock	Salmon Falls, N. H	Oct. 25, 1870	108, 688
Spinning-mule, Self-acting	J. Dodge	Oldham, England	May 2, 1871	114, 274
Spinning-mule, Self-acting	J. Entwistle	Conshohocken, Pa	Oct. 18, 1870	108, 467
Spinning-mule, Self-acting	W. Hackley	Moosup, Conn	May 3, 1870	102, 537
Spinning-mule, Self-acting	P. J. Kent and N. W. Bancroft	Worcester, Mass	July 26, 1870	105, 812
Spinning-mule, Self-acting	B. Lapham	Adams, Mass	Sept. 25, 1840	1, 797
Spinning-mule, Self-acting	W. Mason	Taunton, Mass	Oct. 8, 1840	1, 801
Spinning-mule, Self-acting	P. McGovern	Lawrence, Mass	Sept. 12, 1871	118, 808
Spinning-mule, Self-acting	P. McGovern	North Andover, Mass	May 6, 1873	138, 511
Spinning-mule, Self-acting	A. Metcalf and W. Gibbons	Preston, Great Britain	Jan. 14, 1873	134, 915
Spinning-mule, Self-acting	C. B. Parkinson, A. and J. Metcalf, and W. H. Heald.	Preston, Great Britain	Apr. 4, 1871	113, 445
Spinning-mule, Self-acting	A. Paul	Cohoes, N. Y	Jan. 21, 1873	135, 008
Spinning-mule, Self-acting	S. D. Paul	Woonsocket, R. I	Feb. 1, 1870	99, 342
Spinning-mule, Self-acting	F. O. C. Robinson	Fall River, Mass	Jan. 30, 1872	123, 189
Spinning-mule, Self-acting	J. S. Rosenthal	Philadelphia, Pa	Aug. 6, 1872	130, 155
Spinning-mule, Self-acting	W. Rouse	Taunton, Mass	Feb. 6, 1872	123, 364
Spinning-mule, Self-acting	I. Stead, H. Holcroft, and F. R. Pearson.	Philadelphia, Media, and Germantown, Pa.	May 9, 1871	114, 619
Spinning-mule, Self-acting	J. Sutherland	East Hampton, Mass	Apr. 18, 1871	113, 814
Spinning-mule, Self-acting	J. P. Sweet	Hebronville, Mass	Jan. 16, 1872	122, 786
Spinning-mule, Self-acting	G. O. Wickers	North Andover, Mass	Apr. 1, 1873	137, 334
Spinning-mule, Self-acting	E. Wright	Worcester, Mass	Feb. 1, 1870	99, 511
Spinning-mule, Self-acting	E. Wright	Worcester, Mass	July 18, 1871	117, 231
Spinning-mule, Self-acting	G. Wright	New England Village, Mass	July 11, 1854	11, 279
Spinning-mule, Self-acting	G. Wright	Grafton, Mass	Aug. 18, 1857	18, 029
Spinning-mule, Self-acting	J. Wright	Worcester, Mass	July 5, 1859	24, 690
Spinning-mules, Belt-shifting device for	H. Macon	Providence, R. I	Oct. 1, 1872	131, 762
Spinning-mules, Device for preventing the uncoupling of clutches in.	H. Macon and J. Hunt	Providence, R. I	July 26, 1870	105, 705
Spinning-mules, Scroll for operating the carriage of.	W. Bond	Windsorville, Conn	May 30, 1871	715, 271
Spinning oakum	S. Baldwin	Saint Louis, Mo	Jan. 5, 1858	19, 011
Spinning or filling slack-twisted yarn	J. Thorp	Providence, R. I	Nov. 25, 1828	....
Spinning or throwing silk, cotton, flax, or wool, &c.	H. Ruggles	New York	Nov. 24, 1829	....
Spinning-reel	S. McCawley	Fallston, Pa	Dec. 2, 1834	....
Spinning, reeling, and spooling machine for flax and hemp.	N. Jones	Madison County, N. Y	Mar. 14, 1812	....
Spinning, Regulating drag of yarn in	J. Whitehead	Manchester, Va	June 18, 1842	2, 673
Spinning-ring	W. T. Carroll	Medway, Mass	May 23, 1871	115, 160
Spinning-ring	W. F. Draper	Hopedale, Mass	Aug. 9, 1870	106, 140
Spinning-ring	H. G. Hall	Fayetteville, N. C	Aug. 27, 1867	68, 185
Spinning-ring	H. L. Peirce	Taunton, Mass	Aug. 1, 1871	117, 676
Spinning-ring	J. W. Wattles	Canton, Mass	Oct. 28, 1873	144, 004
Spinning-ring, Adjustable	J. B. Bancroft	Hopedale, Mass	July 15, 1873	140, 757
Spinning-ring and traveler	T. Welham	Philadelphia, Pa	Apr. 13, 1869	88, 996
Spinning-ring fastener	C. E. Trowbridge	Whitinsville, Mass	Mar. 14, 1871	112, 655
Spinning-ring fastening	J. H. Sawyer	Lowell, Mass	Aug. 8, 1871	117, 934
Spinning-ring holder	B. H. Jenks	Bridesburgh, Pa	Dec. 17, 1872	134, 068
Spinning-ring holder	G. W. Knight	Hopedale, Mass	Oct. 11, 1870	108, 270
Spinning-ring holder	T. Marsh	North Providence, R. I	Aug. 29, 1871	118, 544
Spinning-ring holder	T. Marsh	Pawtucket, R. I	July 9, 1872	128, 741
Spinning-ring holder	S. S. Shorey	Hopedale, Mass	Jan. 2, 1872	122, 335
Spinning, Ring rail and holder for	G. W. Spaulding and W. T. Carroll.	Woonsocket, R. I	Feb. 18, 1873	135, 944
Spinning-ring supporter	T. Marsh	North Providence, R. I	Aug. 29, 1871	118, 622
Spinning-ring traveler	J. Goulding	Worcester, Mass	Mar. 11, 1873	136, 719
Spinning-ring traveler	H. L. Pierce	Taunton, Mass	Sept. 28, 1869	95, 261
Spinning-ring traveler	H. T. Potter	Norwich Town, Conn	June 25, 1867	66, 104
Spinning-rings, Process of repairing	H. L. Pierce	Taunton, Mass	Nov. 18, 1873	144, 630
Spinning-rings, Restoring ring-traveler	F. Tully	Philadelphia, Pa	Jan. 7, 1873	134, 712

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Invention.	Inventor.	Residence.	Date.	No.
Spinning, &c., Roll for machine for preparing fibrous material for.	D. Read	New York, N. Y	June 6, 1865	48,134
Spinning-rolls, Covering	D. Read	Boston, Mass	Aug. 19, 1862	36,257
Spinning-roller	I. Goodspeed and G. S. Goodspeed.	Norwich, Conn., and Providence, R. I.	Mar. 21, 1865	46,896
Spinning-roller	W. Weild	Manchester, England	Jan. 19, 1864	41,333
Spinning rope and cordage	J. Carpenter	New York, N. Y	Oct. 10, 1854	11,775
Spinning rope and yarns	S. B. Whitlock	New York	Aug. 22, 1834	
Spinning rope-yarn	R. S. Tucker	Brooklyn, N. Y	Dec. 23, 1851	8,617
Spinning rope, yarn, and twine, Machine for	S. Gorham		Feb. 4, 1800	
Spinning rope-yarn Ropery for	J. Pitman		Dec. 24, 1799	
Spinning rope, yarn, &c., Machine for	N. Cutting	Washington, D. C	July 14, 1806	
Spinning, &c., Self-lubricating spindle-bearings for.	G. W. Briggs	Fiskeville, R. I	Apr. 18, 1865	47,278
Spinning silk, Spindle for	G. Singleton	Rockville, Conn	Dec. 28, 1869	98,309
Spinning-spindle	J. Eaton	Boston, Mass	May 6, 1862	35,145
Spinning-spindle	A. H. Gilman	Hopedale, Mass	June 25, 1867	66,017
Spinning-spindle	A. Jillson	Dorchester, Mass	May 27, 1815	
Spinning spindle and bobbin	J. G. Reed	Paterson, N. J	Jan. 15, 1850	7,028
Spinning, Spindle for throstle	C. E. Brown	Millbury, Mass	Dec. 7, 1858	22,262
Spinning spindles, Means for adjusting ring	F. A. Sterry	Canton, Mass	Jan. 1, 1867	60,802
Spinning, Substitute for the flyer in	O. G. and N. Rogers	Whitestown, N. Y	July 28, 1824	
Spinning the hair of neat-cattle	W. Shotwell and A. Kinder	New York	Nov. 4, 1813	
Spinning-throstle	C. Danforth	Paterson, N. J	Apr. 1, 1830	
Spinning-throstle	O. Pearl	Lawrence, Mass	Feb. 11, 1868	74,416
Spinning-top	L. O. Franke	Baltimore, Md	Apr. 26, 1870	102,244
Spinning, &c., Top roll for	W. A. Caswell	Providence, R. I	Mar. 28, 1871	113,140
Spinning, Top roller for	E. Freeman	Norton, Mass	Sept. 17, 1872	131,432
Spinning-top, &c., whirling-jack	J. Wright	Bristol, Conn	Sept. 10, 1861	33,284
Spinning, twisting, and reeling machine	G. Hoover and A. N. Hadley	Richmond, Ind	Jan. 1, 1867	60,728
Spinning, Twisting-tube for	C. D. House	Lake Village, N. H	Feb. 8, 1870	99,674
Spinning-wheel, &c	J. Brown	Providence, R. I	June 12, 1818	
Spinning-wheel	J. Bryce	Grand Haven, Mich	Sept. 24, 1872	131,657
Spinning-wheel	J. Cochran, jr	Cornwallis, Nova Scotia	July 16, 1872	129,459
Spinning-wheel	C. L. Cole	Richmond, Mich	Nov. 24, 1868	84,261
Spinning-wheel	T. Cruttenden	Poultney, Vt	Apr. 23, 1808	
Spinning-wheel	T. Cruttendon	New York	May 12, 1817	
Spinning-wheel	W. Drury	Brookfield, Mass	Mar. 19, 1810	
Spinning-wheel	J. M. Flood	Fulton, Mo	Dec. 12, 1865	51,532
Spinning-wheel	D. Hurlbut	Aurelius, N. Y	Aug. 4, 1813	
Spinning-wheel	T. Johnson	Ruby Post-Office, Mich	Nov. 8, 1870	109,016
Spinning-wheel	H. Miller	Ronald Township, Mich	Dec. 10, 1867	71,897
Spinning-wheel	A. Minor		Nov. 16, 1803	
Spinning-wheel	J. H. Rowe	Hudson, N. Y	Nov. 5, 1867	70,622
Spinning-wheel	E. Russell	Long Meadow, Mass	Apr. 18, 1814	
Spinning-wheel	E. B. Sandford	Newtown, Conn	Apr. 11, 1816	
Spinning-wheel	C. F. Schafile	Lewisburgh, Pa	Feb. 28, 1824	
Spinning-wheel	O. Seely		Aug. 6, 1808	
Spinning-wheel	J. Shaw	Herkimer County, N. Y	Apr. 27, 1812	
Spinning-wheel	J. Shaw, jr	Hinckley, Ohio	Oct. 10, 1848	5,847
Spinning-wheel	J. Strain	Artemisia, Canada	Apr. 4, 1871	113,594
Spinning-wheel	F. Voegtli	Montgomery City, Mo	Feb. 21, 1871	111,991
Spinning-wheel	H. F. Wheeler	Springville, Pa	Dec. 15, 1846	4,892
Spinning-wheel	L. Wight	Benton, Pa	Mar. 18, 1856	14,482
Spinning-wheel	H. Wilson	Phelps, Ontario County, N. Y.	Dec. 29, 1818	
Spinning-wheel	H. Wright and O. Roberts	Bristol, Conn	Mar. 26, 1814	
Spinning-wheel	J. Wright	Campbell County, Ky	Feb. 28, 1817	
Spinning-wheel and twisting-mill for making cordage.	W. B. Dyer		Feb. 27, 1804	
Spinning wheel, Hand	S. W. Clark	Prairie du Chien, Wis	Feb. 4, 1868	74,047
Spinning wheel, Hand	J. Green	Joliet, Ill	Oct. 30, 1866	59,210
Spinning wheel, Hand	C. Matheny	Greensburgh, Ind	Feb. 7, 1860	27,059
Spinning wheel for wool and cotton, Hand	N. Harris	Fairfield County, Ohio	Jan. 21, 1829	
Spinning-wheel for wool, Household	G. Brewster	Norwich, Conn	Feb. 27, 1824	
Spinning-wheel head	T. D. Hotchkiss	Guilford, Conn	May 10, 1864	42,661
Spinning-wheel head	A. Miner	Marcellus, N. Y	Apr. 11, 1810	
Spinning-wheel head, Linen	J. S. Stewart	Springfield, N. Y	Apr. 19, 1821	
Spinning wheel, Linen	B. Simmons	Paris, N. Y	July 20, 1820	
Spinning-wheel, Small	N. Lewis	Canandaigua, N. Y	Mar. 29, 1817	
Spinning wheel, Wool	G. Brooks	Athol, N. Y	Apr. 2, 1824	
Spinning wheel, Flyer for flax	J. Wilson	Monroe County, Ky	Feb. 16, 1833	
Spinning wool	W. Ayres and J. Cochran	Durnham, Vt	Oct. 6, 1815	
Spinning wool	A. E. E. Bigelow	Chicopee, Mass	Mar. 27, 1855	12,582
Spinning wool	A. Campbell	Kingston, Pa	June 19, 1834	
Spinning wool	S. Clements	Harford, Vt	Mar. 16, 1812	
Spinning wool	Sykes and Conradt	Fredericktown, Md	Mar. 3, 1836	
Spinning wool	W. Sykes and G. M. Conradt	Fredericktown, Md	May 10, 1834	
Spinning wool	J. Withered	Baltimore, Md	Mar. 30, 1836	
Spinning wool	D. S. Wooster	Sheldon, N. Y	Feb. 14, 1831	
Spinning wool and cotton	D. Newbrough	Riley Township, Ohio	Apr. 27, 1832	
Spinning wool and cotton	P. Paddleford	Lyman, N. H	May 18, 1816	
Spinning wool and cotton	D. Read	Brookfield, N. Y	Sept. 10, 1811	
Spinning wool, &c., and in the manufacture of heavy fabrics.	W. W. Calvert, R. Southwich, and A. Messenger.	Lowell, Mass	Mar. 31, 1832	
Spinning wool and cotton, Apparatus for	W. Church	Birmingham, England	June 11, 1827	
Spinning wool and cotton by hand	G. W. Robinson	Providence, R. I	Feb. 16, 1826	
Spinning wool and cotton from the roll, Machine for	W. R. McCall	Knox County, Ind	May 12, 1828	
Spinning wool and cotton, Horizontal machine for	H. Hunt and C. Bradish	Lowville, N. Y	Dec. 24, 1824	
Spinning wool and cotton, Machine for	A. S. Wittse and J. Farnham	Tioga, N. Y	June 28, 1825	
Spinning wool by a continued rotary motion	G. Brewster	Norwich, Conn	Mar. 13, 1824	
Spinning wool, cotton, &c	S. Boyden	Foxborough, Mass	Dec. 7, 1826	
Spinning wool, cotton, flax, and hemp, Throstle for	S. Shallcross	New York	Jan. 21, 1814	
Spinning wool, cotton, &c., Machine for	S. Boyden	Foxborough, Mass	Dec. 29, 1826	
Spinning wool, Hand-machine for	M. Hulings	Randolph County, Ind	June 3, 1851	8,130
Spinning wool, Machine for	T. S. Abbott	Greenland, N. H	Feb. 26, 1837	
Spinning wool, Machine for	W. Bushnell and J. Altoffer	Harrisonburgh, Va	Aug. 30, 1821	
Spinning wool, &c., Machine for	J. Corrill and W. P. Rogers	Harpersfield, Ohio	June 15, 1826	

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Spinning wool, &c., Machine for	A. Critchfield	Licking County, Ohio	Apr. 24, 1828	....
Spinning wool, Machine for	L. W. Felt	Keene, N. H	Oct. 24, 1871	120, 255
Spinning wool, Machine for	E. E. Kilbourn	New Brunswick, N. J	May 17, 1870	103, 052
Spinning wool, Machine for	B. Lapham	Queensbury, N. Y	June 29, 1827	....
Spinning wool, Machine for	J. Orndorff	Russellville, Ky	Nov. 10, 1829	....
Spinning wool, Machine for	D. Pool and A. Copeland	Philadelphia, Pa	Dec. 24, 1824	....
Spinning wool, Machinery for	W. T. Abell	Vernon, Iowa	May 13, 1862	35, 205
Spinning wool, Machinery for	F. S. Stoddard	Litchfield, Conn	Mar. 13, 1855	12, 532
Spinning wool, Machinery for	I. B. Hartwell	Northfield, Vt	June 7, 1839	1, 166
Spinning wool, Machinery for	E. Victory	Watertown, N. Y	June 13, 1854	11, 106
Spinning woolen roving, Machine for	E. M. Titcomb	Andover, Mass	July 29, 1837	300
Spinning woolen yarn	J. Sharp	Whitestown, N. Y	Mar. 13, 1822	....
Spinning woolen yarn, Mule for	S. D. Paul	Lawrence, Mass	June 28, 1864	43, 333
Spinning yarn and making rope, Machinery for	C. Whipple	Providence, R. I	Feb. 26, 1850	7, 130
Spinning yarn from sheep's wool	W. B. Taber	Canton, Mass	Jan. 30, 1829	....
Spinning yarn, Jack and mule for	J. Goulding	Worcester, Mass	May 2, 1865	47, 547
Spinning yarn, Machinery for	J. E. Crowell	Chelsea, Mass	May 8, 1860	28, 161
Spinning yarn, Machinery for	E. Victory	Watertown, N. Y	May 8, 1860	28, 220
Spinning yarn, &c., Roll for	A. A. Taylor	New York, N. Y	Dec. 22, 1863	41, 030
Spiral fastening	C. S. Muscroft	Cincinnati, Ohio	May 31, 1870	103, 645
Spiral float-wheel mill	F. Ives	Lisle, N. Y	July 5, 1809	....
Spiral knives, Machine for grinding	S. Stevens	East Brookfield, Mass	May 21, 1850	7, 388
Spiral lines, Instrument for describing	L. W. Truesdell	Owego, N. Y	Dec. 7, 1869	97, 571
Spiral spring	F. C. Payne	New York, N. Y	Oct. 24, 1865	50, 622
Spiral spring applied to traces, swingle-trees, &c., Elastic.	J. Sherfy	Uniontown, Md	July 22, 1833	....
Spiral spring for furniture	H. Hard	Akron, Ohio	Mar. 4, 1873	136, 507
Spiral spring for mattresses and furniture	S. P. Kittle	Brooklyn, N. Y	Jan. 4, 1870	98, 505
Spiral-spring former	V. De Lent	Chelsea, Mass	Apr. 1, 1856	14, 566
Spiral springs, and mode of applying to carriages	S. Baker	Elba, N. Y	June 19, 1838	788
Spiral springs for belts, pantaloons, vests, &c., Mode of making.	W. Hunt	New York, N. Y	Mar. 21, 1838	649
Spiral springs for chairs, sofas, and other articles, Forming.	J. T. Foster, J. J. Banta, and J. H. Banta.	Jersey City, N. J., and Piermont, N. Y.	Apr. 7, 1857	16, 972
Spiral springs of wire, Machine for making	W. Van Anden	Trenton, N. J	Aug. 7, 1849	6, 634
Spiral tubing, Manufacture of	E. Savoral	Washington, D. C	Nov. 15, 1864	45, 083
Spiral-wheel band	S. S. Walley	Chester, Pa	Aug. 17, 1835	....
Spiral wheel for working in tide-water	E. Ring	....	Dec. 10, 1797	....
Spiral wheels, Regulating the action of the tide on	J. Martin	....	Apr. 27, 1798	....
Spirals, &c., Instrument for describing	G. Crandell	Washington, D. C	Feb. 15, 1870	99, 853
Spirit-level	A. P. Odholm	Bridgeport, Conn	Oct. 26, 1869	96, 140
Spirit-meter	J. G. Allen	Philadelphia, Pa	Apr. 2, 1867	63, 452
Spirit-meter	J. G. Allen	Philadelphia, Pa	Apr. 14, 1868	76, 690
Spirit-meter	M. Augenstein	New York, N. Y	Dec. 31, 1867	72, 774
Spirit-meter	J. H. Cox and J. and W. Murphy.	Montreal, Canada	Aug. 15, 1865	49, 486
Spirit-meter	W. Magrowitz	New York, N. Y	Sept. 18, 1866	58, 114
Spirit-meter	W. Siemens and J. G. Halske	Berlin, Prussia	Oct. 8, 1867	69, 714
Spirit-meter	I. P. Tice	New York, N. Y	Apr. 16, 1867	63, 964
Spirit-meter	I. P. Tice	New York, N. Y	Dec. 24, 1867	72, 698
Spirit-meter	I. P. Tice	New York, N. Y	Dec. 24, 1867	72, 699
Spirit-meter	I. P. Tice	New York, N. Y	Dec. 24, 1867	72, 700
Spirit-meter	I. P. Tice	New York, N. Y	Dec. 24, 1867	72, 701
Spirit-meter	I. P. Tice	New York, N. Y	Dec. 24, 1867	72, 702
Spirit-meter	J. D. Weaver	Troy, N. Y	Aug. 11, 1868	80, 888
Spirit meter and registering apparatus	I. P. Tice	New York, N. Y	Aug. 6, 1867	67, 611
Spirit meter and separator	I. P. Tice	New York, N. Y	Mar. 26, 1867	63, 334
Spirit meter and separator	I. P. Tice	New York, N. Y	Mar. 26, 1867	63, 335
Spirit-meter for distillery	J. C. Horton and J. Milligan	New York and Brooklyn, N. Y.	Jan. 7, 1868	73, 099
Spirit-meter regulator	L. Shulze	Louisville, Ky	Aug. 2, 1870	106, 031
Spirit proof, Ardent	B. Miller	North Salem, N. Y	Feb. 21, 1814	....
Spirit-testing apparatus and preventing fraud on the revenue.	J. C. Dunlevy	Dayton, Ohio	Dec. 4, 1866	60, 158
Spirits and neutral alcohol, Process for the manufacture of good-flavored.	F. Haeck	Brussels, Belgium	Nov. 8, 1864	45, 001
Spirits and other distillates, Apparatus for measuring and testing.	E. Payne	London, England	Jan. 24, 1865	46, 058
Spirits and prevention of fraud upon the revenue, Apparatus for the production of.	J. Dawson	Staunton, Va	Jan. 7, 1873	134, 524
Spirits and wine, Ameliorating	W. Thornton	Washington, D. C	Sept. 7, 1809	....
Spirits from corn and corn-cob, Making	J. and S. Demund	New Jersey	Jan. 17, 1816	....
Spirits from corn, Manufacturing	J. Sanders	Schenectady, N. Y	Feb. 7, 1811	....
Spirits from lime, Mode of obtaining	J. Hale	....	Nov. 22, 1815	....
Spirits from starch, Manufacture of	H. Koehler	New York, N. Y	Sept. 27, 1870	107, 787
Spirits, Manufacture of	H. Purdy	Burlington, Iowa	Aug. 20, 1872	130, 743
Spirits, Manufacture of	G. B. Stone	Chicago, Ill	Mar. 9, 1869	87, 599
Spirits, Manufacture and treatment of alcoholic	O. Lugo	Baltimore, Md	Mar. 14, 1871	112, 725
Spirits, Manufacture of alcoholic	J. W. Richardson	Ogden, Ohio	Feb. 12, 1867	62, 070
Spirits, Manufacturing and purifying	P. Martin	Forest Grove, Oreg	Aug. 4, 1868	80, 606
Spirits, Mode of improving	B. Allison	....	May 12, 1802	....
Spirits, Purifying	A. Pease and S. Bestor	Enfield, Conn	July 27, 1812	....
Spirits, Purifying wood	J. Pollock	Morrisania, N. Y	June 30, 1868	79, 499
Spirits, Treating ardent	J. J. Speed and F. B. Smith	Gorham, Me., and Brooklyn, N. Y.	July 15, 1862	35, 960
Spirituous liquors, Heater and condenser for manufacturing.	T. Shurley	Madison County, Va	Nov. 18, 1814	....
Spirituous liquors from tomatoes, Manufacture of	W. Schilling	Baltimore, Md	Jan. 1, 1861	31, 058
Spirituous liquors, Treating and ageing	G. Goewey	Philadelphia, Pa	Aug. 5, 1873	141, 554
Spirometer	A. P. Barnes	Boston, Mass	Nov. 21, 1865	51, 002
Spirometer	G. W. Brown	Rockford, Ill	Jan. 14, 1868	73, 2[illegible]9
Spit, Mode of turning a	S. Morey	....	Jan. 29, 1793	....
Spittoon	L. W. Barquet	New York, N. Y	Aug. 22, 1865	49, 493
Spittoon	S. G. Cabell	Washington, D. C	May 23, 1871	115, 023
Spittoon	F. E. Darrow	Bristol, Conn	May 5, 1868	77, 594
Spittoon	E. Detwiler	Milwaukee, Wis	June 9, 1868	78, 722
Spittoon	F. L. Faulkner	Derby, Conn	Mar. 13, 1866	53, 131
Spittoon	F. Gaisberg	New York, N. Y	June 17, 1873	140, 027

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Spittoon	J. Hillin	Poughkeepsie, N. Y	July 2, 1872	128, 544
Spittoon	J. L. Howard	Hartford, Conn	Feb. 18, 1873	136, 060
Spittoon	J. M. Klingenmeier	Buffalo, N. Y	July 27, 1869	93, 095
Spittoon	E. Mather	Chicago, Ill	Jan. 28, 1873	135, 234
Spittoon	J. H. Seymour	Hagerstown, Md	Nov. 7, 1871	120, 673
Spittoon	W. Stachlen	Williamsburgh, N. Y	June 1, 1858	20, 451
Spittoon	H. Tongue	Chicago, Ill	May 20, 1873	139, 213
Spittoon	W. H. Topham	New York, N. Y	Aug. 2, 1870	106, 094
Spittoon	W. H. Tyrrel	Philadelphia, Pa	June 24, 1873	140, 323
Spittoon	J. W. Wetmore	Erie, Pa	Apr. 9, 1872	125, 641
Spittoon and foot-warmer, Combined	G. B. Clarke	Leonardville, N. Y	Apr. 18, 1865	47, 280
Spittoon, Car	J. H. Seymour	Hagerstown, Md	Feb. 18, 1868	74, 610
Spittoon, Car	W. G. Smith	Carlisle, Pa	June 19, 1866	55, 729
Spittoon, Car	W. G. Smith	Carlisle, Pa	July 3, 1866	56, 113
Spittoon-chair	A. Quirolo	New York, N. Y	Apr. 16, 1872	125, 757
Spittoon-footstool	C. Marcher	New York, N. Y	June 15, 1869	91, 356
Spittoon-footstool	J. N. Morrison	Philadelphia, Pa	May 4, 1869	89, 682
Spittoon for cars, Stationary	J. C. Tunison	Decatur, Ill	Mar. 3, 1868	75, 222
Spittoon for dental chairs	W. M. Butler	San Francisco, Cal	Dec. 19, 1865	51, 552
Spittoon-envelope	A. J. Doolittle	Hamden, Conn	July 2, 1867	66, 313
Spittoon-envelope	S. W. H. Ward	New York, N. Y	Mar. 5, 1867	62, 709
Spittoon-holder	C. O. Haley	Westfield, Mass	Sept. 13, 1870	107, 362
Spittoon, Invalid	J. M. Cayce	Franklin, Tenn	Sept. 17, 1867	68, 953
Spittoon-lifter	J. Walker and H. F. Lilly	Philadelphia, Pa	Apr. 18, 1871	113, 822
Spittoon, Railway-car	W. J. Beach	Nashville, Tenn	June 28, 1870	104, 691
Spittoon, Railway-car	F. H. Furniss	Crestline, Ohio	July 17, 1866	56, 400
Spittoon, Railway-car	J. H. Seymour	Hagerstown, Md	May 8, 1866	54, 613
Spittoon, Railway-car	J. H. Seymour	Hagerstown, Md	Oct. 30, 1866	59, 280
Spittoon, Railway-car	H. Stanley	Saint Johnsbury, Vt	June 18, 1872	127, 993
Spittoon, Railway-car	M. Traver	Poughkeepsie, N. Y	July 30, 1867	67, 377
Spittoon, Railway-car	B. Van Deusen	Troy, N. Y	Sept. 17, 1867	68, 916
Spittoon, Railway-car	A. H. Wells	Waterbury, Conn	Nov. 20, 1866	59, 881
Spittoon, Railway-car	H. J. Zimmerman	Hudson, Mich	Apr. 29, 1873	138, 464
Spittoon-tongs	A. H. Seipt	Philadelphia, Pa	June 20, 1871	116, 226
Spittoons from rubber, gutta-percha, &c., Manufacture of.	T. J. Mayall	Roxbury, Mass	Jan. 26, 1869	86, 171
Spittoons to floors of railway-cars, Device for attaching.	J. C. Daggett	Hope, Me	Feb. 15, 1870	99, 877
Splint	J. L. Burch	Franklin, Tenn	Aug. 6, 1867	67, 493
Splint	A. Wheat	Canaan, N. H	July 8, 1873	140, 662
Splint apparatus, Surgical	J. H. H. and W. J. Burge	Brooklyn, N. Y	May 5, 1857	17, 195
Splint-cutting machine	J. C. Brown	Brooklyn, N. Y	June 21, 1864	43, 177
Splint-cutting machine	C. P. and C. D. Clark	Beaver Dam, Wis	Apr. 29, 1873	138, 378
Splint-cutting machine	E. Knight	Elizabeth, Ind	Mar. 14, 1871	112, 721
Splint-cutting machine	C. E. Ramus	Lawrence, Kans	Apr. 30, 1872	126, 331
Splint-cutting machine	A. F. Scow	Chicago, Ill	May 23, 1871	115, 110
Splint-cutting tool	J. L. Devol	Parkersburgh, W. Va	May 28, 1872	127, 319
Splint, Extension	W. Bunce	Sullivan, Ohio	Oct. 26, 1858	21, 872
Splint, Extension	H. G. Davis	New York, N. Y	May 20, 1862	35, 303
Splint for fractures	A. Hays	Madison, Ind	Aug. 13, 1850	7, 561
Splint for fractures	E. Thomas	New Athens, Ohio	Mar. 8, 1836	......
Splint for fractured limbs	G. S. King	Washington, D. C	Apr. 12, 1870	101, 743
Splint for fractured limbs, Flexible	W. Wood, jr	Smithfield, Ohio	Mar. 5, 1833	......
Splint for fracture of clavicle, &c	H. L. Richardson	New York, N. Y	Feb. 8, 1870	99, 769
Splint-knife	S. Friend and J. M. Collom	Decatur, Ill	Oct. 20, 1868	83, 148
Splint-machine	L. L. Gilliland	Dayton, Ohio	Apr. 29, 1851	8, 069
Splint-machine	H. Mellish	Walpole, N. H	Apr. 1, 1851	8, 017
Splint-machine	H. Patterson	Templeton, Mass	May 14, 1850	7, 367
Splint-making tool	C. F. Stewart	Corunna, Mich	Feb. 15, 1870	99, 795
Splint-riveting tool	W. Baker	East Templeton, Mass	June 28, 1864	43, 281
Splint-spikes, Machinery for making	A. Whittemore	Cambridgeport, Mass	Oct. 2, 1866	58, 521
Splint, Surgical	D. Ahl	Newville, Pa	May 17, 1859	23, 996
Splint, Surgical	D. Ahl	Newville, Pa	Oct. 15, 1861	33, 470
Splint, Surgical	H. D. Ballard	Findlay, Ohio	Sept. 29, 1868	82, 478
Splint, Surgical	J. Clough and D. M. Cummings	Enfield, N. H	May 13, 1856	14, 873
Splint, Surgical	M. M. Latta	Goshen, Ind	June 17, 1862	35, 614
Splint, Surgical	S. A. Skinner	Brownington, Vt	May 16, 1854	10, 969
Splint, Surgeon's	B. Welch	Lakeville, Conn	Sept. 3, 1850	7, 626
Splints, Felted fabric for surgical	J. Cocking	London, England	Sept. 24, 1872	131, 520
Splints, Machine for making	J. D. Skelton and E. Victor	Fort Branch, Ind	Nov. 5, 1872	132, 866
Splints to fractured limbs, Mode of making and applying.	D. S. C. H. Smith	Sutton, Mass	July 7, 1829	......
Splinter-bar, Three-horse	J. B. Morrison	Fort Madison, Iowa	Oct. 23, 1866	59, 053
Splint-ring	T. S. Hattersley	Trenton, N. J	Feb. 15, 1870	99, 891
Splint-rings, Machine for making	E. H. Perry	Providence, R. I	Aug. 20, 1861	33, 125
Splitting and skiving machine	W. Best	Abingdon, Ill	Feb. 16, 1869	86, 969
Splitting-gage	T. Rice	Boston, Mass	Sept. 9, 1873	142, 584
Splitting-knife in hoop-pole machines, Method of operating.	C. Washburn	Bridgewater, Mass	Mar. 10, 1857	16, 816
Splitting machine, Wood	D. Milliken	New York, N. Y	Oct. 7, 1873	143, 455
Spoke and ax-helve machine	O. Redmond	Rochester, N. Y	Oct. 30, 1855	13, 731
Spoke and felly connection	G. Allen	Winchester, Mass	June 30, 1868	79, 533
Spoke and felly machine	D. Reed and T. E. Pierce	Sullivan, Ind	Feb. 28, 1871	112, 279
Spoke and hub	W. Beauchamp	Grayville, Ill	Oct. 3, 1871	119, 557
Spoke and wheel, Vehicle	W. A. Lewis	Chicago, Ill	Jan. 2, 1872	122, 471
Spoke-dressing machine	R. P. Benton	Rochester, N. Y	Mar. 21, 1854	10, 662
Spoke-dressing machine	R. H. and H. S. Boynton	Oshkosh, Wis	Oct. 18, 1870	108, 439
Spoke-dressing machine	O. Mather	Cincinnati, Ohio	Dec. 3, 1850	7, 811
Spoke-dressing machine	A. Merrell	New Bedford, Pa	Feb. 7, 1854	10, 507
Spoke-driving bench, Wheelwright's	F. M. Lemmon	Shelbyville, Ill	Jan. 1, 1867	60, 752
Spoke-driving implement	W. Edwards	Indianapolis, Ind	Feb. 21, 1871	112, 021
Spoke-driving machine	C. Haas and J. C. Noll	Chicago, Ill	Apr. 22, 1856	14, 718
Spoke-driving machine	E. Keith and D. Bird	La Fontaine, Ind	Nov. 13, 1866	59, 612
Spoke-driving machine	G. W. Miles	Michigan City, Ind	Sept. 10, 1867	68, 773
Spoke, Extension	D. C. Brewster	Kent, Ohio	Nov. 17, 1868	84, 164
Spoke-fastener	H. N. Houghton	Brattleborough, Vt	June 29, 1869	91, 938
Spoke-finishing machine	W. P. Hale	Ionia, Mich	Jan. 18, 1870	98, 955
Spoke-machine	R. H. Boynton	Oshkosh, Wis	Jan. 23, 1866	52, 130

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Invention.	Inventor.	Residence.	Date.	No.
Spoke-machine	R. W. Coffee	Big Spring, Va	May 6, 1873	138, 616
Spoke-machine	G. W. Cooke	Springfield, N. J	Nov. 24, 1857	18, 680
Spoke-machine	A. R. Davis	Syracuse, N. Y	Aug. 20, 1861	33, 074
Spoke-machine	L. J. Dickason and J. Frazee	Georgetown, Ohio	Jan. 18, 1859	22, 633
Spoke-machine	J. Foster	Long Branch, N. J	Aug. 8, 1865	49, 341
Spoke-machine	J. Gilchrist	Berlin City, Wis	Oct. 23, 1860	30, 474
Spoke-machine	L. L. Knight and D. H. Rice	Barre, Mich	Oct. 26, 1858	21, 886
Spoke-machine	A. Landphere and S. Remington.	Albion, Pa., and Ilion, N. Y.	Feb. 27, 1855	12, 459
Spoke-machine	S. Lord	Perry, Ga	Sept. 15, 1857	18, 207
Spoke-machine	T. R. Markillie	Winchester, Ill	Dec. 4, 1855	13, 882
Spoke-machine	A. McNeile	London, England	Aug. 19, 1873	142, 034
Spoke-machine	N. North	Stow, Ohio	Sept. 12, 1854	11, 677
Spoke-machine	N. Olney and C. H. Kellogg	Amherst, Mass	Jan. 4, 1859	22, 509
Spoke-machine	J. Stamm and J. Shubert	Sardinia, Ohio	June 19, 1860	28, 787
Spoke-machine	W. Van Anden	Poughkeepsie, N. Y	Aug. 7, 1855	13, 408
Spoke-machine	S. B. Wilkins	Milton, Pa	July 10, 1860	29, 117
Spoke-machine	E. K. Wisell	Warren, Ohio	Mar. 3, 1863	37, 839
Spoke-machine-feeding mechanism	E. Briggs	South Bend, Ind	Jan. 1, 1861	31, 006
Spoke machine, Wagon	C. C. Dupue	Wayne, Mich	June 18, 1867	65, 891
Spoke-machines, Device for holding pieces in	I. Starks and L. Perrigo	Genoa and Groton, N. Y	June 13, 1854	11, 084
Spoke-polishing machine	G. L. Rouse	Cincinnati, Ohio	July 8, 1873	147, 732
Spoke-polishing machine	J. V. Woolsey	Sandusky, Ohio	Aug. 24, 1869	94, 163
Spoke-polishing machine, Wagon	S. L. Myers and G. Willison	Massillon, Ohio	Apr. 9, 1867	63, 740
Spoke-sawing machine	G. F. Almy	Toledo, Ohio	July 11, 1871	116, 915
Spoke-sawing machine	J. L. Thralls	Warsaw, Ind	Sept. 9, 1873	142, 749
Spoke-sawing machine	T. J. Tolan	Delphos, Ohio	Oct. 31, 1871	120, 468
Spoke-sawing machine	J. V. Woolsey	Sandusky, Ohio	Dec. 24, 1872	134, 184
Spoke-setting apparatus	A. Danison	West Liberty, Ohio	Dec. 24, 1872	134, 260
Spoke-setting machine	W. R. Greene	Juda, Wis	Nov. 25, 1873	144, 900
Spoke-setting machine	A. Hafer and G. Wilkinson	Colon, Mich	June 22, 1858	20, 642
Spoke-setting machine	R. Walker	Batavia, N. Y	Dec. 26, 1865	51, 765
Spoke-shave	L. Bailey	Winchester, Mass	July 13, 1858	20, 855
Spoke-shave	L. Bailey	Boston, Mass	June 19, 1866	55, 599
Spoke-shave	I. L. Beckwith	Quincy, Mass	Apr. 29, 1837	184
Spoke-shave	M. Colton	Sardinia, N. Y	June 25, 1861	32, 617
Spoke-shave	J. Davies	Muskegon, Mich	Jan. 4, 1870	98, 475
Spoke-shave	J. Groven	Buffalo, N. Y	Mar. 12, 1872	124, 435
Spoke-shave	E. Holmes	Lynn, Mass	Jan. 1, 1856	14, 018
Spoke-shave	S. F. Hutchins	North Anson, Me	Jan. 28, 1868	73, 723
Spoke-shave	J. Jennings, jr	Natick, Mass	Oct. 29, 1861	33, 589
Spoke-shave	S. Leonard	Bridgewater, Mass	Sept. 18, 1860	30, 071
Spoke-shave	S. S. Mowry and A. G. Bates	Providence, R. I	Dec. 5, 1865	51, 339
Spoke-shave	J. A. Perley	Lynn, Mass	Dec. 14, 1869	97, 802
Spoke-shave	M. Snow	North Bridgewater, Mass	Apr. 8, 1856	14, 635
Spoke-shave	G. N. Stearns	Syracuse, N. Y	Dec. 13, 1870	110, 168
Spoke-shave	J. G. Steiger	Cleveland, Ohio	Apr. 3, 1866	53, 698
Spoke-shave	B. Tolman	Pembroke, Mass	May 10, 1859	23, 927
Spoke-shave	M. Tuell	Penn Yan, N. Y	Oct. 27, 1863	40, 437
Spoke-shave	C. H. Weston	Nashua, N. H	June 1, 1858	20, 459
Spoke-shaves, Method of adjusting and holding the knives of.	M. Packard	North Bridgewater, Mass	Apr. 21, 1857	17, 111
Spoke-sizing machine	J. V. Woolsey	Sandusky, Ohio	Dec. 24, 1872	134, 183
Spoke-smoothing machine	H. Keyes	Terre Haute, Ind	Feb. 15, 1870	99, 913
Spoke-socket and felly-clamp	L. D. Flanders	Cleveland, Ohio	Jan. 26, 1864	41, 370
Spoke socket, Carriage-wheel	W. Christian	New York, N. Y	Sept. 3, 1872	131, 082
Spoke socket, Carriage-wheel	S. Mitchell	Lima, N. Y	June 4, 1872	127, 501
Spoke-tenon	G. W. Stouffer	Lewistown, Pa	Aug. 4, 1868	80, 678
Spoke tenons and shoulders, Cutting	P. Emmitt	Hopewell, Pa	June 29, 1833	....
Spoke-tenons, Machine for cutting bevels on	A. F. Gue	Eastmanville, Mich	June 21, 1870	104, 582
Spoke-tenoning and felly-boring machine	J. Bauman	Shepherdstown, Pa	Jan. 9, 1872	122, 551
Spoke-tenoning and hub-boring device	J. Deming	Salem, Ohio	May 17, 1870	103, 157
Spoke-tenoning device	C. W. Tompkins	Assyria, Mich	Apr. 12, 1870	101, 945
Spoke-tenoning machine	F. H. Brinkkotter	Callahan's Ranch, Cal	Sept. 7, 1869	94, 468
Spoke-tenoning machine	A. H. Calhoun and G. W. Collins.	West Lebanon, Pa	Sept. 1, 1868	81, 595
Spoke-tenoning machine	J. P. Crutchfield and C. T. Whitten.	Longmire's Store, S. C	Jan. 11, 1870	98, 746
Spoke-tenoning machine	G. E. Culp and M. Flaig	Lockhaven, Pa	Jan. 24, 1871	111, 181
Spoke-tenoning machine	L. A. Dole	Salem, Ohio	Oct. 31, 1865	50, 768
Spoke-tenoning machine	W. Gerrish	Portsmouth, N. H	July 21, 1835	....
Spoke-tenoning machine	M. Gregg	Philadelphia, Pa	Feb. 9, 1858	19, 292
Spoke-tenoning machine	A. F. Gue	Eastmanville, Mich	Feb. 13, 1872	123, 563
Spoke-tenoning machine	M. Gunn	Jeffersontown, Ky	Nov. 16, 1869	96, 800
Spoke-tenoning machine	J. W. Huffman	Fremont, Ind	Oct. 4, 1870	107, 911
Spoke-tenoning machine	J. Lefeber	Cambridge, Ind	Sept. 4, 1866	57, 736
Spoke-tenoning machine	J. Lenher	Cocalico Township, Pa	July 28, 1834	....
Spoke-tenoning machine	J. Letterel	Union, Ind	Nov. 6, 1866	59, 420
Spoke-tenoning machine	H. M. Preston	Saint Louis, Mo	Mar. 3, 1863	37, 842
Spoke-tenoning machine	J. H., T. S., and J. S. Rook	York, Ill	Aug. 1, 1871	117, 686
Spoke-tenoning machine	A. Sherman	Poughkeepsie, N. Y	May 9, 1871	114, 720
Spoke-tenoning machine	A. P. Smith	Cornwall, Conn	Nov. 1, 1830	....
Spoke-tenoning machine	J. Smith	Fayette, Me	June 7, 1832	....
Spoke-tenoning machine	W. Thomas	Oxford, Ohio	Feb. 8, 1859	22, 903
Spoke-tenoning machine	O. Vanorman	Ripon, Wis	Aug. 7, 1866	57, 018
Spoke-tenoning machine	J. V. Woolsey	Sandusky, Ohio	Aug. 24, 1869	94, 164
Spoke-throating machine	J. B. Stanley and M. D. Smith	Tough Kenamon, Pa	July 9, 1872	122, 823
Spoke-throating machine	J. Woodburn	Indianapolis, Ind	Aug. 15, 1871	118, 173
Spoke-timber, Machine for preparing	A. W. Gearhart	Beallsville, Ohio	Aug. 16, 1853	9, 938
Spoke-turning machine	N. H. Davis	Naugatuck, Conn	Dec. 17, 1872	134, 037
Spoke-turning machine, Wagon	T. Derington	Carbondale, Ill	Aug. 14, 1866	57, 099
Spoke-turning machine	L. Ward	Naugatuck, Conn	Oct. 29, 1872	132, 702
Spoke-tenoning machine, Wheelwright's	G. H. Ober	Newbury, Ohio	July 16, 1867	66, 875
Spoke-tenoning machinery	J. McCune	Senecaville, Ohio	June 26, 1847	5, 173
Spoke-tenoning, Method of	R. L. Sibbet	Shippensburgh, Pa	Aug. 29, 1854	11, 619
Spoke-tenoning tool	J. J. Croy	Caledonia, Mo	Feb. 3, 1857	16, 532
Spoke, Wagon-wheel	R. Potts and N. Ogden	Chatham, N. Y	May 10, 1870	102, 861
Spoke, Wheel	D. H. Wiswell	Petersham, Mass	Apr. 12, 1833	....

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Invention.	Inventor.	Residence.	Date.	No.
Spoked wheel, Machine for the manufacture of	E. A. Archibald	Methuen, Mass	Dec. 28, 1869	98, 331
Spokes and fellies of carriage-wheels, Tightening the.	B. A. Rogers	Shubuta, Miss	Apr. 13, 1858	19, 951
Spokes and fellies of wooden wheels, Mode of uniting.	D. A. Johnson	Chelsea, Mass	Feb. 19, 1861	31, 462
Spokes and fellies, Socket for connecting	S. Mitchell	Lima, N. Y	Aug. 8, 1871	117, 799
Spokes by hand, Machine to aid in making	E. Julier	Sharon, Ohio	Nov. 25, 1856	16, 121
Spokes, Dressing wheel	D. H. Wiswell	New York	Nov. 19, 1833	
Spokes in vehicle-wheels, Device for mending	A. J. Caywood	Poughkeepsie, N. Y	July 2, 1872	128, 535
Spokes in wheel-fellies, Mode of securing	D. A. Johnson	Chelsea, Mass	July 30, 1861	32, 946
Spokes in wheel-hubs, Securing	R. Moor	Westport, Ind	Sept. 23, 1856	15, 770
Spokes, Machine for cutting tenons on wheel	J. M. Simpson	Maultville, N. Y	Dec. 2, 1862	37, 000
Spokes of carriage-wheel, Attaching	J. Y. Schelly	Hereford, Pa	Dec. 13, 1859	26, 447
Spokes, Sawing	T. Green	De Witt, N. Y	Dec. 26, 1848	5, 989
Spokes to wheels, Method of attaching	J. G. Wiggins	Lima, N. Y	Feb. 28, 1871	112, 200
Spoking-machine	A. Humphries	Bethel, Ohio	Feb. 2, 1869	86, 402
Spoking machine, Wheel	A. Humphries and J. Keethler	Mount Oreb, Ohio	July 30, 1867	67, 306
Sponge, Bleaching, tanning, and coloring	F. Braum and A. T. Schmidt	Pittsburgh, Pa	May 10, 1870	102, 760
Sponge, Coach-cleaning	H. D. Ohlsen	Chicago, Ill	Aug. 2, 1870	106, 076
Sponge-cup	S. B. Brague	New York, N. Y	Feb. 20, 1866	52, 667
Sponge-cup	S. C. Catlin	Cleveland, Ohio	Nov. 28, 1871	121, 233
Sponge-cup	E. H. Howard and A. J. Manchester.	Providence, R. I	Oct. 16, 1866	58, 829
Sponge-cup	W. McConnell	Philadelphia, Pa	Aug. 5, 1873	141, 573
Sponge for artillery	J. Gether	Philadelphia, Pa	May 16, 1826	
Sponge for producing textile fabrics, Mode of treating.	A. Paraf	Mulhouse, France	Dec. 17, 1867	72, 322
Sponge for stuffing padding, &c., Preparing	A. T. Moith	Fishkill Landing, N. Y	July 25, 1865	48, 970
Sponge-holders to tables, &c., Attaching	C. S. See	New Brunswick, N. J	June 14, 1870	104, 214
Sponge, Manufacture of rubber	E. Chesterman	Tremont, N. Y	Dec. 14, 1869	97, 880
Sponge, Multiple	H. E. Smith	Newark, N. J	Apr. 12, 1860	101, 776
Sponge-tent, Implement for the manufacture of	W. Scheide	New York, N. Y	Dec. 3, 1872	133, 671
Spool	A. Carmichel	Westerly, R. I	Feb. 11, 1873	135, 626
Spool	M. F. Doran	Philadelphia, Pa	July 13, 1869	92, 432
Spool and bobbin winding	A. C. Sherwood		Oct. 18, 1814	
Spool and needle-threader, Combined	G. P. Farmer	Philadelphia, Pa	Aug. 30, 1870	106, 925
Spool and stand, Twine	G. P. Goodwin	Lowell, Mass	Aug. 28, 1866	57, 496
Spool and thread-protector	T. O. L. Schrader	New York, N. Y	Oct. 12, 1869	95, 842
Spool-attachment for cutting thread	J. W. Murrell	Seaford, Del	Oct. 20, 1868	83, 353
Spool-blanks, Machine for making	J. T. Hawkins	Salisbury, Vt	Mar. 25, 1873	137, 136
Spool-box	J. C. Bohn	Centralia, Ill	Jan. 21, 1873	135, 071
Spool-case	S. W. Baldwin	Yonkers, N. Y	June 25, 1872	128, 275
Spool-case	G. W. Cook	Chicago, Ill	July 16, 1872	129, 396
Spool-case	W. F. Foster	Chicago, Ill	Mar. 22, 1870	100, 995
Spool-case	A. W. Harper	Philipsburgh, Pa	Nov. 18, 1873	144, 762
Spool, Chalk-line	J. E. Richardson	Lowell, Mich	Mar. 23, 1869	88, 212
Spool, Darning	J. H. Greenleaf	New Haven, Conn	Feb. 13, 1866	52, 643
Spool-exhibiter	J. D. Cutler	Brooklyn, N. Y	Apr. 18, 1871	113, 858
Spool-filling machine	W. Breitenstein	New York, N. Y	July 12, 1864	43, 474
Spool-frame	E. Robinson	Augusta, Mass	Mar. 6, 1816	
Spool-guard	W. C. Cleaveland	Cambridge, Mass	June 2, 1868	78, 577
Spool-heads, Machinery for embossing	L. H. Dwelley	South Boston, Mass	Apr. 8, 1873	137, 601
Spool-heads, Mode of fastening	L. N. Parks	Winchendon, Mass	May 9, 1865	47, 658
Spool-holder	J. B. Gibbs	New York, N. Y	Apr. 30, 1872	126, 199
Spool-holder	J. C. Kock and B. J. Beck	Brooklyn, N. Y	Sept. 27, 1870	107, 786
Spool-holder	L. F. Ward	Marathon, N. Y	Jan. 14, 1873	134, 952
Spool-holder	A. W. Warren	Annapolis, Md	Oct. 17, 1871	120, 135
Spool-holder and thread-cutter	A. P. Ayers	Benton Harbor, Mich	Apr. 1, 1873	137, 282
Spool-holder lock	N. Kenny	New York, N. Y	Oct. 31, 1871	120, 563
Spool-holding device	J. Lofvendahl	Boston, Mass	Feb. 11, 1862	34, 397
Spool, Jack	D. R. Day and J. G. Folsom	Winchendon, Mass	Aug. 22, 1865	49, 507
Spool, Jack	D. R. Day and J. G. Folsom	Rindge, N. H., and Winchendon, Mass.	Sept. 7, 1869	94, 556
Spool, Jack	B. James	Worcester, Mass	May 17, 1870	103, 193
Spool-labeling machine	A. W. C. Williams	Hartford, Conn	July 10, 1866	56, 312
Spool-machine	J. F. C. Rider and E. P. Brownell	South New Market, N. H., and Providence, R. I.	July 12, 1870	105, 250
Spool or bobbin	A. Carmichel	Westerly, R. I.	May 10, 1870	102, 772
Spool or bobbin	W. Clegg	Norwich, Conn	Feb. 24, 1830	
Spool-rack	W. P. Patton	Harrisburgh, Pa	Oct. 19, 1869	96, 032
Spool reservoir or case	J. P. Thompson	Philadelphia, Pa	Apr. 27, 1869	89, 519
Spool, Self-winding counter	W. J. Fox	Morrisania, N. Y	Sept. 6, 1870	107, 031
Spool, Sewing-thread	D. Tracy	Worcester, Mass	June 3, 1862	35, 493
Spool-silk case	S. Elmer	Ashtabula, Ohio	Feb. 14, 1871	111, 828
Spool-stand	N. P. Clarke	Central Falls, R. I	Apr. 21, 1868	76, 997
Spool-stand	W. Harris	Rochester, N. Y	Dec. 9, 1873	145, 297
Spool-stand	E. C. Heywood	Worcester, Mass	Nov. 15, 1870	109, 209
Spool-stand	G. A. Ridham	Newark, N. J	Jan. 28, 1868	73, 926
Spool-stand	J. H. Simmons	Philadelphia, Pa	Apr. 7, 1868	76, 533
Spool-stand and button-box, Combined	J. H. Drum	Bethel, Mich	May 9, 1871	114, 537
Spool-stand and show-case	E. B. Fenton and H. S. Penfield	Chicago, Ill	July 19, 1870	105, 559
Spool-stand and thread-cutter	L. F. Ward	Marathon, N. Y	Feb. 4, 1873	135, 609
Spool-stand, Revolving	J. P. and F. V. Wilson	Ilion, N. Y	Oct. 23, 1860	30, 513
Spool-support	J. Fewkes	Newton, Mass	Nov. 26, 1867	71, 291
Spool tension-attachment	M. B. Westhead and R. Smith	Manchester, Great Britain	Sept. 14, 1869	94, 800
Spool, Thread	I. L. Hoard	Bristol, R. I	Oct. 25, 1870	108, 595
Spool, Thread	C. V. Pettibone	Fond du Lac, Wis	Sept. 13, 1870	107, 288
Spool-thread case	J. D. Cutter	New York, N. Y	Aug. 9, 1870	106, 128
Spool-thread case	A. Parsons	Burlington, Iowa	Apr. 12, 1870	101, 909
Spool-thread case	W. S. Phillips	Chicago, Ill	July 18, 1871	117, 107
Spool thread-guide	T. O. L. Schrader	New York, N. Y	Sept. 28, 1869	95, 271
Spool-turning machine	J. S. Parker	West Willington, Conn	June 11, 1861	32, 528
Spool-turning machine	E. C. Walker and W. M. Gooding	Newark, N. J	June 17, 1873	139, 935
Spool-turning machine	A. D. Waymoth	Fitchburgh, Mass	Aug. 11, 1857	18, 001
Spool, Twine	F. A. Parmelee	New Haven, Conn	Nov. 29, 1859	26, 287
Spools and bobbins for weaving, Machine for winding.	W. Janes	Ashford, Conn	Aug. 20, 1810	
Spools and bobbins, Revolving cutter for truing and equalizing the ends of.	S. Presbrey, jr	Canton, Mass	July 26, 1832	

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Spools of silk, cotton, &c., Apparatus for displaying	J. N. Leonard	Rockville, Conn	July 13, 1869	92, 619
Spools of thread, Device for holding	L. F. Hobbs	Quincy, Mass	Aug. 25, 1868	81, 504
Spools, Machine for making	J. F. C. Rider	South New Market, N. H	Feb. 4, 1873	135 443
Spools, Machine for manufacturing	A. D. Waymoth	Fitchburgh, Mass	July 29, 1856	15, 416
Spools, Machine for turning	J. H. Cary	North New Salem, Mass	Aug. 21, 1844	3, 710
Spools, Machine for winding thread on	H. Conant	Willimantic, Conn	Dec. 13, 1859	26, 415
Spools, Mandrel for making	J. W. Foster	Pawtucket, R. I	Jan. 7, 1873	134, 534
Spooling and winding machine, Guide for	P. Laflin	Warren, Mass	July 30, 1872	130, 058
Spooling cotton, &c., Machine for	G. Ermen and R. Smith	Manchester, England	Aug. 30, 1864	44, 052
Spooling cotton roving	W. H. Elliott	Leicester, Mass	Dec. 28, 1833	....
Spooling-gage	R. H. Norris	Paterson, N. J	Mar. 15, 1870	100, 793
Spooling-machine	G. W. Daugherty	Wilmington, Del	June 7, 1870	103, 995
Spooling-machine	J. F. Stone	North Andover, Mass	June 17, 1873	139, 930
Spooling-machine-bobbin holder	A. M. Wade	Lawrence, Mass	Oct. 28, 1873	144, 041
Spooling-machine measuring-device	T. K. Keith and A. Seaver	Haverhill and Milford, Mass.	Nov. 25, 1873	144, 985
Spooling-machine stop-motion	S. Semple, jr	Mount Holly, N. J	Mar. 8, 1870	100, 675
Spooling-machinery	A. Babbett	Auburn, N. Y	Feb. 5, 1850	7, 064
Spooling, winding, and bobbin machine	C. Flag and O. Wright	Hudson, N. Y	June 29, 1816	....
Spoon	S. Farrer	New York, N. Y	Mar. 3, 1868	75, 139
Spoon	F. Grosjean	Brooklyn, N. Y	Feb. 28, 1871	112, 240
Spoon	J. Hart	Philadelphia, Pa	Dec. 30, 1873	146, 070
Spoon	R. Humphrey	Unionville, Conn	Mar. 21, 1865	46, 907
Spoon	H. C. Milligan	South Orange, N. J	May 23, 1871	115, 085
Spoon	J. Mix	Cheshire, Conn	Mar. 14, 1848	5, 473
Spoon	J. Perkins	Newburyport, Mass	June 29, 1813	....
Spoon	J. H. Smith	Brooklyn, N. Y	Nov. 7, 1871	120, 679
Spoon	G. H. Spencer	Cleveland, Ohio	Sept. 13, 1870	107, 419
Spoon	F. W. Willard	New York, N. Y	Jan. 29, 1867	61, 591
Spoon-blank	L. S. White	Waterbury, Conn	Dec. 24, 1867	72, 706
Spoon-blank-cutting die	F. A. Rich and H. W. Bassett	Wallingford, Conn	June 16, 1868	79, 004
Spoon-burnishing machine	H. M. Jacobs	Hartford, Conn	Aug. 14, 1860	29, 650
Spoon-burnishing machine	H. M. Jacobs	Hartford, Conn	Nov. 27, 1860	30, 734
Spoon, Camp	P. Ulmer	Philadelphia, Pa	Feb. 4, 1862	34, 338
Spoon, fork, &c	G. C. Robinson	Cincinnati, Ohio	Feb. 4, 1873	135, 590
Spoon-holder	S. Simpson	Wallingford, Conn	Mar. 15, 1870	100, 938
Spoon-holder and bell	S. Simpson	Wallingford, Conn	Mar. 8, 1870	100, 681
Spoon, Invalid	D. J. Pearson	Boston, Mass	Dec. 26, 1865	51, 748
Spoon, Medicine	J. L. Colby and L. B. Thomson	Saxonville, Mass	June 17, 1873	139, 944
Spoon, Medicine	I. C. Taylor	West Liberty, Ohio	Feb. 17, 1852	8, 749
Spoon, Mixing	W. S. Clarke	Ishpeming, Mich	Dec. 3, 1872	133, 564
Spoon-mold	L. and N. S. Boardman	East Haddam, Conn	June 28, 1870	104, 822
Spoon, Mustache	E. B. A. Mitcheson	Philadelphia, Pa	Jan. 21, 1873	135, 141
Spoon, Sheet-metal	J. Fallows	Philadelphia, Pa	June 13, 1865	48, 164
Spoon, Sheet-metal	J. Fallows	Philadelphia, Pa	Aug. 15, 1865	49, 471
Spoon, Sheet-metal	J. Fallows	Philadelphia, Pa	May 8, 1866	54, 516
Spoon, Sheet-metal	F. Grosjean	New York, N. Y	Jan. 28, 1862	34, 252
Spoon, &c., Silver	W. Gale	New York	Dec. 7, 1826	....
Spoon, Tinned-iron	R. B. Perkins	Meriden, Conn	Jan. 6, 1863	37, 373
Spoon, &c., Buff for polishing	L. Boardman	East Haddam, Conn	Dec. 15, 1843	3, 380
Spoons, Buffing-apparatus for finishing	H. Barrett	Brooklyn, N. Y	Oct. 11, 1870	108, 092
Spoons, Casting	J. Hall, 2d	Wallingford, Conn	Apr. 25, 1846	4, 468
Spoons, Casting	W. Mix	Prospect, Conn	June 28, 1836	....
Spoons, Construction of metallic	F. G. Niedringhaus	Saint Louis, Mo	Oct. 20, 1868	83, 300
Spoons, forks, &c., Handle of sheet-metal	H. C. Milligan	Brooklyn, N. Y	June 7, 1870	104, 051
Spoons, forks, &c., Machinery for making	A. Krupp	Essen, Prussia	June 8, 1852	8, 909
Spoons, forks, &c., Manufacture of	D. J. Fleetwood	Birmingham, England	July 10, 1866	56, 337
Spoons, forks, &c., Manufacture of plated	H. E. Fowler and W. W. Holmes.	Wallingford, Conn	May 19, 1868	77, 971
Spoons from tin plates, pewter in sheets, sheet-silver, &c.	R. Butcher	Philadelphia, Pa	Dec. 27, 1830	....
Spoons, Machine for making	J. P. Brinkerhoff	Brooklyn, N. Y	Nov. 16, 1858	22, 060
Spoons, Machine for manufacturing	I. Bisbee	Bath, Mass	Nov. 20, 1809	....
Spoons, Machine for manufacturing silver	J. Brockway	United States	Sept. 20, 1836	26
Spoons, Making	A. Little	Bridgeton, N. J	Dec. 14, 1830	....
Spoons, Making	J. Ridgeway	Groton, Mass	Sept. 22, 1814	....
Spoons, Making	J. Seymour	Syracuse, N. Y	Oct. 11, 1859	25, 765
Spoons, Making iron	G. I. Mix	Wallingford, Conn	Oct. 27, 1857	18, 513
Spoons, Making iron	R. B. Perkins	Meriden, Conn	Oct. 27, 1857	18, 517
Spoons, &c., Manner of forming mold for casting	L. Boardman	Chester, Conn	Oct. 7, 1842	2, 802
Spoons, Manufacture of	W. W. Hart	Philadelphia, Pa	May 9, 1846	4, 505
Spoons, Manufacture of	G. I. Mix	Wallingford, Conn	Feb. 26, 1861	31, 555
Spoons, Manufacture of	G. I. Mix	Wallingford, Conn	Oct. 9, 1866	58, 665
Spoons, Manufacture of	W. Mix	Prospect, Conn	May 23, 1848	5, 598
Spoons, Manufacture of	R. B. Perkins	Meriden, Conn	Apr. 1, 1862	34, 863
Spoons, Manufacture of	R. Wallace	New Haven, Conn	Mar. 14, 1848	5, 470
Spoons, Manufacture of iron	G. I. Mix	Wallingford, Conn	Sept. 20, 1859	25, 518
Spoons, Manufacture of silver	J. Brockway	Troy, N. Y	Sept. 20, 1836	....
Spoons, &c., Manufacture of wire-strengthened	L. Boardman	East Haddam, Conn	May 20, 1851	8, 102
Spoons, Manufacturing	T. Bruff	....	Sept. 14, 1801	....
Spoons, Manufacturing	C. Goodyear	Philadelphia, Pa	Aug. 11, 1832	....
Spoons, Method of making wire-strengthened	W. Mix	Prospect, Conn	May 1, 1849	6, 413
Spoons, Mold for casting metal	T. Mix	Cheshire, Conn	Mar. 5, 1833	....
Spoons, Plating-mill for making	S. Boon	Hamilton, N. Y	July 19, 1838	848
Spoons, Process for making iron	F. Grosjean	New York, N. Y	Sept. 10, 1861	33, 247
Spout-bending machine	D. Hayes and J. Marten	Cambridge, Mass	June 13, 1871	115, 852
Spout-bracket	J. E. Rohrer	Rohrersville, Md	Feb. 4, 1868	74, 145
Spout, Rain	F. P. Rogers	Philadelphia, Pa	Dec. 13, 1864	45, 4 8
Spout, Sap	G. L. Cady	Lowell, Mass	Dec. 21, 1869	98, 026
Spout, Sap	L. Gore	Newburgh, Ohio	May 7, 1867	64, 524
Spouts, Bending metallic	E. Valentine and M. T. Ridout	Milwaukee, Wis	Dec. 16, 1862	47, 205
Spouts, Machine for swaging sheet-metal	S. F. Woodworth	Iowa Falls, Iowa	Mar. 27, 1866	53, 515
Spouts, Making corrugated funnel	J. Walton	Brooklyn, N. Y	Jan. 31, 1865	46, 162
Spouts to sheet-metal vessels, Mode of attaching	W. A. Munn	Milwaukee, Wis	Feb. 5, 1867	61, 853
Spouted can	T. C. Phinney and C. E. Bancroft.	Montpelier, Vt	Oct. 19, 1869	96, 034
Spray-dampener	R. R. Foote	Chicago, Ill	June 29, 1869	92, 029
Sprigs, nails, brads, clouts, &c., Manufacturing	R. Noble	Baltimore, Md	May 17, 1819	....

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Spring:

See Adjustable spring.
Air-spring.
Arrow-spring.
Back-lash spring.
Bed-spring.
Bed-bottom spring.
Bolster-spring.
Buggy-spring.
Bumper-spring.
Caoutchouc spring.
Car-spring.
Car and carriage spring.
Car-buffer spring.
Carriage-spring.
Chair-spring.
Check-spring.
Clock-spring.
Coil-spring.
Collar-spring.
Compensating-spring.
Cone-spring.
Corset-spring.
Cushion-spring.
Door-spring.
Door and gate spring.
Drill-spring.
Elastic spring.
Elliptic spring.
Friction-spring.
Furniture-spring.
Gate and door spring.
Gun-lock spring.
Hat-brim spring.
Helical spring.
Hoop-skirt spring.
India-rubber spring.
India-rubber and pneumatic spring.
Lady's dress-spring.
Lantern-spring.
Magnet-spring.
Mattress-spring.
Metallic spring.
Mill-spindle spring.
Omnibus-spring.
Pen-holder spring.
Piston-spring.
Plate-spring.
Pneumatic spring.
Rocking spring.
Rocking-chair spring.
Rubber spring.
Sash-spring.
Seat-spring.
Skirt-spring.
Spiral spring.
Steel spring.
Stop-motion spring.
Suspender-spring.
Thorough-brace spring.
Torsion-spring.
Truss-spring.
Upholstery-spring.
Vehicle-spring.
Vehicle stay-spring.
Volute spring.
Wagon-spring.
Wagon-seat spring.
Watch-spring.
Watch-case spring.

Invention.	Inventor.	Residence.	Date.	No.
Spring	H. A. Alden	Matteawan, N. Y	Nov. 8, 1864	44,925
Spring	E. U. Benedict	Chicago, Ill	Mar. 23, 1869	88,117
Spring	H. N. Black	Philadelphia, Pa	May 4, 1869	89,621
Spring	A. Bridges	New York, N. Y	Sept. 10, 1861	33,277
Spring	F. Cajar	New York, N. Y	Oct. 27, 1868	83,360
Spring	W. Evans	Eureka, Wis	Aug. 24, 1869	93,978
Spring	G. Hopson and J. H. Mason	Bridgeport, Conn	Sept. 7, 1869	94,603
Spring	W. Kroeger	Allegheny City, Pa	July 7, 1868	79,578
Spring	E. Lindner	New York, N. Y	Dec. 6, 1864	45,329
Spring	W. Pearson	Windsor Locks, Conn	Dec. 7, 1869	97,685
Spring	J. C. Plumer	Boston, Mass	Sept. 5, 1865	49,786
Spring	H. A. V. Post	Cincinnati, Ohio	Aug. 25, 1868	81,536
Spring	J. M. Schmidt	New Albany, Ind	Nov. 16, 1869	96,983
Spring	J. M. Schmidt	New Albany, Ind	Oct. 25, 1870	108,636
Spring	T. Shaw	Philadelphia, Pa	May 9, 1865	47,663
Spring	G. Sill	Wilkins, Pa	Feb. 2, 1869	86,598
Spring	G. S. Smith and B. S. Judson	Matteawan, N. Y	Sept. 3, 1867	68,578
Spring	J. Wayland	New York, N. Y	Apr. 26, 1870	102,340
Spring	J. Webster	Leicester, England	Nov. 4, 1851	8,496
Spring-adjuster	S. A. Alexander	Sunbury, Pa	May 30, 1871	115,410
Spring-adjuster	J. D. Van Hoevenburgh	Kingston, N. Y	Oct. 20, 1868	83,343
Spring and spring fabric	W. A. Le Row	Boston, Mass	Oct. 1, 1872	131,885
Spring-back chair	T. D. Judah	Sacramento, Cal	July 1, 1862	35,761
Spring-back chair	R. H. Staples	Lowell, Mass	Nov. 8, 1864	44,987
Spring-balances	J. M. H. A. Taurines	Paris, France	Oct. 28, 1862	36,867
Spring-bed	J. L. Whipple	Detroit, Mich	Oct. 25, 1859	25,924
Spring-bolt	O. H. Bush	Fall River, Mass	Aug. 5, 1851	8,286
Spring-bolt	W. E. Copeland	Fall River, Mass	Dec. 16, 1859	16,228
Spring-bolt	E. Doen	New Britain, Conn	July 20, 1858	20,940
Spring-bolt	W. E. Sparks	New Haven, Conn	Feb. 7, 1871	111,693
Spring-bolt	G. D. Whitmore	Boston, Mass	May 29, 1866	55,187
Spring bolt and clip	J. Deeble	Plantsville, Conn	Feb. 1, 1870	99,413
Spring-bolt catch	G. M. Morris	Roxbury, Mass	May 16, 1865	47,741
Spring-bolt for door and other locks	G. W. and E. B. Robinson	Boston, Mass	June 10, 1840	1,626
Spring-bolt for windows	M. Judd	New Haven, Conn	June 21, 1870	104,465
Spring-bolt for windows, door, &c	S. Trumball	Suffield, Conn	Apr. 23, 1816	....
Spring-bolts, Metal case for	E. J. Manville	Waterbury, Conn	Mar. 26, 1867	63,275
Spring brace, Elliptic	M. Barker	Humphrey, N. Y	Oct. 1, 1867	69,386
Spring catch-bolt	T. McCargar	Masonville, Iowa	July 5, 1870	105,104
Spring-chair	H. C. Smith	Washington, D. C	July 20, 1869	92,758
Spring-chair, Child's	M. Stephan	Canton, Ohio	Feb. 22, 1870	100,083
Spring-clasp	A. C. and W. Wurzbach	Memphis, Tenn., and New York, N. Y.	July 2, 1867	66,273
Spring clasp or button	F. E. Drake	Chicopee, Mass	June 14, 1864	43,152
Spring-coiling machine	J. W. Evans	New York, N. Y	Oct. 1, 1867	69,421
Spring-coiling machine	S. M. Hunter	Terryville, Conn	Apr. 2, 1867	63,521
Spring-coiling machinery	R. Vose and W. Tosach	New York, N. Y	Sept. 18, 1866	58,156
Spring-coupling	L. Rodenhausen	Philadelphia, Pa	Dec. 28, 1869	98,418
Spring coupling and brake, Internal	L. Mégy, J. De Echeverria, and F. Bazan.	Paris, France	Sept. 30, 1873	143,293
Spring coupling, Vehicle	H. P. Dolson	Highland, N. Y	May 21, 1872	126,879
Spring-curving die	A. Komp	New York, N. Y	Oct. 31, 1865	50,721
Spring-cushion	C. D. Flint	Philadelphia, Pa	Aug. 17, 1869	93,815
Spring-cushion	C. D. Flynt	New York, N. Y	Sept. 24, 1872	131,676
Spring-cushion for car-seats	W. B. Hatch	Elmira, N. Y	Oct. 18, 1870	108,477
Spring-cushion, mattress, &c	D. N. Selleg	Newburgh, N. Y	Nov. 4, 1873	144,362
Spring-dies in machines for making clinch-rings, Arrangement of.	G. M. Patten	Bath, Me	May 2, 1854	10,864
Spring-girth and saddle-tree, Elastic	P. Harry	Harrisonburgh, Va	Feb. 1, 1823	....
Spring-guard	J. S. Behn	Elizabeth Township, Pa	Apr. 26, 1870	102,209
Spring guard, Jointed	U. B. Kline	Reamstown, Pa	June 7, 1870	104,039

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Invention.	Inventor.	Residence.	Date.	No.
Spring-heads, Manufacture of	G. Hopson	Bridgeport, Conn	June 27, 1871	116, 311
Spring-holder	D. Witt	Hubbardston, Mass	Jan. 21, 1868	73, 559
Spring-hook for clothing	J. C. Loveland	Springfield, Vt	Nov. 20, 1860	30, 683
Spring-keys, Machine for forming	M. Deering	Syracuse, N. Y	Sept. 30, 1873	143, 226
Spring-lock	A. M. Smith	Brooklyn, N. Y	Jan. 8, 1867	61, 025
Spring-lock for coach and railway-car doors, &c	P. Alverson	New Haven, Conn	Apr. 2, 1838	666
Spring lock, Spiral	N. Read	Belfast, Me	Mar. 31, 1823	....
Spring-manufacture	J. F. Dubber	Brooklyn, N. Y	Dec. 4, 1866	60, 157
Spring-motor	R. Grimm	New York, N. Y	Feb. 1, 1870	99, 340
Spring-plate washer	F. R. Gridley	Saint Paul, Minn	Apr. 22, 1873	138, 149
Spring-plates, Device for preparing	J. B. Cleveland	Hackensack, N. J	Aug. 20, 1867	67, 954
Spring-plates, Machine for setting, fitting, and tempering.	J. B. Cleveland and H. C. Guilderslein.	Hackensack, N. J	July 13, 1869	92, 424
Spring-points, Machine for drawing	E. J. Homer	Wilmington, Del	Nov. 15, 1864	45, 041
Spring-power	T. Ebeling	San Francisco, Cal	Nov. 25, 1873	144, 894
Spring-power	A. C. Hallam and J. W. McKee	Brooklyn, E. D., N. Y	Feb. 8, 1870	99, 669
Spring-power, Mode of applying	G. W. Morgan	Prattsburgh, N. Y	Mar. 15, 1859	23, 260
Spring rake-teeth	L. Baker	Newbury, N. H	May 8, 1849	6, 424
Spring-seat	J. W. Blakeney	New York, N. Y	Sept. 12, 1871	118, 782
Spring-seat	L. W. Fillebrown, jr	Wayne, Me	July 10, 1866	56, 200
Spring-seat	D. F. Haasz	Philadelphia, Pa	May 3, 1870	102, 678
Spring-seat	C. H. Hudson	New York, N. Y	Mar. 9, 1869	87, 675
Spring-seat	C. H. Lathrop and J. M. Fowles	Jersey City, N. J	Aug. 27, 1872	130, 922
Spring-seat	J. I. Mabbett	Titusville, Pa	July 30, 1867	67, 326
Spring-seat	C. B. Smith	Springfield, Ill	Oct. 6, 1868	82, 760
Spring-seat	J. L. Whipple	Detroit, Mich	June 9, 1868	78, 705
Spring seat and bed	J. P. Chamberlin	North Abington, Mass	July 16, 1872	129, 098
Spring seat and bed-bottom	M. Flanigan	Detroit, Mich	Apr. 26, 1870	102, 386
Spring-seat for carriages	J. Werntz	Bourbon, Ind	Nov. 26, 1867	71, 563
Spring-seat for chairs, cars, carriages, &c	J. D. Bonney	Pembroke, Mass	Aug. 31, 1869	94, 179
Spring-seat for chairs, wagons, cars, &c	W. Carr	Saint Louis, Mo	May 4, 1869	89, 736
Spring-seat for furniture or cars	M. G. Briggs	Boston, Mass	Oct. 22, 1872	132, 350
Spring-seat for vehicles	G. W. Diller	Odel, Ill	Aug. 16, 1870	106, 338
Spring-seat for vehicles	W. Hughes	Brandon, Wis	Oct. 8, 1867	69, 565
Spring-seat for vehicles	H. W. Mapes	Ripon, Wis	Feb. 26, 1867	62, 350
Spring-seats for wheeled vehicles	E. F. Dunaway	Cincinnati, Ohio	July 25, 1871	117, 892
Spring-tension-regulator	T. Silver	New York, N. Y	Mar. 8, 1864	41, 868
Spring-testing machine	G. Hopsen	Bridgeport, Conn	Dec. 7, 1869	97, 510
Spring to cushion, Apparatus for applying	E. F. Johns	Philadelphia, Pa	Feb. 26, 1867	62, 340
Spring-wagon seat	J. I. Bear	Decatur, Ill	Aug. 31, 1869	94, 275
Spring-washer and safety-nut	A. V. B. Orr	Steeleville, Pa	Mar. 17, 1868	75, 643
Spring-wire lock	J. Baker	New Bedford, Mass	Oct. 1, 1830	....
Springs, Hardening	G. G. Crowell	Lime Rock, Conn	Oct. 23, 1866	58, 990
Springs, Machine for bending and setting	J. Evans	New Haven, Conn	Feb. 22, 1859	23, 018
Springs, Machine for coiling	J. Freeland and D. Ward	New York, N. Y	Mar. 10, 1868	75, 405
Springs, Machine for coiling	F. W. Rhinelander and J. L. Hornig.	New York, N. Y., and Jersey City, N. J.	Jan. 9, 1872	122, 523
Springs, Machinery for coiling	G. L. Turner	New York, N. Y	May 23, 1865	47, 882
Springs, Machine for testing the strength of	S. H. Hartman	Pittsburgh, Pa	July 6, 1858	20, 792
Springs, Manufacture of	W. Evans	Philadelphia, Pa	Nov. 26, 1872	133, 424
Springs, Setting	D. C. Andrews	Westmoreland, N. Y	Sept. 6, 1833	....
Springs, Tempering	W. Barnes	Bristol, Conn	May 28, 1867	65, 045
Springs, Tempering	B. Whysall and J. Porritt	Port Jervis, N. Y	Sept. 11, 1866	58, 031
Springs, Templet for bending	J. Gatchell	Rahway, N. J	Apr. 6, 1869	88, 624
Sprinkler: *See* Clothes-sprinkler. Clothes and flower sprinkler. Garden-sprinkler. Hose-sprinkler. Lawn-sprinkler. Portable sprinkler. Pump-sprinkler. Rose-head sprinkler. Street-sprinkler.				
Sprinkler	W. R. Worden	New Haven, Conn	Mar. 17, 1868	75, 717
Sprinkler and dredge	G. Jones	New Haven, Conn	June 9, 1868	78, 805
Sprinkler and dredger	J. M. Keep and S. R. Dummer	New York, N. Y	July 3, 1866	56, 063
Sprinkler for powdered substances	J. M. Keep	New York, N. Y	Nov. 6, 1866	59, 406
Sprinkling-can	H. and A. Kaiser	Columbus, Ohio	July 6, 1869	92, 194
Sprinkling-pot	W. L. Fish	Springfield, Mass	Jan. 4, 1870	98, 481
Spur	S. Wehrly	San Francisco, Cal	July 7, 1868	79, 793
Spur	S. Wehrly	San Francisco, Cal	June 9, 1868	78, 763
Spur	T. Townsend	Brooklyn, N. Y	Mar. 10, 1863	37, 880
Spur	C. C. Remhardt	Baltimore, Md	June 24, 1843	3, 142
Spur	H. Fellows	Bloomington, Ind	Mar. 28, 1870	113, 152
Spur	J. S. Ewbank	New York, N. Y	Jan. 30, 1855	12, 338
Spur	B. A. Davis	Petersburgh, Va	Nov. 26, 1867	71, 462
Spur	S. Craig	Philadelphia, Pa	Dec. 28, 1869	98, 935
Spur	J. C. Bohn	Allegheny City, Pa	June 27, 1871	116, 404
Spur and creeper, Combined	F. Mehrman	Fountain City, Wis	Sept. 8, 1868	81, 925
Spur-carrier, boot-drawer, and pantaloon-guard, Combined.	E. P. Watson	New York, N. Y	Jan. 3, 1865	45, 776
Spur for excelsior machine	J. A. Folsom	South Bend, Ind	Aug. 10, 1869	93, 428
Spur, Horseman's	T. Garrick	Providence, R. I	Aug. 11, 1863	39, 477
Spur, Riding	A. H. Langholz	Chicago, Ill	June 30, 1863	39, 106
Spur, Spring	A. S. Hudson	Sterling, Ill	June 3, 1862	35, 448
Spur-wheel	C. F. Woodruff	Newbern, Tenn	May 5, 1868	77, 700
Spur-wheel	C. F. Woodruff	Newbern, Tenn	Sept. 8, 1868	82, 054
Spy-glass, Adjustment	A. V. Rider	New York, N. Y	May 14, 1872	126, 838
Square	J. Morss	Philadelphia, Pa	July 30, 1867	67, 338
Square, Adjustable	K. Steen	Rochester, N. Y	May 16, 1871	114, 986
Square, Adjustable	S. F. Wesner	Camden, N. J	Dec. 20, 1870	110, 316
Square, Adjustable center	W. H. Brock	Bridgeport, Conn	May 4, 1869	89, 625
Square, Adjustable try	L. Bailey	New Britain, Conn	May 9, 1871	114, 634
Square, Adjustable try	C. A. Schaeffer	Chicago, Ill	June 10, 1873	139, 821
Square and bevel, Adjustable	E. B. Foster and J. G. Witt	Elmira, N. Y	Oct. 13, 1868	82, 933
Square and bevel, Combined	G. A. Shelley	Madison, Conn	Apr. 5, 1864	42, 230
Square and bevel, Combined	H. G. Taylor	Port Hope, Canada	June 9, 1868	78, 770
Square and bevel, Combined try	C. Winterbottom	Philadelphia, Pa	June 29, 1869	91, 892
Square and bevel, Try	S. N. Batchelder	Prairie du Chien, Wis	Dec. 10, 1867	71, 953
Square and calipers, Combined	C. W. Guerrant	Leaksville, N. C	June 2, 1868	78, 591
Square and calipers, Combined	J. Potts	Milwaukee, Wis	Dec. 21, 1869	98, 106

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Square and calipers, Sliding	L. L. Lamb	Fitchburgh, Mass	Feb. 15, 1870	99, 917
Square and gage, Combined	T. C. Hendry	Union Point, Ga	Feb. 11, 1868	74, 356
Square and level, Combined	G. L. Chamberlin	Marietta, Ohio	Jan. 1, 1867	60, 690
Square and level, Try	H. L. Buckwalter	Limerick Township, Pa	Nov. 1, 1870	108, 875
Square and miter	W. S. Winterbottom	Philadelphia, Pa	June 23, 1868	79, 175
Square and other prismatic boxes, &c., Method of removing.	S. D. Williamson	Anderson, Ohio	Feb. 4, 1843	2, 945
Square and triangle, Draftsman's	A. V. Benoit	New York, N. Y	Oct. 12, 1869	95, 759
Square, Bevel	W. T. Fisher	Lenoir's, Tenn	June 23, 1868	79, 062
Square, Bevel	C. O. Hansen	Memphis, Tenn	June 23, 1868	79, 069
Square, bevel, plumb, and gage, Combined	M. M. Wilson	Elwood, N. J	May 2, 1871	114, 378
Square, calipers, &c., Combined try	W. J. Linton	Detroit, Mich	Oct. 5, 1869	95, 495
Square, Carpenter's	J. Hathen	Philadelphia, Pa	June 26, 1860	28, 859
Square, Carpenter's	O. T. Hayes	Hastings, Minn	Jan. 29, 1867	61, 539
Square, Carpenter's	O. H. P. Robinson	Bellport, N. Y	Nov. 12, 1867	70, 901
Square, Center	M. J. Trowbridge	Cazenovia, N. Y	June 15, 1869	91, 385
Square, Centering	G. W. Brooks	Clinton, Mass	Oct. 13, 1868	82, 917
Square, Combination	D. A. B. Bailey	Saint Johnsbury, Vt	June 11, 1867	65, 631
Square, Combination	H. N. Burr	Mount Gilead, Ohio	Sept. 14, 1869	94, 867
Square, Folding	J. T. Baker	Brooklyn, N. Y	June 18, 1872	128, 096
Square for finding the center of a circle, Center	N. Ames	Saugus, Mass	July 6, 1852	9, 089
Square-forging die	H. K. Jones	Kensington, Conn	June 4, 1872	127, 417
Square, Graduated bevel	S. E. Bickford and F. Flanders	Franklin, N. H	June 11, 1867	65, 532
Square, Joiner's	J. Iseman	Rosston, Pa	May 6, 1862	35, 159
Square-marking machine	C. S. Bement	Southington, Conn	Jan. 3, 1871	110, 623
Square, miter-square, and bevel, Combined	A. McKenzie	Boston, Mass	Apr. 21, 1857	17, 106
Square-necked bolts, Method of making	G. C. Bell	Buffalo, N. Y	Aug. 31, 1869	94, 276
Square, Pattern	N. W. Burnett	South Hadley, Mass	Feb. 11, 1868	74, 297
Square, protractor, level, &c., Combined	J. A. Littlefield	Randolph, Mass	Apr. 5, 1870	101, 477
Square, protractor, rule, bevel, plumb, and level, Combined.	C. J. Shoff	Osceola, Pa	Oct. 14, 1873	143, 595
Square, scale, level, and bevel	J. Shanklin	Parkersburgh, Va	Oct. 24, 1854	11, 841
Square, T-	A. Bronson	New York, N. Y	Sept. 18, 1866	58, 056
Square, Tailor's	D. Tierney	New York, N. Y	May 26, 1868	78, 338
Square to a right angle, Device for adjusting joiner's.	L. Yale, jr	Philadelphia, Pa	Oct. 19, 1858	21, 861
Square, Trial	J. Burt and A. M. Miller	Sturgis, Mich	July 23, 1867	66, 946
Square, Try	W. F. Arnold	Winthrop, Conn	Apr. 22, 1873	138, 113
Square, Try	L. Bailey	New Britain, Conn	Dec. 23, 1873	145, 715
Square, Try	W. H. Cooper	Lowell, Mass	Sept. 9, 1873	142, 557
Square, Try	J. E. Cowdery	Wheatland, Ind	Nov. 19, 1867	70, 966
Square, Try	H. Disston and J. Morss	Philadelphia, Pa	May 7, 1872	126, 527
Square, Try	N. Hamblin	Flatbush, N. Y	Oct. 29, 1867	70, 204
Square, Try	H. L. Ogden	Atkinson, Ill	Jan. 28, 1868	73, 828
Square, Try	W. Ross	Paducah, Ky	Aug. 11, 1868	81, 011
Square, Try	E. J. Toof	Fort Madison, Iowa	Apr. 21, 1868	77, 130
Square, Try	J. A. Traut	New Britain, Conn	Apr. 16, 1872	125, 858
Square, Try	J. Williams	Shelburne, Mass	Aug. 29, 1865	49, 670
Square, Trying	J. Richards	Columbus, Ohio	Jan. 26, 1864	41, 396
Square, Trying	T. W. Wisner	Osceola, Mich	Nov. 18, 1862	36, 977
Square, Universal	D. M. Moore	Windsor, Vt	May 10, 1870	102, 957
Squares, Adjustment for try	J. Whitney	Winchester, Mass	Aug. 11, 1857	17, 991
Squares, Attachments to carpenter's	J. Dalgliesh	Charlestown, Mass	Mar. 26, 1872	124, 887
Squares, Attachment to carpenter's	J. Hyman	Belvidere, N. J	Mar. 11, 1873	136, 653
Squares, Framing	W. Ripley	Edgartown, Mass	Jan. 11, 1859	22, 585
Squares, Graduating carpenter's	D. I. George and N. Millington	South Shaftsbury, Vt	Aug. 28, 1849	6, 684
Squares, Machine for figuring carpenter's	N. Millington	South Shaftsbury, Vt	Mar. 9, 1869	87, 580
Squares, Machine for figuring carpenter's	N. Millington and D. J. George	Shaftsbury, Vt	Oct. 18, 1853	10, 136
Squares, &c., Machine for graduating	C. S. Bement	Southington, Conn	June 14, 1870	104, 249
Squares, Machine for graduating carpenter's	H. K. Jones	Hartford, Conn	Aug. 10, 1869	93, 449
Squares, Machine for graduating carpenter's	N. Millington and D. J. George	Shaftsbury, Vt	Aug. 8, 1854	11, 489
Squares, Machine for graduating carpenter's	H. Wipple	Shaftsbury, Vt	Mar. 17, 1857	16, 857
Squares, Machine for indicating carpenter's	H. K. Jones	Kensington, Conn	Jan. 31, 1865	46, 191
Squares, Machine for making carpenter's	J. Essex	Bennington, Vt	Apr. 17, 1849	6, 332
Squares, Machine for making carpenter's	A. M. Healy and C. H. Raymond.	Berlin, Conn., and Woodstock, Vt.	Oct. 18, 1870	108, 479
Squares, Machine for making carpenter's	H. K. Jones	Kensington, Conn	Apr. 30, 1872	126, 307
Squares, Machine for stamping carpenter's	H. K. Jones	Kensington, Conn	Feb. 23, 1864	41, 742
Squares, Machine for stamping figures in carpenter's.	H. Whipple	Shaftsbury, Vt	Mar. 10, 1857	16, 817
Squares, Manufacture of metallic	S. Darling	Bangor, Me	Oct. 6, 1857	18, 327
Squares, Method of making carpenter's	H. K. Jones	Kensington, Conn	June 15, 1869	91, 449
Squeezers	J. Letzkus	Pittsburgh, Pa	June 12, 1866	55, 513
Squeezers, Metal	L. W. Lewis	Sharpsburgh, Pa	Dec. 29, 1868	85, 457
Stable-cleaner	T. F. Longaker	Philadelphia, Pa	Aug. 9, 1870	106, 181
Stable-cleaning device	S. Kepner	Pottstown, Pa	May 14, 1867	64, 772
Stable-cleaning machine	D. S. Bigler and W. N. McCracken.	Monaghan Township, Pa	Mar. 23, 1869	88, 119
Stable-cleaning machine	T. F. Longaker	Philadelphia, Pa	Mar. 15, 1870	100, 778
Stable-fixtures	S. S. Bent	Port Chester, N. Y	May 2, 1871	114, 392
Stable for horses, &c., Safety	W. E. McIntire	Salem, Mass	Sept. 18, 1860	30, 077
Stable-hook	G. W. Sanderson	Shirley, Mass	Nov. 16, 1869	96, 940
Stables, Crib for horses'	W. Croasdale	Hartsville, Pa	Sept. 29, 1857	18, 275
Stables, Releasing-apparatus for	A. Dehuff	York, Pa	Mar. 19, 1872	124, 668
Stables, Releasing-device for	E. B. Myers	York, Pa	Dec. 26, 1871	122, 188
Stables, &c., Automatic feed-crib for	E. B. Rich	South Boston, Mass	Apr. 20, 1869	89, 078
Stabling cows	P. Burke	Helena, N. Y	Oct. 9, 1860	30, 294
Stack-bottom and feed-rack, Combined	F. F. Fowler	Upper Sandusky, Ohio	Aug. 14, 1866	57, 115
Stack-cover	J. Bickhart	Harlan, Ind	May 19, 1863	38, 547
Stacker, Chaff and straw	W. H. Loomis	Fairfield, Iowa	Mar. 21, 1865	46, 918
Stacking agricultural products	C. W. Glover	Farm Ridge, Ill	Dec. 28, 1858	22, 473
Stacking agricultural products	J. Van Doren	Farm Ridge, Ill	Dec. 28, 1858	22, 475
Staff, Leveling	W. H. Robinson	Vermont, Ill	May 11, 1869	90, 025
Staff, Miller's	P. Brown and B. Brown	Houghton and Huntington, England.	July 27, 1869	92, 935
Staff, Miller's red	G. H. Carpenter	Warwick Township, Pa	Dec. 10, 1872	133, 696
Stage, Acoustic	T. Grob	San Francisco, Cal	Mar. 30, 1869	88, 384
Stage, Artisan's	W. B. Wait	South Reading, Mass	Sept. 8, 1863	39, 849

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Invention.	Inventor.	Residence.	Date.	No.
Stage-ceiling	J. W. Dunne	New York, N. Y	Apr. 4, 1871	113, 277
Stage-clamp	W. H. Seymour	Liverpool, N. Y	Feb. 20, 1866	52, 757
Stage, Climbing	L. J. Barker	East Machias, Me	Mar. 12, 1867	62, 806
Stage-machinery	G. W. Hinckley	San Francisco, Cal	July 16, 1872	129, 227
Stage-machinery	J. Schönberg	New York, N. Y	Feb. 13, 1872	123, 735
Stage-machinery	J. Schönberg	New York, N. Y	Apr. 8, 1873	137, 725
Stages and other carriages, Body of	J. Smith	Lancaster, Pa	Apr. 29, 1815	....
Stages, &c., Cloth for boot of	P. Laporte	Augusta County, Va	July 28, 1828	....
Stages, &c., Construction of mail	D. W. Eames	Watertown, N. Y	May 8, 1823	....
Staging	W. Arrouquier	Worcester, Mass	Oct. 9, 1866	58, 571
Staging	C. S. Burton	Seneca County, Ohio	Feb. 18, 1868	74, 665
Staging	J. E. Long	Norway, Me	Dec. 29, 1868	85, 314
Staging	D. Morrison	Portland, Me	June 16, 1868	78, 886
Staging	S. Sowle	New Albany, Ind	Sept. 3, 1867	68, 391
Staging-brackets, Arrangement of	J. B. Latham	Pœnixville, Conn	Apr. 7, 1857	16, 982
Staging-frame	H. Wood	Leverett, Mass	Feb. 11, 1868	74, 472
Staging, Portable	W. P. Goolman and S. Morris	Springtown, Ind	Sept. 19, 1854	11, 694
Staging-supporter for mechanics' use	A. Reynolds, jr	North Bridgewater, Mass	Apr. 17, 1860	27, 921
Staging-swing	E. Drury	Washington, Mass	Feb. 16, 1829	....
Stair and floor plate	P. W. Neefus	New York, N. Y	Nov. 29, 1870	109, 651
Stair and floor plate	P. W. Neefus	New York, N. Y	Feb. 28, 1871	112, 168
Stair-case	A. Eliaers	Boston, Mass	Jan. 13, 1857	16, 380
Stair-case and ladder, Folding	C. Monson	New Haven, Conn	Feb. 4, 1862	34, 314
Stair-cases in buildings, Manner of arranging	W. P. Gibbs	Boston, Mass	June 14, 1843	3, 133
Stair-cases, Illuminator for lighting	J. H. Ross	Baltimore, Md	June 24, 1808	....
Stair-cover	M. McGeviran	New York, N. Y	Nov. 5, 1872	132, 727
Stair-pad	E. H. Bailey	Brooklyn, N. Y	Sept. 19, 1871	119, 105
Stair-pad, Elastic	T. J. Mayall	Roxbury, Mass	Oct. 12, 1858	21, 799
Stair-plate, Metallic and elastic	P. W. Neefus	New York, N. Y	Nov. 29, 1870	109, 649
Stair-rail bracket	J. C. Kelley	Boston, Mass	May 21, 1872	127, 066
Stair-rail-jointing machine	J. B. Margeson	Lynn, Mass	Nov. 1, 1870	108, 803
Stair-rail-molding machine	J. B. Margeson	Swampscott, Mass	Nov. 11, 1873	144, 4[illegible]2
Stair-rails, Apparatus for laying out	A. Schollars	Leavenworth, Kans	Dec. 8, 1869	97, 767
Stair-rails, Gage for	C. M. Swany	Richmond, Ind	July 10, 1855	13, 237
Stair-rails, Trammel for	G. Hoover	Richmond, Ind	Mar. 10, 1868	75, 423
Stair railings, Instrument for drawing the curve of circular.	G. S. Stewart	Meadville, Pa	Sept. 1, 1857	18, 110
Stair-railings, Instrument for laying out	A. Clow	Erie, Pa	July 16, 1867	66, 796
Stair-rod	H. J. Burr	Bloomfield, Conn	Feb. 2, 1869	86, 357
Stair-rod	W. M. Clayton	New York, N. Y	Mar. 15, 1870	100, 858
Stair-rod	W. B. Gould	New York, N. Y	Feb. 12, 1867	61, 027
Stair-rod	W. B. Gould	New York, N. Y	Mar. 9, 1869	87, 662
Stair-rod	S. Hiler	New York, N. Y	Oct. 26, 1869	96, 111
Stair-rod	H. M. Hoover	New York, N. Y	Aug. 8, 1865	49, 270
Stair-rod	H. Iversen and D. Acker	New York, N. Y	Oct. 5, 1869	95, [illegible]89
Stair-rod	M. Krickl	New York, N. Y	Apr. 13, 1869	88, 966
Stair-rod	S. C. Lane	Philadelphia, Pa	Nov. 15, 1864	45, 053
Stair-rod	H. C. Marston	New York, N. Y	Dec. 5, 1871	121, 641
Stair-rod	W. T. Mersereau	Newark, N. J	July 18, 1865	48, 825
Stair-rod	W. T. Mersereau	Newark, N. J	Jan. 19, 1869	86, 092
Stair-rod	W. T. Mersereau	Orange, N. J	Oct. 4, 1870	107, 941
Stair-rod	P. Miles	New York, N. Y	Dec. 10, 1872	133, 876
Stair-rod	W. A. Morse	Philadelphia, Pa	May 7, 1867	64, 440
Stair-rod	E. Rath	New York, N. Y	Aug. 22, 1871	118, 271
Stair-rod	E. Rath	Hoboken, N. J	Apr. 9, 1872	125, 615
Stair-rod	G. W. Rogers	New York, N. Y	Aug. 10, 1869	93, 479
Stair-rod	T. Sargeant	Williamsburgh, N. Y	Dec. 1, 1868	84, 584
Stair-rod	E. Schlichting	New York, N. Y	July 16, 1872	129, 062
Stair-rod	A. Shipley	Newark, N. J	Mar. 20, 1866	53, 381
Stair-rod	E. J. Smith	Washington, D. C	Nov. 28, 1871	121, 431
Stair-rod	E. J. Smith	Washington, D. C	May 6, 1873	138, 704
Stair-rod	C. E. Stearns	Boston, Mass	July 16, 1867	66, [illegible]03
Stair-rod	J. Stuehler	Brooklyn, N. Y	Nov. 23, 1869	97, 132
Stair-rod	H. Uhry	New York, N. Y	Feb. 9, 1869	86, 715
Stair-rod	H. Uhry	New York, N. Y	Feb. 9, 1869	86, 716
Stair-rod	H. Uhry	New York, N. Y	Feb. 9, 1869	86, 884
Stair-rod	H. Uhry	New York, N. Y	Apr. 13, 1869	88, 993
Stair-rod	H. Uhry	New York, N. Y	Apr. 13, 1869	88, 994
Stair-rod	H. Uhry	New York, N. Y	Apr. 13, 1869	88, 995
Stair-rod	H. Uhry	New York, N. Y	July 13, 1869	92, 670
Stair-rod	H. Uhry	New York, N. Y	July 13, 1869	92, 671
Stair-rod	H. Uhry	New York, N. Y	July 13, 1869	92, 672
Stair-rod	H. Uhry	New York, N. Y	Mar. 22, 1870	101, 063
Stair-rod	H. Uhry	New York, N. Y	Mar. 22, 1870	101, 064
Stair-rod	J. Wilks	Trenton, N. J	June 20, 1871	116, 249
Stair-rod and fastening	E. H. Boswell	Philadelphia, Pa	May 15, 1866	54, 677
Stair-rod fastener	W. R. Anderson	New York, N. Y	Jan. 21, 1868	73, 563
Stair-rod fastener	W. B. Gould	Montrose, N. J	Nov. 18, 1873	144, 758
Stair-rod fastener	W. B. Gould	Montrose, N. J	Nov. 18, 1873	144, 759
Stair-rod fastening	E. A. Goodes	Philadelphia, Pa	Oct. 20, 1863	40, 339
Stair-rod fastening	R. Hutchinson	Newark, N. J	Jan. 17, 1871	110, 975
Stair-rod fastening	H. Jackson	Brooklyn, N. Y	Apr. 25, 1865	47, 422
Stair-rod fastening	W. T. Mersereau	Newark, N. J	Nov. 20, 1866	59, 921
Stair-rod fastening	E. Rath	New York, N. Y	Jan. 24, 1871	111, 249
Stair-rod holder	E. C. Wilson	Peekskill, N. Y	May 20, 1862	35, 345
Stair-rods, &c., Mode of ornamenting	W. M. Marshall	Philadelphia, Pa	July 14, 1868	79, 846
Stair-steps, Arrangement of	C. Robinson	Cambridgeport, Mass	May 5, 1857	17, 234
Stair-sweeper	F. H. Moore	Boston, Mass	Dec. 14, 1858	22, 301
Stair-tread, Facing for	O. Snow	Meriden, Conn	Mar. 13, 1866	53, 193
Stairs	N. Adkins	Danbury, Conn	Nov. 26, 1867	71, 436
Stairs	J. Koch	Brookline, Mass	Dec. 24, 1867	72, 507
Stairs	W. W. Page	Troy, N. Y	Nov. 19, 1867	71, 049
Stairs	N. Poulson	New York, N. Y	July 6, 1869	92, 356
Stairs, Circular, elliptical, or conic	E. B. Smith	Buffalo, N. Y	Nov. 15, 1832	....
Stairs, Construction of iron	B. F. Miller	New York, N. Y	Oct. 23, 1849	6, 810
Stairs, Hand-rail for	J. M. Bull	Sidney, Ohio	Jan. 23, 1855	12, 300
Stairs, Revolving	N. Ames	Saugus, Mass	Aug. 9, 1859	25, 076
Stairs, Spiral	W. Widmayer	New York, N. Y	Feb. 27, 1866	52, 922

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Invention.	Inventor.	Residence.	Date.	No.
Stairs, Spiral or winding	W. J. Kein	New York, N. Y	July 14, 1868	79,985
Stairway	C. S. Close	Philadelphia, Pa	Feb. 7, 1871	111,610
Stake-puller	R. Knott	Suisun City, Cal	May 25, 1869	90,559
Stalk and cane puller	Z. B. Sims	Bonham, Tex	Aug. 31, 1869	94,354
Stalk and kindling-wood cutter	G. B. Hamlin	Willimantic, Conn	Aug. 16, 1870	106,483
Stalk and root cutter	F. Fidler	Batavia, N. Y	Aug. 28, 1860	29,775
Stalk and weed cutter and land-roller combined	W. Leslie	Fort Madison, Iowa	Oct. 25, 1870	108,712
Stalk-binding apparatus	S. Kuh	Jefferson, Iowa	Dec. 23, 1873	145,739
Stalk-chopper	A. Richards	Anderson, Tex	May 21, 1872	126,986
Stalk-chopper	C. L. Spielman	Blandinsville, Ill	Feb. 18, 1873	136,106
Stalk chopper, Cotton and corn	J. H. Gatling	Murfreesborough, N. C	Apr. 25, 1871	114,127
Stalk-crusher	M. D. Cheek	Memphis, Tenn	Oct. 15, 1872	132,252
Stalk-cutter	V. Ansley and J. W. Weaver	Morrison, Ill	Aug. 26, 1873	142,187
Stalk-cutter	J. and G. Armstrong	Elmira, Ill	Apr. 1, 1873	137,281
Stalk-cutter	J. Babcock, J. F. Stilson, and J. C. Leidy.	Galesburgh, Ill	May 2, 1871	114,252
Stalk-cutter	R. A. Boulware	Doniphan, Kans	Oct. 26, 1869	96,079
Stalk-cutter	M. Caywood	Peoria, Ill	Sept. 27, 1870	107,662
Stalk-cutter	J. A. Dexter	Augusta, Ill	Apr. 16, 1867	63,868
Stalk-cutter	R. F. M. Flack	Columbus City, Iowa	Aug. 6, 1872	130,204
Stalk-cutter	B. R. Harness	Schooley's Station, Ohio	July 1, 1873	140,413
Stalk-cutter	J. Lee	Galesburgh, Ill	Feb. 1, 1870	99,328
Stalk-cutter	J. C. Leidy	Galesburgh, Ill	Aug. 20, 1872	130,581
Stalk-cutter	M. K. Lewis and J. Munger	Malcom, Iowa	May 2, 1871	114,308
Stalk-cutter	S. B. Miller	Stanwood, Iowa	Apr. 8, 1873	137,707
Stalk cutter	R. B. and J. R. Parks	Neponset, Ill	Jan. 12, 1869	85,847
Stalk-cutter	R. B. and J. R. Parks	Princeton, Ill	Feb. 13, 1872	123,641
Stalk-cutter	J. M. Savill	Canton, Ill	July 16, 1872	129,427
Stalk-cutter	L. Soniat	Jefferson Parish, La	Sept. 24, 1872	131,574
Stalk-cutter	L. Stadler, W. H. Staats, and A. C. Schwanke.	Bowen and La Prairie, Ill.	Aug. 10, 1869	93,493
Stalk-cutter	E. A. Wright	Fort Madison, Iowa	Aug. 15, 1871	118,175
Stalk-cutter and husker	J. D., C. B., and L. N. Rice and E. Briggs, jr.	Detroit, Mich	Sept. 29, 1868	82,553
Stalk-cutter and land-roller, Combined	J. Price	Columbia County, Fla	Mar. 18, 1873	136,866
Stalk-cutting machine	G. W. Cole	Canton, Ill	Sept. 4, 1866	57,678
Stalk-cutting machine	M. E. Rudasill	Shelby, N. C	Oct. 23, 1860	30,501
Stalk-cutting machine	J. B. Ryder	Wapello, Iowa	June 20, 1865	48,312
Stalk-cutting machine	W. F. Starnes	Macomb, Ill	Oct. 16, 1866	58,909
Stalk-cutting machine	R. Wright	Houston, Tex	May 4, 1869	89,824
Stalk-puller	H. Buttenberg and J. L. Strong	Memphis, Tenn	May 9, 1871	114,526
Stalk-puller	W. E. Merriman	Akron, Ohio	Nov. 19, 1872	133,110
Stalk pulling and cutting machine	H. Snyder	Dayton, Ohio	Oct. 9, 1860	30,359
Stalks and stubble, Machine for cutting	G. W. Wilson	Galesburgh, Ill	Dec. 12, 1865	51,507
Stalks in the field, Machine for cutting	G. Pye and F. S. C. Souther	South Boston, Mass	Apr. 2, 1867	63,559
Stalks, weeds, &c., Device for turning down and burying.	S. Collins	Prescott, Wis	Feb. 18, 1868	74,666
Stall, Cattle	S. D. Stone	Warwick, R. I	Mar. 17, 1868	75,595
Stall, Cattle	H. Tarbox, 2d	Tremont, N. Y	July 15, 1856	15,350
Stall, Cattle and horse	L. B. F. Zitkor	Portland, Me	Dec. 17, 1867	72,257
Stall-floor	W. M. Bleakley	Verplank, N. Y	June 8, 1869	90,986
Stall-floor	Z. G. Garlick	Otsego, N. Y	July 21, 1863	39,283
Stall-floor	F. E. Hall	Bridgewater, Mass	Nov. 28, 1871	121,243
Stall floor, Horse	G. W. Gordon	Charlestown, Mass	June 4, 1872	127,477
Stall floor, Horse	J. Hollingsworth	Chicago, Ill	May 18, 1869	90,172
Stall for animals	O. Bolster	Worcester, Mass	Oct. 15, 1861	33,473
Stall for animals	S. S. Putnam	Dorchester, Mass	Sept. 17, 1867	69,022
Stall for feeding animals	S. H. Shaw	Attica, N. Y	May 10, 1870	102,874
Stall for horses on shipboard	S. Samuels	Brooklyn, N. Y	Feb. 22, 1859	23,045
Stall for horses, Portable	J. W. Adams	Rockville, Ind	Nov. 4, 1873	144,304
Stall for preventing cribbing	J. Kraus	Clarence, N. Y	July 26, 1870	105,814
Stall for steam-fire-engine houses, Horse	W. C. Davol, jr	Fall River, Mass	Oct. 28, 1873	144,068
Stall, Horse	S. S. Bent	Port Chester, N. Y	Jan. 31, 1871	111,436
Stall, Horse	D. M. Denison	Savannah, Ga	Apr. 4, 1871	113,637
Stall, Horse	A. Hosmer	Watertown, Mass	Oct. 6, 1868	82,838
Stall, Horse, &c	J. Jenne	Bethany, N. Y	July 24, 1855	13,312
Stall, Horse	J. W. Mackintire	Woburn, Mass	Jan. 14, 1862	34,152
Stall, Horse	J. Wilkinson	Baltimore, Md	Apr. 25, 1871	114,241
Stall, Market	J. McCandless	New York, N. Y	Aug. 1, 1871	117,633
Stall, Portable	D. P. and W. F. Leach	Franklin, Ind	Feb. 7, 1871	111,653
Stalls, Device for releasing animals from	W. Kloenne	New York, N. Y	Oct. 27, 1863	40,416
Stalls, Feeding-device for cattle	A. H. Maham	Hamden, N. Y	June 13, 1871	115,874
Stalls for horses, Mode of constructing	H. Eddy	North Bridgewater, Mass.	Jan. 6, 1857	16,357
Stammering, Instrument for cure of	R. Bates	Philadelphia, Pa	Sept. 30, 1851	8,394
Stamp, Adhesive postage and revenue	H. Loewenberg	New York, N. Y	Nov. 15, 1864	45,057
Stamp, Adhesive postal and revenue	A. C. Fletcher	New York, N. Y	Apr. 5, 1870	101,604
Stamp-affixer	R. P. Thian	Georgetown, D. C	Sept. 16, 1873	142,822
Stamp affixer and canceler	T. A. Slack	Peoria, Ill	July 9, 1867	66,528
Stamp affixer, Postage	E. B. Morgan	Paterson, N. J	Jan. 21, 1873	135,143
Stamp-affixing instrument	C. B. Sill	Wilkins, Pa	Nov. 17, 1868	84,223
Stamp and canceler, Hand	J. B. Secor	Chicago, Ill	Oct. 17, 1865	50,501
Stamp and die, Sheet-metal	W. D. Grimshaw	Newark, N. J	Dec. 1, 1868	84,625
Stamp and embossing-press, Hand	W. Burrows	New York, N. Y	Oct. 24, 1865	50,556
Stamp and label, Adhesive	F. Walker	New Orleans, La	June 4, 1872	127,663
Stamp and label sticker, Postage	C. Sellers	Philadelphia, Pa	June 16, 1857	17,587
Stamp-battery	G. D. Crocker	Virginia City, Nev	Oct. 25, 1870	108,570
Stamp-battery	J. W. Forbes	La Porte, Ind	May 30, 1871	115,295
Stamp, Branding	A. M. Darrell	Washington, D. C	Jan. 31, 1871	111,436
Stamp, Branding	J. W. Dodge	Malden, Mass	Mar. 11, 1873	136,710
Stamp, Butter	N. L. Janney	Philadelphia, Pa	Oct. 22, 1864	70,095
Stamp-canceler	F. W. Brooks	New York, N. Y	June 28, 1870	104,701
Stamp-canceler	F. W. Brooks	New York, N. Y	Jan. 17, 1871	111,033
Stamp-canceler	F. W. Brooks	New York, N. Y	June 6, 1871	115,633
Stamp-canceler	H. W. Dopp	Buffalo, N. Y	July 5, 1870	105,052
Stamp-canceler	D. E. Eaton	Boston, Mass	Dec. 12, 1871	121,765
Stamp-canceler	C. C. Egerton	Washington, D. C	Jan. 17, 1871	110,962
Stamp-canceler	J. Goldsborough	Philadelphia, Pa	Dec. 20, 1870	110,247
Stamp-canceler	J. Goldsborough	Philadelphia, Pa	June 27, 1871	116,434

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Stamp-canceler	J. Goldsborongh	Philadelphia, Pa	Nov. 26, 1872	133, 435
Stamp-canceler	E. E. Hendrick	Carbondale, Pa	June 14, 1870	104, 148
Stamp-canceler	R. T. Osgood	Orland, Me	Feb. 16, 1869	87, 060
Stamp-canceler	A. D. Owen	Thornton, Ind	Feb. 14, 1871	111, 773
Stamp-canceler	G. B. Rogers	Boston, Mass	Aug. 30, 1870	106, 963
Stamp-canceler	R. H. Rogers	New York, N. Y	Dec. 8, 1863	40, 857
Stamp-canceler	J. E. Thomson	Buffalo, N. Y	Dec. 3, 1872	133, 604
Stamp-canceler, Hand	L. B Van Kleeck	New York, N. Y	May 3, 1870	102, 734
Stamp canceler, Revenue	F. W. Brooks	New York, N. Y	Dec. 19, 1871	121, 986
Stamp-canceler, Rotary	W. Schacht	Brooklyn, N. Y	June 24, 1873	140, 219
Stamp, Canceling	C. E. Donnellan	Indianapolis, Ind	Nov. 15, 1870	109, 302
Stamp, Canceling	J. W. Foster	Washington, D. C	Jan. 3, 1865	45, 708
Stamp, Canceling	M. P. Norton	Troy, N. Y	Aug. 15, 1865	49, 432
Stamp, Canceling	G. G. Noyes	Worcester, Mass	Oct. 25, 1870	108, 619
Stamp, Canceling	W. A. Wheeler	New York, N. Y	Feb. 22, 1870	100, 225
Stamp canceling and severing machine, Revenue	P. W. Brown and J. Delarue	Richmond, Va	Aug. 29, 1871	118, 511
Stamp-canceling brand	A. D. Owen	Thorntown, Ind	June 7, 1870	103, 919
Stamp-canceling device	J. C. Gaston	Cincinnati, Ohio	Apr. 20, 1869	89, 213
Stamp-canceling machine, Post-mark	C. E. Donnellan	Indianapolis, Ind	Dec. 6, 1870	109, 882
Stamp canceling, Postage	W. Raynor	Brooklyn, N. Y	Oct. 27, 1863	40, 430
Stamp canceling, Postage and revenue	T. S. Hudson	East Cambridge, Mass	Nov. 21, 1865	51, 053
Stamp-canceling press	F. Hovey	New York, N. Y	July 17, 1866	56, 498
Stamp for barrels, Revenue	E. A. Locke	Boston, Mass	Aug. 3, 1869	93, 391
Stamp for cigars, Revenue	A. Atwood	New York, N. Y	Sept. 21, 1869	94, 934
Stamp for cigars, Revenue	C. F. Martorana	Baltimore, Md	Sept. 24, 1872	131, 694
Stamp for cutting checks, bonds, &c., Hand	J. F. Cory and J. H. Brown	Brooklyn, E. D., N. Y	May 17, 1870	103, 146
Stamp for cutting out figures	E. J. Fischer	Philadelphia, Pa	May 6, 1873	138, 559
Stamp for fruit-cans	J. Kinzer	Pittsburgh, Pa	May 17, 1870	103, 056
Stamp for liquor-barrels, Revenue	G. W. Bishop	Baltimore, Md	Oct. 20, 1868	83, 127
Stamp for malleable metal	J. Stroop	Landisburgh, Pa	July 17, 1830	....
Stamp for marking sheep	A. Todd, jr	Pultneyville, N. Y	Dec. 11, 1866	60, 439
Stamp for post and other offices	B. Chambers	Washington City	Sept. 9, 1835	....
Stamp for post-offices, Hand	M. P. Norton	Troy, N. Y	Jan. 14, 1862	34, 184
Stamp for printing, Hand	D. H. Chamberlain	West Roxbury, Mass	Jan. 31, 1865	46, 076
Stamp, Fountain hand	F. J. Coutant	New York, N. Y	Sept. 9, 1873	142, 617
Stamp, Government revenue	G. W. Bowlsby	Monroe, Mich	Mar. 31, 1868	76, 153
Stamp-guide	H. Bolthoff	Central City, Colo	Dec. 19, 1871	121, 985
Stamp, Hand	N. Ames	Saugus, Mass	Dec. 2, 1856	16, 167
Stamp, Hand	F. L. Bailey	Boston, Mass	Mar. 19, 1872	124, 655
Stamp, Hand	L. Bailey	Winchester, Mass	Mar. 3, 1857	16, 712
Stamp, Hand	E. H. Barney	Springfield, Mass	Aug. 1, 1871	117, 593
Stamp, Hand	E. E. Barrett	Salem, Mass	Dec. 29, 1857	18, 947
Stamp, Hand	V. Beaumont	New York, N. Y	Sept. 22, 1863	40, 074
Stamp, Hand	A. Bencini	Salisbury, N. C	Aug. 13, 1872	130, 354
Stamp, Hand	J. H. Berret	New York, N. Y	Feb. 18, 1868	74, 657
Stamp, Hand	S. B. Brague	New York, N. Y	Feb. 20, 1866	52, 666
Stamp, Hand	S. B. Brague and W. S. Starr	New York, N. Y	Feb. 20, 1866	52, 668
Stamp, Hand	D. H. Chamberlain	West Roxbury, Mass	Aug. 1, 1865	49, 084
Stamp, Hand	D. H. Chamberlain	West Roxbury, Mass	Jan. 22, 1867	61, 396
Stamp, Hand	D. H. Chamberlain	West Roxbury, Mass	July 9, 1867	66, 560
Stamp, Hand	D. H. Chamberlain	West Roxbury, Mass	July 9, 1867	66, 561
Stamp, Hand	E. D. Chamberlain	New York, N. Y	July 6, 1869	92, 264
Stamp, Hand	E. D. Chamberlain	New York, N. Y	Apr. 16, 1872	125, 788
Stamp, Hand	N. L. Chamberlain	West Roxbury, Mass	Mar. 19, 1867	63, 017
Stamp, Hand	N. L. Chamberlain	Boston, Mass	Oct. 20, 1868	83, 253
Stamp, Hand	W. F. Corne	New York, N. Y	Aug. 23, 1870	106, 665
Stamp, Hand	A. Fessler	Vienna, Austria	June 2, 1868	78, 446
Stamp, Hand	D. W. Fish	Brooklyn, N. Y	Dec. 6, 1870	109, 814
Stamp, Hand	L. H. Gano	New York, N. Y	Nov. 3, 1868	83, 704
Stamp, Hand	J. C. Gaston	Cincinnati, Ohio	June 21, 1870	104, 444
Stamp, Hand	E. S. Goodman	New Orleans, La	Dec. 13, 1870	110, 031
Stamp, Hand	W. B. Gorham	Boston, Mass	Aug. 26, 1873	142, 099
Stamp, Hand	H. H. H. Grosskopf	Philadelphia, Pa	Oct. 18, 1870	108, 351
Stamp, Hand	C. W. Hackett	Elmira, N. Y	Sept. 23, 1856	15, 764
Stamp, Hand	J., jr., and E. Harris	Boston, Mass	July 24, 1855	13, 308
Stamp, Hand	F. J. Hart	New Haven, Conn	June 22, 1869	91, 741
Stamp, Hand	J. E. Higgins, C. Merriam, and C. O. Luce	Brandon, Vt	July 20, 1869	92, 825
Stamp, Hand	B. B. Hill	Chicopee, Conn	Nov. 6, 1866	59, 395
Stamp, Hand	B. B. Hill	Springfield, Mass	Nov. 28, 1871	121, 286
Stamp, Hand	G. J. Hill	Buffalo, N. Y	May 12, 1863	38, 535
Stamp, Hand	G. J. Hill	Buffalo, N. Y	Jan. 10, 1865	45, 893
Stamp, Hand	H. Holt	Winchester, Mass	Aug. 28, 1855	13, 495
Stamp, Hand	H. Holt	Winchester, Mass	Mar. 3, 1857	16, 731
Stamp, Hand	H. Holt	Brooklyn, N. Y	June 9, 1863	38, 864
Stamp, Hand	H. Holt	Brooklyn, N. Y	July 4, 1865	48, 624
Stamp, Hand	H. Holt and W. W. Secombe	New York, N. Y	Feb. 14, 1871	111, 844
Stamp, Hand	T. S. Hudson	East Cambridge, Mass	Apr. 30, 1867	64, 320
Stamp, Hand	T. S. Hudson	East Cambridge, Mass	July 27, 1869	93, 050
Stamp, Hand	T. S. Hudson and A. Hardy	East Cambridge, Mass	June 20, 1865	48, 358
Stamp, Hand	L. P. Jenks	Boston, Mass	May 17, 1864	42, 819
Stamp, Hand	A. Jones	Buffalo, N. Y	Oct. 31, 1865	50, 715
Stamp, Hand	L. Lehman	Buffalo, N. Y	July 5, 1870	104, 967
Stamp, Hand	W. B. Mason	Boston, Mass	Feb. 5, 1867	61, 843
Stamp, Hand	G. McClement	Philadelphia, Pa	Apr. 28, 1863	38, 315
Stamp, Hand	C. Merriam and C. O. Luce	Brandon, Vt	Mar. 24, 1868	75, 945
Stamp, Hand	D. W. Messer	Boston, Mass	Feb. 27, 1855	12, 468
Stamp, Hand	J. G. Moody	New York, N. Y	June 6, 1871	115, 763
Stamp, Hand	W. Morse and J. Hughes	Boston, Mass	July 13, 1858	20, 922
Stamp, Hand	A. L. Munson	New Haven, Conn	Apr. 5, 1870	101, 649
Stamp, Hand	M. P. Norton	Troy, N. Y	July 13, 1869	92, 688
Stamp, Hand	M. P. Norton	Troy, N. Y	Jan. 10, 1871	110, 864
Stamp, Hand	W. E. Osborn	Brooklyn, N. Y	Aug. 16, 1870	106, 328
Stamp, Hand	J. A. A. Post	New York, N. Y	Aug. 3, 1869	93, 345
Stamp, Hand	P. A. Ramsay	Boston, Mass	Feb. 10, 1857	16, 618
Stamp, Hand	T. J. W. Robertson	New York, N. Y	Sept. 22, 1857	18, 249
Stamp, Hand	G. Rost	Union Hill, N. J	Jan. 31, 1871	111, 386

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Stamp, Hand	G. H. Rountree	Milwaukee, Wis	Mar. 4, 1873	136, 458
Stamp, Hand	S. P. Ruggles	Boston, Mass	Sept. 23, 1851	8, 388
Stamp, Hand	S. P. Ruggles	Boston, Mass	Aug. 21, 1855	13, 470
Stamp, Hand	E. A. Russell	Hookset, N. H	Aug. 19, 1856	15, 574
Stamp, Hand	H. W. Safford	New York, N. Y	Oct. 4, 1870	107, 964
Stamp, Hand	A. Selkirk	Albany, N. Y	Aug. 25, 1868	81, 415
Stamp, Hand	J. Sloper	London, England	June 13, 1871	115, 989
Stamp, Hand	R. H. Smith	Springfield, Mass	Oct. 26, 1869	96, 162
Stamp, Hand	S. J. Smith	New York, N. Y	Aug. 15, 1865	49, 452
Stamp, Hand	E. Spencer	Saint Louis, Mo.	Aug. 5, 1862	36, 114
Stamp, Hand	C. G. Taft, jr	Norton, Mass	May 16, 1871	114, 879
Stamp, Hand	J. C. Tone and H. A. Clum	Rochester, N. Y	Nov. 2, 1869	96, 508
Stamp, Hand	S. S. Turner and C. and G. M. Stevens.	Westborough and Boston, Mass.	Aug. 8, 1871	117, 832
Stamp, Hand	J. Walters	Norfolk, Va	Mar. 21, 1871	112, 871
Stamp, Hand	J. M. Wilbur	Cleveland, Ohio	Nov. 19, 1867	71, 105
Stamp, Hand	G. E. Woodbury	Cambridge, Mass	Nov. 6, 1866	59, 497
Stamp, Hand	P. O. Wright	Oswego, N. Y	June 20, 1871	116, 132
Stamp, Hand	A. Zantzinger	Louisville, Ky	Nov. 29, 1870	109, 792
Stamp, Hand cance'ing	E. H. Thomas	Louisville, Ky	June 3, 1873	139, 486
Stamp, Hand dating	E. Bierstadt	Jersey City, N. J	July 6, 1869	92, 147
Stamp, Hand printing	B. B. Stanton	New York, N. Y	Apr. 6, 1858	19, 881
Stamp-handle	M. C. Bogia	Philadelphia, Pa	Feb. 16, 1864	41, 597
Stamp-holder	H. V. Dempster	Washington, D. C	Aug. 20, 1872	130, 783
Stamp-holder	J. G. Rogers	Van Buren County, Mich	Aug. 29, 1871	118, 488
Stamp-holder and inkstand, Combination of	P. Perry and J. Brooks	Charlestown and Newton, Mass.	Feb. 12, 1867	61, 950
Stamp holder, Currency and postage	S. V. Beckwith	Brooklyn, N. Y	June 3, 1873	139, 492
Stamp holder, Postage	G. C. Hatch	Calcutta, India	Nov. 14, 1871	120, 970
Stamp holder, Postage	J. Ropes	Ishpeming, Mich	Jan. 31, 1871	111, 385
Stamp, Letter	B. Chambers	Washington, D. C	Sept. 23, 1851	8, 384
Stamp, Marking	W. B. Mason	Boston, Mass	Dec. 18, 1866	60, 532
Stamp-mill	J. M. Crawford	Philadelphia, Pa	May 23, 1871	115, 172
Stamp-mill	G. R. Mitchell	Nevada, Colo	Jan. 14, 1868	73, 366
Stamp-mill	R. Uren and J. Walker	Houghton, Mich	June 16, 1868	79, 034
Stamp mill and crusher, Device for collecting the dust from.	J. Brodie	San Francisco, Cal	May 17, 1864	42, 743
Stamp-mill guide	C. A. H. Rice and A. J. Van Deren.	Central City, Colo	Sept. 21, 1869	95, 045
Stamp-moistener	J. M. Flagg	Providence, R. I	Jan. 28, 1868	73, 708
Stamp-moistener	H. A. Hoyt	Mott Haven, N. Y	Oct. 2, 1866	58, 4[illegible]0
Stamp, Numbering	D. Emonnot	New York, N. Y	May 29, 1866	55, 078
Stamp, Ore-crushing	H. I. Behrens	New York, N. Y	Oct. 10, 1865	50, 326
Stamp, Ore-crushing	E. Dart	New York, N. Y	Oct. 10, 1865	50, 342
Stamp, Pie	H. Marshall	Dracut, Mass	Feb. 24, 1863	37, 761
Stamp, Post-mark and canceling	M. P. Norton	Troy, N. Y	Dec. 16, 1862	37, 175
Stamp, Post-marking	M. P. Norton	Troy, N. Y	Aug. 9, 1859	25, 036
Stamp, Post-office	M. P. Norton	Troy, N. Y	Apr. 14, 1863	38, 175
Stamp, Post-office	J. Spear	Philadelphia, Pa	Feb. 14, 1860	27, 194
Stamp, Post-office	A. White	Templeton, Mass	Feb. 27, 1830	
Stamp, Post-office hammer	E. Miller	Janesville, Wis	Mar. 22, 1859	23, 307
Stamp, &c., Postage	G. W. Bowlsby	Monroe, Mich	Dec. 26, 1865	51, 782
Stamp, Postage	S. Carusi	Washington, D. C	Jan. 14, 1868	73, 296
Stamp, Postage	A. C. Fletcher	New York, N. Y	June 8, 1869	92, 108
Stamp, Postage	J. M. Sturgeon	New York, N. Y	June 23, 1868	79, 157
Stamp, Postage and revenue	S. W. Francis	New York, N. Y	June 27, 1865	48, 389
Stamp, Postage and revenue	E. Harmon	Washington, D. C	Feb. 9, 1864	41, 505
Stamp, Postage and revenue	M. K. Kellogg	Baltimore, Md	May 12, 1868	77, 887
Stamp, Postage and revenue	H. Loewenberg	New York, N. Y	Apr. 5, 1764	42, 207
Stamp, Postage and revenue	W. C. Wyckoff	Brooklyn, N. Y	Apr. 3, 1866	53, 724
Stamp, Printing	W. H. Elliot	Plattsburgh, N. Y	Feb. 10, 1857	16, 581
Stamp, Printing	W. H. Elliot	Plattsburgh, N. Y	Feb. 17, 1857	16, 641
Stamp protector, Revenue	R. M. Smith	Baltimore, Md	Nov. 7, 1871	120, 786
Stamp, Railway-ticket	E. Spencer	Saint Louis, Mo.	Feb. 11, 1862	34, 378
Stamp, Revenue	G. W. Bowlsby	Monroe, Mich	July 14, 1868	79, 806
Stamp, Revenue	R. F. Hunter	Staunton, Va	May 13, 1873	138, 891
Stamp, Revenue and postage	C. F. Steel	New York, N. Y	Feb. 16, 1869	86, 952
Stamp, Revenue and postal	L. Abraham	New York, N. Y	Apr. 26, 1870	102, 200
Stamp, Sealing-wax	J. H. Parsons	Quincy, Mich	July 2, 1867	66, 381
Stamp, Self-canceling postal and revenue	S. M. Clark	Washington, D. C	Dec. 21, 1869	98, 031
Stamp, Self-inking	N. Ames	Saugus, Mass	Apr. 1, 1856	14, 548
Stamp, Self-inking	J. D. Billings	Rutland, Vt	Mar. 10, 1863	37, 884
Stamp, Self-inking hand	L. M. H. Fromont	Paris, France	June 14, 18[illegible]	43, 165
Stamp, Self-inking hand	S. J. Hoggson	New Haven, Conn	Mar. 31, 1863	38, 041
Stamp, Self-inking hand	S. E. Pettee and E. G. Cobb	Mansfield and Foxborough, Mass.	May 11, 1858	20, 217
Stamp-wetting and pen-cleaning instrument	T. P. Marshall	Trenton, N. J	Dec. 24, 1867	72, 656
Stamp, &c., wetting apparatus	R. W. Sackett	Worcester, Mass	May 12, 1863	38, 503
Stamps, Canceling and registering revenue	C. F. Martorana	Washington, D. C	Dec. 10, 1872	133, 871
Stamps, Composition for elastic hand	G. H. Mellen	Alexandria, Va	Sept. 10, 1867	68, 770
Stamps, Composition for gumming postage and revenue.	C. L. Coombs	Washington, D. C	Aug. 24, 1869	94, 079
Stamps, Composition for making elastic hand	G. H. Mellen	Alexandria, Va	Feb. 5, 1867	61, 849
Stamps, Device for attaching postage and revenue.	C. H. Bacon	Springfield, Ohio	Dec. 24, 1867	72, 442
Stamps, Device for preserving postage	J. P. Herron	Washington, D. C	July 7, 1863	39, 147
Stamps, Identifying	G. Pardy	San Francisco, Cal	Oct. 10, 1871	119, 715
Stamps, &c., in two or more colors, Printing revenue	J. Earle and A. B. Steel	Philadelphia, Pa	July 13, 1869	92, 593
Stamps, Ink for printing revenue and postage	T. Antisell	Washington, D. C	Oct. 5, 1869	95, 662
Stamps, Ink-pad for hand	J. M. Willbur	Cleveland, Ohio	Sept. 22, 1868	82, 426
Stamps, Instrument for canceling postage and revenue.	C. S. Wells	Chicopee, Mass	Sept. 19, 1865	50, 058
Stamps, Machine for attaching revenue	R. L. Smith	Stockport, N. Y	Apr. 25, 1865	47, 4[illegible]4
Stamps, Machine for canceling postage and other	S. W. Francis	New York, N. Y	Apr. 21, 1863	38, 22[illegible]
Stamps, Manufacture of postage	C. F. Steel	Brooklyn, N. Y	Oct. 22, 1867	70, 147
Stamps, Manufacture of revenue and other	G. T. Jones	Cincinnati, Ohio	Mar. 22, 1870	101, 020
Stamps, &c., Method of inking	C. M. Witherill	La Fayette, Ind	Jan. 24, 1855	46, 038
Stamps, Mode of applying inks of different characters to print revenue and other.	W. Thorpe	Saint Louis, Mo	Oct. 5, 1869	95, 624

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Stamps, Mode of canceling postage and revenue	H. Greenfield	New York, N. Y	Aug. 11, 1868	80, 943
Stamps, Mode of canceling postage and revenue	C. W. Harris	Pittsburgh, Pa	Nov. 15, 1864	45, 038
Stamps, Mode of canceling revenue and other	E. Harmon	Washington, D. C	Mar. 22, 1864	41, 991
Stamps on beer-barrels, Lock for securing	F. Brackett	Minneapolis, Minn	May 31, 1870	103, 711
Stamps, Operating steam	W. Ball	Chicopee, Mass	May 27, 1856	14, 944
Stamps, Postage and other	A. J. Gibson	Worcester, Mass	Jan. 5, 1864	41, 118
Stamps to letters, Machine for affixing	W. Benseman and E. Slocum	Washington, D. C	Apr. 22, 1873	138, 120
Stamps to letters, Machine for affixing post-office	G. K. Snow	Watertown, Mass	May 18, 1858	20, 306
Stamped ware, Manufacture of	G. H. Hazelton	Philadelphia, Pa	Sept. 20, 1864	44, 308
Stamper for metallic ores, Anti-friction	J. A. Bertola	New York, N. Y	Apr. 19, 1864	42, 340
Stamping and crushing mill	J. D. Whelpley and J. J. Storer	Boston, Mass	Aug. 1, 1865	49, 187
Stamping and drilling machine	J. W. Fowle	Boston, Mass	Sept. 1, 1863	39, 768
Stamping and hammering machine	G. D. Crocker	Virginia City, Nev	Apr. 2, 1872	125, 178
Stamping apparatus, Post-office letter	T. C. Hargrave	Boston, Mass	Nov. 21, 1871	121, 099
Stamping apparatus, Post-office letter	A. Parkham	Carrollton, Ky	Feb. 13, 1872	123, 578
Stamping engravings on horn, &c	J. H. Derby	Worcester, Mass	Apr. 30, 1816	....
Stamping-head	P. W. Gates	Chicago, Ill	Feb. 13, 1866	52, 641
Stamping-heads, Casting	P. W. Gates	Chicago, Ill	July 31, 1860	29, 372
Stamping letters, Machine for	J. C. W. Maas and C. Fischer	Hamburg, Germany	Mar. 17, 1868	75, 638
Stamping-machine for crushing stone, &c., Portable	J. Stever	Bristol, Conn	Apr. 3, 1860	27, 744
Stamping-machine for leather, combined with rolling-machine.	F. Berry	Harrisburgh, Pa	Dec. 9, 1856	16, 205
Stamping machine, Reed-plate	C. Austin	Concord, N. H	Nov. 13, 1866	59, 541
Stamping, &c., Machinery for	G. H. Reay	New York, N. Y	Jan. 29, 1867	61, 626
Stamping-machinery, Shoe for	P. W. Gates	Chicago, Ill	July 10, 1866	56, 321
Stamping, &c., Metal	V. Draper	North Attleborough, Mass	May 24, 1864	42, 907
Stamping-mill or crusher	G. F. Case	Windsor, Vt	Dec. 13, 1870	110, 010
Stamping patterns on rollers, Machine for	J. Baxendale	Providence, R. I	Dec. 20, 1853	10, 332
Stamping-press	J. W. Dodge	Malden, Mass	Jan. 16, 1872	122, 817
Stamping-press	A. G. Mead and C. J. Addy	Boston, Mass	Apr. 14, 1868	76, 647
Stamping-press for letters, &c., Hand	A. Hatch	Forestville, Conn	Feb. 12, 1856	14, 238
Stamping-press for pans, dishes, &c	J. B. Jones	Williamsburgh, N. Y	Oct. 10, 1871	119, 771
Stamping-press, Hand	S. J. Smith	New York, N. Y	July 7, 1863	39, 178
Stamping press, Ticket, &c	G. Bailey	Buffalo, N. Y	Oct. 28, 1862	36, 763
Stamping sheet-metal, Process of	S. W. Hemp	Saint Louis, Mo	Dec. 3, 1872	133, 532
Stamping trade-marks on cloth, &c., Machine for	A. S. Wright	Lawrence, Mass	Oct. 5, 1858	21, 716
Stamping varnished surfaces	T. H. Müller	Yonkers, N. Y	Jan. 9, 1872	122, 636
Stamping wearing-apparel	C. Gernert	Philadelphia, Pa	Apr. 25, 1871	113, 999
Stanchion	W. C. Gifford	Jamestown, N. Y	May 30, 1871	115, 304
Stanchion	L. S. Safford	Hope, Me	Nov. 13, 1866	59, 662
Stanchion for cattle stalls	C. E. Petrie	Cherry Valley, Ohio	May 31, 1864	42, 963
Stanchion, Swinging	W. C. Gifford	Jamestown, N. Y	July 19, 1870	105, 445
Stand:				
See Barrel-stand. Blowers' stand. Boiler-stand. Book-stand. Bottle-stand. Broom-stand. Camera-stand. Case-stand. Caster-stand. Coal-hod stand. Coffee-pot stand. Collar and necktie stand. Compass-stand. Compositors' stand. Copying-press stand. Crucible-stand. Cruet-stand. Dentists' instrument stand. Dish-stand. Dry-goods stand. Egg-stand. Flower-stand. Fodder-stand. Fruit-stand. Gas-stand. Hat-stand. Hat and cane stand. Ice-stand. Ink-stand. Ironing-stand. Lady's figure stand. Lady's work-stand. Lamp-stand. Lamp or candle stand. Machine-stand. Map-stand. Match-stand. Milk-stand. Model-stand. Mosquito-net stand. Mucilage-stand. Muff-stand. Music-stand. Painters' stand. Photograph-exhibiting stand. Photographic-camera stand. Pickle-stand. Pickle and cruet stand. Picture-stand. Plant-stand. Portfolio-stand. Printer's case-stand. Roller-stand. Sad-iron stand. Sewing-stand. Sewing-machine stand. Shovel and tongs stand. Show-stand. Shutter-stand. Sirup-stand. Smoking-stand. Soap-stand. Soda-water stand. Spool-stand. Stove-stand. Switch-stand. Table-stand. Teapot-stand. Toilet-stand. Treadle-stand. Tumbler-stand. Twine-stand. Twine-holder stand. Umbrella-stand. Urn-stand. Wash-stand. Watch-stand. Water-cooler stand. Wire stand. Work-stand.				
Stand and clothes-drier	M. E. Charles	Hope, Ind	May 31, 1870	103, 565
Stand and mirror	W. H. Hughes and H. L. Lent	Peekskill, N. Y	Sept. 4, 1866	57, 723
Stand and secretary, Combined	M. P. Brown	Fayetteville, Mo	July 9, 1872	128, 848
Stand and waiter	G. Gill	Taunton, Mass	Aug. 2, 1870	106, 051
Stand, desk, and book-holder	D. I. Stagg	New York, N. Y	June 26, 1866	55, 925
Stands, Construction of base for	E. Ripley	Troy, N. Y	Apr. 16, 1850	7, 291
Standard gage	J. Richards	Cincinnati, Ohio	Oct. 15, 1867	69, 954
Standing press	J. Barns	Philadelphia, Pa	Apr. 17, 1837	166
Standing press	C. Evans	Philadelphia, Pa	June 13, 1831	....
Standing press	S. Fairlamb	New York	May 15, 1833	....

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Standing-press	A. Hale	Boston, Mass	June 26, 1832	....
Standing-press	J. H. Stewart	Philadelphia, Pa	Aug. 11, 1831	....
Staple	B. Boardman	Norwich, Conn	May 1, 1866	54, 283
Staple, Blind	F. Douglas	Norwich, Conn	Nov. 12, 1867	70, 702
Staple-machine	J. T. Darnell	Florence, N. J	May 3, 1870	102, 659
Staple-machine	B. Hershey	Erie, Pa	Apr. 4, 1871	113, 663
Staple-machine	C. W. Kennedy	Williamsburgh, N. Y	Apr. 5, 1870	101, 471
Staple-machine	W. Malick	Erie, Pa	Oct. 10, 1871	119, 711
Staple-making machine	J. Adt	New Haven, Conn	Feb. 27, 1872	124, 107
Staple-making machine	W. Malick	Erie, Pa	Sept. 9, 1873	142, 574
Staple-making machine	W. F. Nolker and E. H. Morgan	Cincinnati, Ohio	Oct. 3, 1871	119, 529
Staple-making machine	J. C. Stead	Jersey City, N. J	Oct. 25, 1870	108, 735
Staple-making machine	A. Whittemore	Cambridgeport, Mass	May 14, 1872	126, 660
Staple, Wire	H. A. Harvey	New York, N. Y	Apr. 2, 1867	63, 385
Staples, Device for driving	J. Tomlinson	Goderich, Canada	Oct. 15, 1872	132, 221
Staples, Machine for inserting blind	D. M. Smyth	New York, N. Y	Jan. 5, 1864	41, 180
Staples, Machine for pointing	W. Malick	Erie, Pa	Nov. 11, 1873	144, 401
Starch-agitator	A. Erkenbrecher	Cincinnati, Ohio	Aug. 6, 1867	67, 516
Starch, Apparatus for manufacture of	C. Gilbert	Buffalo, N. Y	Apr. 15, 1873	137, 911
Starch, Apparatus for manufacture of	T. Kingsford	Oswego, N. Y	June 24, 1873	140, 141
Starch, Apparatus for manufacture of	T. Kingsford	Oswego, N. Y	Aug. 5, 1873	141, 442
Starch, Apparatus for manufacture of	T. Kingsford	Oswego, N. Y	Dec. 2, 1873	145, 213
Starch, Apparatus for manufacture of	J. A. Owens	Little Falls, N. Y	Jan. 14, 1868	73, 259
Starch, Apparatus for manufacturing	H. V. Duryea	Oswego, N. Y	May 8, 1855	12, 846
Starch, Apparatus for manufacturing	W. Duryea	Glen Cove, N. Y	Feb. 1, 1859	22, 789
Starch, Construction of machinery for cleaning	C. S. Irwin	Madison, Ind	May 15, 1860	28, 278
Starch-deposit, Machine for removing	W. Duryea	Glen Cove, N. Y	Apr. 19, 1864	42, 358
Starch, dextrine, and glucose, Manufacture of	T. Sim and E. S. Hutchinson	Baltimore, Md	Apr. 27, 1869	89, 510
Starch-drying apparatus	A. Erkenbrecher	Cincinnati, Ohio	Aug. 27, 1867	68, 294
Starch-elevator	A. Erkenbrecher	Cincinnati, Ohio	Aug. 6, 1867	67, 514
Starch from maize	W. Watt	Belfast, Ireland	June 30, 1857	17, 710
Starch from maize, Manufacture of	T. Bragg	West Milton, Ohio	Dec. 24, 1850	7, 850
Starch from wheat and spirits from residuum, Making.	E. Perkins	Shrewsbury, N. J	Sept. 16, 1810	....
Starch-gloss	H. Sawyer	Boston, Mass	Apr. 9, 1867	63, 754
Starch, &c., Machine for packing	I. A. Brownell	Providence, R. I	Nov. 15, 1859	26, 084
Starch, Machine for washing and pulverizing potatoes in the manufacture of.	S. Richardson	Jericho, Vt	Jan. 9, 1838	563
Starch, Machinery for the manufacture of	T. Kingsford	Oswego, N. Y	Nov. 24, 1863	40, 693
Starch-making	H. Colgate	Jersey City, N. J	July 24, 1855	13, 340
Starch-making apparatus	A. Erkenbrecher	Cincinnati, Ohio	Aug. 6, 1867	67, 515
Starch-manufacture	C. S. Irwin	Madison, Ind	Feb. 14, 1860	27, 130
Starch, Manufacture of	B. Descamp	Buffalo, N. Y	Sept. 27, 1864	44, 405
Starch, Manufacture of	C. Gilbert	Buffalo, N. Y	Feb. 18, 1873	135, 904
Starch, Manufacture of	J. J. Gilbert	Little Falls, N. Y	June 11, 1867	65, 664
Starch, Manufacture of	O. Jones	City Road, England	Mar. 12, 1841	2, 000
Starch, Manufacture of	S. T. Stratton	Philadelphia, Pa	Dec. 28, 1858	22, 460
Starch, Manufacture of potato	J. Biddis		Mar. 22, 1802	....
Starch, Manufacture of potato	C. B. Hutchins	Ann Arbor, Mich	July 4, 1871	116, 597
Starch-mill	C. Gilbert	Buffalo, N. Y	Apr. 15, 1873	137, 912
Starch, Mode of putting up	A. Irwin	Madison, Ind	Oct. 20, 1868	83, 167
Starch or gloss for use in laundries	P. W. Weida	Philadelphia, Pa	Mar. 9, 1869	87, 607
Starch, paste, &c., Machine for making	C. H. Blanchard	Boston, Mass	June 25, 1867	66, 121
Starch, Rice	W. and T. Liversidge	Dorchester, Mass	Feb. 17, 1836	....
Starch-separator	C. Gilbert	Buffalo, N. Y	Sept. 8, 1868	81, 888
Starch, size, &c., Apparatus for preparing	J. Briggs	Roxbury, Mass	July 17, 1866	56, 356
Starch-sirup	H. C. Becker	New York, N. Y	Mar. 19, 1867	62, 997
Starch-stirring machine	P. Mason and J. W. Brant	Oswego, N. Y	Sept. 3, 1867	68, 374
Starch-water, Extracting spirit from	J. Naylor		Mar. 7, 1803	....
Starching-apparatus	W. B. Coates	Philadelphia, Pa	Apr. 28, 1868	77, 256
Starching-machine	W. W. Carrell	Belleville, N. J	July 30, 1872	129, 932
Starching-machine	A. M. Dolph	Cincinnati, Ohio	Oct. 28, 1873	144, 071
Starching-machine	L. Sternberger	Philadelphia, Pa	Jan. 21, 1873	135, 171
Starching-machine	P. O'Thayne	New York, N. Y	Mar. 26, 1872	124, 969
Station and street indicator for railway-cars	A. Bertier	Hannibal, Mo	Apr. 14, 1863	38, 143
Station-indicator	C. Barton	Philadelphia, Pa	May 20, 1873	138, 989
Station-indicator	O. B. Grigg	Mansfield Centre, Conn	May 6, 1873	138, 496
Station-indicator	E. Jamieson	Chicago, Ill	July 12, 1870	105, 214
Station-indicator	G. R. Johnson	Wilmington, Del	Oct. 12, 1869	95, 692
Station-indicator	J. K. Magie	Canton, Ill	Apr. 15, 1873	137, 853
Station-indicator	C. K. Marshall	New Orleans, La	Aug. 18, 1868	81, 097
Station-indicator	E. B. Marshall	Atlanta, Ga	Oct. 20, 1868	83, 190
Station-indicator	L. Nelk	Chicago, Ill	Nov. 29, 1870	109, 751
Station-indicator	J. W. Newlin and J. S. Simmerman.	Millville, N. J	Dec. 16, 1873	145, 583
Station-indicator	A. and M. Pirz	New York, N. Y	Feb. 4, 1868	74, 127
Station-indicator	A. C. Rodgers	Suffield, Conn	June 20, 1871	116, 223
Station-indicator	E. Spencer	Ottawa, Canada	Oct. 27, 1868	83, 563
Station-indicator	F. J. Underwood	South Hardwick, Vt	Feb. 16, 1864	41, 653
Station-indicator	F. F. Warner and J. W. Benham	Chicago, Ill	Dec. 5, 1871	121, 476
Station-indicator, Pneumatic	J. P. Kealy and J. Rigney	Bridgeport, Conn	Nov. 25, 1873	144, 909
Station indicator, Railway	G. W. Alexander	Chicago, Ill	Mar. 14, 1871	112, 670
Station indicator, Railway	J. B. Alexander	Washington, D. C	Mar. 14, 1871	112, 671
Station indicator, Railway	E. Conley	Cincinnati, Ohio	Apr. 5, 1870	101, 437
Station indicator, Railway	A. S. Cox	Washington, D. C	Jan. 9, 1866	51, 927
Station indicator, Railway	E. A. Davis	Crawfordsville, Ind	Nov. 4, 1856	16, 005
Station indicator, Railway	C. C. Gaie	Columbus, Ohio	Feb. 20, 1866	52, 704
Station indicator, Railway	P. E. and J. P. Gruger	Lancaster, Pa	Apr. 3, 1866	53, 607
Station indicator, Railway	J. M. Harvey and N. J. Becker	Amsterdam and Florida, N. Y.	Apr. 6, 1858	19, 847
Station indicator, Railway	H. S. Ingersoll	Lansing, Mich	Oct. 15, 1872	132, 290
Station indicator, Railway	L. Koch	New York, N. Y	Aug. 9, 1859	25, 081
Station indicator, Railway	G. T. Lape	Summit, N. Y	Sept. 17, 1867	68, 997
Station indicator, Railway	C. A. McEvoy	Richmond, Va	Nov. 20, 1855	13, 824
Station indicator, Railway	T. Payne	Detroit, Mich	July 14, 1868	80, 005
Station indicator, Railway	J. P. Pfau	Lansingburgh, N. Y	May 17, 1870	103, 237
Station indicator, Railway	A. C. Rodgers	Fort Washington, Pa	Sept. 21, 1869	95, 046
Station indicator, Railway	C. J. Smith	North Prairie, Wis	Apr. 6, 1858	19, 880

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Station indicator, Railway	L. E. Smith	New Haven, Conn	Jan. 28, 1862	34, 274
Station indicator, Railway	E. Spencer	Ottawa, Canada	Dec. 31, 1867	72, 930
Station indicator, Railway	E. B. Van Winkle	New York, N. Y	Nov. 13, 1866	59, 685
Station indicator, Railway	E. M. and J. E. Woodward	Philadelphia, Pa	June 26, 1860	28, 932
Station indicator, Railway	J. F. Zacharias	Leesburgh, Va	May 26, 1868	78, 349
Station-indicator, Railway-car	G. M. Bowman	Lebanon, Pa	Sept. 17, 1872	131, 421
Station-indicator, Railway-car	W. H. Eckert and J. A. Black	Dayton, Ohio	July 20, 1869	92, 802
Station-indicator, Railway-car	W. Hebdon	New York, N. Y	May 17, 1870	103, 179
Station or street-registering indicator	A. H. Raw	Philadelphia, Pa	Feb. 7, 1860	27, 068
Stations or streets of city, Machine for indicating railway.	H. H. Gratz	Spring Station, Ky	Jan. 29, 1861	31, 237
Stationary engine	C. S. Crane	Chicago, Ill	Dec. 17, 1872	133, 926
Stationary machinery, Mechanism for operating	G. Maranville	Hampton, N. Y	Feb. 25, 1868	74, 838
Stationery-articles, Receptacle for	W. F. Baade	Buffalo, N. Y	Feb. 14, 1871	111, 717
Stationery-furniture	C. H. Wight	Baltimore, Md	Dec. 28, 1869	98, 453
Stationery-implement, Compound	H. S. Ball	Spartanburgh, S. C	Nov. 26, 1872	133, 350
Statues, Method of casting	L. Myers	Philadelphia, Pa	Jan. 8, 1842	2, 420
Stave and hoop splitting machine	Z. Bisbee	East Bridgewater, Mass	June 5, 1830	....
Stave and parallel jointer, Double	J. S. Keen	Philadelphia, Pa	Oct. 1, 1816	....
Stave and shingle machine	W. Baley	Nelson County, Ky	Apr. 10, 1811	....
Stave and shingle machine and heading for barrels	Everhart, Pearson, Morford, and Everhart.	Wayne, Ohio	Oct. 6, 1835	....
Stave, Barrel	C. McGregor	Newport, N. H	July 2, 1836	....
Stave-bender	J. Merrill	Boston, Mass	July 5, 1870	105, 110
Stave-bending machine	C. B. Hutchinson	Auburn, N. Y	Apr. 17, 1866	53, 983
Stave beveling and jointing machine	E. M. Pitman	Warren County, Va	Mar. 3, 1857	16, 746
Stave-bolts, Mode of sawing	B. McKeage	Accotink, Va	Nov. 7, 1854	11, 900
Stave chamfering and crozing machine	C. B. Hutchinson	Auburn, N. Y	Apr. 17, 1866	53, 982
Stave chiming and jointing machine	D. R. Bowker and W. P. Bensel	New York, N. Y	Feb. 12, 1861	31, 368
Stave crossing and chiming	C. F. Beverly	Salem, Ohio	Oct. 16, 1840	1, 829
Stave crozing and chamfering machine	S. S. Gray	Boston, Mass	Jan. 7, 1873	134, 597
Stave crozing and chamfering machine	H. L. McNish	Lowell, Mass	Sept. 1, 1857	18, 123
Stave crozing and chamfering machine	O. Osten	Tahoe City, Cal	Nov. 5, 1872	132, 734
Stave-crozing machine	H. Bradshaw	Chicago, Ill	June 6, 1871	115, 690
Stave-crozing machine	H. Elliott	Boston, Mass	Feb. 16, 1869	86, 912
Stave-cutting	J. I. Ralya	Allegheny, Pa	Oct. 31, 1865	50, 782
Stave-cutting machine	J. Bell	Lancaster, N. Y	Aug. 7, 1866	56, 883
Stave-cutting machine	J. Burt and E. Smith	Sullivan, N. Y	June 29, 1839	1, 208
Stave-cutting machine	A. Cook	Saint Clair Borough, Pa	Mar. 12, 1872	124, 483
Stave-cutting machine	J. Greenwood	Rochester, N. Y	July 7, 1868	79, 651
Stave-cutting machine	T. Hanvey	Elma, N. Y	Dec. 6, 1864	45, 323
Stave-cutting machine	I. Hosmer and W. P. S. Badger	Concord, Mass	Sept. 2, 1840	1, 754
Stave-cutting machine	A. J. Howell and J. Murphy	Spruce Hill, Pa	Jan. 31, 1871	111, 457
Stave-cutting machine	C. B. Hutchinson	Waterloo, N. Y	Feb. 5, 1850	7, 069
Stave-cutting machine	C. Manning	Acton, Mass	Sept. 10, 1840	1, 781
Stave-cutting machine	C. Manning	Acton, Mass	Sept. 14, 1840	1, 787
Stave-cutting machine	C. Manning	Acton, Mass	Apr. 10, 1841	2, 030
Stave-cutting machine	H. Martin	Galveston, Ind	June 16, 1868	78, 882
Stave-cutting machine	M. Randolph	Saint Louis, Mo	May 30, 1867	48, 028
Stave-cutting machine	H. M. Shaw	Fremont, Ohio	Jan. 31, 1865	46, 149
Stave-cutting machine	O. Sheldon	New Marlborough, Mass	Sept. 10, 1840	1, 786
Stave-cutting machine	W. Sisson	Fulton, N. Y	May 2, 1871	114, 359
Stave-cutting machine	P. Welch	Oswego, N. Y	Dec. 1, 1863	40, 783
Stave-cutting machine, Barrel	T. Peck	Lenox, N. Y	Nov. 20, 1837	465
Stave cutting, shaving, and jointing	E. Gregg	Derry, N. H	Dec. 27, 1833	....
Stave-dresser, &c., Cylindrical	J. R. Averill	Manchester, N. Y	Dec. 29, 1824	....
Stave-dressing	L. Read and A. Willoughby	Rochester, N. Y	Sept. 16, 1833	....
Stave dressing and jointing machine	L. Benton	Hanover, N. Y	July 12, 1828	....
Stave dressing, heading, and jointing machine	J. G. Tackless	Pomfret, N. Y	July 20, 18[illegible]	....
Stave-dressing machine	M. P. Adams	Pittsburgh, Pa	May 3, 1870	102, 467
Stave-dressing machine	L. D. and L. C. Benson	North Jackson, Pa	June 13, 1871	115, 811
Stave-dressing machine	L. D., L. C., and A. M. Benson	North Jackson, Pa	Sept. 1, 1863	39, 711
Stave-dressing machine	E. Brady	New York, N. Y	Feb. 23, 1858	19, 407
Stave-dressing machine	L. S. Chichester	Troy, N. Y	Sept. 3, 1850	7, 611
Stave-dressing machine	L. S. Chichester	Williamsburgh, N. Y	Nov. 4, 1851	8, 429
Stave-dressing machine	W. S. Colwell	Pittsburgh, Pa	Feb. 11, 1868	74, 309
Stave-dressing machine	J. G. Couser	Rehrersburgh, Pa	Jan. 31, 1831	....
Stave-dressing machine	J. D. Elliot	Leicester, Mass	Nov. 15, 1853	10, 227
Stave-dressing machine	A. Fairchild	Queensbury, N. Y	Dec. 17, 1834	....
Stave-dressing machine	C. B. Goodrich	Rutland, Mass	May 10, 1830	....
Stave-dressing machine	W. Hawkins	Milwaukee, Wis	July 22, 1851	8, 245
Stave-dressing machine	E. and B. Holmes	Buffalo, N. Y	Jan. 10, 1860	26, 766
Stave-dressing machine	E. Holmes	Buffalo, N. Y	Feb. 17, 1863	37, 720
Stave-dressing machine	V. W. Houck	Buffalo, N. Y	June 24, 1862	35, 681
Stave-dressing machine	S. Learned	Ridgway, N. Y	May 30, 1842	2, 652
Stave-dressing machine	J. Palmiter	Jamestown, N. Y	Apr. 19, 1864	42, 395
Stave-dressing machine	J. J. Ralya	Cleveland, Ohio	Oct. 28, 1873	144, 138
Stave-dressing machine	W. M. Sloane	Buffalo, N. Y	Feb. 14, 1869	27, 161
Stave-dressing machine	G. Stevens	East Hardwick, Vt	Sept. 13, 1864	44, 231
Stave-dressing machine	P. Stricker and J. Lefeber	Cambridge City, Ind	Feb. 2, 1869	86, 468
Stave-dressing machine	J. Sweet	Muncy, Pa	Oct. 28, 1835	....
Stave-dressing machine	W. Thomas	Pomfret, N. Y	Oct. 7, 1830	....
Stave-dressing machine, Barrel	W. Trapp	Elmira, N. Y	Aug. 23, 1864	43, 934
Stave-dressing machinery	H. Benson	Jackson Township, Pa	Sept. 26, 1848	5, 799
Stave-dressing machinery	A. Broad	Louisville, Ky	Dec. 18, 1849	6, 965
Stave-dressing machinery	G. Gilbert	New Haven, Conn	Apr. 17, 1849	6, 352
Stave-dressing machinery	I. Judson	New Haven, Conn	May 1, 1847	5, 099
Stave-dressing machinery	H. Law	Wilmington, N. C	May 8, 1849	6, 443
Stave-dressing machinery	J. H. Lester	New London, Conn	May 9, 1846	4, 510
Stave-dressing machinery	J. Miner and S. Merrick	Fallston, Pa	Nov. 12, 1845	4, 267
Stave-equalizer	E. P. Spaulding	Murfreesborough, Tenn	Nov. 12, 1872	132, 989
Stave-equalizer	H. S. Wiley	Madison, Ind	Apr. 25, 1871	114, 073
Stave-finishing machine	A. Cutter	Boston, Mass	June 14, 1870	104, 121
Stave gaging, measuring, &c., machine	L. T. Atkins	Page County, Va	Oct. 9, 1855	13, 631
Stave heading and dressing machine	A. Stearns, jr	Schaghticoke, N. Y	Mar. 22, 1830	....
Stave-holding clamp	E. Doremus	Rondout, N. Y	Jan. 4, 1870	98, 574
Stave-jointer	J. B. Bell	Pittsburgh, Pa	Sept. 6, 1870	106, 988
Stave-jointer	S. C. Blinn	Tecumseh, Mich	July 4, 1871	116, 670

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Stave-jointer	H. A. Crossley	Cleveland, Ohio	May 11, 1869	89, 860
Stave-jointer	H. A. Crossley	Cleveland, Ohio	Oct. 12, 1869	95, 774
Stave-jointer	H. A. Crossley	Cleveland, Ohio	Apr. 4, 1871	113, 268
Stave-jointer	A. H. Crozier	Oswego, N. Y	Sept. 23, 1856	15, 757
Stave-jointer	J. K. Derby	Jamestown, N. Y	July 8, 1856	15, 285
Stave-jointer	F. P. Deuel	Tecumseh, Mich	Aug. 22, 1871	118, 215
Stave-jointer	G. G. Gabrion and N. B. Whitney.	Copenhagen, N. Y	Jan. 22, 1861	31, 164
Stave-jointer	G. W. George	Boston, Mass	July 5, 1870	105, 064
Stave-jointer	J. E. Greene	Saint Louis, Mo	July 8, 1873	140, 699
Stave-jointer	E. Greenlee	Summerhill Township, Pa	Sept. 11, 1860	29, 965
Stave-jointer	J. McGrew	Ravenswood, W. Va	Nov. 26, 1872	133, 469
Stave-jointer	W. Halderman	Freeport, Ill	Oct. 19, 1857	21, 830
Stave-jointer	A. J. Howell and J. Murphy	Spruce Hill, Pa	Aug. 8, 1871	117, 887
Stave-jointer	B. McKeage	Accotink, Va	Nov. 18, 1856	16, 005
Stave-jointer	S. Newman	Cleveland, Ohio	Dec. 20, 1870	110, 271
Stave-jointer	L. R. Palmer	Belfast, Me	Aug. 8, 1871	117, 920
Stave-jointer	L. R. Palmer	Belfast, Me	Aug. 22, 1871	118, 387
Stave-jointer	J. J. Ralya	Cleveland, Ohio	May 13, 1873	138, 702
Stave-jointer	J. F. Sayer	Macomb, N. Y	Aug. 21, 1866	57, 387
Stave-jointer	J. F. Sayer	Macomb, N. Y	Jan. 29, 1867	61, 688
Stave-jointer	J. F. Sayer	Macomb, N. Y	Jan. 12, 1869	85, 859
Stave-jointer	J. F. Sayer	Macomb, N. Y	Aug. 30, 1870	106, 874
Stave-jointer	J. Sherman and W. Marriott	Cleveland, Ohio	Mar. 28, 1871	113, 214
Stave-jointer	J. W. Treadway	Crown Point, N. Y	Jan. 9, 1855	12, 221
Stave-jointer gage	W. Race and S. D. Hooper	Lockport, N. Y	Nov. 28, 1871	121, 418
Stave-jointer treadle	G. W. Corson	Perrysburgh, Ohio	Sept. 10, 1872	131, 251
Stave jointing and cutting	C. Worvey	Elbridge, N. Y	May 1, 1849	6, 419
Stave jointing and dressing machine	J. Dobbins	Litchfield, Mich	Oct. 21, 1862	36, 705
Stave jointing and dressing machine	H. Law	Wilmington, N. C	July 15, 1840	1, 687
Stave jointing and planing machine	R. W. George	Boston, Mass	May 27, 1873	139, 242
Stave-jointing apparatus	H. Baker	McLean, N. Y	Dec. 9, 1846	4, 877
Stave-jointing machine	J. W. Alesworth	Santa Cruz, Cal	May 17, 1870	103, 119
Stave-jointing machine	A. M. Benson	Cleveland, Ohio	Mar. 19, 1872	124, 716
Stave-jointing machine	H. Benter	Wheeling, Va	Feb. 22, 1859	23, 007
Stave-jointing machine	J. F. and I. W. Bristow	Vevay, Ind	July 3, 1860	28, 962
Stave-jointing machine	A. Casebeer	Sipesville, Pa	June 5, 1866	55, 238
Stave-jointing machine	L. S. Chichester	Williamsburgh, N. Y	Aug. 12, 1851	8, 288
Stave-jointing machine	A. Cutter	Boston, Mass	May 17, 1870	103, 151
Stave-jointing machine	J. K. Derby	Jamestown, N. Y	Nov. 1, 1859	25, 956
Stave-jointing machine	D. Drawbaugh	White Hill Post-Office, Pa	Nov. 11, 1851	8, 505
Stave-jointing machine	G. Eby	Clarence, N. Y	Apr. 14, 1831	....
Stave-jointing machine	L. B. Ecker	Union Bridge, Md	Sept. 1, 1868	81, 613
Stave-jointing machine	F. A. Finn	New York, N. Y	Apr. 26, 1864	42, 467
Stave-jointing machine	I. Fobes	Bridgewater, Mass	Aug. 3, 1831	....
Stave-jointing machine	L. R. and M. Fulda	San Francisco, Cal	Dec. 7, 1869	97, 625
Stave-jointing machine	R. W. George	Boston, Mass	Feb. 18, 1873	135, 903
Stave-jointing machine	C. B. Goodrich	Rutland, Mass	May 20, 1830	....
Stave-jointing machine	S. S. Gray	Boston, Mass	Sept. 27, 1870	107, 678
Stave-jointing machine	S. S. Gray	Boston, Mass	Jan. 7, 1873	134, 596
Stave-jointing machine	C. J. Hall	Mount Desert, Me	Feb. 13, 1872	123, 693
Stave-jointing machine	C. J. Hall	Mount Desert, Me	July 30, 1872	129, 949
Stave-jointing machine	G. R. Hay	Edgerton, Ohio	May 28, 1867	65, 080
Stave-jointing machine	E. and B. Holmes	Buffalo, N. Y	July 22, 1873	141, 003
Stave-jointing machine	E. and B. Holmes	Buffalo, N. Y	July 28, 1868	80, 483
Stave-jointing machine	C. B. Hutchinson	Syracuse, N. Y	Oct. 4, 1853	10, 094
Stave-jointing machine	C. B. Hutchinson	Auburn, N. Y	Mar. 3, 1868	75, 021
Stave-jointing machine	E. Jenny and D. Rood	Middleborough and Boston, Mass.	June 15, 1852	9, 028
Stave-jointing machine	S. Jobes	Moundsville, Va	Aug. 28, 1849	6, 685
Stave-jointing machine	M. T. Kennedy	Fallston, Pa	June 12, 1855	13, 036
Stave-jointing machine	W. Maguire	Cincinnati, Ohio	Jan. 7, 1851	7, 886
Stave-jointing machine	C. Murdock	Sarnia, Canada	Oct. 28, 1873	143, 991
Stave-jointing machine	L. R. Palmer	Belfast, Me	Aug. 13, 1872	130, 528
Stave-jointing machine	L. R. Palmer	Belfast, Me	Aug. 20, 1872	130, 739
Stave-jointing machine	W. C. Perkins	Stockton, Me	Aug. 27, 1872	130, 819
Stave-jointing machine	W. Robinson	Augusta, Ga	Sept. 11, 1860	29, 996
Stave-jointing machine	W. H. Seymour	Stockton, N. Y	May 22, 1849	6, 470
Stave-jointing machine	J. G. Stephenson	Buffalo, N. Y	June 21, 1859	24, 499
Stave-jointing machine	J. S. Thompson	Glen's Falls, N. Y	Sept. 13, 1864	44, 233
Stave-jointing machine	J. Troop	Sinclairville, N. Y	Apr. 5, 1859	23, 514
Stave-jointing machine	D. D. Tupper	Canning, Canada	Mar. 5, 1872	124, 233
Stave-jointing machine	E. Valentine and A. Bradway	Monson, Mass	Mar. 28, 1854	10, 687
Stave-jointing machine	P. Welch	Oswego, N. Y	Dec. 1, 1863	40, 784
Stave-jointing machine	W. Widdowson	Rochester, N. Y	Aug. 2, 1870	106, 014
Stave-jointing machine	A. Wilbur	Lancaster, Pa	Mar. 21, 1854	10, 683
Stave-jointing machine	H. S. Wiley	Madison, Ind	Apr. 21, 1868	77, 151
Stave-jointing machine	D. Woodcock	Independence Centre, N. Y	May 25, 1852	8, 976
Stave-jointing machine	C. M. Young	Sinclairsville, N. Y	July 31, 1860	29, 449
Stave-jointing machine, Barrel	J. B. Bell	Pittsburgh, Pa	Jan. 11, 1870	98, 735
Stave-jointing machine, Barrel	H. A. Cropley	Cleveland, Ohio	Feb. 1, 1870	99, 411
Stave-jointing machinery	H. and L. D. Benson	Jackson, Pa	Sept. 25, 1849	6, 744
Stave-jointing machinery	L. S. Chichester	Troy, N. Y	July 3, 1849	6, 568
Stave-jointing machinery	L. R. Clark and J. C. Smith	Utica and Syracuse, N. Y	Apr. 9, 1872	125, 440
Stave-jointing machinery	A. C. Currier and A. Bradway	Palmer and Monson, Mass	Apr. 4, 1848	5, 499
Stave-jointing machinery	L. Pardee and I. Judson	New Haven, Conn	Aug. 15, 1848	5, 713
Stave-jointing machinery	A. H. Pinney	Columbus, Ohio	May 29, 1847	5, 134
Stave-jointing machinery	D. Vaughan	Remsen, N. Y	Dec. 11, 1849	6, 948
Stave-machine	J. W. Adams	Pleasant Valley, Vt	Mar. 27, 1860	27, 607
Stave-machine	S. B. Averill	Barre, Vt	Jan. 12, 1858	19, 064
Stave-machine	J. W. Bowers	Ovid Centre, Mich	Jan. 31, 1865	46, 068
Stave-machine	T. Cheshire	Cincinnati, Ohio	Apr. 10, 1866	53, 784
Stave-machine	F. O. Clark	Benton's Port, Iowa	Nov. 26, 1867	71, 276
Stave-machine	F. O. Clark	Benton's Port, Iowa	Nov. 26, 1867	71, 277
Stave-machine	W. S. Colwell	Pittsburgh, Pa	Jan. 21, 1868	73, 505
Stave-machine	W. S. Colwell	Allegheny City, Pa	Oct. 27, 1868	83, 466
Stave-machine	W. S. Colwell and F. Veazie	Pittsburgh, Pa	Jan. 8, 1867	60, 999
Stave-machine	J. C. Cook	Buffalo, N. Y	Nov. 20, 1866	59, 821

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Stave-machine	J. Decker	Reidsville, Ga	Sept. 27, 1859	25, 603
Stave-machine	C. G. Dibble	Farmington, Iowa	Feb. 28, 1865	46, 548
Stave-machine	W. H. Doane	Chicago, Ill	May 6, 1862	35, 142
Stave-machine	D. Drawbaugh	Eberly's Mills, Pa	May 22, 1855	12, 900
Stave-machine	I. B. Dudrey	Athens, Ohio	Aug. 29, 1854	11, 599
Stave-machine	I. B. Dudrey	Athens, Ohio	Aug. 29, 1854	11, 600
Stave-machine	L. R. Fulda	San Francisco, Cal	Apr. 30, 1872	126, 197
Stave-machine	S. F. Gelston, J. T. Johnson, and C. R. Tompkins.	Rochester, N. Y	Sept. 25, 1860	30, 178
Stave-machine	T. Hanvey	Elma, N. Y	Aug. 25, 1863	39, 649
Stave-machine	G. R. Hay	Edgerton, Ohio	June 27, 1865	48, 486
Stave-machine	H. Hays	New York, N. Y	Oct. 4, 1859	25, 639
Stave-machine	C. Hobson	Hannibal, Mo	May 30, 1854	10, 988
Stave-machine	E. and B. Holmes	Buffalo, N. Y	Jan. 22, 1861	31, 169
Stave-machine	E. and B. Holmes	Buffalo, N. Y	Feb. 19, 1861	31, 459
Stave-machine	J. Holmes	Belfast, Me	Oct. 6, 1868	82, 718
Stave-machine	A. H. Hook	New York, N. Y	Apr. 3, 1866	53, 618
Stave-machine	W. E. Hopkins	Parkman, Ohio	Dec. 24, 1867	72, 640
Stave-machine	D. Lewers	Louisville, Ky	Dec. 24, 1867	72, 648
Stave-machine	J. Little	Evansville, Ind	Dec. 20, 1859	26, 505
Stave-machine	G. W. Livermore	Cambridgeport, Mass	Feb. 19, 1856	14, 299
Stave-machine	J. McMurtry	Fayette County, Ky	July 29, 1856	15, 429
Stave-machine	H. S. McNish	Lowell, Mass	Apr. 21, 1857	17, 130
Stave-machine	E. Moore, W. Clark, and J. Lindsey.	Shelbyville, Ind	Feb. 9, 1858	19, 308
Stave-machine	C. Murdock	Ellenville, N. Y	June 19, 1866	55, 695
Stave-machine	C. Murdock	Hartford, Conn	Dec. 15, 1868	84, 897
Stave-machine	J. Nevison	Morgan, Ohio	Apr. 2, 1861	31, 934
Stave-machine	S. Newman	Cleveland, Ohio	Nov. 30, 1869	97, 310
Stave-machine	A. Pettengill, jr	Peterborough, N. H	July 22, 1862	35, 948
Stave-machine	J. J. Ralya	Allegheny, Pa	June 19, 1866	55, 708
Stave-machine	W. Robinson	Augusta, Ga	July 10, 1855	13, 230
Stave-machine	W. Robinson	Augusta, Ga	Feb. 23, 1858	19, 444
Stave-machine	W. Sisson	Fulton, N. Y	Sept. 24, 1861	33, 370
Stave-machine	W. M. Sloane	Buffalo, N. Y	June 29, 1858	20, 737
Stave-machine	W. M. Sloane	Buffalo, N. Y	July 17, 1860	29, 199
Stave-machine	M. Snell	Medina, N. Y	Mar. 26, 1861	31, 831
Stave-machine	G. H. Swan	Bridgeport, Conn	June 12, 1855	13, 045
Stave-machine	J. S. Thompson	Glen's Falls, N. Y	Aug. 8, 1865	49, 320
Stave-machine	W. Trapp	Elmira, N. Y	June 12, 1860	28, 701
Stave-machine	B. W. Warner	Rome, N. Y	June 17, 1873	140, 101
Stave-machine	P. Werum	Berlin, Ohio	June 27, 1865	48, 468
Stave-machine	J. R. Winfield and W. S. Colwell.	Pittsburgh, Pa	Mar. 13, 1866	53, 211
Stave-machine bed-plate	W. H. Doane	Chicago, Ill	Feb. 11, 1862	34, 353
Stave-machine, Rotary	G. Starkweather	Hartford, Conn	Mar. 15, 1859	23, 274
Stave-machines, Chopping-block for	A. H. Crozier and C. Carrier	Oswego, N. Y	Mar. 29, 1859	23, 356
Stave-machines, Device for drawing saw-dust, &c., from.	M. Brayer	Rochester, N. Y	Apr. 12, 1859	23, 550
Stave-machines, Method of holding and feeding the bolts in.	A. Hupp	Lancaster, Ohio	Apr. 6, 1858	19, 853
Stave-machinery, Device in	C. Hoyt	West Aurora, Ill	July 29, 1856	15, 423
Stave-making machine	A. T., J. B., and S. Barnes	Groesbeck, Ohio	Nov. 17, 1863	40, 596
Stave-manufacturing machine	D. S. Pratt	Orwell, N. Y	June 4, 1872	127, 643
Stave-planing machine	M. T. Kennedy	Fallston, Pa	June 12, 1855	13, 035
Stave, Rammer	A. T. Brewer	Brighton, Mass	Apr. 26, 1870	102, 214
Stave riving and dressing machine	W. Robinson	Augusta, Ga	Sept. 11, 1860	29, 997
Stave-saw	H. Holmes	New Marlborough, Mass	Jan. 21, 1835	....
Stave-saw	H. Pepper	Southwick, Mass	Feb. 5, 1835	....
Stave, &c., sawing	A. Bard and S. Heywood	Lunenburgh, Mass	Feb. 20, 1836	....
Stave-sawing	C. J. Holman	Oshkosh, Wis	Jan. 2, 1866	51, 896
Stave-sawing	C. M. Keller	Washington, D. C	June 30, 1836	....
Stave-sawing	J. J. Smith and J. J. Price	Cayuga County, N. Y	Jan. 21, 1834	....
Stave sawing and dressing machine	D. Woodcock	Independence Centre, N. Y	July 15, 1851	8, 230
Stave sawing and jointing machine	S. King	Suffield, Conn	Sept. 14, 1839	1, 322
Stave sawing and jointing machine	N. Moore	Ellsworth, Me	June 19, 1838	789
Stave sawing and jointing machine	C. Mowry	Oneida Lake, N. Y	Sept. 3, 1872	131, 022
Stave sawing, jointing, and smoothing machine	D. Toms	Auburn, N. Y	July 8, 1830	....
Stave-sawing machine	W. R. and O. D. Bishop	Harrison, Wis	Mar. 24, 1868	75, 846
Stave-sawing machine	P. Cornell	Brutus, N. Y	Apr. 11, 1832	....
Stave-sawing machine	P. Deal and J. Greenman	Amsterdam and Northampton, N. Y.	Sept. 1, 1857	18, 088
Stave-sawing machine	R. Densmore	South Haven, Mich	Sept. 6, 1859	25, 321
Stave-sawing machine	H. H. Evarts	Chicago, Ill	Mar. 23, 1858	19, 692
Stave-sawing machine	H. H. Evarts	Chicago, Ill	July 10, 1868	29, 125
Stave-sawing machine	R. W. George	Boston, Mass	Mar. 28, 1871	113, 043
Stave-sawing machine	P. Gerlach, A. Knipper, and J. Gerlach.	Cleveland, Ohio	Aug. 27, 1872	130, 802
Stave-sawing machine	H. Holmes	New Marlborough, Mass	Dec. 20, 1837	527
Stave-sawing machine	R. E. House	Choconut, Pa	Aug. 12, 1839	1, 284
Stave-sawing machine	W. W. Hurlbut and J. B. Hurlbut.	Muscatine, Iowa, and Chicago, Ill.	July 3, 1860	28, 986
Stave-sawing machine	W. Lancy and S. Merrick	Springfield, Mass	Sept. 25, 1838	946
Stave-sawing machine	C. Mowry	Oneida Lake, N. Y	Oct. 4, 1864	44, 550
Stave-sawing machine	C. Murdock	Sarnia, Canada	Oct. 28, 1873	143, 992
Stave-sawing machine	O. Osten	Tahoe City, Cal	June 25, 1872	128, 243
Stave-sawing machine	H. Pepper	Southwick, Mass	Sept. 3, 1839	1, 313
Stave-sawing machine	A. Rewrick	San Francisco, Cal	Apr. 4, 1871	113, 565
Stave-sawing machine	N. J. Templeton	Cincinnati, Ohio	Apr. 16, 1872	125, 768
Stave-sawing machine	N. J. Templeton	Cincinnati, Ohio	Mar. 4, 1873	136, 550
Stave-sawing machine	D. Toms	Auburn, N. Y	Mar. 2, 1830	....
Stave-sawing machine	J. W. Trout	Arcola, Ill	Feb. 2, 1869	86, 607
Stave-sawing machine	C. T. Watson	Deerfield, Mich	Jan. 31, 1871	111, 414
Stave-sawing machine	B. D. Whitney	Winchendon, Mass	May 7, 1872	126, 603
Stave-sawing machine for barrels, &c	J. J. Smith	Brutus, N. Y	Mar. 3, 1837	135
Stave-sawing machinery	E. Jenney	New Bedford, Mass	May 21, 1850	7, 380
Stave-setting machine, Barrel	J. A. Morrell	Chicago, Ill	Nov. 12, 1867	70, 738
Stave shaving and listing machine	D. North and H. Naramor	Caledonia, N. Y	Nov. 26, 1824	....

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Invention.	Inventor.	Residence.	Date.	No.
Staves and shingles, Machine for shaving and heading.	J. Everhart	Waynesville, Ohio	June 12, 1835	....
Staves, blind-slats, &c., from solid blocks, Machine for cutting.	H. Brauck	New York, N. Y	May 3, 1839	1, 142
Staves, Clamp for trussing cylinders of	W. Shepperman	Pittsburgh, Pa	Feb. 18, 1868	74, 725
Staves for barrels, casks, &c., Machine for jointing	J. Wyman	Boston, Mass	July 28, 1838	860
Staves for barrels, casks, &c., Machine for sawing bilged.	R. Stewart	Michigan City, Ind	Nov. 25, 1841	2, 372
Staves for barrels, Dressing	S. Crumber	Buckhorn, Pa	Mar. 18, 1834	....
Staves for barrels, Jointing and making	C. McGregory	Newport, N. H	Aug. 26, 1834	....
Staves for inside of casks, Machine for shaving	C. B. Goodrich	Rutland, Mass	Feb. 3, 1829	....
Staves for outside of casks, Machine for shaving	C. B. Goodrich	Rutland, Mass	Feb. 4, 1829	....
Staves from steamed timber, Cutting	G. Pack	Sullivan, N. Y	Oct. 10, 1835	....
Staves from the block, Machine for cutting	J. Little	Evansville, Ind	Mar. 8, 1859	23, 181
Staves from the block, Machine for riving	S. Lyman, J. P. Hodgkins, and E. Rawson.	Carthage, N. Y	Feb. 8, 1859	22, 882
Staves from the bolt, and dressing their edges simultaneously, Method of sawing.	E. K. Collins	Cambridge, Mass	July 28, 1857	17, 871
Staves from the bolt, Machine for cutting	I. W. Forbes	Jefferson, Wis	Dec. 7, 1858	22, 231
Staves from the bolt, Machine for cutting	W. Steele	Wheeling, Va	Oct. 19, 1858	21, 856
Staves from the bolt, Machine for sawing	H. H. Evarts	Chicago, Ill	May 17, 1859	24, 079
Staves, &c., Knife for cutting	I. Crossett	East Bennington, Vt	Jan. 13, 1847	4, 925
Staves, &c., Machine for beveling	J. Trahin and C. Vœbel	New Orleans, La	Aug. 4, 1857	17, 946
Staves, Machine for chamfering and crozing barrel	J. W. Jones	Middleport, Ohio	Jan. 14, 1873	134, 892
Staves, Machine for crozing the ends of	G. W. Livermore	Cambridgeport, Mass	Apr. 4, 1854	10, 749
Staves, Machine for cutting grooves in	C. Ruggles	Huron, Ohio	Oct. 7, 1873	143, 466
Staves, Machine for finishing ends of	J. E. Warner	Boston, Mass	Nov. 15, 1853	10, 242
Staves, Machine for planing tapering	V. Munck	Carrollton, La	Mar. 17, 1857	16, 849
Staves, Machinery for plaining rived	H. Law	Wilmington, N. C	Sept. 19, 1848	5, 792
Staves, Method of making wooden vessels of	W. H. Smoote	Prince William County, Va	Feb. 19, 1861	31, 487
Staves or billets of cast-iron for packing tobacco, &c., in square boxes, Constructing.	T. Samson	Richmond, Va	May 11, 1841	2, 090
Staves ready for the truss-hoop, Machine for making cooper's.	A. Amsden	Bloomfield, N. Y	July 27, 1827	....
Staves, Rotary reciprocating knife for smoothing	W. B. Dunning	Geneva, N. Y	Mar. 30, 1858	19, 760
Staves, Saw for sawing	S. King	Chittenango, N. Y	Aug. 29, 1833	....
Staves, Sawing or rounding	P. Cornell	Weedsport, N. Y	Jan. 5, 1833	....
Stay-ends, Die for forging	P. W. Lowe	Plantsville, Conn	May 6, 1873	138, 668
Stay-log	J. A. Squires	New York, N. Y	Feb. 18, 1873	135, 945
Stay-log clamp	J. N. Lyman	New York, N. Y	Feb. 22, 1870	100, 164
Stays and other bolts, Tool for cutting off	J. Renshaw	Michigan City, Ind	Mar. 7, 1865	46, 763
Stays for articles of dress	J. Dick	New York, N. Y	Feb. 13, 1855	12, 379
Stays for removing distortions in the spine	L. McKechnie	....	July 1, 1796	....
Stays for supporting the spine of the human body, and keeping the body erect, &c.	L. Whiton	Troy, N. Y	Oct. 12, 1844	3, 795
Stays, Lady's	L. Balis	Oriskany, N. Y	Sept. 10, 1850	7, 627
Steak-crusher	A. Castellaw	Chester, Ill	Feb. 11, 1868	74, 304
Steak-mangler	J. P. Dorman	Galesburgh, Ill	Aug. 8, 1865	49, 245
Steak-masher	R. Flynn	West Brookfield, Mass	July 14, 1868	79, 966
Steak-masticator	R. F. Cook	Jacksonville, Fla	Aug. 27, 1872	130, 844
Steaks tender, Machine for making beef and other	T. W. Moore	Plattsburgh, N. Y	Aug. 3, 1858	21, 108
Steam-alarm and safety-apparatus	S. W. Warren	Brooklyn, N. Y	July 6, 1858	20, 835
Steam alarm, Superheated	D. Saunders	Brooklyn, N. Y	Nov. 5, 1872	132, 863
Steam and air brake	S. M. Goodale	Saint Louis, Mo	Aug. 6, 1872	130, 215
Steam and air brake	W. Loughridge	Baltimore, Md	Feb. 11, 1873	135, 828
Steam and air brake	W. Naylor	Mildmay Park, England	July 30, 1872	130, 064
Steam and air brake	A. Q. Smith and H. M. Ogden	Burlington, Iowa	Jan. 14, 1873	134, 774
Steam and air brake	B. W. Smith and E. O. Frink	Indianapolis, Ind	Mar. 4, 1873	136, 462
Steam and air brake	J. Y. Smith	Pittsburgh, Pa	Mar. 11, 1873	136, 781
Steam and air brake	G. Westinghouse, jr	Pittsburgh, Pa	Dec. 24, 1872	134, 177
Steam and air brake	G. Westinghouse, jr	Pittsburgh, Pa	Dec. 24, 1872	134, 178
Steam and air brake	G. Westinghouse, jr	Pittsburgh, Pa	Dec. 31, 1872	134, 408
Steam and air brake	G. Westinghouse, jr	Pittsburgh, Pa	Oct. 28, 1873	144, 006
Steam and air brake, Railway-car	C. E. Moore and M. L. Wyman	Boston and Melrose, Mass	Aug. 12, 1873	141, 805
Steam or air brakes, Operating	S. F. Clouser	Salt Lake City, Utah	May 13, 1873	138, 859
Steam and air brakes, Slack-taking-up apparatus for	G Westinghouse, jr	Pittsburgh, Pa	Nov. 11, 1873	144, 582
Steam and air brakes, Universal expansion-joint for	S. M. Goodale	Saint Louis, Mo	Aug. 6, 1872	130, 216
Steam and air engine	J. F. Alexander	Shelby, N. C	Oct. 10, 1871	119, 685
Steam and air engine	E. L. Buckup	Stapleton, N. Y	Oct. 1, 1872	131, 736
Steam and air engine	C. Burleigh	Fitchburgh, Mass	July 27, 1869	93, 051
Steam and air engine	F. J. Crouch	San José, Cal	Dec. 9, 1873	145, 281
Steam and air engine	G. Warsop	Nottingham, England	Feb. 22, 1870	100, 090
Steam and air engine, Combined	J. B. Atwater	Chicago, Ill	Mar. 26, 1867	63, 198
Steam and air engine, Combined	W. M. Storm	New York, N. Y	Nov. 7, 1871	120, 681
Steam and air engine, Combined	J. B. Tarr	Chicago, Ill	Nov. 26, 1867	71, 425
Steam and air engine lubricator	S. N. Goodale	Saint Louis, Mo	Oct. 17, 1871	120, 056
Steam and air, Method of combining and utilizing	R. E. Rogers and J. Black	Philadelphia, Pa	Apr. 23, 1861	32, 149
Steam and caloric engine	A. Hendry	Victoria, British Columbia	Dec. 21, 1869	98, 061
Steam and condensed air applied to machinery	H. G. Spafford	Lansingburgh, N. Y	July 2, 1833	....
Steam and fire regulator	A. Kipp, jr	Sing Sing, N. Y	Sept. 1, 1868	81, 649
Steam and fire regulator	J. Woodruff	Rahway, N. J	Mar. 6, 1860	27, 403
Steam and gas engine, Combined	J. A. H. Ellis	Springfield, Vt	Oct. 25, 1870	198, 574
Steam and gas pipe hook	C. B. Long	Worcester, Mass	June 14, 1870	104, 326
Steam and hot-air engine, Combined	D. Musselman	Lucas County, Iowa	Apr. 30, 1861	32, 200
Steam and hot-air heating apparatus, Combined	L. Phleger	Philadelphia, Pa	Nov. 1, 1864	44, 888
Steam and hydraulic press	J. F. Taylor	Charleston, S. C	Feb. 28, 1871	112, 298
Steam and other boats to prevent them from sinking, Constructing.	H. D. Forbes	New York	Feb. 16, 1843	2, 954
Steam and other engine regulator	J. A. Burnap	Albany, N. Y	Oct. 16, 1860	30, 384
Steam and other enginery, Device for	P. Lear	Boston, Mass	Mar. 16, 1869	87, 783
Steam and other motive-power engines	R. M. Marchant	London, England	June 13, 1871	115, 876
Steam and other pipes, Covering for	C. M. O'Hara	Fall River, Mass	June 17, 1873	139, 968
Steam and power engine	S. Costill	Philadelphia, Pa	Feb. 20, 1832	....
Steam and pressure gage	J. Alcroft and T. Mighten	New York, N. Y	Jan. 27, 1857	16, 458
Steam and rotary-wheel engine	F. Harris	Albany, N. Y	July 10, 1827	....
Steam and vacuum gage	C. Bourgeois	Buffalo, N. Y	June 8, 1869	90, 988
Steam and vacuum gage	P. Stillman	New York, N. Y	May 9, 1848	5, 552

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Steam and vapor engine	G. H. Babcock and S. Wilcox	Plainfield, N. J., and Brooklyn, N. Y.	Dec. 10, 1872	133, 742
Steam and vapor engine	F. A. Morley	Syracuse, N. Y	Sept. 6, 1870	107, 206
Steam and vapor generator	R. Brereton	Easton, Pa	Dec. 2, 1873	145, 086
Steam and water engine	H. J. King and D. C. Mulock	Middletown, N. Y	Feb. 28, 1871	112, 151
Steam and water, Engine operated by	J. Black	Philadelphia, Pa	Jan. 8, 1850	6, 995
Steam and water gage	W. C. Grimes	Spring Garden, Pa	Jan. 6, 1852	8, 629
Steam and water gage	A. Williams	Williamsburgh, N. Y	May 10, 1859	23, 994
Steam and water gage, Steam-boiler	C. H. Hall	New York, N. Y	July 30, 1872	129, 948
Steam and water heater	A. Cary	New York, N. Y	June 4, 1867	65, 345
Steam and water indicator for boilers	T. P. Akers	New York, N. Y	June 9, 1868	78, 781
Steam and water joint	W. Young	Easton, Pa	July 16, 1867	66, 932
Steam and water motor, Combined	F. Millward	Cincinnati, Ohio	May 1, 1866	54, 469
Steam and water pipe	E. H. Hill	Worcester, Mass	May 1, 1866	54, 346
Steam and water pipes in an exhaust-chamber, Arranging.	J. Becker	Chickies, Pa	Aug. 22, 1871	118, 183
Steam and water piping for buildings, System of	J. H. Mills	Boston, Mass	Dec. 30, 1873	145, 962
Steam and water power, Combination of	A. Huffer	Hagerstown, Md	Jan. 6, 1863	37, 344
Steam and water separator for steam-engines	C. E. Emery	Brooklyn, N. Y	Mar. 8, 1870	100, 512
Steam, Apparatus for burning fluids for the generation of.	T. Shaw	Philadelphia, Pa	June 2, 1863	38, 791
Steam, Apparatus for controlling the pressure of	H. S. Williams	Malta, Ohio	Feb. 14, 1854	10, 526
Steam, Application of	S. Morey		Mar. 25, 1795	
Steam, Application of	A. N. Sabin	Frankfort, Ky	Dec. 30, 1820	
Steam, Application of	J. Skinner	Mantua, Ohio	Mar. 14, 1828	
Steam, Applying	E. Baldwin	Washington, D. C	Jan. 28, 1833	
Steam as a motive-power, Employing water used for condensing.	J. P. Pirsson	New York, N. Y	Dec. 19, 1848	5, 977
Steam as a motor, Device for applying	R. Blair	Malugin Grove, Ill	Nov. 8, 1859	26, 009
Steam as a moving power to machinery, Application of.	S. Briggs	New Orleans	May 28, 1817	
Steam-bath	L. Heine	Philadelphia, Pa	June 16, 1868	78, 971
Steam-bath	C. Keastner	Chicago, Ill	Apr. 18, 1871	113, 894
Steam-bath	B. Reilley	Cincinnati, Ohio	Feb. 5, 1831	
Steam-bath	J. Young	Williamsburgh, N. Y	May 29, 1866	55, 194
Steam-bath apparatus, Medicated	L. Heine and C. Scholfield	Philadelphia, Pa	June 14, 1870	104, 307
Steam-baths, Applying simple or medicated	B. Reilley	Philadelphia, Pa	July 31, 1832	
Steam-bathing apparatus	W. Wolff	New York, N. Y	Aug. 26, 1873	142, 185
Steam-blower	A. K. Rider	Hydeville, Vt	Jan. 23, 1866	52, 206
Steam-blower	J. W. Stevens	South Danvers, Mass	July 18, 1865	48, 850
Steam, Blowing off	P. Taltavull	Washington, D. C	Aug. 8, 1865	49, 318
Steamboat	D. Dod	Mendham, N. J	Feb. 2, 1814	
Steamboat	R. Fulton	New York	Feb. 11, 1809	
Steamboat	E. West		July 6, 1802	
Steamboat and boiler	W. Thornton	Washington, D. C	Jan. 16, 1809	
Steamboat and engine	D. Large and F. Grice	Philadelphia, Pa	Nov. 12, 1812	
Steamboat-boilers, Filtering-apparatus for	P. K. Hubbs	Holmesburgh, Pa	Apr. 24, 1849	6, 384
Steamboat-chain float	M. Morrison	Boston, Mass	Jan. 17, 1811	
Steamboat-chimneys, Means of operating	J. Christy	Cincinnati, Ohio	Mar. 4, 1873	136, 414
Steamboat for passage of rapids	T. Blanchard	Springfield, Mass	Mar. 25, 1831	
Steamboat furnaces, boilers, and chimneys, Adjustment of.	E. Nott	Schenectady, N. Y	Apr. 22, 1835	
Steamboat, Ice	R. Irvine	Baltimore, Md	Jan. 12, 1832	
Steamboat, Shallow-water	B. Phillips	New York	Apr. 28, 1826	
Steamboat shoving-pole	D. Cumming, jr	Mobile, Ala	Feb. 24, 1857	16, 704
Steamboat-signal	A. Potts	Philadelphia, Pa	Sept. 8, 1859	18, 159
Steamboat-signal apparatus	P. Kenny	New York, N. Y	Jan. 22, 1867	61, 434
Steamboat-stages, Apparatus for handling	F. Moore and G. Hastie	Florence, Ind	Sept. 1, 1868	81, 667
Steamboat-staging	A. J. Bell	Ashland, Ky	Jan. 22, 1861	31, 147
Steamboat water-wheel	D. Hulme	Bergen County, N. J	Apr. 16, 1833	
Steamboat-wheel, Anti-friction	J. Nicolet	Pittsburgh, Pa	June 12, 1835	
Steamboat-wheel, Anti-friction	J. Nicolet	Pittsburgh, Pa	June 12, 1835	
Steamboats and steam-mills, Protection of	G. R. Clark	Rochester, N. Y	July 7, 1835	
Steamboats, Constructing	H. Burden	Troy, N. Y	Mar. 8, 1834	
Steamboats, Explosion-guard for	J. Longhead and J. B. Chapman	Philadelphia, Pa	June 11, 1830	
Steamboats, &c., Fender for	E. C. Genet	New York	Sept. 9, 1825	
Steamboats from sinking, Mode of preventing	L. G. Mickles	New York	Apr. 25, 1843	3, 060
Steamboats, Mode of preserving the equilibrium or trim of.	S. M. Purse and M. Staley	Ashley, Mo	Dec. 31, 1839	1, 460
Steamboats, Water-tight bulk-head for	R. Whiting	Louisville, Ky	June 6, 1825	
Steamboats, Water-tight iron tank for the protection of the timbers of.	A. G. Polhamens	Nyack, N. Y	Mar. 26, 1867	63, 293
Steam-boiler	H. W. Adams	Philadelphia, Pa	Feb. 6, 1872	123, 437
Steam-boiler	O. W. Allison	Buffalo, N. Y	Dec. 30, 1873	145, 039
Steam-boiler	J. H. Ames	Baltimore, Md	Feb. 7, 1865	46, 203
Steam-boiler	J. H. Ansell	Pontiac, Mich	Dec. 19, 1871	121, 979
Steam-boiler	J. F. Antisdell, G. W. Cronk, and J. H. Haviland.	Janesville, Wis	June 27, 1871	116, 255
Steam-boiler	J. Armstrong	New Orleans, La	Dec. 23, 1856	16, 262
Steam-boiler	J. Armstrong	New Orleans, La	Mar. 6, 1860	27, 340
Steam-boiler	J. B. Atwater	Geneva, Ill	June 20, 1871	116, 007
Steam-boiler	W. Avery	Syracuse, N. Y	June 28, 1836	
Steam-boiler	S. Baker	New York	Dec. 13, 1821	
Steam-boiler	S. Baldwin	Saint Louis, Mo	Apr. 7, 1857	16, 959
Steam-boiler	G. W. Barnett	Springfield, Ohio	May 25, 1858	28, 319
Steam-boiler	L. P. Barre	Paris, France	Mar. 26, 1861	31, 772
Steam-boiler	B. H. Bartol	Philadelphia, Pa	Mar. 4, 1862	34, 556
Steam-boiler	A. F. Barton	Dedham, Mass	Sept. 22, 1863	40, 016
Steam-boiler	I. Barton	Williamsport, Pa	Apr. 9, 1872	125, 520
Steam-boiler	N. S. Bean and J. G. Collins	Manchester, N. H., and Boston, Mass.	July 3, 1860	29, 032
Steam-boiler	W. E. Bird	Cahawba, Ala	July 18, 1854	11, 316
Steam-boiler	F. B. Blanchard	Brooklyn, N. Y	Apr. 2, 1861	31, 861
Steam-boiler	F. B. Blanchard	Brooklyn, N. Y	June 25, 1861	32, 613
Steam-boiler	N. L. Blanchard	Spuyten Duyvil, N. J	July 25, 1871	117, 251
Steam-boiler	C. T. Boardman	Pawtucket, R. I	May 23, 1865	47, 790
Steam-boiler	H. Boardman	Plattsburgh, N. Y	Apr. 10, 1855	12, 665
Steam-boiler	J. H. Boardman	New York, N. Y	July 31, 1860	29, 355

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Invention.	Inventor.	Residence.	Date.	No.
Steam-boiler	T. G. Boone	Brooklyn, N. Y	May 22, 1855	12,893
Steam-boiler	A. Brase and L. Salladay	Sciotoville, Ohio	Jan. 17, 1871	111,036
Steam-boiler	J. Briggs	Louisville, Ky	Oct. 27, 1863	40,391
Steam-boiler	M. S. Bringier	New Orleans, La	Oct. 18, 1859	25,802
Steam-boiler	J. Brown	New York, N. Y	July 24, 1860	29,241
Steam-boiler	W. Budd and J. L. Husband	Philadelphia, Pa	July 12, 1864	43,476
Steam-boiler	P. N. Burke	Buffalo, N. Y	Dec. 6, 1859	26,333
Steam-boiler	H. Camp	Rouseville, Pa	Jan. 14, 1873	134,784
Steam-boiler	B. F. Campbell	Roxbury, Mass	Dec. 6, 1859	26,334
Steam-boiler	B. F. Campbell	Roxbury, Mass	Dec. 18, 1860	30,957
Steam-boiler	T. Champion	Washington, D. C	Feb. 6, 1855	12,360
Steam-boiler	M. R. Clapp	Seneca Falls, N. Y	June 12, 1860	28,711
Steam-boiler	A. Clark	Fort Des Moines, Iowa	Mar. 16, 1858	19,621
Steam-boiler	G. Clark	Buffalo, N. Y	Nov. 16, 1869	96,885
Steam-boiler	C. Clinton	Goshen, N. Y	Apr. 29, 1842	2,582
Steam-boiler	F. Coffin and C. C. K. Beach	Boston, Mass	June 29, 1829	....
Steam-boiler	E. R. Cole	Pawtucket, R. I	Feb. 25, 1873	136,214
Steam-boiler	F. Calligon	Buffalo, N. Y	July 2, 1861	32,682
Steam-boiler	J. S. Calvin	Pittsburgh, Pa	June 12, 1860	28,657
Steam-boiler	H. D. Cooper	Boston, Mass	May 3, 1864	42,562
Steam-boiler	P. Cooper	New York	Oct. 13, 1831	....
Steam-boiler	G. H. Corliss	Providence, R. I	Aug. 26, 1862	36,278
Steam-boiler	B. F. Cowan	New York, N. Y	Dec. 27, 1864	45,589
Steam-boiler	E. Crane	Dorchester, Mass	Nov. 8, 1859	26,021
Steam-boiler	W. W. Crane	Auburn, N. Y	June 9, 1863	38,812
Steam-boiler	W. H. Davis, and R. V. De Guinon.	Jersey City, N. J	Feb. 18, 1873	136,041
Steam-boiler	B. Densmore	Rochester, N. Y	Sept. 15, 1863	39,895
Steam-boiler	R. V. De Witt	Albany, N. Y	Sept. 25, 1839	1,339
Steam-boiler	R. E. Dibble	New York, N. Y	Aug. 20, 1850	7,576
Steam-boiler	E. N. Dickerson	New York, N. Y	Mar. 1, 1864	41,762
Steam-boiler	F. P. Dimpfel	Philadelphia, Pa	July 16, 1850	7,506
Steam-boiler	F. P. Dimpfel	Philadelphia, Pa	Apr. 1, 1856	14,555
Steam-boiler	W. Douglass and J. H. Brown	Pittsburgh, Pa., and Youngstown, Ohio.	Sept. 2, 1873	142,330
Steam-boiler	G. S. Dubois	Jersey City, N. J	Dec. 6, 1870	109,883
Steam-boiler	J. Dunham	Detroit, Mich	Mar. 19, 1861	31,704
Steam-boiler	J. J. Dutcher	New Haven, Conn	Aug. 14, 1855	13,425
Steam-boiler	J. Ekin	Xenia, Ohio	July 29, 1862	36,051
Steam-boiler	G. M. Eldridge	Philadelphia, Pa	Sept. 3, 1872	130,985
Steam-boiler	W. M. and J. B. Ellis	Washington, D. C	Sept. 29, 1857	18,276
Steam-boiler	W. M. and J. B. Ellis	Washington, D. C	Aug. 26, 1862	36,288
Steam-boiler	E. Evans	North Tonawanda, N. Y	Mar. 7, 1871	112,328
Steam-boiler	J. P. Evans	Hazleton, Pa	Apr. 1, 1862	34,823
Steam-boiler	J. B. Eversole	Saint Louis, Mo	Mar. 31, 1840	1,536
Steam-boiler	J. W. Farrell	Reading, Pa	May 18, 1852	8,955
Steam-boiler	R. Ferguson	New Orleans, La	Aug. 4, 1857	17,924
Steam-boiler	L. B. Flanders	Philadelphia, Pa	June 28, 1864	43,301
Steam-boiler	L. B. Flanders	Philadelphia, Pa	July 19, 1864	43,577
Steam-boiler	D. Flynn	Fall River, Mass	Nov. 15, 1870	109,195
Steam-boiler	D. H. Fowler	New Orleans, La	Sept. 30, 1856	15,803
Steam-boiler	J. L. Frisbie	Brooklyn, N. Y	Jan. 24, 1871	111,191
Steam-boiler	H. Gerner	New York, N. Y	July 18, 1865	48,805
Steam-boiler	F. W. Gordon	Ironton, Ohio	May 9, 1871	114,666
Steam-boiler	T. Greer	Philadelphia, Pa	July 4, 1854	11,220
Steam-boiler	B. L. Griffith	Hazle Township, Pa	May 24, 1859	24,117
Steam-boiler	R. S. Harris	Galena, Ill	July 21, 1863	39,289
Steam-boiler	R. S. Harris	Dubuque, Iowa	Dec. 15, 1863	40,929
Steam-boiler	S. Harris	Washington, D. C	May 14, 1872	126,609
Steam-boiler	J. Harrison, jr	Philadelphia, Pa	Oct. 4, 1859	25,640
Steam-boiler	J. Harshman	Dayton, Ohio	July 3, 1855	13,168
Steam-boiler	J. F. Hayen	Buffalo, N. Y	Oct. 31, 1871	120,516
Steam-boiler	S. H. Head	Boston, Mass	Nov. 1, 1859	26,002
Steam-boiler	H. Hinkley	Boston, Mass	Nov. 21, 1865	51,046
Steam-boiler	A. Hitchcock	New York, N. Y	June 30, 1863	39,047
Steam-boiler	C. B. Hoard	Watertown, N. Y	Apr. 22, 1856	14,721
Steam-boiler	H. Hoffman	New York, N. Y	Feb. 26, 1861	31,542
Steam-boiler	R. Hooper	Baltimore, Md	Aug. 9, 1859	25,017
Steam-boiler	E. L. Horton	Hartford, Conn	Sept. 5, 1838	906
Steam-boiler	S. Hoyt	New York, N. Y	Nov. 10, 1863	40,563
Steam-boiler	F. A. Huntington	San Francisco, Cal	Dec. 24, 1872	134,284
Steam-boiler	B. Irving	Green Point, N. Y	Aug. 30, 1853	9,971
Steam-boiler	E. M. Ivens	New Orleans, La	Apr. 5, 1859	23,470
Steam-boiler	H. Jackson	Elizabeth Township, Ohio	July 25, 1854	11,377
Steam-boiler	N. Johnson	Jasper, N. Y	Apr. 14, 1857	17,042
Steam-boiler	T. J. Jones	West Whiting, Pa	July 18, 1865	48,870
Steam-boiler	W. R. Jones	Cambridge, Mass	Aug. 29, 1871	118,457
Steam-boiler	G. Keen	North McGregor, Iowa	Aug. 22, 1871	118,246
Steam-boiler	E. Kendall	Cambridgeport, Mass	Feb. 22, 1859	23,030
Steam-boiler	A. R. Ketcham	Buffalo, N. Y	July 6, 1858	20,802
Steam-boiler	A. T. Lackland	Saint Charles, Mo	Apr. 19, 1864	42,383
Steam-boiler	L. Lefebore	Donaldsonville, La	May 3, 1859	23,848
Steam-boiler	H. Leslie	Jersey City, N. J	July 5, 1864	43,417
Steam-boiler	W. A. Lightall	New York, N. Y	July 22, 1862	35,942
Steam-boiler	D. Lister	Carbondale, Pa	Aug. 1, 1865	49,125
Steam-boiler	G. G. Lobdell	Wilmington, Del	Nov. 18, 1873	144,778
Steam-boiler	T. J. Lovegrove	Philadelphia, Pa	Aug. 15, 1871	118,030
Steam-boiler	E. Lynch	Washington, D. C	Apr. 12, 1859	23,593
Steam-boiler	W. B. Mack	Detroit, Mich	Dec. 6, 1870	109,829
Steam-boiler	T. Main	Green Point, N. Y	May 30, 1865	47,968
Steam-boiler	G. Mann, jr	Ottawa, Ill	June 28, 1864	43,350
Steam-boiler	D. B. Martin	Washington, N. J	Nov. 28, 1854	11,997
Steam-boiler	L. E. C. Martin	London, England	Aug. 2, 1864	43,749
Steam-boiler	L. E. C. Martin	London, England	Jan. 17, 1865	45,955
Steam-boiler	D. Matthew	Philadelphia, Pa	Dec. 8, 1857	18,822
Steam-boiler	D. Matthew	Philadelphia, Pa	July 1, 1862	35,768
Steam-boiler	G. B. McDonald	Louisville, Ky	Jan. 20, 1863	37,455
Steam-boiler	G. Menzel	Milwaukee, Wis	Apr. 5, 1859	23,482

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Steam-boiler	C. M. Miles	Vineland, N. J	Apr. 19, 1864	42, 443
Steam-boiler	C. M. Miles	Vineland, N. J	July 19, 1864	43, 624
Steam-boiler	J. Millholland	Reading, Pa	Feb. 17, 1852	8, 742
Steam-boiler	E. S. Mills	Mankato, Minn	Oct. 8, 1872	132, 095
Steam-boiler	J. Montgomery	Memphis, Tenn	Dec. 26, 1845	4, 331
Steam-boiler	J. Montgomery	Brooklyn, N. Y	May 4, 1858	20, 167
Steam-boiler	J. Montgomery	Baltimore, Md	Apr. 17, 1860	27, 922
Steam-boiler	C. Moore	Trenton, N. J	Oct. 2, 1855	13, 619
Steam-boiler	J. Murphy	New York, N. Y	July 10, 1855	13, 223
Steam-boiler	R. Needham	Dukinfield, England	July 30, 1867	67, 340
Steam-boiler	J. E. Neill	Brooklyn, N. Y	Jan. 3, 1865	45, 739
Steam-boiler	E. Neumann	New York, N. Y	Oct. 22, 1872	132, 484
Steam-boiler	O. Newton	Pittsburgh, Pa	July 27, 1858	21, 017
Steam-boiler	E. Nicholson	Cleveland, Ohio	Feb. 6, 1872	123, 414
Steam-boiler	S. Norris	Philadelphia, Pa	Jan. 3, 1860	26, 701
Steam-boiler	W. G. Norris	Philadelphia, Pa	Oct. 20, 1857	18, 467
Steam-boiler	W. Oldman	Buffalo, N. Y	June 7, 1859	24, 326
Steam-boiler	J. J. Palmer	Flushing, N. Y	Feb. 24, 1857	16, 693
Steam-boiler	J. N. Paxman and H. M. Davey	Colchester, England	July 9, 1872	128, 812
Steam-boiler	J. Perkins and W. H. Burnet	Newark, N. J	Sept. 29, 1863	40, 118
Steam-boiler	C. J. C. Petersen	Davenport, Iowa	Dec. 14, 1858	22, 303
Steam-boiler	H. N. Pettengill	Rockford, Ill	Nov. 6, 1855	13, 761
Steam-boiler	L. Phleger	Tamaqua, Pa	Mar. 11, 1856	14, 408
Steam-boiler	W. H. Phelon	New Orleans, La	Nov. 5, 1872	132, 856
Steam-boiler	S. Pierce	Troy, N. Y	Apr. 5, 1859	23, 490
Steam-boiler	J. Porter	Jefferson, Tex	Mar. 5, 1861	31, 620
Steam-boiler	T. W. Pratt	Boston, Mass	Sept. 26, 1865	50, 161
Steam-boiler	T. W. Pratt	Boston, Mass	Aug. 26, 1873	142, 293
Steam-boiler	T. T. Prosser	Fond du Lac, Wis	Aug. 11, 1863	39, 530
Steam-boiler	P. Quinn	South New Market, N. H	Dec. 13, 1870	110, 158
Steam-boiler	G. W. Rains	Newburgh, N. Y	Aug. 14, 1860	29, 615
Steam-boiler	G. W. Rains	Newburgh, N. Y	Apr. 30, 1861	32, 204
Steam-boiler	E. Reynolds	Mansfield, Conn	Apr. 4, 1865	47, 130
Steam-boiler	H. Ricketson	New York	Dec. 13, 1816	....
Steam-boiler	S. Ritty	Dayton, Ohio	July 22, 1873	141, 172
Steam-boiler	R. L. Robertson, jr	New Orleans, La	Oct. 17, 1871	120, 102
Steam-boiler	J. A. Roebling	Trenton, N. J	Dec. 5, 1854	12, 032
Steam-boiler	C. Rogers and I. Vance	Pittsburgh, Pa	July 9, 1872	128, 913
Steam-boiler	R. E. Rogers and J. Black	Philadelphia, Pa	Jan. 19, 1864	41, 323
Steam-boiler	E. H. Rümmell	Glenbeulah, Wis	Oct. 3, 1871	119, 652
Steam-boiler	W. Schaubel	Philadelphia, Pa	Jan. 10, 1860	26, 788
Steam-boiler	G. Shand	Blackfriars, England	Nov. 28, 1871	121, 426
Steam-boiler	T. Shaw	Philadelphia, Pa	Apr. 19, 1864	42, 448
Steam-boiler	H. M. Shreve	Louisville, Ky	Apr. 21, 1830	....
Steam-boiler	C. F. Sibbald	Philadelphia, Pa	Dec. 20, 1853	10, 353
Steam-boiler	E. B. Sintzenich	Rochester, N. Y	Feb. 21, 1865	46, 533
Steam-boiler	M. Smart	New York, N. Y	Feb. 20, 1872	123, 845
Steam-boiler	E. W. Smith and J. H. Mars	New York, N. Y	Oct. 2, 1860	30, 258
Steam-boiler	M. Smith	Pittsburgh, Pa	Jan. 28, 1862	34, 275
Steam-boiler	S. Solliday	Sumneytown, Pa	Dec. 18, 1860	30, 992
Steam-boiler	J. H. Springer	Philadelphia, Pa	Feb. 16, 1864	41, 665
Steam-boiler	S. Steinmetz	Chicago, Ill	Feb. 24, 1863	37, 795
Steam-boiler	I. C. Stern	Philadelphia, Pa	Dec. 14, 1858	22, 334
Steam-boiler	C. Stewart	Worcester, Mass	Aug. 26, 1873	142, 180
Steam-boiler	O. M. Stillman and S. Wilcox, jr	Westerly, R. I	Mar. 25, 1856	14, 523
Steam-boiler	G. A. Stone and J. A. Whipple	Roxbury and Boston, Mass	Apr. 10, 1860	27, 843
Steam-boiler	W. M. Storm	New York, N. Y	Aug. 1, 1865	49, 199
Steam-boiler	J. W. and E. Strange	Taunton, Mass	Sept. 29, 1836	....
Steam-boiler	S. Stuart	Sterling Centre, Mass	Nov. 12, 1861	33, 717
Steam-boiler	D. Sullivan	Bangor, Me	May 16, 1871	114, 876
Steam-boiler	F. Sulter	Cleveland, Ohio	Dec. 27, 1870	110, 604
Steam-boiler	P. Sweeney	Buffalo, N. Y	June 13, 1854	11, 069
Steam-boiler	E. W. Tarbell	Boston, Mass	Apr. 17, 1860	27, 954
Steam-boiler	C. F. Thomas	Taunton, Mass	June 19, 1855	13, 111
Steam-boiler	S. Tucker and J. R. Brownell	Dayton, Ohio	June 13, 1871	115, 993
Steam-boiler	J. Vaile	Miami City, Ohio	July 24, 1860	29, 334
Steam-boiler	F. R. Walker	Tully, Mo	Dec. 15, 1857	18, 875
Steam-boiler	O. Weboskey	Providence, R. I	May 28, 1872	127, 394
Steam-boiler	H. Whinfield	New York, N. Y	Mar. 16, 1858	19, 669
Steam-boiler	H. Whitaker	Buffalo, N. Y	June 23, 1857	17, 648
Steam-boiler	E. Whiteley	Boston, Mass	Apr. 19, 1859	23, 733
Steam-boiler	J. M. Whittemore	Brighton, Mass	Nov. 23, 1837	478
Steam-boiler	J. Wightman	Pittsburgh, Pa	June 13, 1854	11, 102
Steam-boiler	A. Wigzell	Halifax, England	Dec. 24, 1872	134, 232
Steam-boiler	J. G. Wilson	New York	Feb. 22, 1837	....
Steam-boiler	E. D. Wood	Utica, N. Y	Jan. 31, 1865	46, 171
Steam-boiler	J. Wood and H. N. Winans	Jersey City, N. J	Mar. 9, 1858	19, 601
Steam-boiler	F. A. Woodson	Selma, Ala	May 2, 1871	114, 503
Steam-boiler	F. A. Woodson	Selma, Ala	Jan. 7, 1873	134, 720
Steam-boiler	J. R. Worswick and E. Lewis	Cleveland, Ohio	Nov. 4, 1873	144, 378
Steam-boiler	B. H. Wright	Rome, N. Y	Apr. 24, 1860	28, 032
Steam-boiler	R. Yeamans	Baltimore, Md	Nov. 20, 1817	....
Steam-boiler alarm	P. Clark	Rahway, N. J	Dec. 5, 1854	12, 019
Steam-boiler alarm	H. B. Fernald	Boston, Mass	Nov. 13, 1847	5, 370
Steam-boiler alarm	J. H. and W. J. Killey	Hamilton, Canada	Feb. 6, 1872	123, 484
Steam-boiler alarm	J. H. and W. J. Killey	Hamilton, Canada	Nov. 12, 1872	132, 967
Steam-boiler alarm	T. Stubblefield	Columbus, Ga	Jan. 1, 1856	14, 033
Steam-boiler alarm and indicator	J. Ditks	Philadelphia, Pa	Dec. 3, 1850	7, 808
Steam-boiler alarm-apparatus	J. Kirk	London, England	Oct. 3, 1871	119, 522
Steam-boiler alarm-gage	E. A. Kimball	Boston, Mass	June 19, 1860	28, 810
Steam boiler and evaporator	D. Marvin and O. W. Seely	New York and Sodus, N. Y	Aug. 28, 1840	1, 746
Steam boiler and evaporator	O. W. Seely	New York	July 1, 1841	2, 153
Steam boiler and furnace	E. Ingalls	Providence, R. I	May 30, 1846	4, 554
Steam boiler and furnace	G. W. Lascell	Syracuse, N. Y	Nov. 19, 1872	133, 161
Steam boiler and generator	L. E. Hopkins	New York	June 18, 1842	2, 678
Steam boiler and kettle, Combined	A. Lapham	Brooklyn, N. Y	Nov. 18, 1856	16, 002
Steam-boiler and regulating height of water therein	D. H. Hooper	New Albany, Ind	Oct. 31, 1831	....
Steam-boiler and steam-engine	J. Rumsey	Kentucky	Nov. 15, 1816	....

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Invention.	Inventor.	Residence.	Date.	No.
Steam-boiler, Annular	T. Champion	Philadelphia, Pa	Feb. 18, 1851	7,935
Steam-boiler ash-pan	J. Gates	Portland, Oreg	Nov. 14, 1871	120,870
Steam-boiler attachments, Thimble for making	A. Talbott	Richmond, Va	Nov. 14, 1871	121,017
Steam-boiler, Base-burning	T. S. Durfee	New York, N. Y	Mar. 19, 1872	124,672
Steam-boiler blow-off	B. C. Davis and J. T. Hardester	Baltimore, Md	Mar. 5, 1872	124,341
Steam-boiler blow-off	B. C. Nye	Pomeroy, Ohio	Dec. 10, 1872	133,881
Steam-boiler blow-off pipe	J. C. McLaughlin	Pittsburgh, Pa	June 14, 1870	104,178
Steam-boiler blow-off pipe	N. Sherman	Cincinnati, Ohio	Aug. 1, 1871	117,571
Steam-boiler, Brewers'	A. Hammer	Reading, Pa	Aug. 11, 1857	17,968
Steam-boiler casing and furnace	W. P. Hall	Piqua, Ohio	Dec. 19, 1871	122,010
Steam-boiler, Cast iron	J. R. Averill	Manchester, N. Y	May 27, 1824	......
Steam-boiler chimney	A. Fairchild	Ashland, Ohio	Feb. 13, 1855	12,385
Steam-boiler, Compound-furnace	L. Disbrow	New York	Feb. 18, 1831	......
Steam-boiler connection, Sectional	J. B. Root	New York, N. Y	Dec. 30, 1873	146,097
Steam-boiler, &c., covering, Fabric for	W. C. Selden and C. B. Kid	Brooklyn and New York, N. Y.	Oct. 27, 1868	83,414
Steam-boiler detectors, Preventing explosion by means of.	T. Eubank	New York	June 8, 1830	......
Steam-boiler explosions, Mode of obviating the danger from.	S. Waterman	Williamsburgh, N. Y	Aug. 2, 1853	9,907
Steam-boiler explosions, Preventing	A. B. Quimby	Hagerstown, Md	Oct. 1, 1830	......
Steam-boiler feed and blow-off	R. P. Garsed and I. D. Buck	Norristown and Philadelphia, Pa.	Sept. 23, 1873	143,006
Steam-boiler feed and blow-off apparatus	J. Frick	Philadelphia, Pa	Mar. 18, 1856	14,449
Steam-boiler feed-pipe	J. Cone	Bristol, Pa	Oct. 10, 1871	119,824
Steam-boiler feed-regulator	C. H. Brown	Fitchburgh, Mass	June 17, 1862	35,584
Steam-boiler feeder	J. H Blessing	Albany, N. Y	Jan. 21, 1873	134,972
Steam-boiler feeder	L. Foote	North Fairfield, Ohio	Jan. 24, 1871	111,116
Steam-boiler feeder	J. E. Karns and W. C. and J. C. Douthett.	Allegheny County, Pa	July 9, 1872	128,889
Steam-boiler feeder	C. H. Prentiss	Detroit, Mich	Dec. 5, 1865	51,392
Steam-boiler feeder	A. Spencer, jr., and T. C. Spencer.	Penn Yan and Elmira, N. Y.	Apr. 1, 1873	137,497
Steam-boiler feeder, Self-regulating	G. W. Blake	New York, N. Y	Aug. 26, 1862	36,270
Steam-boiler-feeding apparatus	T. Shaw	Philadelphia, Pa	July 31, 1860	29,444
Steam-boiler fire-boxes, Water-legs of	R. Montgomery	New York, N. Y	May 7, 1872	126,476
Steam-boiler float	W. S. Blake	Boston, Mass	Dec. 9, 1856	16,173
Steam-boiler float	S. Dusten	Detroit, Mich	July 30, 1872	129,885
Steam-boiler float	F. A. Hoyt	Boston, Mass	May 27, 1856	14,959
Steam-boiler flue	J. M. Schramm	Pontoosuc, Ill	Jan. 23, 1872	122,971
Steam-boiler flue and water-space, Arrangement of	W. E. Milligan	Troy, N. Y	July 15, 1851	8,226
Steam-boiler-flue cleaner	C. H. Stebbins	Circleville, Ohio	July 11, 1871	117,008
Steam-boiler-flue joint	A. C. Fletcher	New York, N. Y	Oct. 31, 1871	120,508
Steam-boiler flues, Machine for removing scales from.	P. E. Garvin	Philadelphia, Pa	Aug. 8, 1865	49,255
Steam-boiler flues, Mode of preventing corrosion at the joints of.	P. Wineman	Minooka, Ill	July 2, 1867	66,435
Steam-boiler for cooking	E. Whiteley	Boston, Mass	Apr. 8, 1856	14,622
Steam-boiler for cooking food for stock	W. J. Estes	Penn Township, Ill	May 3, 1870	102,521
Steam-boiler for heating by hot air and steam	D. Sullivan	Bangor, Me	Apr. 30, 1872	126,163
Steam-boiler for heating purposes, Hot-air jackets for marine.	J. W. Beach	Buffalo, N. Y	June 18, 1872	127,950
Steam-boiler for steam-engines, &c	T. Ashcroft	Boston, Mass	Nov. 23, 1835	......
Steam-boiler for steam-engines, &c	J. J. Rush	Philadelphia, Pa	June 3, 1837	221
Steam-boiler for warming buildings	G. W. Blake	Brooklyn, N. Y	Aug. 26, 1873	142,126
Steam-boiler furnace	J. Alcorn, jr	Charlestown, Mass	Oct. 5, 1858	21,644
Steam-boiler furnace	J. Amory	West Roxbury, Mass	Apr. 19, 1859	23,650
Steam-boiler furnace	J. Amory and W. P. Parrott	Boston, Mass	June 27, 1854	11,150
Steam-boiler furnace	W. D. Ballard	Kansas City, Mo	Oct. 11, 1859	25,713
Steam-boiler furnace	J. Best	Lancaster, Pa	Jan. 8, 1867	60,990
Steam-boiler furnace	L. Bradley	Sharon, Conn	Dec. 12, 1844	3,853
Steam-boiler furnace	D. Carpenter	Cohoes, N. Y	June 6, 1848	5,621
Steam-boiler furnace	N. L. Carpenter	Natchez, Miss	June 2, 1868	78,426
Steam-boiler furnace	T. Champion	Washington, D. C	June 26, 1855	13,146
Steam-boiler furnace	J. Chilcott	Brooklyn, N. Y	Jan. 9, 1866	51,923
Steam-boiler furnace	H. Clark	Dedham, Mass	Feb. 10, 1863	37,608
Steam-boiler furnace	T. H. Clark	Indianapolis, Ind	Feb. 12, 1867	62,007
Steam-boiler furnace	J. H. Connelly and J. W. Phillips.	Wheeling, Va	Jan. 21, 1862	34,198
Steam-boiler furnace	B. Crawford	Allegheny City, Pa	Jan. 29, 1850	7,051
Steam-boiler furnace	T. B. Dexter	Lynn, Mass	Aug. 8, 1865	49,241
Steam-boiler furnace	F. P. Dimpfel	Philadelphia, Pa	Nov. 5, 1850	7,752
Steam-boiler furnace	F. P. Dimpfel	Philadelphia, Pa	Jan. 3, 1854	10,364
Steam-boiler furnace	F. P. Dimpfel	Philadelphia, Pa	Nov. 30, 1858	22,169
Steam-boiler furnace	H. R. Foote	Oil City, Pa	Oct. 15, 1867	69,790
Steam-boiler furnace	C. Townes	Pittsburgh, Pa	Dec. 17, 1867	72,278
Steam-boiler furnace	C. H. Fox	New Orleans, La	Feb. 20, 1872	123,882
Steam-boiler furnace	H. Gerner	New York, N. Y	Nov. 17, 1863	40,618
Steam-boiler furnace	R. Gill and G. W. Grier	Altoona, Pa	Mar. 13, 1860	27,442
Steam-boiler furnace	H. F. and L. A. Gossin	Thibodeaux, La	Dec. 25, 1855	13,983
Steam-boiler furnace	J. Green	Norristown, Pa	Oct. 29, 1867	70,200
Steam-boiler furnace	E. F. Griffin	Chicago, Ill	Jan. 9, 1872	122,521
Steam-boiler furnace	J. C. Gripp	Pittsburgh, Pa	Apr. 4, 1871	113,424
Steam-boiler furnace	J. T. Hancock	Boston, Mass	Mar. 1, 1864	41,770
Steam-boiler furnace	C. J. Harris	Bloomington, Ill	Oct. 3, 1871	119,605
Steam-boiler furnace	G. G. Hunt	Quincy, Ill	Aug. 4, 1863	39,402
Steam-boiler furnace	H. H. Huntley	Quincy, Ill	Oct. 6, 1868	82,841
Steam-boiler furnace	E. T. Ingalls	Haverhill, Mass	July 29, 1856	15,424
Steam-boiler furnace	E. H. Jones and R. Stevenson	Albany and Schenectady, N. Y.	Oct. 25, 1859	25,901
Steam-boiler furnace	L. Maillard	New York, N. Y	May 18, 1839	1,144
Steam-boiler furnace	J. Millholland	Reading, Pa	Apr. 16, 1861	32,176
Steam-boiler furnace	I. Morgan	Quincy, Ill	Feb. 23, 1869	87,279
Steam-boiler furnace	J. F. Myers	Kokomo, Ind	Dec. 4, 1866	60,229
Steam-boiler furnace	J. F. Myers and N. and W. Leas	Kokomo, Ind	Nov. 26, 1867	71,501
Steam-boiler furnace	J. L. Paige	Rochester, N. Y	Jan. 5, 1869	85,688
Steam-boiler furnace	J. R. Robinson	Boston, Mass	Mar. 5, 1861	31,627
Steam-boiler furnace	J. R. Robinson	Boston, Mass	Mar. 19, 1861	31,743

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Steam-boiler furnace	J. R. Robinson	Boston, Mass	May 14, 1861	32, 313
Steam-boiler furnace	J. Q. C. Searle	Topeka, Kans	Jan. 11, 1870	98, 805
Steam-boiler furnace	G. Shryock and S. Underwood	Louisville, Ky	Sept. 14, 1843	3, 295
Steam-boiler furnace	C. D. Smith	Chicago, Ill	Sept. 19, 1871	119, 056
Steam-boiler furnace	S. Smith	Worcester, Mass	Aug. 18, 1868	81, 22[illegible]
Steam-boiler furnace	W. S. Storms	Middletown, Ohio	Apr. 9, 1867	63, 670
Steam-boiler furnace	F. Salter	Saint Paul, Minn	June 30, 1868	79, 514
Steam-boiler furnace	L. R. Wallace	Adrian, Mich	May 25, 1869	90, 615
Steam-boiler furnace	J. H. Webster	Saint Louis, Mo	Mar. 20, 1866	53, 367
Steam-boiler furnace	H. Wilkins	Brownsville, Pa	Oct. 2, 1860	30, 275
Steam-boiler furnace	F. X. Wurm	Vienna, Austria	Nov. 14, 1848	5, 917
Steam-boiler furnace	H. Yates	Brantford, Canada	July 6, 1858	20, 840
Steam-boiler-furnace door-way	W. S. Wood	Newtown, N. Y	Apr. 16, 1872	125, 777
Steam-boiler furnaces, Apparatus for the combustion of smoke in.	D. H. Williams	Allegheny, Pa	May 15, 1860	28, 335
Steam-boiler furnaces from the wheel-house of steamers, Arrangement for supplying air to.	L. Brandt	Indianola, Tex	Dec. 20, 1859	26, 470
Steam-boiler furnaces, Means of promoting combustion in.	J. C. Tiffany and G. G. Heermance.	New York and Hudson, N. Y.	Apr. 2, 1861	31, 938
Steam-boiler furnaces, Mode of supplying steam to promote combustion in.	J. B. Petitval	Charleston, S. C	July 17, 1839	1, 250
Steam-boiler furnaces, Safety-apparatus for regulating.	W. G. Pike and I. R. Scott	Waltham, Mass	June 23, 1857	17, 636
Steam-boiler gage	G. W. Graeber, B. F. Cowan, and A. C. Wurzback.	Memphis, Tenn	Mar. 6, 1860	27, 364
Steam-boiler gage and water-regulator	M. Nutting	Portland, Me	Feb. 10, 1857	16, 604
Steam-boiler gage, Electro-magnetic	M. G. Farmer	Salem, Mass	Sept. 20, 1859	25, 496
Steam-boiler gage, Magnetic	F. A. Hoyt	Boston, Mass	Mar. 13, 1860	27, 498
Steam-boiler, Gas-generating	J. Laing	Hoboken, N. J	Apr. 9, 1861	31, 985
Steam-boiler generator	R. Yeamans	Baltimore, Md	Jan. 9, 1815	....
Steam-boiler heater	D. Hess	West Union, Iowa	July 5, 1859	24, 637
Steam-boiler heater	W. C. Wren and M. Waterhouse.	Brooklyn, N. Y., and Passaic, N. J.	Sept. 3, 1872	131, 044
Steam-boiler heater and condenser-tube joint	J. Harrison, jr	Philadelphia, Pa	Jan. 9, 1872	122, 606
Steam-boiler heater and feeder	J. Pilkington	Philadelphia, Pa	June 24, 1873	140, 301
Steam-boiler-heating attachment	E. Spencer	Elizabeth, N. J	Mar. 15, 1870	100, 947
Steam-boiler, Horizontal flue	B. G. Wood	Nashville, Tenn	Apr. 16, 1872	125, 871
Steam-boiler, Hydrocarbon-burning	A. G. Bugby	Philadelphia, Pa	Feb. 6, 1872	123, 452
Steam-boiler indicator	A. J. Maris	New York, N. Y	Oct. 6, 1868	82, 856
Steam-boiler indicator, Telephonic	T. P. Akers	Lexington, Mo	June 1, 1858	20, 398
Steam-boiler, Marine	T. Rimmer	South Braintree, Mass	Sept. 13, 1870	107, 293
Steam-boiler, Marine	A. C. Stuners	Castleton, N. Y	Aug. 16, 1864	43, 872
Steam-boiler meter	W. H. Lindsay	New York, N. Y	Feb. 17, 1852	8, 741
Steam-boiler, Oil-burning	F. W. Ofeldt	Newark, N. J	Oct. 8, 1872	131, 966
Steam boiler or generator	A. W. Sharp and W. F. Horton	Honeoye Falls, N. Y	Dec. 5, 1842	2, 871
Steam-boiler register	J. D. Rice	Philadelphia, Pa	Aug. 20, 1850	7, 583
Steam-boiler regulator	S. Graham	Roxbury, Mass	Feb. 15, 1838	609
Steam-boiler regulator	C. A. Wilson	Cincinnati, Ohio	May 1, 1860	28, 123
Steam-boiler-riveting machine	L. Severance	Pittsburgh, Pa	July 11, 1837	268
Steam-boiler, Safety	R. Bulkley	New York, N. Y	Apr. 8, 1824	....
Steam-boiler, Safety	L. P. Clark	Baltimore, Md	May 30, 1838	762
Steam-boiler, Safety	C. Curtis	New York, N. Y	May 28, 1833	....
Steam-boiler, Safety	J. C. Douglas	New York, N. Y	July 20, 1831	....
Steam-boiler safety-apparatus	T. Clark	New Haven, Conn	Aug. 21, 1847	5, 254
Steam-boiler safety-apparatus	J. and J. I. G. Collins	Chester, Pa	Nov. 25, 1851	8, 543
Steam-boiler safety-apparatus	W. K. Hall	West Hoboken, N. J	Mar. 9, 1858	19, 568
Steam-boiler safety-apparatus	A. H. Judd	Saint Louis, Mo	Aug. 15, 1854	11, 525
Steam-boiler safety-apparatus	L. E. Lincoln	Lowell, Mass	Oct. 4, 1859	25, 655
Steam-boiler safety-apparatus	C. McCarthy	New York, N. Y	Oct. 9, 1860	30, 336
Steam-boiler safety-apparatus	J. Montgomery	Memphis, Tenn	Sept. 2, 1845	4, 178
Steam-boiler safety-apparatus	G. W. Bains	Newburgh, N. Y	June 11, 1861	32, 532
Steam-boiler safety-apparatus	J. M. Reeder	Nashville, Tenn	Sept. 18, 1855	13, 583
Steam-boiler safety-apparatus	F. Stebbins	Hinsdale, N. H	Nov. 2, 1858	21, 991
Steam-boiler safety-apparatus	J. C. Tennant and J. Workman	Philadelphia, Pa	Aug. 13, 1850	7, 570
Steam-boiler safety-apparatus	H. Waterman	Williamsburgh, N. Y	Dec. 28, 1852	9, 509
Steam-boiler safety-attachment	H. Kaempf	Newark, N. J	May 7, 1872	126, 398
Steam-boiler safety-guard	G. Mann, jr	Ottawa, Ill	June 18, 1861	32, 572
Steam-boiler safety-plug	J. R. Robinson	Boston, Mass	Apr. 30, 1861	32, 206
Steam-boiler safety-plug	J. R. Robinson	Boston, Mass	Apr. 16, 1872	125, 692
Steam-boiler, Sectional	J. K. Abbott	Cincinnati, Ohio	Sept. 23, 1873	142, 976
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	Plainfield, N. J., and Brooklyn, N. Y.	Jan. 7, 1873	134, 505
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	Plainfield, N. J., and Brooklyn, N. Y.	Feb. 18, 1873	135, 877
Steam-boiler, Sectional	J. S. Barden	Providence, R. I	July 16, 1872	129, 513
Steam-boiler, Sectional	W. H. Cornell	Easton, Pa	Apr. 18, 1871	113, 857
Steam-boiler, Sectional	S. J. Gold	Cornwall, Conn	Dec. 12, 1865	51, 448
Steam-boiler, Sectional	J. Griffith and G. W. Wundram	New York, N. Y	Aug. 6, 1872	130, 294
Steam-boiler, Sectional	J. S. Griffith and C. E. Emery	New York, N. Y	Feb. 7, 1871	111, 639
Steam-boiler, Sectional	J. Harris	Baltimore, Md	Feb. 18, 1873	135, 910
Steam-boiler, Sectional	J. McCorn	Philadelphia, Pa	July 25, 1871	117, 311
Steam-boiler, Sectional	T. E. McNeill	New York, N. Y	June 10, 1873	139, 724
Steam-boiler, Sectional	J. H. Mills	Boston, Mass	Nov. 28, 1871	121, 395
Steam-boiler, Sectional	H. B. Pancoast and F. I. Maule	Philadelphia, Pa	Mar. 4, 1873	136, 453
Steam-boiler, Sectional	D. Renshaw	Syracuse, N. Y	Feb. 20, 1872	123, 793
Steam-boiler, Sectional	D. Renshaw	Syracuse, N. Y	Dec. 24, 1872	134, 165
Steam-boiler, Sectional tubular	J. A. Maynard	Newtonville, Mass	Sept. 19, 1871	119, 038
Steam-boiler-socket-bolt washer	J. G. Collins	Boston, Mass	Mar. 19, 1867	63, 021
Steam-boiler straw-burning attachment	D. W. Kellogg and B. C. Coffin	Battle Creek, Mich., and New York, N. Y.	July 29, 1873	141, 359
Steam-boiler superheater	J. Wolford and R. Conner	Knightsville, Ind	May 6, 1873	138, 723
Steam-boiler thimble	S. Wethered	Baltimore, Md	Aug. 23, 1864	43, 938
Steam-boiler to hatters' grates, Applying	H. V. Raymond	New York, N. Y	Sept. 16, 1824	....
Steam-boiler, Triple-pipe	S. Morey	Oxford, N. H	Dec. 19, 1818	....
Steam-boiler tube	R. C. Bristol	China, Mich	Aug. 1, 1854	11, 409
Steam-boiler-tube bushing	F. R. Hulbert	Grand Rapids, Mich	Dec. 26, 1871	122, 252
Steam-boiler-tube coupling	P. J. Brennan and I. M. Quigg	New York	Sept. 17, 1872	131, 390

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Steam-boiler tubes, Plug or ferrule for stopping leaks in.	R. A. Copeland	Brooklyn, N. Y	Dec. 16, 1873	145, 631
Steam-boiler, Tubular	J. Howard and E. T. Bousfield	Bedford, England	Apr. 4, 1871	113, 298
Steam-boiler, Tubular	O. Hyde	Oakland, Cal	Aug. 29, 1871	118, 613
Steam-boiler, Tubular	C. A. Thompson	Flushing, N. Y	Apr. 4, 1871	113, 466
Steam-boiler, Upright	G. W. Rawson	Cambridgeport, Mass	July 8, 1873	147, 729
Steam-boiler, Vertical	C. M. Miller	Phelps, N. Y	Aug. 12, 1873	141, 656
Steam-boiler, Vertical	E. S. Miller	Charleston, S C	June 21, 1830	....
Steam-boiler, Vertical cylindrical	J. W. and E. Strange	Taunton, Mass	Sept. 29, 1836	34
Steam-boiler, Vertical tubular	H. Whitaker	New York, N. Y	July 16, 1872	129, 381
Steam-boiler water-gage and feed-water indicator	A. S. Goodrich	New York, N. Y	May 13, 1873	138, 882
Steam-boiler water-tube	C. G. Beitel	Easton, Pa	Mar. 26, 1872	124, 929
Steam-boilers and furnaces thereof, Arrangement of	H. Boardman	Plattsburgh, N. Y	Aug. 14, 1849	6, 649
Steam-boilers and lining safes, Composition for covering.	A. Ott	New York, N. Y	Apr. 6, 1869	88, 661
Steam-boilers and other furnaces, Consumption of fuel in.	C. Burckhardt	Cincinnati, Ohio	June 5, 1849	6, 503
Steam-boilers and supplying water to same, Mode of connecting.	C. Evans	Pittsburgh, Pa	Sept. 3, 1840	1, 762
Steam boilers and tanks, Construction of	H. J. Stein	Hannibal, Mo	Oct. 4, 1870	107, 976
Steam-boilers, Apparatus for feeding and returning water of condensation to.	T. E. McNeill	New York, N. Y	May 6, 1873	138, 673
Steam-boilers, Apparatus for indicating the action of the feed-pump to.	T. J. Sloan	New York, N. Y	Jan. 17, 1854	10, 432
Steam-boilers, Apparatus for indicating the position of the water in.	H. F. Hart	Brooklyn, N. Y	Mar. 26, 1861	31, 803
Steam-boilers, Apparatus for purifying acid water for.	G. C. L. Degenhardt	Tresckow, Pa	Dec. 3, 1861	33, 828
Steam-boilers, Apparatus for regulating the drafts and preventing the explosion of.	H. L. Justice	Nashville, Tenn	June 12, 1860	28, 675
Steam-boilers, Apparatus for regulating the supply of water to.	I. L. Colman	Vincennes, Ind	Mar. 15, 1859	23, 229
Steam-boilers, Apparatus for regulating the supply of water to.	Z. L. Jacobs	Hebron, Conn	July 27, 1858	21, 003
Steam-boilers, Apparatus for skimming the surface of the water in.	A. M. Sprague	Mobile, Ala	Mar. 22, 1859	23, 320
Steam-boilers, Apparatus for testing hollow floats for.	G. W. Lane	Boston, Mass	Apr. 3, 1860	27, 725
Steam-boilers, Apparatus to prevent explosion of	C. Evans	Pittsburgh, Pa	Apr. 15, 1839	1, 122
Steam-boilers, Apparatus to regulate the supply of water to.	S. R. Cline	Spring Garden, Pa	Aug. 2, 1853	9, 895
Steam-boilers, Application of an electrical current to.	M. G. Farmer	Salem, Mass	Mar. 30, 1869	88, 285
Steam-boilers, Arrangement of	W. Barnhill	Pittsburgh, Pa	Mar. 2, 1852	8, 768
Steam-boilers, Arrangement of air-tubes in fireboxes of.	B. L. Griffith	Hazleton, Pa	Dec. 22, 1857	18, 897
Steam-boilers, Arrangement of fusible plug or disk for.	W. Burnett	Boston, Mass	Mar. 7, 1854	10, 589
Steam-boilers, Automatic feeder and indicator for	A. D. Clark	Greenfield, Ohio	July 11, 1870	105, 304
Steam-boilers by auxiliary engines, Feeding water to.	W. Ball	Chicopee, Mass	July 24, 1855	13, 228
Steam-boilers, Closing hand-hole plate in	J. R. Taylor and H. A. Towne	Centralia, Ill	Aug. 1, 1865	49, 170
Steam-boilers, Composition for covering	J. M. Allison	New Albany, Ind	Apr. 29, 1873	138, 358
Steam-boilers, &c., Composition for covering	F. Leroy	London, England	Dec. 14, 1869	97, 781
Steam-boilers, &c., Composition for covering	J. Riley	Troy, N. Y	Oct. 4, 1870	107, 055
Steam-boilers, Composition for covering	J. Riley	Troy, N. Y	May 9, 1871	114, 711
Steam-boilers, &c., Composition for covering	J. Riley and C. W. Bissell	Troy, N. Y	Oct. 5, 1869	95, 517
Steam-boilers, Composition for preventing incrustation in.	S. Brock	New Orleans, La	Apr. 20, 1869	89, 121
Steam-boilers, Composition for preventing incrustation in.	R. Hatfull	Deptford, England	Sept. 30, 1873	143, 240
Steam-boilers, Composition for preventing incrustation in.	W. Hewitt	Pimlico, England	Aug. 4, 1868	80, 544
Steam-boilers, Composition for preventing incrustation in.	H. F. and L. F. Knoderer	Chillicothe, Ohio	Jan. 3, 1860	26, 683
Steam-boilers, Composition for preventing incrustation in.	G. W. Lord	Philadelphia, Pa	Dec. 21, 1869	98, 173
Steam-boilers, Composition for preventing incrustation in.	J. G. Rogers	Madison, Ind	May 31, 1870	103, 661
Steam-boilers, Composition for preventing incrustation in.	A. Temple	Bridgeport, Conn	Nov. 29, 1864	45, 303
Steam-boilers, Composition for removing and preventing incrustation in.	C. Burfitt	New Wimbledon, England	Nov. 4, 1873	144, 254
Steam-boilers, Composition for removing incrustation from.	C. G. Dodge	Marshall, Mich	Oct. 10, 1871	119, 830
Steam-boilers, Composition for removing incrustation from.	C. McKee	San Francisco, Cal	Oct. 9, 1866	58, 660
Steam-boilers, Composition for removing scales from.	C. A. Sweet	Ripon, Wis	Sept. 26, 1871	119, 426
Steam-boilers, Compound and apparatus for removal of incrustation in.	J. Chandler	Pioneer, Pa	Oct. 22, 1872	132, 439
Steam-boilers, Compound and process of removing incrustations of lime from.	J. A. Hewett	Nora Springs, Iowa	Dec. 27, 1870	110, 463
Steam-boilers, &c., Compound for coating the surface of.	W. A. French	Philadelphia, Pa	Sept. 14, 1869	94, 882
Steam-boilers, Compound for coating the surface of	W. A. French	Philadelphia, Pa	Sept. 14, 1869	94, 883
Steam-boilers, Compound for preventing and removing incrustation in.	W. H. Burridge	Cleveland, Ohio	June 7, 1870	103, 974
Steam-boilers, Compound for preventing incrustation in.	G. Birks	Marine, Ill	Mar. 1, 1870	100, 358
Steam-boilers, Compound for preventing incrustation in.	R. J. Ellis and G. Dobson	Liverpool, England	Nov. 5, 1872	132, 820
Steam-boilers, Compound for preventing incrustation in.	H. F. Knoderer, sr., and L. F. Knoderer.	Columbus, Ohio	May 28, 1867	65, 092
Steam-boilers, Compound for preventing incrustation in.	F. Lambrun	New Orleans, La	Aug. 30, 1864	44, 001
Steam-boilers, Compound for preventing incrustation in.	J. J. Lavo	Wyandotte, Kans	Apr. 15, 1873	137, 935

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Steam-boilers, Compound for preventing incrustation in.	T. E. Petersen	Copenhagen, Denmark	July 8, 1873	140, 589
Steam-boilers, Compound for preventing incrustation in.	W. T. Rickard	New Monitor, Cal	July 25, 1871	117, 462
Steam-boilers, Compound for removal of scales from	W. T. Grant	Neelyville, Ill	Jan. 24, 1871	111, 198
Steam-boilers, Compound for stopping leaks in	H. Lefevre and J. McGuire	Lancaster, Pa	Oct. 29, 1867	70, 342
Steam-boilers, Compound to prevent incrustation in	W. Pearson	Chicago, Ill	Oct. 22, 1872	132, 369
Steam-boilers, Connecting sections of	C. Whittier	Roxbury, Mass	June 9, 1863	38, 855
Steam-boilers, Connecting the sheets of sheet-flues and water-space of.	R. Montgomery	New York, N. Y	Jan. 11, 1853	9, 538
Steam-boilers, Constructing	J. F. C. Salomon	Philadelphia, Pa	Oct. 17, 1835	....
Steam-boilers, Construction of	E. A. Lester	Boston, Mass	May 14, 1827	....
Steam-boilers, Construction of	J. Montgomery	Baltimore, Md	Jan. 10, 1860	26, 779
Steam-boilers, Construction of	J. M. Reeder	Memphis, Tenn	Aug. 2, 1853	9, 901
Steam-boilers, Construction of	A. S. Valentine	Bellefonte, Pa	Aug. 6, 1842	2, 748
Steam-boilers, Construction of inverted-arch	J. C. F. Salomon	Cincinnati, Ohio	Nov. 16, 1839	1, 415
Steam-boilers, Copper-coated-iron pipe for	H. J. Newton	New York, N. Y	Oct. 22, 1872	132, 485
Steam-boilers, &c., Corrugated plate for	R. Montgomery	New York, N. Y	May 17, 1853	9, 738
Steam-boilers, Covering	J. Ashcroft	New York, N. Y	June 19, 1866	55, 598
Steam-boilers, Covering	C. A. Baumann	New York, N. Y	Mar. 1, 1870	100, 354
Steam-boilers, Covering	M. A. Johnson	Lowell, Mass	Mar. 24, 1863	37, 967
Steam-boilers, Covering	J. D. Jones	Brooklyn, N. Y	Nov. 12, 1872	133, 037
Steam-boilers, Covering	C. M. O'Hara	New York, N. Y	Nov. 23, 1869	97, 103
Steam-boilers, Covering	W. Peters	Baltimore, Md	Aug. 26, 1862	36, 324
Steam-boilers, Covering	J. E. Sharp, E. Ainsworth, and F. A. Salbaton.	Troy, N. Y	Apr. 5, 1870	101, 527
Steam-boilers, Dead-light for	J. C. Hoadley	Lawrence, Mass	Oct. 14, 1873	143, 574
Steam-boilers, Detachable lining for fire-box of	J. B. Collan	Reading, Pa	Oct. 11, 1853	10, 103
Steam-boilers, Device for preventing explosions in	R. L. Lloyd	Philadelphia, Pa	Dec. 7, 1858	22, 271
Steam-boilers, Device for removing incrustation from.	J. Harrison, jr	Philadelphia, Pa	June 24, 1862	35, 678
Steam-boilers, Electrical apparatus for preventing incrustation in.	S. C. Cabell	Quincy, Ill	Aug. 27, 1867	68, 041
Steam-boilers, Facilitating the removal of incrustation from.	F. P. Dimpfel	Philadelphia, Pa	Aug. 28, 1855	13, 488
Steam-boilers, Feeding water to	T. Champion	Washington, D. C	June 5, 1855	12, 993
Steam-boilers, Filtering-apparatus to prevent incrustation in.	G. Weissenborn	New York, N. Y	Jan. 16, 1855	12, 261
Steam-boilers, Fire-plate for	E. Borleau	Saint Louis, Mo	Feb. 11, 1873	135, 750
Steam-boilers, Foam-collector for	T. G. Gardner	Mount Pulaski, Ill	Sept. 6, 1859	25, 328
Steam-boilers, Forming spiral flues for	B. J. Miller	New York	Apr. 5, 1838	675
Steam-boilers from bursting, Apparatus for preventing.	T. S. Easton	Mobile, Ala	Nov. 9, 1842	2, 846
Steam-boilers from bursting, &c., Mode of preventing.	A. Eitelgeorge	Cincinnati, Ohio	May 22, 1837	200
Steam-boilers from corrosion, Protecting	D. Matthew	Prairie du Chien, Wis	Dec. 17, 1867	72, 309
Steam-boilers from priming, Method of preventing	G. H. Corliss	Providence, R. I	Aug. 26, 1862	36, 279
Steam-boilers from sediment, Arrangement of means for freeing.	H. Strait	Covington, Ky	Apr. 3, 1855	12, 654
Steam-boilers, Furnace for heating	G. Bantz	Frederick, Md	June 22, 1858	20, 616
Steam-boilers, furnaces, &c., Air-heater for	A. C. Fletcher	New York, N. Y	Apr. 23, 1867	64, 090
Steam-boilers, Hand-hole cap for	W. W. Graham	Boston, Mass	Jan. 3, 1871	110, 647
Steam-boilers, Hand-hole stopper for	D. Sullivan	Bangor, Me	July 25, 1871	117, 480
Steam-boilers, Hot-water feeder for	J. H. Mills and J. Howarth	Boston and Salem, Mass	Jan. 3, 1871	110, 668
Steam-boilers, Instrument for preventing incrustation in.	D. Matthew	Prairie du Chien, Wis	May 21, 1867	64, 992
Steam-boilers, Insulated fusible plug for	E. H. Ashcroft	Boston, Mass	Feb. 18, 1851	7, 934
Steam-boilers, Interior arrangement of	S. Knight	Winchester, Ind	Mar. 12, 1850	7, 171
Steam-boilers, Machine for boring flue-sheets of	S. V. Lowe	Reading, Pa	May 12, 1857	17, 288
Steam-boilers, Machine for making brace-jaw for	J. H. Butterworth	Dover, N. J	Oct. 28, 1862	36, 878
Steam-boilers, Man-hole plate for	J. D. Samson	Peoria, Ill	Jan. 10, 1871	110, 872
Steam-boilers, Manner of constructing	Z. C. Robbins	Saint Louis, Mo	July 28, 1843	3, 200
Steam-boilers, Material for preventing incrustation in.	J. J. Allen	Philadelphia, Pa	Apr. 2, 1867	63, 453
Steam-boilers, Mechanical means for preventing incrustation in.	J. McMullen	Baltimore, Md	May 23, 1854	10, 964
Steam-boilers, Method of applying fusible metallic plugs to.	I. C. Saunders	Trenton, Mich	July 24, 1860	29, 322
Steam-boilers, Method of blowing off	J. H. Washington	Baltimore, Md	Jan. 25, 1859	22, 757
Steam-boilers, &c., Method of effecting combustion in furnaces and flues of.	C. E. Detmold	New York, N. Y	Dec. 4, 1843	3, 365
Steam-boilers, Mode of applying a float to regulate the height of water in.	C. Evans	Pittsburgh, Pa	Sept. 30, 1842	2, 795
Steam-boilers, Non-conducting composition for covering.	J. D. Van Arnum and W. Ives	Troy, N. Y	Jan. 11, 1870	98, 818
Steam-boilers, Non-conducting compound for coating.	J. Hessing	Paterson, N. J	Dec. 27, 1870	110, 461
Steam-boilers, Non-conducting cover for	W. Harris and W. Howell	Philadelphia, Pa	Apr. 19, 1870	102, 116
Steam-boilers, Non-conducting covering for	E. Ainsworth	Wilmington, Del	Sept. 10, 1872	131, 204
Steam-boilers, Non-conducting material for covering.	B. F. Smith	New Orleans, La	Feb. 21, 1871	111, 984
Steam-boilers of cinders, Relieving	M. Swank	Philadelphia, Pa	July 8, 1862	35, 845
Steam-boilers, Pipe-connection for	A. H. Clear	Providence, R. I	Aug. 16, 1859	25, 094
Steam-boilers, pipes, and other articles, Composition for covering.	W. B. Davis	Brooklyn, N. Y	Aug. 24, 1869	94, 084
Steam-boilers, pipes, &c., Material for covering	E. S. Hardy	Buffalo, N. Y	Sept. 14, 1869	94, 739
Steam-boilers, pipes, &c., Non-conducting covering for.	E. H. Ashcroft	Lynn, Mass	Nov. 6, 1866	59, 338
Steam-boilers, Preventing accident from explosion of.	P. C. Frese	Baltimore, Md	Apr. 10, 1839	1, 118
Steam-boilers, Preventing and removing scales in	J. Buzby	Philadelphia, Pa	May 23, 1865	47, 794
Steam-boilers, Preventing corrosion of stay-bolts in	J. Cochrane	New York, N. Y	Feb. 25, 1873	136, 213
Steam-boilers, Preventing explosion of	I. N. Coffin	Washington, D. C	Sept. 30, 1839	1, 353
Steam-boilers, Preventing explosion of	T. S. Easton	Mobile, Ala	Feb. 12, 1842	2, 454
Steam-boilers, Preventing explosion of	C. Evans	Pittsburgh, Pa	Feb. 24, 1845	3, 921
Steam-boilers, Preventing explosion of	W. H. Hale	Brooklyn, N. Y	Sept. 14, 1839	1, 324
Steam-boilers, Preventing explosion of	J. Reid	Pawtucket, R. I	May 19, 1840	1, 607

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Steam-boilers, Preventing explosion of	W. M. Wright	Pittsburgh, Pa	Feb. 24, 1845	3,923
Steam-boilers, Preventing incrustation in	S. D. Anthony and D. Barnum	New York, N. Y	Dec. 22, 1846	4,903
Steam-boilers, Preventing incrustation in	L. Baird	Cambridge, Mass	June 21, 1862	34,188
Steam boilers, Preventing incrustation in	W. Brown	Morrison, Ill	Dec. 26, 1865	51,775
Steam-boilers, Preventing incrustation in	S. G. Cabell	Quincy, Ill	Nov. 26, 1867	71,451
Steam-boilers, Preventing incrustation in	S. G. Cabell	Quincy, Ill	Dec. 31, 1867	72,794
Steam-boilers, Preventing incrustation in	S. G. Cabell	Quincy, Ill	Jan. 28, 1868	73,872
Steam-boilers, Preventing incrustation in	C. J. A. Dick	Paris, France	Dec. 27, 1870	110,553
Steam-boilers, Preventing incrustation in	C. J. Eames	New York, N. Y	June 11, 1867	65,657
Steam-boilers, Preventing incrustation in	J. T. Fisher	Pittsburgh, Pa	Mar. 29, 1870	101,248
Steam-boilers, Preventing incrustation in	R. A. Fisher	San Francisco, Cal	June 24, 1873	140,263
Steam-boilers, Preventing incrustation in	J. W. Harnett	Cincinnati, Ohio	Dec. 7, 1858	22,249
Steam-boilers, Preventing incrustation in	A. T. Hay	Burlington, Iowa	Nov. 20, 1866	59,768
Steam-boilers, Preventing incrustation in	I. L. Husband	Philadelphia, Pa	Sept. 24, 1867	69,096
Steam-boilers, Preventing incrustation in	R. McCafferty	Lancaster, Pa	Apr. 14, 1857	17,046
Steam-boilers, Preventing incrustation in	H. McQuaid	Canyon City, Oreg	Oct. 6, 1868	82,859
Steam-boilers, Preventing incrustation in	G. T. Parry	Philadelphia, Pa	Oct. 31, 1865	50,773
Steam-boilers, Preventing incrustation in	G. T. Parry	Philadelphia, Pa	Mar. 12, 1867	62,878
Steam-boilers, Preventing incrustation in	A. F. Porter	Philadelphia, Pa	Oct. 31, 1865	50,774
Steam-boilers, Preventing incrustation in	J. G. Rogers	Madison, Ind	May 31, 1870	103,662
Steam-boilers, Preventing incrustation in	P. H. Vander Weyde	Philadelphia, Pa	Feb. 12, 1867	62,093
Steam-boilers, Preventing incrustation in	P. V. Vigier	Paris, France	Jan. 30, 1872	123,310
Steam-boilers, Preventing incrustation in	N. B. Webster and R. W. Young	Portsmouth, Va	Oct. 23, 1860	30,511
Steam-boilers, Purifying water for	M. Park	Madison, Ind	Oct. 4, 1836	....
Steam-boilers, Reducing pressure in	G. Sewell	Brooklyn, N. Y	Apr. 25, 1871	114,052
Steam-boilers, Regulating height of water in	J. Fox	Lowell, Mass	Apr. 2, 1835	....
Steam-boilers, Regulating height of water in	J. Fox	Lowell, Mass	July 21, 1835	....
Steam-boilers, Regulating height of water in	J. Fox	Lowell, Mass	July 21, 1835	....
Steam-boilers, Regulating height of water in	T. Odiorne	Malden, Mass	Sept. 26, 1835	....
Steam-boilers, Regulating supply of water to	J. Cochrane	Newark, N. J	July 13, 1844	3,660
Steam-boilers, Removable water-lining for fire-box of.	J. J. De Haven	Reading, Pa	Oct. 2, 1849	6,768
Steam-boilers, Removing incrustations from	L. A. Ritterbandt	London, England	Sept. 11, 1845	4,189
Steam-boilers, Safety-casing for	S. Solliday	Sumneytown, Pa	Feb. 28, 1860	27,317
Steam-boilers, Safety-feed-apparatus for	L. J. Knowles	Warren, Mass	Mar. 13, 1860	27,452
Steam-boilers, Safety-plug attachment to	A. Robes and J. C. Chapman	Somerville and Cambridgeport, Mass.	Feb. 28, 1871	112,283
Steam-boilers, Scale-borer for	C. H. Keener	United States Navy	Aug. 15, 1865	49,416
Steam-boilers, &c., Securing tubes in	J. Howell and D. Birdsall	Jersey City, N. J	Jan. 26, 1864	41,380
Steam-boilers, Sediment-agitator for	B. W. Reynolds	Evansville, Ind	Nov. 22, 1870	109,433
Steam-boilers, Sediment-collector and blow-off for	J. P. Leonard and S. Hancock	Oroville, Cal	Jan. 14, 1873	134,811
Steam-boilers, Sediment-collector for	C. W. Deane	Philadelphia, Pa	Apr. 4, 1871	113,405
Steam-boilers, Sediment-collector for	H. H. Havens	New York, N. Y	Nov. 30, 1858	22,178
Steam-boilers, Sediment-collector for	J. T. Price	Rockville, Ind	May 15, 1860	28,303
Steam-boilers, Sediment-collector for	A. Zipser	Biala, Austria	Nov. 28, 1871	121,445
Steam-boilers, Sediment-extractor for	E. Thayer	Worcester, Mass	Apr. 11, 1865	47,232
Steam-boilers, Setting	D. C. Ambler	New York, N. Y	June 20, 1854	11,110
Steam-boilers, Setting	C. T. Boardman	Pawtucket, R. I	Nov. 12, 1867	70,790
Steam-boilers, Setting	J. Chilcott	Brooklyn, N. Y	Oct. 3, 1865	50,221
Steam-boilers, Setting	H. France and C. L. Knowles	Sacramento City, Cal	June 23, 1863	38,956
Steam-boilers, Setting	O. Ranney	Corry, Pa	July 4, 1871	116,630
Steam-boilers, Setting stationary	C. S. Nelson	West Troy, N. Y	June 26, 1866	55,958
Steam-boilers, Setting tubular	H. France and C. L. Knowles	Sacramento City, Cal	June 23, 1863	38,957
Steam-boilers, Sight-gage for	W. Barker	Kingston, Pa	Mar. 24, 1826	....
Steam-boilers, Spark-extinguisher for	D. S. Harris	Galena, Ill	Apr. 10, 1860	27,799
Steam-boilers, Strengthening	J. Hebden	Louisville, Ky	May 7, 1872	126,545
Steam-boilers, Supplying a uniform quantity to	I. Doolittle	Bennington, Vt	June 1, 1827	....
Steam-boilers, Surface-blow for	J. Gates	Portland, Oreg	Oct. 3, 1871	119,597
Steam-boilers, Suspending	C. O. Gause and S. N. Jordan	Osawatomie, Kans	Jan. 7, 1864	43,016
Steam-boilers, Treating water to prevent incrustation in.	M. A. Glynn	Havana, Cuba	Aug. 20, 1867	67,973
Steam-boilers, Use of fusible disk in	W. Burnett and J. Absterdam	Boston, Mass	Feb. 28, 1854	10,573
Steam-boilers, vats, tanks, &c., Mode of preventing corrosion of.	S. W. Wilcox	West Roxbury, Mass	Feb. 18, 1862	34,455
Steam-boilers, Water-circulating pipe for	W. Dillon	Wheeling, W. Va	June 4, 1872	127,466
Steam-boilers, Water-purifier for	G. C. L. Degenhardt	Williamsburgh, N. Y	May 16, 1871	114,776
Steam-boilers with water and ascertaining the height in, Supplying.	W. W. Van Loan	New York	Dec. 31, 1833	....
Steam-boilers with water, Apparatus for supplying	E. Campbell	New York	Aug. 28, 1841	2,233
Steam-boilers with water, Apparatus for supplying	R. Jadwin	Grafton, Ohio	Apr. 16, 1861	32,066
Steam-boilers with water, Mode of supplying	B. M. Hyatt	Wilmington, Del	Oct. 10, 1840	1,819
Steam-boiling apparatus	A. Hammer	Reading, Pa	May 26, 1857	17,372
Steam-boiling apparatus	E. Moneuse	New York, N. Y	Jan. 21, 1873	135,142
Steam-brake, Double-acting	R. L. Currey	Philadelphia, Pa	Dec. 25, 1855	13,978
Steam-brake for railway-cars	T. E. Sickels	Kennett's Square, Pa	Mar. 24, 1857	16,884
Steam-brakes, Mode of connecting pipes for	W. Wright	New York, N. Y	Jan. 16, 1855	12,263
Steam-carriage wheel	A. B. Latta	Cincinnati, Ohio	July 8, 1856	15,297
Steam-chest lubricator	H. C. De Land	Syracuse, N. Y	Feb. 21, 1871	112,020
Steam-coiled hoop	J. Tomlinson	Pockering Township, Canada.	May 26, 1863	38,717
Steam, &c., Compound pipe for conveying	E. B. Buckingham	Somerville, Mass	Feb. 13, 1872	123,612
Steam-condensing	F. Murgatroyd	Cleveland, Ohio	July 31, 1866	56,784
Steam-condensing and water-heating tank	C. N. Tyler	Buffalo, N. Y	June 3, 1873	139,634
Steam-cooker	J. Bentz	Parkersburgh, W. Va	Dec. 30, 1873	145,981
Steam-cooking apparatus	J. Lundgren	New York, N. Y	Sept. 23, 1873	143,171
Steam-crane	D. Tillson	Rockland, Me	Apr. 8, 1873	137,737
Steam-culture, Rope-bearing attachment for machines for.	M. Eyth	New York, N. Y	Dec. 1, 1868	84,621
Steam-cylinder	W. Eddy	Springfield, Mass	Mar. 20, 1847	5,024
Steam-cylinder	W. Inglis	Manchester, England	Dec. 22, 1868	85,098
Steam-cylinder	J. Lawson	Allegheny City, Pa	Jan. 19, 1869	85,940
Steam-cylinder and piston-valve	G. G. Picking and W. Hopkins	Kingston and Islington, England.	Nov. 18, 1873	144,788
Steam-cylinder lubricator	E. H. Ashcroft	Lynn, Mass	Aug. 6, 1867	67,478
Steam-cylinder lubricator	L. F. Smith	Philadelphia, Pa	July 15, 1873	140,958
Steam-cylinder, Exhaust passage for	G. Shield	Cincinnati, Ohio	Sept. 10, 1850	7,634
Steam-cylinders of the water of condensation, Relieving.	G. W. Furman	Brooklyn, N. Y	Jan. 15, 1861	31,116

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Steam-cylinders with the steam-chest, Mode of connecting.	F. E. Sickels	New York, N. Y	Sept. 19, 1845	4, 202
Steam, Decomposing	J. McGeary	Salem, Mass	Oct. 30, 1866	59, 246
Steam-decomposing apparatus	J. A. Bassett	Salem, Mass	Jan. 31, 1860	26, 963
Steam-distributing apparatus	R. Hale	Roxbury, Mass	July 27, 1858	21, 000
Steam-drill	G. F. Case	Windsor, Vt	Feb. 16, 1869	86, 903
Steam-dryer	G. S. Barton	Worcester, Mass	Feb. 2, 1869	86, 350
Steam-drying apparatus	W. Ryner	Philadelphia, Pa	Aug. 27, 1867	68, 239
Steam, Economizing	G. M. Longacre	New Orleans, La	Oct. 9, 1855	13, 652
Steam-elevator	T. W. Eaton	Chicago, Ill	Oct. 28, 1873	143, 971
Steam, Employing exhaust	G. H. Hoagland	Piermont, N. Y	Mar. 19, 1850	7, 190
Steam, &c., Employing waste	J. H. Morton, T. Bevley, and R. Huston.	Lexington, Ky	Apr. 28, 1818	....
Steam-engine	H. W. Adams	Philadelphia, Pa	June 6, 1871	115, 672
Steam-engine	H. W. Adams	Philadelphia, Pa	June 27, 1871	116, 407
Steam-engine	H. W. Adams	Philadelphia, Pa	Jan. 23, 1872	122, 981
Steam-engine	J. F. Allen	New York, N. Y	Apr. 29, 1862	35, 068
Steam-engine	R. Y. P. Allen	Farmdale, Ky	Sept. 9, 1873	142, 660
Steam-engine	R. Allison	Port Carbon, Pa	Sept. 24, 1867	69, 153
Steam-engine	H. F. Ambos	Columbus, Ohio	Nov. 15, 1870	109, 167
Steam-engine	L. Andersen	Chebanse, Ill	Feb. 16, 1869	86, 965
Steam-engine	A. Anderson	Philadelphia, Pa	Aug. 21, 1812	....
Steam-engine	S. Andrews, jr	Westfield, N. Y	Nov. 1, 1864	44, 846
Steam-engine	W. D. Andrews	New York, N. Y	Dec. 2, 1862	37, 030
Steam-engine	E. Ansaldi	Leghorn, Italy	Nov. 12, 1867	70, 774
Steam-engine	J. R. Armstrong	Kendallville, Ind	Apr. 16, 1861	32, 039
Steam-engine	N. Atherton	Philadelphia, Pa	Oct. 31, 1854	11, 851
Steam-engine	N. Atherton	Philadelphia, Pa	Mar. 31, 1868	76, 139
Steam-engine	J. E. Atwood	Buckport, Me	Nov. 25, 1862	36, 985
Steam-engine	W. Avery and H. Scoville	Pompey, N. Y	Sept. 30, 1825	....
Steam-engine	G. H. Babcock	Plainfield, N. J	Dec. 10, 1872	133, 741
Steam-engine	G. H. Babcock and S. Wilcox	Plainfield, N. J., and Brooklyn, N. Y.	June 3, 1873	139, 448
Steam-engine	E. C. Bacon	New York, N. Y	Nov. 24, 1868	84, 249
Steam-engine	G. H. Bailey and H. H. Burritt	Newark, N. J	July 25, 1871	117, 362
Steam-engine	H. Bailey	New York, N. Y	Mar. 19, 1867	62, 920
Steam-engine	H. Bailey	New York, N. Y	Jan. 21, 1868	73, 489
Steam-engine	J. Baird	New York, N. Y	Aug. 11, 1863	39, 458
Steam-engine	J. Baird	New York, N. Y	Apr. 25, 1865	47, 377
Steam-engine	C. W. Baldwin	Boston, Mass	Mar. 31, 1868	76, 140
Steam-engine	E. P. Ball	Chicopee, Mass	May 25, 1869	90, 480
Steam-engine	W. Ball	Chicopee, Mass	Dec. 31, 1867	72, 714
Steam-engine	W. H. Bancroft and W. L. Ward.	Portland, Wis	Sept. 17, 1867	68, 938
Steam-engine	J. Banks	Port Blanchard, Pa	June 27, 1871	116, 394
Steam-engine	J. S. Barden	Providence, R. I	Mar. 15, 1870	100, 641
Steam-engine	J. S. Barden	Providence, R. I	Feb. 12, 1867	61, 916
Steam-engine	N. N. Barlow	Homer, N. Y	Oct. 21, 1846	4, 820
Steam-engine	D. Barnum	Jersey City, N. J	May 4, 1858	20, 136
Steam-engine	D. Barnum	New York, N. Y	Oct. 18, 1859	25, 798
Steam-engine	R. C. Barton	Troy, N. Y	Oct. 9, 1860	30, 373
Steam-engine	M. Battle	Albany, N. Y	Nov. 6, 1829	....
Steam-engine	W. Baxter	Newark, N. J	Oct. 12, 1869	95, 637
Steam-engine	A. Beekman	New York, N. Y	Nov. 25, 1873	144, 883
Steam-engine	E. H. Bellows	Worcester, Mass	Feb. 4, 1868	74, 039
Steam-engine	J. Bennock	Orono, Me	Sept. 9, 1835	....
Steam-engine	B. S. Benson	Baltimore, Md	July 10, 1847	5, 185
Steam-engine	H. Bertolet	Reading, Pa	Sept. 20, 1859	25, 480
Steam-engine	E. Bigelow	Baltimore, Md	Nov. 6, 1826	....
Steam-engine	W. Birkbeck	Jersey City, N. J	July 3, 1860	28, 957
Steam-engine	J. Black	Philadelphia, Pa	Apr. 5, 1859	23, 524
Steam-engine	W. Black	Allegheny, Pa	Sept. 19, 1854	11, 687
Steam-engine	H. and F. I. L. Blandy	Zanesville, Ohio	Aug. 3, 1858	21, 059
Steam-engine	G. Bradford	Watertown, N. Y	June 13, 1871	115, 928
Steam-engine	J. Bradley	Saint Mary's, Ohio	Sept. 3, 1861	33, 181
Steam-engine	G. B. Brayton	Boston, Mass	May 23, 1865	47, 792
Steam-engine	R. Brayton, S. Curtis, and D. June.	Fremont, Ohio	June 11, 1867	65, 536
Steam-engine	S. Briggs, jr	....	Oct. 9, 1802	....
Steam-engine	S. Briggs and A. Steel	Baton Rouge, La	May 29, 1813	....
Steam-engine	S. Broadmeadow	New York	Jan. 29, 1828	....
Steam-engine	E. Bourson	Brussels, Belgium	Nov. 19, 1867	70, 948
Steam-engine	A. Buchanan	Jersey City, N. J	Dec. 24, 1861	33, 981
Steam-engine	R. Bulkley	New York	Apr. 30, 1824	....
Steam-engine	W. W. Burgoyne	Washington, D. C	Apr. 26, 1859	23, 754
Steam-engine	E. Burt	Elizabethtown, N. J	May 12, 1816	....
Steam-engine	E. Burt	Elizabethtown, N. J	June 25, 1816	....
Steam-engine	H. L. Butler and T. A. Christie	Pittsburgh, Pa	Aug. 30, 1870	102, 777
Steam-engine	C. Cadwell	Waukegan, Ill	May 28, 1867	65, 056
Steam-engine	D. B. Caldwell	Cincinnati, Ohio	Sept. 6, 1870	107, 161
Steam-engine	C. W. Cahoon	Portland, Me	Nov. 5, 1867	70, 407
Steam-engine	F. A. Calvert	Lowell, Mass	Sept. 1, 1863	39, 715
Steam-engine	F. A. Calvert	Lowell, Mass	July 19, 1864	43, 568
Steam-engine	F. A. Calvert	Lowell, Mass	Mar. 6, 1866	52, 965
Steam-engine	L. Carmon	McCoy's Station, Ohio	Dec. 26, 1871	122, 224
Steam-engine	T. Carpenter	Providence, R. I	Jan. 29, 1861	31, 226
Steam-engine	W. H. Carr	New York, N. Y	July 27, 1869	93, 053
Steam-engine	W. T. Chamberlain	Norwich, Conn	Feb. 4, 1868	74, 046
Steam-engine	W. C. Champlin	Allegheny City, Pa	Aug. 10, 1869	93, 414
Steam-engine	W. Church	Baltimore, Md	July 11, 1818	....
Steam-engine	W. A. Clark	Saint Louis County, Mo	Sept. 9, 1856	15, 685
Steam-engine	W. H. T. Clark	San Francisco, Cal	Oct. 12, 1869	95, 633
Steam-engine	M. Cluff	Norfolk, Va	Sept. 1, 1815	....
Steam-engine	J. J. G. Collins	Philadelphia, Pa	Aug. 10, 1858	21, 165
Steam-engine	A. Connison	Newark, N. J	Dec. 5, 1842	2, 872
Steam-engine	J. A. Conover	New York, N. Y	Apr. 5, 1859	23, 450
Steam-engine	J. Cooke and A. F. Smith	Paterson, N. J., and Norwich, Conn.	Oct. 13, 1863	40, 307

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Steam-engine	J. M. Cooper	Pittsburgh, Pa	Sept. 5, 1871	118, 692
Steam-engine	G. H. Corliss	Providence, R. I	July 5, 1859	24, 618
Steam-engine	W. Corliss	Providence, R. I	Dec. 31, 1872	134, 361
Steam-engine	A. C. Crary	Utica, N. Y	Mar. 30, 1869	88, 278
Steam-engine	M. Cridge and S. Wadsworth	Pittsburgh, Pa	Jan. 3, 1860	26, 664
Steam-engine	J. E. Culver	Hudson, N. J	Feb. 15, 1870	99, 855
Steam-engine	J. Cumming	Boston, Mass	Nov. 1, 1859	25, 955
Steam-engine	J. M. Curry	South Framingham, Mass	May 24, 1870	103, 431
Steam-engine	J. Curtis	Baltimore, Md	Aug. 8, 1815	....
Steam-engine	J. Curtis and R. Yeamans	Plymouth, N. Y., and Westfield, Mass.	Feb. 8, 1812	....
Steam-engine	E. H. Cutler	Canton, Ohio	Nov. 26, 1872	133, 305
Steam-engine	E. Danford	Geneva, Ill	May 9, 1865	47, 621
Steam-engine	S. F. Davenport	Hallowell, Me	Jan. 1, 1867	60, 861
Steam-engine	J. M. Davidson	Napoleon, Ark	Feb. 16, 1869	86, 974
Steam-engine	R. H. Davies	Philadelphia, Pa	May 16, 1865	47, 766
Steam-engine	A. S. Dawley	Boston, Mass	May 23, 1836	....
Steam-engine	B. F. Day	Philadelphia, Pa	June 20, 1854	11, 119
Steam-engine	T. A. De Blois	Annapolis, Md	Dec. 19, 1865	51, 565
Steam-engine	G. Deming	Niagara, N. Y	Mar. 10, 1826	....
Steam-engine	B. Demming and D. Porter	Cleveland, Ohio	July 4, 1865	48, 529
Steam-engine	W. Denkmann	Philadelphia, Pa	Oct. 20, 1863	40, 335
Steam-engine	A. L. Dewey	Westfield, Mass	June 20, 1871	116, 031
Steam-engine	E. N. Dickerson	New York, N. Y	Sept. 17, 1867	68, 853
Steam-engine	D. Dod	New York	Nov. 29, 1811	....
Steam-engine	D. Dodd	Elizabethtown, N. J	May 12, 1812	....
Steam-engine	H. W. Dopp	Buffalo, N. Y	Mar. 6, 1860	27, 355
Steam-engine	F. Douglas	Norwich, Conn	Apr. 3, 1860	27, 704
Steam-engine	N. T. Edson	New Orleans, La	June 30, 1863	39, 038
Steam-engine	C. E. Emery	Brooklyn, N. Y	Nov. 12, 1867	70, 707
Steam-engine	J. B. Emmerson	New York	Mar. 8, 1834	....
Steam-engine	J. M. Enos	Saint Joseph, Mich	Feb. 5, 1867	61, 819
Steam-engine	J. Ericsson	New York, N. Y	Dec. 20, 1845	4, 317
Steam-engine	J. Ericsson	New York, N. Y	July 6, 1858	20, 782
Steam-engine	J. Ericsson	New York, N. Y	Feb. 16, 1864	41, 612
Steam-engine	P. Estes	Leavenworth, Kans	Oct. 25, 1870	108, 576
Steam-engine	E. Evans	North Tonawanda, N. Y	Dec. 19, 1871	121, 935
Steam-engine	O. Evans	....	Feb. 14, 1804	....
Steam-engine	O. C. Evans	New York, N. Y	Apr. 10, 1860	27, 786
Steam-engine	J. Fairclough	Saint Joseph, Mo	Sept. 10, 1867	68, 721
Steam-engine	S. Fairlamb	Marietta, Ohio	Oct. 24, 1816	....
Steam-engine	C. M. Farrar	Buffalo, N. Y	Mar. 19, 1872	124, 801
Steam-engine	I. Ferris	Cincinnati, Ohio	Apr. 3, 1866	53, 596
Steam-engine	J. Fish	New York, N. Y	Nov. 17, 1863	40, 615
Steam-engine	H. Fontaine	Paris, France	May 2, 1871	114, 429
Steam-engine	I. W. Forbes	La Porte, Ind	May 30, 1871	115, 301
Steam-engine	A. Fraser	Virginia City, Nev	July 29, 1873	141, 343
Steam-engine	D. R. Fraser	Chicago, Ill	Apr. 25, 1871	114, 125
Steam-engine	W. Fuzzard	Chelsea, Mass	June 15, 1869	91, 224
Steam-engine	G. P. Ganster	New York, N. Y	Feb. 26, 1867	62, 482
Steam-engine	E. Garfield	Hartford, Conn	Nov. 19, 1867	71, 159
Steam-engine	W. L. Gold	Allegheny, Pa	Jan. 24, 1860	26, 901
Steam-engine	W. Golding	New Orleans, La	July 4, 1865	48, 549
Steam-engine	H. Goodrich and G. R. Edwards	Shawneetown, Ill	July 17, 1866	56, 404
Steam-engine	H. Gordon	New York	Feb. 28, 1831	....
Steam-engine	S. Graham	Roxbury, Mass	Apr. 21, 1838	701
Steam-engine	D. A. Greene	New York, N. Y	Dec. 26, 1871	122, 248
Steam-engine	L. Griswold and G. Caul	Portland and York, Wis	Aug. 24, 1869	94, 104
Steam-engine	S. Hall	Basford, England	Oct. 30, 1834	....
Steam-engine	A. Hartupee	Pittsburgh, Pa	Dec. 27, 1864	45, 603
Steam-engine	A. Hartupee	Pittsburgh, Pa	Apr. 24, 1866	54, 150
Steam-engine	A. Hartupee	Pittsburgh, Pa	Aug. 3, 1869	93, 199
Steam-engine	T. Hatton	Philadelphia, Pa	Feb. 28, 1822	....
Steam-engine	A. A. Heath	Mercer, Pa	Nov. 28, 1871	121, 364
Steam-engine	J. Heavin	Virginia	Aug. 27, 1817	....
Steam-engine	W. M. Henderson	Philadelphia, Pa	Apr. 3, 1866	53, 613
Steam-engine	W. C. Hicks	New York, N. Y	Feb. 21, 1865	46, 470
Steam-engine	W. C. Hicks	New York, N. Y	May 22, 1866	54, 906
Steam-engine	W. C. Hicks	New York, N. Y	Apr. 13, 1869	88, 871
Steam-engine	J. W. Hill and T. Roberts	Panora, Iowa	Feb. 22, 1870	100, 149
Steam-engine	J. Hilton	Somerset, Me	Aug. 22, 1816	....
Steam-engine	J. M. Hirlinger	Red Rock, Pa	Nov. 12, 1867	70, 841
Steam-engine	J. C. Hoadley	Lawrence, Mass	July 5, 1870	105, 078
Steam-engine	J. Holly	Rouseville, Pa	Sept. 24, 1872	131, 545
Steam-engine	J. Houpt	Springtown, Pa	May 18, 1869	90, 265
Steam-engine	J. Houpt	Springtown, Pa	Feb. 21, 1871	111, 937
Steam-engine	J. Houpt	Springtown, Pa	May 23, 1871	115, 208
Steam-engine	J. Houpt	Springtown, Pa	June 27, 1871	116, 312
Steam-engine	S. W. Hudson	Packer Township, Pa	Sept. 10, 1867	68, 747
Steam-engine	S. W. Hudson	Beaver Meadow, Pa	Sept. 10, 1867	68, 748
Steam-engine	L. Hunton	Milford, Mass	May 15, 1866	54, 731
Steam-engine	L. Hunton	Milford, Mass	Apr. 9, 1867	63, 638
Steam-engine	W. Huston	Wilmington, Del	Mar. 7, 1865	46, 672
Steam-engine	W. Inglis and J. F. Spencer	Bolton and London, England.	Sept. 13, 1870	107, 265
Steam-engine	C. W. Isbell	New York, N. Y	Mar. 14, 1865	46, 800
Steam-engine	A. W. Jackson	Napoleon, Ohio	Aug. 15, 1871	118, 133
Steam-engine	H. T. and T. Jennings	London, England	Sept. 12, 1871	118, 857
Steam-engine	A. Johnson	Brooklyn, N. Y	May 2, 1871	114, 300
Steam-engine	H. Johnson	Pittsburgh, Pa	Apr. 25, 1865	47, 424
Steam-engine	A. Judd	Springfield, Mass	July 8, 1862	35, 826
Steam-engine	W. Kelly	Pittsburgh, Pa	June 18, 1842	2, 670
Steam-engine	A. Kilby	Boston, Mass	Oct. 5, 1869	95, 486
Steam-engine	F. E. Kirby	New York, N. Y	Oct. 11, 1870	108, 156
Steam-engine	F. Latta	Cincinnati, Ohio	May 29, 1866	55, 122
Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 971
Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 972
Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 973

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Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 974
Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 975
Steam-engine	J. L. Lay	Buffalo, N. Y	July 23, 1867	66, 976
Steam-engine	D. Lee	Boston, Mass	May 18, 1869	90, 110
Steam-engine	C. Levy	Toronto, Canada	Aug. 29, 1871	118, 463
Steam-engine	W. A. Lighthall	Albany, N. Y	Apr. 14, 1838	696
Steam-engine	G. F. Lombard	New Orleans, La	May 10, 1859	23, 992
Steam-engine	G. E. Long	Harrisburgh, Pa	Apr. 12, 1870	101, 747
Steam-engine	H. E. Long	Decatur, Ill	May 17, 1870	103, 212
Steam-engine	R. F. Loper	Philadelphia, Pa	Nov. 26, 1845	4, 289
Steam-engine	R. F. Loper and J. W. Nystrom	Philadelphia, Pa	Apr. 15, 1851	8, 039
Steam-engine	H. O. Lothrop	Milford, Mass	July 16, 1867	66, 721
Steam-engine	H. O. Lothrop	Milford, Mass	May 19, 1868	77, 989
Steam-engine	J. L. Lowry	Pittsburgh, Pa	Sept. 20, 1864	44, 327
Steam-engine	J. L. Lowry	Pittsburgh, Pa	Mar. 10, 1868	75, 283
Steam-engine	E. Lynch	Washington, D. C	Apr. 12, 1859	23, 594
Steam, &c., engine	R. M. Marchant	London, England	Oct. 24, 1871	120, 298
Steam-engine	G. T. May	Tompkinsville, N. Y	Jan. 12, 1864	41, 229
Steam-engine	J. Maynard	Ovid, N. Y	June 15, 1827	....
Steam-engine	J. R. Maxwell and E. Cope	Cincinnati, Ohio	July 10, 1866	56, 242
Steam-engine	J. R. Maxwell and E. Cope	Cincinnati, Ohio	Aug. 24, 1869	96, 515
Steam-engine	J. R. Maxwell and E. Cope	Cincinnati, Ohio, and Covington, Ky.	Feb. 13, 1872	123, 635
Steam-engine	E. McClintock	New Brunswick, N. J	Nov. 5, 1867	70, 590
Steam-engine	T. McDonough	Middletown, Conn	Aug. 16, 1864	43, 889
Steam-engine	J. H. McGowan and D. B. Caldwell.	Cincinnati, Ohio	Sept. 19, 1871	119, 039
Steam-engine	C. H. Merrick	Pittsburgh, Pa	Sept. 3, 1867	68, 377
Steam-engine	J. V. Merrick	Philadelphia, Pa	Mar. 26, 1867	63, 281
Steam-engine	J. P. Merriman	Sandusky, Ohio	Aug. 9, 1870	106, 185
Steam-engine	J. H. Mills	Boston, Mass	Mar. 5, 1867	62, 556
Steam-engine	H. Mohr	New York, N. Y	Aug. 16, 1870	106, 497
Steam-engine	J. Montgomery	New York, N. Y	Oct. 25, 1870	108, 718
Steam-engine	S. Morey	Boston, Mass	July 14, 1815	....
Steam-engine	S. Morey, R. Graves, and G. Richards.	....	June 15, 1803	....
Steam-engine	F. Motley	Phœnixville, Pa	Dec. 19, 1871	122, 049
Steam-engine	J. Murphy	Philadelphia, Pa	Mar. 24, 1835	....
Steam-engine	P. Murray	Detroit, Mich	Feb. 19, 1861	31, 474
Steam-engine	N. E. Nash	Westerly, R. I	Apr. 4, 1871	113, 553
Steam-engine	J. Neuert	Sandusky, Ohio	Nov. 7, 1871	120, 661
Steam-engine	A. T. Nichols	Williamsport, Pa	Apr. 16, 1872	125, 838
Steam-engine	E. Nicholson	Cleveland, Ohio	Dec. 12, 1871	121, 891
Steam-engine	P. F. Nickerson	Smyrna, Del	Feb. 28, 1871	112, 170
Steam-engine	M. B. Parmelee	Newtown, Conn	Aug. 25, 1812	....
Steam-engine	D. H. Paullins	Loudonville, Ohio	Feb. 28, 1865	46, 582
Steam-engine	H. O. Perry and J. L. Lay	Buffalo, N. Y	May 21, 1867	65, 003
Steam-engine	W. S. Phelps	Columbus, Ohio	May 16, 1865	47, 748
Steam-engine	O. M. Pike	Chicopee, Mass	July 18, 1871	117, 108
Steam-engine	R. Pomeroy	Belleville, N. J	Jan. 24, 1842	2, 437
Steam-engine	R. Porter	Washington, D. C	Nov. 30, 1858	22, 200
Steam-engine	E. Post	Boston, Mass	Sept. 6, 1870	107, 008
Steam-engine	E. Post	Boston, Mass	July 25, 1871	117, 458
Steam-engine	C. Potts	Philadelphia, Pa	May 31, 1830	....
Steam-engine	J. Randall	Elmira, N. Y	May 8, 1860	28, 242
Steam-engine	E. H. Rees	Mansfield, Ohio	Nov. 21, 1871	121, 064
Steam-engine	T. Reese	Saint Louis, Mo	July 14, 1868	80, 011
Steam, &c., engine	B. Reeves	Philadelphia, Pa	Feb. 6, 1830	....
Steam-engine	C. Reynolds	East Windsor, Conn	July 23, 1814	....
Steam-engine	G. H. Reynolds	New York, N. Y	Oct. 2, 1866	58, 478
Steam-engine	G. H. Reynolds	Mystic Bridge, Conn	Oct. 15, 1867	69, 839
Steam-engine	I. J. Richardson	Geneva, N. Y	Oct. 13, 1817	....
Steam-engine	J. S. Richardson	New Market, N. H	Oct. 17, 1831	....
Steam-engine	W. F. Richardson	Pittsburgh, Pa	Sept. 27, 1870	107, 723
Steam-engine	A. F. Roberts	Fayette City, Pa	June 4, 1867	65, 437
Steam-engine	J. R. Robinson	Boston, Mass	Apr. 30, 1861	32, 205
Steam-engine	T. C. Robinson	Boston, Mass	Jan. 16, 1866	52, 078
Steam-engine	H. Rockwell	Roanoke, Ind	Jan. 5, 1869	85, 526
Steam-engine	J. B. Root	New York, N. Y	Sept. 15, 1863	39, 957
Steam-engine	T. Ross	Rutland, Vt	Jan. 3, 1871	110, 681
Steam-engine	T. F. Rowland	Green Point, Brooklyn, N. Y	Oct. 22, 1872	132, 414
Steam-engine	H. Ruddick	Boston, Mass	Jan. 1, 1867	60, 943
Steam-engine	S. P. Ruggles	Boston, Mass	Mar. 21, 1871	112, 853
Steam-engine	J. D. Russell	Washington, N. C	Apr. 10, 1813	....
Steam-engine	G. Sanford	Poughkeepsie, N. Y	Feb. 15, 1859	22, 981
Steam-engine	W. G. Savage	Knoxville, Iowa	July 14, 1868	79, 863
Steam-engine	W. G. Savage	Knoxville, Iowa	Feb. 16, 1869	87, 073
Steam-engine	E. Savoral	New York, N. Y	Feb. 6, 1866	52, 451
Steam-engine	C. A. Schultz	New York, N. Y	Oct. 26, 1858	21, 907
Steam-engine	D. Sexton	San Gabriel, Cal	Jan. 3, 1865	45, 756
Steam-engine	G. Shale	Taunton, Mass	Dec. 10, 1867	72, 092
Steam-engine	J. Shark and J. W. Thompson	Salem, Ohio	Feb. 21, 1871	111, 982
Steam-engine	J. Sheldon	New Haven, Conn	Mar. 24, 1835	....
Steam-engine	P. Shllenback and J. Harton	Middletown, Ohio, and Seymour, Ind.	Feb. 8, 1870	99, 602
Steam-engine	E. W. Smith	New York, N. Y	June 11, 1861	32, 538
Steam-engine	W. M. Starr	Washington, D. C	Aug. 22, 1871	118, 401
Steam-engine	F. B. Stevens	New York, N. Y	Aug. 4, 1863	39, 430
Steam-engine	J. Stevens	Hoboken, N. J	Mar. 14, 1816	....
Steam-engine	O. M. Stillman	Westerly, R. I	June 20, 1865	48, 321
Steam-engine	W. M. Storm	New York, N. Y	July 11, 1865	48, 777
Steam-engine	J. H. Strehli	Cincinnati, Ohio	Aug. 26, 1873	142, 295
Steam-engine	C. Strong and A. W. Stickney	Lebanon, N. H	Nov. 15, 1870	109, 270
Steam-engine	J. Stubbs and N. Parsons	Chillicothe, Ohio	Feb. 25, 1811	....
Steam-engine	J. L. Sullivan	Boston, Mass	Mar. 24, 1817	....
Steam-engine	J. B. Tarr	Fairhaven, Mass	Oct. 20, 1868	83, 224
Steam-engine	A. Thayer, jr	New York	Mar. 6, 1823	....
Steam-engine	S. D. Tillman	New York, N. Y	Apr. 18, 1871	113, 818

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Steam-engine	H. Tongue	Nashville, Tenn	Oct. 10, 1854	11, 796
Steam-engine	L. Towne	Providence, R. I	Dec. 12, 1865	51, 496
Steam-engine	J. F. Troxel	Bloomsville, Ohio	June 4, 1867	65, 453
Steam-engine	J. F. Troxel	Bloomsville, Ohio	Dec. 10, 1867	72, 121
Steam-engine	G. W. Van Deren	Big Flats, N. Y	Aug. 14, 1860	29, 642
Steam-engine	S. Van Emon	Covington, Ky	Oct. 24, 1871	120, 221
Steam-engine	H. Vosper	Southsea, England	Aug. 1, 1871	117, 701
Steam-engine	C. C. Waggoner	Saint John's, Ohio	Dec. 28, 1869	98, 449
Steam-engine	H. Walters	Tamaqua, Pa	Dec. 16, 1862	37, 186
Steam-engine	M. Ward	Columbia, Ohio	Mar. 23, 1821	....
Steam-engine	G. I. Washburn	Worcester, Mass	Sept. 5, 1865	49, 809
Steam-engine	G. I. Washburn	Worcester, Mass	May 22, 1866	54, 983
Steam-engine	G. I. Washburn	Worcester, Mass	Aug. 14, 1866	57, 228
Steam-engine	G. I. Washburn	Worcester, Mass	Sept. 4, 1866	57, 729
Steam-engine	G. I. Washburn	Worcester, Mass	Mar. 5, 1867	62, 710
Steam-engine	G. I. Washburn	Worcester, Mass	Mar. 5, 1867	62, 711
Steam-engine	G. I. Washburn	Worcester, Mass	Mar. 5, 1867	62, 712
Steam-engine	G. I. Washburn	Worcester, Mass	Mar. 5, 1867	62, 713
Steam-engine	H. Waterman	New York, N. Y	Nov. 17, 1863	40, 656
Steam-engine	F. Wedge	Zanesville, Ohio	Nov. 29, 1870	109, 783
Steam-engine	P. L. Weimer	Lebanon, Pa	Jan. 29, 1861	31, 272
Steam-engine	P. L. Weimer	Lebanon, Pa	May 30, 1871	115, 400
Steam-engine	T. Welham	Washington, D. C	Jan. 31, 1865	46, 165
Steam-engine	W. Wells	New York, N. Y	Sept. 11, 1860	30, 030
Steam-engine	N. W. Wheeler	Brooklyn, N. Y	Feb. 6, 1866	52, 474
Steam-engine	J. Wheelock	Worcester, Mass	Sept. 5, 1871	118, 764
Steam-engine	J. D. Whelpley	Boston, Mass	July 11, 1871	116, 902
Steam-engine	W. Whitham	Huddersfield, England	Sept. 4, 1841	2, 242
Steam-engine	G. B. Whiting	Washington, D. C	Jan. 2, 1866	51, 885
Steam-engine	S. H. Whitmore	Cincinnati, Ohio	Feb. 19, 1861	31, 500
Steam-engine	S. H. Whiimore	Cincinnati, Ohio	Apr. 2, 1861	31, 9[illegible]0
Steam-engine	J. A. Whipple	Boston, Mass	May 10, 1859	23, 993
Steam-engine	S. L. Wiegand	Philadelphia, Pa	Nov. 22, 1864	45, 199
Steam-engine	B. Wilbor	Whitestown, N. Y	Apr. 26, 1815	....
Steam-engine	J. D. Willoughby	Shippensburgh, Pa	Aug. 3, 1869	93, 383
Steam-engine	W. L. and T. Winans	London, England	June 12, 1866	55, 516
Steam-engine	W. P. Wing	Greenwich Village, Mass	Aug. 17, 1827	....
Steam-engine	D. Wood and S. W. Robinson	Ann Arbor, Mich	June 9, 1868	78, 853
Steam-engine	J. C. Woodhead	Allegheny City, Pa	May 23, 1871	115, 145
Steam-engine	G. W. Wright	Washington, D. C	Aug. 17, 1869	93, 940
Steam-engine	R. D. Wright	Saint Louis, Mo	Feb. 9, 1864	41, 586
Steam-engine	W. Wright	New York, N. Y	June 28, 1864	43, 362
Steam-engine	R. Wyatt	Brooklyn, N. Y	June 6, 1865	48, 139
Steam-engine	G. Yellott	Baltimore County, Md	Nov. 14, 1865	50, 983
Steam-engine	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Oct. 18, 1870	108, 426
Steam-engine and applying steam	F. B. Ogden	Essex County, N. J	Dec. 31, 1813	....
Steam-engine and boiler	E. Backus	....	May 31, 1796	....
Steam-engine and boiler	G. F. Burkhardt	Boston Highlands, Mass	June 20, 1871	116, 019
Steam-engine and boiler, Portable	G. Rogers	Mount Vernon, Ohio	July 16, 1872	129, 078
Steam engine and feeder for boilers	O. Mallory	Oswego, N. Y	Dec. 28, 1830	....
Steam-engine and force-pump, Exhaust	J. Houpt	Springtown, Pa	Mar. 5, 1872	124, 359
Steam-engine and its operation	L. Tibbitts	New Glasgow, Va	June 22, 1832	....
Steam-engine and other machinery	I. Jennings	New York	Mar. 15, 1825	....
Steam-engine and pump	G. Westinghouse, jr	Pittsburgh, Pa	Aug. 30, 1870	106, 899
Steam-engine and steamboat	J. Dowers, jr	Philadelphia, Pa	Apr. 23, 1814	....
Steam-engine, Auxiliary boiler-feeding	H. R. Worthington	New York, N. Y	July 24, 1844	3, 677
Steam-engine boiler	J. P. Attaire	New York	May 14, 1828	....
Steam-engine boiler	R. Bulkley	New York	Mar. 25, 1824	....
Steam-engine boiler	L. Burnell	Elyria, Ohio	May 21, 1834	....
Steam-engine boiler	J. C. Douglass	New York	Dec. 17, 1830	....
Steam-engine boiler	A. Hermange	Baltimore, Md	Nov. 26, 1828	....
Steam-engine boiler	R. Jarvis	Boston, Mass	Mar. 29, 1834	....
Steam-engine boiler	I. Jennings	New York	Dec. 21, 1831	....
Steam-engine boiler	S. Morey	Orford, N. H	Mar. 13, 1817	....
Steam-engine boiler	J. Poole	Sheffield, England	May 14, 1827	....
Steam-engine boiler	N. Read	....	Aug. 26, 1791	....
Steam-engine boiler	W. Schultz	New York	Jan. 26, 1816	....
Steam-engine boiler	T. Skidmore	New York	Nov. 30, 1821	....
Steam-engine boiler	J. L. Sullivan	Boston, Mass	Dec. 29, 1818	....
Steam-engine boiler	J. L. Sullivan	Boston, Mass	Feb. 28, 1818	....
Steam-engine, &c., boiler	A. Van Order	Ithaca, N. Y	July 17, 1838	844
Steam-engine boiler and apparatus	P. C. Curtis	Utica, N. Y	May 3, 1831	....
Steam-engine boiler and furnace	S. Forbes	New York	Mar. 17, 1831	....
Steam-engine boilers, Manner of regulating the supply of water to.	D. Barnum	Bridgeport, Conn	July 24, 1844	3, 676
Steam-engine boilers, Supplying water to	J. S. Williams	Maysville, Ky	Nov. 17, 1830	....
Steam-engine boilers, Self-acting apparatus for supplying water to.	J. Hampson	New Orleans, La	Sept. 4, 1841	2, 244
Steam-engine, Centrifugal pneumatic	C. C. Conway	New York	Nov. 14, 1835	....
Steam-engine circulator	W. A. Lighthall	New York, N. Y	June 17, 1862	35, 615
Steam-engine, Combined high and low pressure	J. C. Pedrick	Washington, D. C	Sept. 29, 1868	82, 547
Steam-engine, Compound	S. Archbold	Chester, Pa	Dec. 31, 1872	134, 344
Steam-engine, Compound	J. H. Cooper and A. D. Emery	Philadelphia, Pa	July 15, 1873	140, 8[illegible]2
Steam-engine, Compound	C. E. Emery	New York, N. Y	May 7, 1872	126, 383
Steam-engine, Compound	C. E. Emery	New York, N. Y	May 20, 1873	139, 052
Steam-engine condenser	C. W. Copeland	New York	June 11, 1841	2, 1[illegible]5
Steam-engine condenser	J. Houpt	Springtown, Pa	Mar. 18, 1873	136, 917
Steam-engine, Condensing	T. Edwards	Birmingham, England	Apr. 25, 1871	113, 9[illegible]9
Steam-engine, Condensing	J. Houpt	Springfield, Pa	May 18, 1869	90, 266
Steam-engine, Condensing	G. H. Reynolds	New York, N. Y	Dec. 2, 1862	37, 0[illegible]7
Steam-engine, Condensing	J. Sutton	New York, N. Y	May 31, 1859	24, 2[illegible]6
Steam-engine condensing-apparatus	C. H. De Lamater	New York, N. Y	Aug. 31, 1869	94, 403
Steam-engine connection	L. Phleger	Philadelphia, Pa	May 31, 1870	103, 649
Steam-engine crank and cross-head connection	J. S. Barden	New Haven, Conn	Feb. 18, 1862	34, 400
Steam-engine crank-connection	J. H. McGowan and D. B. Caldwell.	Cincinnati, Ohio	Sept. 30, 1873	143, 292
Steam-engine cylinder	H. Gerner	New York, N. Y	Sept. 23, 1873	143, 008

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Steam-engine cylinder	S. D. Gibson	Syracuse, N. Y	Aug. 11, 1863	39, 527
Steam-engine-cylinder lubricator	J. Absterdam	Boston, Mass	Nov. 21, 1854	11, 958
Steam-engine, Direct-acting	W. D. Hooker	San Francisco, Cal	Dec. 6, 1870	109, 204
Steam-engine, Direct-acting compound	W. M. Henderson	Philadelphia, Pa	Apr. 5, 1870	101, 617
Steam-engine, Double	J. Smallman and N. J. Roosevelt.	....	May 31, 1798	....
Steam-engine, Double-cylinder	D. Barnum	New York	Sept. 19, 1846	4, 765
Steam-engine draft-box	A. M. Eastwick	Philadelphia, Pa	Apr. 5, 1838	674
Steam-engine, Elementary circulating	T. Beach	Deer Creek, Ohio	Nov. 16, 1825	....
Steam-engine, Expansive	S. Barber	Providence, R. I	June 14, 1834	....
Steam-engine for avoiding the dead-point of a crank	V. Carter	Georgetown, D. C	Aug. 3, 1829	....
Steam-engine for boats, Horizontal	J. W. Sexton	Burlington, N. J	July 18, 1812	....
Steam-engine for boats, mills, &c	D. French	New York	Oct. 12, 1809	....
Steam-engine for land-carriages	R. E. Rogers	Philadelphia, Pa	Dec. 27, 1859	26, 619
Steam-engine for navigation, &c	E. Rumsey	Kentucky	Nov. 15, 1816	....
Steam-engine for propelling boats	J. Stephens	New York, N. Y	May 21, 1811	....
Steam-engine for propelling boats, Revolving	M. Battle	Herkimer County, N. Y	Mar. 27, 1812	....
Steam-engine for screw-propeller vessels	C. Wegschaider and P. Bonetti	Trieste, Austria	Aug. 29, 1871	118, 657
Steam-engine for seine-hauling	P. M. Warren	Edenton, N. C	May 4, 1869	89, 717
Steam-engine for vessels or vehicles used in inclined planes, rivers, &c.	J. Stimpson	Baltimore, Md	Aug. 23, 1831	....
Steam-engine furnace	C. B. Gregory	Beverly, N. J	May 11, 1869	89, 986
Steam-engine furnace	G. M. Wyne and W. MacGrove	Dennison, Ohio	July 19, 1870	105, 617
Steam-engine furnaces, Mode of supplying air to	E. A. Stevens	Bordentown, N. J	Apr. 1, 1842	2, 524
Steam-engine-governing device	P. A. Stewart	Lucesco, Pa	Sept. 7, 1869	94, 523
Steam-engine, High-pressure	B. Crawford	Pittsburgh, Pa	June 20, 1854	11, 117
Steam-engine, High-pressure	I. Jennings	New York	Feb. 11, 1828	....
Steam-engine, Horizontal	C. Curtis	New York	May 28, 1833	....
Steam-engine, Hydraulic	J. Catlin	Cincinnati, Ohio	June 11, 1829	....
Steam-engine, Hydro	W. Baxter	Newark, N. J	June 10, 1856	15, 056
Steam-engine, Hydro	J. Widmer	Bristol, Conn	Jan. 21, 1873	135, 024
Steam-engine, Hydrodynamic	W. Burnett	San Francisco, Cal	Apr. 15, 1873	137, 759
Steam-engine indicator	C. B. Richards	Hartford, Conn	Mar. 24, 1863	37, 980
Steam-engine indicator	S. L. Wiegand and W. B. Le Van.	Philadelphia, Pa	Jan. 5, 1864	41, 182
Steam-engine indicator, Electro-magnetic	A. R. Harris	Saint Louis, Mo	June 13, 1871	115, 847
Steam-engine indicators, Reducing-gear for	H. L. Brevoort	Brooklyn, N. Y	Mar. 8, 1870	100, 592
Steam-engine jet-condenser	J. Houpt	Springtown, Pa	Mar. 18, 1873	136, 918
S eam-engine, Locomotive	J. C. Hagan	Nashville, Tenn	Aug. 10, 1858	21, 130
Steam-engine, Locomotive	A. F. Smith	Norwich, Conn	Apr. 5, 1864	42, 233
Steam-engine-lubricating cup	T. Fleetwood	Carleton, New Brunswick	Jan. 8, 1867	61, 062
Steam-engine-lubricating cup	M. Vergnes	New York, N. Y	Sept. 25, 1866	58, 354
Steam-engine lubricator	A. N. Allen and R. H. Dewey	Pittsfield, Mass	Jan. 23, 1872	122, 982
Steam-engine lubricator	J. Ashcroft	New York, N. Y	June 4, 1867	65, 463
Steam-engine lubricator	P. W. Brewster	Philadelphia, Pa	Nov. 26, 1872	133, 297
Steam-engine lubricator	J. Broughton	New York, N. Y	Oct. 16, 1866	58, 767
Steam-engine lubricator	I. Church, jr	Norwalk, Conn	June 1, 1869	90, 728
Steam-engine lubricator	W. A. Clark	New Haven, Conn	Mar. 26, 1872	125, 022
Steam-engine lubricator	R. Colburn	Norwich, Conn	July 16, 1872	129, 460
Steam-engine lubricator	J. Collett	Williamsburgh, N. Y	July 23, 1867	67, 027
Steam-engine lubricator	F. Colligon	Buffalo, N. Y	July 9, 1867	66, 462
Steam-engine lubricator	R. W. Deely	Richmond, Ind	Apr. 30, 1872	126, 274
Steam-engine lubricator	C. W. Doten	East Boston, Mass	Sept. 10, 1867	68, 719
Steam-engine lubricator	O. H. Dunham	Washington, D. C	Dec. 2, 1862	37, 036
Steam-engine lubricator	J. P. Ferris	London, Great Britain	Nov. 21, 1865	51, 106
Steam-engine lubricator	J. Foster	Philadelphia, Pa	Mar. 26, 1872	124, 946
Steam-engine lubricator	S. E. Foster	Fitchburgh, Mass	Nov. 21, 1865	51, 112
Steam-engine lubricator	G. Girty	Raimer, Oreg	Oct. 20, 1868	83, 275
Steam-engine lubricator	S. Hall	Basford, England	Nov. 19, 1833	....
Steam-engine lubricator	J. Harper	New Haven, Conn	Sept. 26, 1871	119, 269
Steam-engine lubricator	J. Harper	New Haven, Conn	Dec. 12, 1871	121, 7[illegible]9
Steam-engine lubricator	M. Hawkins	Birmingham, Conn	Jan. 30, 1872	123, 259
Steam-engine lubricator	F. Jackson	Wigan, England	Dec. 6, 1870	109 908
Steam-engine lubricator	H. and C. Jarecki	Erie, Pa	Aug. 6, 1867	67, 551
Steam-engine lubricator	H. Kessler	Caub City, Duchy of Nassau.	Mar. 26, 1867	63, 257
Steam-engine lubricator	C. Lynch	Detroit, Mich	Nov. 21, 1871	121, 055
Steam-engine lubricator	J. A. Lynch	Boston, Mass	May 25, 1869	90, 371
Steam-engine lubricator	E. McCoy	Ypsilanti, Mich	July 23, 1872	129, 843
Steam-engine lubricator	E. McCoy	Ypsilanti, Mich	Aug. 6, 1872	130, 305
Steam-engine lubricator	M. Morton	Romeo, Mich	July 16, 1872	129, 360
Steam-engine lubricator	J. Nation	Portland, Oreg	Mar. 24, 1868	75, 958
Steam-engine lubricator	C. H. Parshall	Detroit, Mich	May 7, 1872	126, 572
Steam-engine lubricator	W. R. Patterson	Chicago, Ill	Apr. 29, 1873	138, 344
Steam-engine lubricator	T. G. Pelton	Lyons, Iowa	Aug. 6, 1867	67, 577
Steam-engine lubricator	J. Roscoe	Leicester, England	Dec. 23, 1862	37, 245
Steam-engine lubricator	J. Ross	North Cambridge, Mass	June 2, 1868	78, 540
Steam-engine lubricator	J. S. Stewart	Philadelphia, Pa	Apr. 16, 1872	125, 740
Steam-engine lubricator	J. Storer	New York, N. Y	Mar. 13, 1866	53, 195
Steam-engine lubricator	J. Sutton	New York, N. Y	Jan. 16, 1855	13, 259
Steam-engine lubricator	G. W. Teasdale	Lexington, Cal	Feb. 23, 1869	87, 222
Steam-engine lubricator	M. N. Ward	Somerville, Mass	Aug. 15, 1871	118, 078
S eam-engine lubricator	J. L. Whipple and A. Bonzano	Detroit, Mich	Dec. 31, 1867	72, 952
Steam-engine lubricator	S. E. Whitney	Canaseraga, N. Y	Mar. 5, 1872	124, 407
Steam-engine machinery	W. A. Turner	Washington County, N. C	July 21, 1831	....
Steam-engine mechanism	M. R. Clapp	New York, N. Y	Mar. 2, 1869	87, 468
Steam, Engine or machinery to supersede the use of	L. Marchand	Baltimore, Md	June 14, 1834	....
Steam engine or pump, Rotary	G. S. Follansbee	Philadelphia, Pa	Aug. 30, 1870	106, 804
Steam-engine, Oscillating	W. S. Mackintosh	Pittsburgh, Pa	Jan. 17, 1860	26, 852
Steam-engine, Oscillating	W. S. Mackintosh and J. Hemphill.	Pittsburgh, Pa	Jan. 17, 1860	26, 853
Steam-engine, Oscillating	J. A. Reed	Jersey City, N. J	July 19, 1859	24, 821
Steam-engine, Oscillating	A. Wood	Pittsburgh, Pa	Jan. 5, 1858	19, 057
Steam-engine, Pendulum	J. Staples	Richmond, Va	July 18, 1811	....
Steam-engine piston-head	J. Rees	Pittsburgh, Pa	June 27, 1871	116, 3[illegible]3
Steam-engine, Portable	E. F. Cooper	Mount Gilead, Ohio	July 16, 1872	129, 00[illegible]
Steam-engine, Portable	R. Scheidler and J. H. McNamar.	Newark, Ohio	Aug. 19, 1873	141, 955

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Steam-engine, Portable	W. Wright	New York, N. Y	Aug. 8, 1865	49, 334
Steam-engine-power indicator	W. Ashton and J. H. Storey	Manchester, Great Britain	June 11, 1872	127, 729
Steam-engine, Reacting	L. Brunier	France	Oct. 25, 1842	2, 830
Steam-engine, Reacting rotary	J. Black	Williamsport, Pa	Mar. 12, 1845	3, 943
Steam-engine register	G. P. Clark and M. B. Edson	New York and Brooklyn, N. Y.	May 5, 1868	77, 584
Steam-engine register	J. Garsed	Frankford, Pa	Dec. 1, 1868	81, 622
Steam-engine registering-apparatus	P. L. Weimer	Lebanon, Pa	Feb. 26, 1861	31, 582
Steam-engine regulator	J. F. Belleville	Paris, France	Sept. 22, 1868	82, 276
Steam-engine regulator	A. Merriman	Middletown, Conn	June 20, 1854	11, 132
Steam-engine regulator	H. Webster	Beetown, Wis	June 5, 1855	13, 019
Steam-engine, Repeating expansive	J. Frost	Brooklyn, N. Y	Nov. 3, 1841	2, 323
Steam-engine, Reversible rotary	O. Adams	Black Hawk, Col	Aug. 9, 1873	141, 909
Steam-engine, Revolving-cylinder	T. Rogers	Philadelphia, Pa	Mar. 23, 1858	19, 715
Steam-engine, Revolving or concentric	E. Penny and I. N. Crosby	Rochester, N. Y	July 22, 1833	....
Steam-engine, Rotary	F. E. Mills	San Francisco, Cal	Sept. 6, 1870	107, 078
Steam-engine, Rotary	L. F. Parker	Davenport, Iowa	Apr. 15, 1873	137, 795
Steam-engine, Rotary-shifting-piston	J. Lansing, jr., and A. Thayer, jr.	Albany, N. Y	Jan. 19, 1822	....
Steam-engine, Safety	E. D. Tippett	Washington, D. C	Nov. 23, 1836	....
Steam-engine, Safety	E. D. Tippett	Washington, D. C	Nov. 23, 1836	84
Steam-engine safety-stop	W. H. Darling	New York, N. Y	May 28, 1872	127, 315
Steam-engine, Savary's	E. Cruse	....	Aug. 26, 1791	....
Steam-engine, Savary's	J. Rumsey	....	Aug. 26, 1791	....
Steam-engine, Savary's	J. Stevens, jr	....	Aug. 26, 1791	....
Steam-engine, Semi-rotative	C. B. Gallagher	Allegheny City, Pa	May 12, 1857	17, 271
Steam-engine, Specific	A. S. Kirk	Smithfield Township, Jefferson County, Ohio.	Feb. 13, 1828	....
Steam-engine, Spring teeth-rack-frame	W. Willis	Charleston, S. C	Feb. 1, 1828	....
Steam-engine steam-chest	W. Stamp	Susquehanna Depot, Pa	Nov. 10, 1868	84, 014
Steam-engine stop-motion	J. T. Ackley	Philadelphia, Pa	Mar. 10, 1857	16, 779
Steam-engine stop-motion	J. Storer	Peekskill, N. Y	June 21, 1870	104, 659
Steam-engine stop-motion	C. S. Westland	Providence, R. I	June 11, 1867	65, 711
Steam-engine stuffing-box	V. Duterne	Paris, France	Oct. 17, 1865	50, 541
Steam-engine to the two crank-shafts, Method of adapting the vibrating.	I. H. Towne	Philadelphia, Pa	Jan. 10, 1845	3, 878
Steam-engine tube	K. H. Loomis	Cincinnati, Ohio	June 25, 1867	66, 156
Steam-engine used for pumping, Condensing	B. Holly	Seneca Falls, N. Y	Feb. 12, 1856	14, 239
Steam-engine, valve, &c	R. F. Hatfield	New York, N. Y	July 3, 1866	56, 045
Steam-engine, Vibrating	P. Davis	York, Pa	Feb. 17, 1821	....
Steam-engine, Vibrating	E. A. Lester	Boston, Mass	Feb. 7, 1844	3, 426
Steam-engine, Vibrating	N. Rowland	Philadelphia, Pa	May 24, 1833	....
Steam-engine, Vibratory	W. Darker, jr	West Philadelphia, Pa	July 22, 1856	15, 371
Steam-engines, Air-trap for	T. Sault	Seymour, Conn	Feb. 28, 1860	27, 313
Steam-engines and boilers, Construction of	J. Stevens	New York	Jan. 3, 1810	....
Steam-engines and calenders, Trunnion for	T. Hill	Vallejo, Cal	Oct. 11, 1870	108, 136
Steam-engines, Apparatus for condensing steam and for regulating combustion in.	A. Collins	Ulster, N. Y	Dec. 31, 1838	1, 047
Steam-engines, Apparatus for controlling the velocity in.	W. E. Worthen	New York, N. Y	Nov. 28, 1871	121, 306
Steam-engines, Apparatus for oiling cylinders and pistons for.	C. A. Stebbins	Boston, Mass	June 28, 1859	24, 606
Steam-engines, Apparatus for operating	J. Donnelly	Hudson, N. Y	June 11, 1872	127, 747
Steam-engines, Apparatus for regulating the draft of.	W. S. Hudson	Paterson, N. J	Feb. 1, 1859	22, 808
Steam-engines, Apparatus for utilizing the exhaust steam of.	H. Gerner	New York, N. Y	June 21, 1870	104, 573
Steam-engines, Application of the escape heat of	A. Brown	Salina, N. Y	Oct. 30, 1827	....
Steam-engines, &c., Applying spare heat of blast furnaces to.	E. Burrall	Canaan, Conn	Jan. 31, 1816	....
Steam-engines, Applying the power of	J. Widmer	New Haven, Conn	June 8, 1858	20, 533
Steam-engines, Arrangement in double-piston	W. S. Burgess	Norristown, Pa	Jan. 2, 1855	12, 179
Steam-engines, Arrangement of	F. P. Dimpfel	New York, N. Y	July 1, 1851	8, 201
Steam-engines, Arrangement of	W. M. Ellis	Washington, D. C	Aug. 22, 1854	11, 549
Steam-engines, Arrangement of	R. F. Loper and J. W. Nystrom	Philadelphia, Pa	Dec. 17, 1850	7, 842
Steam-engines, Arrangement of feed-water-heating pipes of.	B. Crawford	Pittsburgh, Pa	Apr. 2, 1861	31, 874
Steam-engines, Arrangement of the lever half-beam of.	W. A. Lighthall	Albany, N. Y	Oct. 23, 1849	6, 811
Steam-engines, Automatic stop-motion for	H. B. Beckman	Newburyport, Mass	Oct. 21, 1862	36, 699
Steam-engines, Automatic stop-motion for	H. B. Beckman	Newburyport, Mass	Sept. 12, 1865	51, 412
Steam-engines, Automatic stop-motion for	J. Jackman, jr	Newburyport, Mass	Apr. 18, 1865	47, 357
Steam-engines, Automatic stop-motion for	J. Jackman, jr	Newburyport, Mass	Apr. 18, 1865	47, 358
Steam-engines, Automatic stop-motion for	J. Jackman, jr	Newburyport, Mass	Apr. 18, 1865	47, 359
Steam-engines, Automatic stop-motion for	A. Nadow	Springfield, Mass	June 27, 1865	48, 426
Steam-engines by the sun's rays, Mode of heating water in boilers of.	M. Longwell	Gettysburgh, Pa	July 11, 1807	....
Steam-engines, Cam-rod hook of	B. A. Haycock	Richland, Iowa	Jan. 12, 1864	41, 219
Steam-engines, Cataract-mechanism for	J. Storer	New York, N. Y	June 14, 1870	104, 226
Steam-engines, Combined force and bucket pump for.	J. S. Wilson	Philadelphia, Pa	Sept. 24, 1872	131, 646
Steam-engines, Construction of	N. Bosworth	Philadelphia, Pa	July 9, 1838	824
Steam-engines, Construction of illustrating	J. B. Hyde	New York, N. Y	Oct. 15, 1872	132, 289
Steam-engines, Crank connection in double-piston	J. Smith	Cincinnati, Ohio	Jan. 2, 1855	12, 187
Steam-engines, Cutting off steam in	I. Adams	Boston, Mass	May 17, 1838	744
Steam-engines, Eccentric-rod for	J. F. McCutchen	Philadelphia, Pa	Mar. 25, 1873	137, 227
Steam-engines, Equalizing-apparatus for	W. H. Morrison	Indianapolis, Ind	Dec. 21, 1852	9, 486
Steam-engines, Escape-pipe for	J. Smith	Philadelphia, Pa	July 30, 1867	67, 364
Steam-engines for propelling street passenger-cars, Arrangement of.	R. H. Long	Philadelphia, Pa	Jan. 24, 1860	26, 911
Steam-engines, Governing and reversing	J. D. Custer	Norristown, Pa	June 21, 1839	1, 179
Steam-engines, Heating the supply-water and carrying off the escape steam in high-pressure.	N. Cope	Hanover, Ohio	Feb. 20, 1843	2, 968
Steam-engines, Impermeator for	H. Wilson	Stockton-on-Tees, Great Britain.	June 28, 1870	104, 914
Steam-engines, Link for	F. A. Brown	Ithaca, N. Y	Sept. 13, 1864	44, 159
Steam-engines, Link for	D. A. Woodbury	Rochester, N. Y	Jan. 30, 1872	123, 138
Steam-engines, Link-motion device for	E. Faron	Chester, Pa	Nov. 16, 1869	96, 903

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Steam-engines, Lubricator for cylinders of condensing.	W. Fletcher	New York, N. Y	Nov. 7, 1871	120, 635
Steam-engines, Making dry	J. Goulding	Dedham, Mass	Oct. 25, 1834	....
Steam-engines, Metallic packing-ring for	P. Clark	Rahway, N. J	Sept. 22, 1857	18, 235
Steam-engines, Oiling slides of	T. Carpenter	Providence, R. I	Apr. 8, 1862	34, 876
Steam-engines, Operating	Z. Allen	Providence, R. I	Mar. 28, 1834	....
Steam-engines, Operating	S. G. Cabell	Quincy, Ill	Aug. 7, 1866	56, 898
Steam-engines, Operating locomotive	G. Gärtner and C. Diebold	Lebanon, Pa	Dec. 12, 1871	121, 864
Steam-engines, Pipe-boiler for	A. Potter	New York	Oct. 11, 1828	....
Steam-engines, Piston and stuffing-box for	E. H. and C. Eversole	Saint Louis, Mo	July 20, 1843	3, 186
Steam-engines, Raising water by	D. Colver	Deer Creek, Ohio	June 6, 1832	....
Steam-engines, Regulating the motion of	W. C. Hibbard	Boston, Mass	July 4, 1854	11, 223
Steam-engines, Regulating the waste steam in locomotive.	R. Winans	Baltimore, Md	Nov. 26, 1840	1, 868
Steam-engines, Reversing-device for	S. E. Stokes, jr	Philadelphia, Pa	July 16, 1872	129, 372
Steam-engines, Reversing-gear for	A. M. Allen	New York, N. Y	Apr. 27, 1869	89, 457
Steam-engines, Reversing-gear for	D. A. Woodbury	Rochester, N. Y	Mar. 1, 1870	100, 483
Steam-engines, Self-lubricating cross-head for	I. H. Congdon	Omaha, Nebr	Jan. 26, 1869	86, 214
Steam-engines, Steam-ports of	H. R. Camfield	Susquehanna Depot, Pa	Dec. 29, 1868	85, 278
Steam-engines, Variable exhaust-pipe for	G. Edwards	Worcester, Mass	Jan. 31, 1860	27, 020
Steam-engines with propellers of steam-vessels, Connection of.	R. and T. Winans	Baltimore, Md	Oct. 26, 1858	21, 920
Steam-enginery	J. Eve	London, England	Aug. 16, 1826	....
Steam-enginery	W. Goodwin	Boston, Mass	Dec. 8, 1868	84, 819
Steam-enginery called the power-wheel	J. A. Wadsworth	Portsmouth, R. I	Sept. 27, 1825	....
Steam for actuating engines, Use of	C. E., J., and S. Wethered	Baltimore, Md	Sept. 27, 1853	10, 054
Steam for cooking, &c., Generating	H. Branch	New York	Apr. 12, 1833	....
Steam for engines, Producing	J. Buchanan	Lexington, Ky	Sept. 13, 1824	....
Steam for forging malleable iron, &c., Generating	P. J. Clute	Schenectady, N. Y	May 20, 1833	....
Steam for heating and evaporating, Mode of using	H. Merrill	Philadelphia, Pa	Apr. 30, 1867	64, 347
Steam for heating purposes, Application of combined ordinary and superheated.	C. E., J., and S. Wethered	Baltimore, Md	June 20, 1854	11, 143
Steam for heating purposes, Method of using exhaust	B. F. Babbitt	New York, N. Y	Mar. 31, 1863	38, 021
Steam-furnace	C. H. De Lamater	New York, N. Y	May 25, 1869	90, 346
Steam-furnace and other devices	D. Harger	Des Moines, Iowa	Oct. 19, 1869	96, 001
Steam-gage	A. J. Allen	Buffalo, N. Y	Oct. 4, 1859	25, 615
Steam-gage	A. J. Allen	Buffalo, N. Y	Aug. 14, 1860	29, 646
Steam-gage	E. G. Allen	Boston, Mass	Jan. 17, 1860	26, 871
Steam-gage	E. G. Allen	Boston, Mass	May 1, 1860	28, 045
Steam-gage	C. Barnes	Cincinnati, Ohio	Sept. 19, 1865	49, 961
Steam-gage	V. Beaumont	New York, N. Y	Oct. 3, 1854	11, 743
Steam-gage	R. C. Blake	Cincinnati, Ohio	July 31, 1867	56, 694
Steam-gage	R. C. Blake	Cincinnati, Ohio	July 4, 1871	116, 669
Steam-gage	M. Botticher	Newark, N. J	Dec. 24, 1867	72, 595
Steam-gage	C. Bourgeois	Buffalo, N. Y	Feb. 6, 1866	52, 320
Steam-gage	F. Burckle	Boston, Mass	Mar. 23, 1858	19, 731
Steam-gage	W. Chesley	Cincinnati, Ohio	Sept. 28, 1869	95, 323
Steam-gage	G. M. Davis	Chicago, Ill	Sept. 17, 1867	68, 849
Steam-gage	G. H. Dodge	Camden, N. J	July 15, 1862	35, 871
Steam-gage	R. B. Donaldson and E. Quinn	Washington, D. C	July 2, 1867	66, 311
Steam-gage	J. J. Ducomet	Paris, France	Jan. 9, 1866	52, 006
Steam-gage	H. W. Evans	Philadelphia, Pa	Sept. 26, 1865	50, 107
Steam-gage	W. Y. Gill	Henderson, Ky	Mar. 8, 1859	23, 166
Steam-gage	G. W. Grader and A. C. Wurzbach.	Memphis, Tenn	Oct. 9, 1860	30, 312
Steam-gage	A. S. Green	Washington, D. C	Dec. 10, 1867	72, 023
Steam-gage	J. P. Holt	Cleveland, Ohio	Oct. 29, 1867	70, 213
Steam-gage	J. P. Holt	Cleveland, Ohio	July 26, 1870	105, 685
Steam-gage	C. W. Kimball	Springfield, Mass	Jan. 17, 1860	26, 850
Steam-gage	J. Lowe	New York, N. Y	July 3, 1866	56, 070
Steam-gage	H. Matthes	Cambridgeport, Mass	July 7, 1868	79, 669
Steam-gage	W. K. Miller	Canton, Ohio	July 1, 1856	15, 246
Steam-gage	E. Quinn	Washington, D. C	Mar. 13, 1866	53, 183
Steam-gage	E. Quinn	Washington, D. C	Mar. 12, 1867	62, 885
Steam-gage	T. S. Ray	Buffalo, N. Y	May 24, 1864	42, 873
Steam-gage	C. C. Schmidt	New York, N. Y	Nov. 14, 1865	50, 991
Steam-gage	P. Schofield	Philadelphia, Pa	Mar. 5, 1867	62, 562
Steam-gage	J. R. Sees	New York, N. Y	Apr. 26, 1864	42, 540
Steam-gage	T. Shaw	Philadelphia, Pa	Feb. 24, 1863	37, 794
Steam-gage	T. Shaw	Philadelphia, Pa	May 2, 1865	47, 578
Steam-gage	W. Stamp	Susquehanna Depot, Pa	Feb. 12, 1867	62, 083
Steam-gage	T. Stubblefield	Columbus, Ga	July 18, 1854	11, 333
Steam-gage	D. G. Wells	New York, N. Y	Aug. 11, 1857	17, 988
Steam-gage	C. A. Wilson	Cincinnati, Ohio	Apr. 3, 1866	53, 721
Steam-gage	C. A. Wilson	Cincinnati, Ohio	July 3, 1866	56, 135
Steam-gage, Alarm	L. L. Lee	Milwaukee, Wis	Apr. 19, 1864	42, 384
Steam-gage and safety-valve	I. N. Whittelsey	Mount Vernon, Ind	Nov. 8, 1870	109, 086
Steam-gage case	H. Belfield	Philadelphia, Pa	Sept. 24, 1872	131, 651
Steam-gage, Combination	E. G. Allen	Boston, Mass	Nov. 22, 1859	26, 152
Steam-gage, Electric	E. A. Wood	Utica, N. Y	Oct. 8, 1867	69, 797
Steam-gage for boilers, Safety	J. A. Roebling	Saxenburgh, Pa	July 16, 1842	2, 728
Steam-gage for heat and pressure	J. M. Blanchard	Washington, D. C	July 13, 1869	92, 572
Steam-gage for preventing explosion of boilers	S. Raub, jr	Wilkesbarre, Pa	Dec. 28, 1835	....
Steam-gage, Magnetic	J. Lowe	New York, N. Y	July 6, 1858	20, 851
Steam-gage, Recording	J. B. Edson	Brooklyn, N. Y	Dec. 16, 1873	145, 495
Steam-gage, Registering	E. H. Ashcroft	Boston, Mass	Feb. 20, 1872	123, 855
Steam-gage, Registering	E. H. Ashcroft	Boston, Mass	July 29, 1873	141, 307
Steam-gage, Registering	E. Clark	Louisville, Ky	Apr. 5, 1870	101, 583
Steam-gage, Registering	D. P. Davis	Jersey City, N. J	July 2, 1867	66, 307
Steam-gage, Registering	T. C. Hargrave	Boston, Mass	Mar. 19, 1872	124, 816
Steam-gage, Registering	T. C. Hargrave	Boston, Mass	Sept. 17, 1872	131, 347
Steam-gage, Registering	J. P. Holt	Cleveland, Ohio	July 30, 1872	129, 958
Steam-gage, Registering	P. Maltby	Cleveland, Ohio	Oct. 14, 1873	143, 630
Steam-gage, Thermometric	D. M. Greene	Troy, N. Y	Apr. 14, 1868	76, 625
Steam-gage, Thermometric	G. Lightbody	New York, N. Y	Oct. 24, 1871	120, 201
Steam-gage, Thermometrical	E. A. L. Roberts	New York, N. Y	Aug. 26, 1862	36, 304
Steam-generator	C. Ahrens and F. Kamman	Cincinnati, Ohio	Jan. 31, 1871	111, 298
Steam-generator	J. F. Allen	Tremont, N. Y	Apr. 14, 1868	76, 580

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Steam-generator	J. F. Allen	New York, N. Y	Apr. 4, 1871	113, 613
Steam-generator	J. F. Allen	Mott Haven, N. Y	Oct. 8, 1872	132, 041
Steam-generator	J. Ames	Springfield, Mass	Mar. 12, 1836	....
Steam-generator	J. Amory	West Roxbury, Mass	July 28, 1868	80, 265
Steam-generator	D. Amsdell	Hamburgh, N. Y	May 17, 1870	103, 120
Steam-generator	V. D. Anderson	Milton, Wis	Feb. 11, 1868	74, 269
Steam-generator	V. D. Anderson	Milton, Wis	Oct. 13, 1868	83, 016
Steam-generator	W. D. Andrews	New York, N. Y	Jan. 1, 1867	60, 662
Steam-generator	J. Armstrong	New Orleans, La	June 23, 1868	79, 094
Steam-generator	J. Armstrong	Bucyrus, Ohio	Sept. 8, 1868	81, 972
Steam-generator	W. Arthur	Newport, Ky	June 21, 1870	104, 533
Steam-generator	P. Atherton	Philadelphia, Pa	Sept. 17, 1867	68, 934
Steam-generator	B. T. Babbitt	New York, N. Y	June 29, 1869	92, 000
Steam-generator	G. H. Babcock and S. Wilcox, jr	Providence, R. I	May 28, 1867	65, 042
Steam-generator	G. H. Babcock and S. Wilcox	Plainfield, N. J., and Brooklyn, N. Y.	Mar. 11, 1873	136, 691
Steam-generator	J. Badger	Chicago, Ill	Jan. 2, 1866	51, 788
Steam-generator	R. Bailey	Idaho City, Idaho	Dec. 18, 1866	60, 611
Steam-generator	W. C. Baker	New York, N. Y	Nov. 24, 1863	40, 722
Steam-generator	W. C. Baker	New York, N. Y	Dec. 18, 1866	60, 459
Steam-generator	W. C. Baker	New York, N. Y	Oct. 28, 1873	144, 047
Steam-generator	J. S. Baldwin	Newark, N. J	Jan. 21, 1873	135, 062
Steam-generator	W. Ball	Chicopee, Mass	Apr. 7, 1868	76, 381
Steam-generator	N. H. Barbour	New York, N. Y	July 26, 1870	105, 626
Steam-generator	J. S. Barden	Providence, R. I	Feb. 26, 1867	62, 307
Steam-generator	J. S. Barden	Providence, R. I	Feb. 26, 1867	62, 308
Steam-generator	G. A. Barnard	New York, N. Y	July 11, 1871	116, 796
Steam-generator	I. Barton	Williamsport, Pa	July 15, 1873	140, 872
Steam-generator	M. Battel	Albany, N. Y	Aug. 16, 1859	25, 085
Steam-generator	J. Battin	Newark, N. J	July 15, 1862	35, 865
Steam-generator	F. Baumann	Chicago, Ill	Nov. 27, 1866	59, 947
Steam-generator	W. Baxter	Newark, N. J	Oct. 27, 1868	83, 445
Steam-generator	W. Baxter	Newark, N. J	June 28, 1870	104, 820
Steam-generator	E. Bayard	New York, N. Y	Dec. 10, 1872	133, 743
Steam-generator	O. W. Bayley	Boston, Mass	Sept. 13, 1864	44, 153
Steam-generator	C. Bean	East Douglass, Mass	Aug. 25, 1868	81, 330
Steam-generator	J. D. Beers	Philadelphia, Pa	Sept. 12, 1865	49, 847
Steam-generator	C. G. Beitel	Easton, Pa	Oct. 26, 1869	96, 190
Steam-generator	C. S. Bell	Hillsborough, Ohio	Sept. 11, 1866	58, 017
Steam-generator	J. F. Belleville	Nancy, France	Oct. 6, 1857	18, 319
Steam-generator	J. F. Belleville	Paris, France	Apr. 19, 1870	101, 973
Steam-generator	H. Betts and J. A. McLean	Norwalk, Conn	Dec. 24, 1823	....
Steam-generator	H. Bevis	Cincinnati, Ohio	July 16, 1867	66, 670
Steam-generator	A. L. Bezy and I. A. Desnoyers	Paris, France	Sept. 15, 1868	82, 198
Steam-generator	G. W. Blake	New York, N. Y	Dec. 1, 1868	84, 607
Steam-generator	C. T. Boardman	Pawtucket, R. I	July 30, 1867	67, 255
Steam-generator	J. W. Bookwalter	Springfield, Ohio	Jan. 7, 1873	134, 635
Steam-generator	E. Bourne	Pittsburgh, Pa	May 7, 1867	64, 479
Steam-generator	E. Bourne	Pittsburgh, Pa	Dec. 14, 1869	97, 864
Steam-generator	E. Bourne	Pittsburgh, Pa	Dec. 14, 1869	97, 865
Steam-generator	E. and J. Bourne	Pittsburgh, Pa	Jan. 13, 1863	37, 382
Steam-generator	J. F. Boynton	Syracuse, N. Y	Sept. 10, 1867	68, 598
Steam-generator	W. Branagan	Burlington, Iowa	Nov. 27, 1866	59, 952
Steam-generator	W. Branagan	Burlington, Iowa	Jan. 8, 1867	60, 991
Steam-generator	W. Branagan	Burlington, Iowa	July 7, 1868	79, 544
Steam-generator	G. B. Brayton	Providence, R. I	Oct. 11, 1864	44, 597
Steam-generator	G. B. Brayton	Providence, R. I	Oct. 11, 1864	44, 598
Steam-generator	G. B. Brayton	Providence, R. I	Oct. 11, 1864	44, 599
Steam-generator	G. B. Brayton	Providence, R. I	Oct. 11, 1864	44, 600
Steam-generator	G. B. Brayton	Providence, R. I	Oct. 11, 1864	44, 601
Steam-generator	G. B. Brayton	Boston, Mass	Mar. 27, 1866	53, 399
Steam-generator	N. P. Brightman	New Bedford, Mass	May 6, 1873	138, 607
Steam-generator	M. S. Bringier	Ascension Parish, La	Dec. 21, 1869	98, 021
Steam-generator	A. D. Brock	Washington, D. C	Nov. 21, 1871	121, 079
Steam-generator	H. G. Brooks	New York, N. Y	Sept. 22, 1868	82, 283
Steam-generator	H. G. Brooks	New York, N. Y	Nov. 10, 1868	83, 916
Steam-generator	H. J. Brunner	Nazareth, Pa	Apr. 6, 1869	88, 694
Steam-generator	W. Buchanan and J. M. Toucey	New York and Poughkeepsie, N. Y.	Mar. 26, 1867	63, 137
Steam-generator	G. F. Burkhardt	Boston Highlands, Mass	Sept. 26, 1871	119, 310
Steam-generator	W. Byers	Philadelphia, Pa	Nov. 14, 1871	120, 957
Steam-generator	C. W. Cahoon	Portland, Me	Oct. 27, 1868	83, 457
Steam-generator	J. A. Campbell	Saint Louis, Mo	June 5, 1866	55, 237
Steam-generator	L. W. Campbell	Aurora, Ill	Mar. 19, 1867	63, 014
Steam-generator	J. Carr	Springborough, Ohio	Mar. 12, 1836	....
Steam-generator	J. Carrol	Detroit, Mich	July 26, 1870	105, 642
Steam-generator	C. E. Case	Xenia, Ohio	Apr. 2, 1867	63, 469
Steam-generator	C. E. Case	Xenia, Ohio	Dec. 10, 1867	71, 851
Steam-generator	E. Chapman and C. T. Allaire	Rochester, Minn	Jan. 28, 1868	73, 780
Steam-generator	E. P. Chase	Rockland, Me	Sept. 18, 1866	58, 164
Steam-generator	R. A. Chesebrough	New York, N. Y	Aug. 3, 1869	93, 176
Steam-generator	M. R. Clapp	New York, N. Y	Jan. 15, 1867	61, 162
Steam-generator	J. M. Clark	New York, N. Y	Sept. 8, 1868	81, 983
Steam-generator	J. M. Clark	New York, N. Y	May 11, 1869	89, 916
Steam-generator	J. M. Clark	New York, N. Y	Apr. 5, 1870	101, 433
Steam-generator	J. M. Clark	New York, N. Y	Apr. 5, 1870	101, 434
Steam-generator	J. M. Clark	New York, N. Y	Aug. 23, 1870	106, 662
Steam-generator	G. H. Clarke	Brooklyn, N. Y	Dec. 31, 1867	72, 720
Steam-generator	O. Clarke	Rockford, Ill	Aug. 22, 1871	118, 197
Steam-generator	T. S. Clogston	Boston, Mass	June 18, 1867	65, 874
Steam-generator	J. C. Cochrane	Rochester, N. Y	Apr. 27, 1869	89, 291
Steam-generator	L. H. Colborn	Chicago, Ill	Nov. 6, 1866	59, 361
Steam-generator	L. H. Colborne	Albion, N. Y	Aug. 3, 1869	93, 276
Steam-generator	S. M. Colburn	Ansonia, Conn	May 21, 1867	64, 844
Steam-generator	H. S. Cole	Pawtucket, R. I	July 21, 1868	80, 144
Steam-generator	W. Conant	Geneva, Ill	Oct. 9, 1866	58, 604
Steam-generator	S. T. Conn	Washington, D. C	July 20, 1826	....
Steam-generator	J. Connery	Wilmington, Del	Dec. 12, 1865	51, 510

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Steam-generator	G. H. Corliss	Providence, R. I	Aug. 26, 1862	36, 281
Steam-generator	G. H. Corliss	Providence, R. I	July 25, 1871	117, 385
Steam-generator	L. R. Cornell	Flatbush, N. Y	Dec. 6, 1870	109, 807
Steam-generator	I. E. Craig	Cleveland, Ohio	May 30, 1865	47, 933
Steam-generator	I. E. Craig and J. Madden	Cleveland, Ohio	Nov. 15, 1864	45, 025
Steam-generator	B. Crawford	Pittsburgh, Pa	Apr. 14, 1868	76, 607
Steam-generator	B. Crawford	Allegheny City, Pa	May 25, 1869	90, 506
Steam-generator	C. Crawford	East Cleveland, Ohio	Sept. 5, 1865	49, 728
Steam-generator	W. Creed	Boston, Mass	Dec. 26, 1837	534
Steam-generator	J. E. Culver	Hudson, N. J	Oct. 14, 1862	36, 643
Steam-generator	H. E. Curry	Louisville, Ky	Mar. 29, 1870	101, 233
Steam-generator	E. Danford	Geneva, Ill	Nov. 21, 1865	51, 026
Steam-generator	J. Darling	Cincinnati, Ohio	July 16, 1867	66, 683
Steam-generator	J. A. Davis	Watertown, N. Y	Nov. 3, 1868	83, 608
Steam-generator	J. A. Davis	Watertown, N. Y	Feb. 2, 1869	86, 373
Steam-generator	R. W. and D. Davis	Flushing and Long Island City, N. Y.	Apr. 17, 1866	54, 063
Steam-generator	R. W. and D. Davis	Long Island City, N. Y	Mar. 26, 1867	63, 226
Steam-generator	E. Day	Rockford, Ill	Aug. 1, 1871	117, 519
Steam-generator	J. Delery	Saint Bernard Parish, La	Jan. 22, 1867	61, 324
Steam-generator	A. Demarce	Fairfield, Iowa	May 18, 1869	90, 083
Steam-generator	J. M. Dillon	Wheeling, W. Va	Aug. 13, 1867	67, 637
Steam-generator	E. P. Doyen	Portland, Me	June 20, 1871	116, 167
Steam-generator	R. W. Dugan and B. F. Clark	Covington, Ky., and Cairo, Ill.	Sept. 5, 1871	118, 702
Steam-generator	J. H. Duhme	Cincinnati, Ohio	Jan. 7, 1868	73, 083
Steam-generator	F. B. Dunn	New York, N. Y	Dec. 15, 1868	85, 000
Steam-generator	F. B. Dunn	New York, N. Y	Sept. 14, 1869	94, 876
Steam-generator	E. Dunscomb	Boston, Mass	June 23, 1868	79, 215
Steam-generator	J. Eaton	Bridgeport, Ill	June 15, 1869	91, 316
Steam-generator	J. Eberhardt	Conshohocken, Pa	Sept. 26, 1871	119, 225
Steam-generator	S. W. Emery and E. P. Doyen	Portland, Me	Aug. 1, 1871	117, 613
Steam-generator	H. W. Evans	Philadelphia, Pa	May 3, 1870	102, 522
Steam-generator	L. Fagin	Cincinnati, Ohio	Apr. 2, 1867	63, 375
Steam-generator	J. A. Fanshawe and J. A. Jaques.	Tottenham, England	June 17, 1862	35, 595
Steam-generator	R. Faries	Maroa, Ill	Jan. 8, 1867	61, 060
Steam-generator	R. and H. B. Faries	Indianapolis, Ind	May 9, 1865	47, 627
Steam-generator	E. Faron	New York, N. Y	Sept. 26, 1865	50, 109
Steam-generator	H. T. Fenton	Philadelphia, Pa	May 7, 1867	64, 513
Steam-generator	H. T. Fenton	Philadelphia, Pa	Mar. 3, 1868	75, 141
Steam-generator	J. Fermenich	Buffalo, N. Y	Mar. 20, 1866	53, 284
Steam-generator	H. Feyh	Columbus, Ohio	Dec. 18, 1866	60, 496
Steam-generator	H. Feyh	Columbus, Ohio	Jan. 1, 1867	60, 870
Steam-generator	H. Feyh	Columbus, Ohio	June 4, 1867	65, 479
Steam-generator	G. B. Field	New York, N. Y	June 23, 1868	79, 110
Steam-generator	L. C. Field	Galesburgh, Ill	Feb. 7, 1871	111, 527
Steam-generator	J. R. Fish and H. C. Hartman	Fort Wayne, Ind	Jan. 15, 1867	61, 181
Steam-generator	A. C. Fletcher	New York, N. Y	Mar. 30, 1869	88, 288
Steam-generator	M. Fletcher	Louisville, Ky	July 17, 1866	56, 396
Steam-generator	C. H. Ford	Baltimore, Md	Jan. 23, 1866	52, 243
Steam-generator	M. Foreman	Philadelphia, Pa	Oct. 16, 1866	58, 802
Steam-generator	A. S. Foster	Indianapolis, Ind	Mar. 31, 1868	76, 180
Steam-generator	C. H. Franklin, jr	New York, N. Y	July 27, 1869	92, 952
Steam-generator	B. Garvey	New York, N. Y	July 17, 1860	29, 217
Steam-generator	H. Gerner	New York, N. Y	Jan. 21, 1868	73, 595
Steam-generator	R. Gerner	New York, N. Y	Sept. 23, 1873	143, 007
Steam-generator	E. Goddard	Saint Louis, Mo	Oct. 28, 1873	144, 024
Steam-generator	E. Goddard	Saint Louis, Mo	Dec. 9, 1873	145, 293
Steam-generator	W. Golding	New Orleans, La	Oct. 28, 1873	144, 088
Steam-generator	C. H. Gould	Cincinnati, Ohio	Apr. 30, 1867	64, 306
Steam-generator	S. Greenhalgh	Newark, N. J	Aug. 9, 1864	43, 769
Steam-generator	A. Guthrie and C. Mason	Chicago, Ill	Apr. 6, 1869	88, 707
Steam-generator	G. Guy	Bay City, Mich	July 21, 1868	80, 165
Steam-generator	J. Hafer	Bedford, Pa	Mar. 19, 1867	62, 953
Steam-generator	C. H. Hall	Smith's Ferry, Pa	Feb. 2, 1869	86, 393
Steam-generator	J. G. Hamilton	Chicago, Ill	Mar. 16, 1869	87, 772
Steam-generator	T. Harang	Banana Grove Plantation, La.	Jan. 28, 1873	135, 219
Steam-generator	J. Harrison, jr	Philadelphia, Pa	Aug. 8, 1865	49, 263
Steam-generator	J. Harrison, jr	Philadelphia, Pa	Aug. 4, 1868	80, 543
Steam-generator	J. Harrison, jr	Philadelphia, Pa	Feb. 22, 1870	100, 141
Steam-generator	J. M. Harvey	Buchanan, Va	Dec. 24, 1867	72, 489
Steam-generator	D. G. Haskins	Cambridge, Mass	July 31, 1866	56, 748
Steam-generator	H. Heine	New York, N. Y	June 23, 1868	79, 225
Steam-generator	J. M. Hicks	New York, N. Y	Mar. 20, 1866	53, 300
Steam-generator	B. Holly	Lockport, N. Y	Apr. 3, 1866	53, 617
Steam-generator	P. Hoelzel	New Orleans, La	Oct. 23, 1866	59, 020
Steam-generator	T. Holt	Trieste, Austria	Apr. 2, 1867	63, 518
Steam-generator	T. Holt	Trieste, Austria	Aug. 11, 1868	80, 956
Steam-generator	R. Hooper	Baltimore, Md	Apr. 22, 1873	138, 025
Steam-generator	F. M. Horning	East Pike, N. Y	Oct. 20, 1868	83, 102
Steam-generator	J. Houpt	Springtown, Pa	Nov. 29, 1870	109, 616
Steam-generator	H. Howard	Springfield, Mass	Mar. 26, 1872	124, 898
Steam-generator	J. Howard and E. T. Bousfield	Bedford, England	Oct. 23, 1866	59, 147
Steam-generator	J. Howard and E. T. Bousfield	Bedford, England	July 9, 1867	66, 590
Steam-generator	J. Howard and E. T. Bousfield	Bedford, England	Sept. 1, 1868	81, 638
Steam-generator	J. Howard and E. T. Bousfield	Bedford, England	May 25, 1869	90, 450
Steam-generator	D. C. Howell	Goshen, N. Y	May 15, 1866	54, 730
Steam-generator	H. Hubbell	Philadelphia, Pa	Aug. 6, 1838	876
Steam-generator	R. W. Humphreys	Clarksville, Tenn	Oct. 27, 1868	83, 384
Steam-generator	G. G. Hunt	Bridgeport, Conn	Sept. 24, 1867	69, 215
Steam-generator	C. W. Isbell and P. W. Mackenzie.	New York, N. Y., and Jersey City, N. J.	Apr. 30, 1867	64, 326
Steam generator	R. H. Isham	Brooklyn, N. Y	Oct. 20, 1868	83, 169
Steam-generator	W. H. Ivens	Trenton, N. J	Mar. 1, 1870	100, 411
Steam-generator	W. H. Ivens	Trenton, N. J	Apr. 25, 1871	114, 146
Steam-generator	L. S. Ives	Pittsburgh, Pa	Sept. 14, 1869	94, 827

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Steam-generator	J. Jacobs	Maysville, Ky	Feb. 22, 1870	100,041
Steam-generator	C. F. Jauriet	Aurora, Ill	Oct. 6, 1868	82,843
Steam-generator	J. Jennings	New York, N. Y	July 1, 1836	....
Steam-generator	J. Johnson	Biddeford, Me	Oct. 9, 1860	30,326
Steam-generator	J. J. Jordan	Philadelphia, Pa	Dec. 19, 1871	122,027
Steam-generator	T. B. Jordan	South Lambeth, England	Oct. 27, 1868	83,505
Steam-generator	E. B. Jucket	Roxbury, Mass	Jan. 29, 1867	61,542
Steam-generator	J. L. Judge	Milwaukee, Wis	Feb. 21, 1871	112,049
Steam-generator	W. E. Kelly	New Brunswick, N. J	Aug. 12, 1873	141,798
Steam-generator	J. Kelshan	La Fayette, Ind	Aug. 4, 1868	80,633
Steam-generator	J. C. Kilgore	Philadelphia, Pa	Nov. 24, 1868	84,427
Steam-generator	J. C. Kilgore	Philadelphia, Pa	Sept. 6, 1870	107,181
Steam-generator	M. C. Kilgore	Washington, Iowa	Jan. 15, 1867	61,210
Steam-generator	C. Kinkel	New York, N. Y	Aug. 28, 1866	57,637
Steam-generator	E. D. Lacy	Rockford, Ill	Apr. 4, 1871	113,533
Steam-generator	T. S. La France	Elmira, N. Y	June 14, 1870	104,167
Steam-generator	T. S. La France	Elmira, N. Y	Oct. 25, 1870	108,604
Steam-generator	V. Langlois	Cherbourg, France	Sept. 29, 1868	82,534
Steam-generator	A. B. Latta	Cincinnati, Ohio	June 6, 1854	11,025
Steam-generator	A. B. Latta	Cincinnati, Ohio	Apr. 10, 1855	12,682
Steam-generator	A. B. Latta	Cincinnati, Ohio	Oct. 20, 1857	18,460
Steam-generator	A. B. Latta	Cincinnati, Ohio	Apr. 12, 1859	23,589
Steam-generator	W. H. Laubach	Philadelphia, Pa	Nov. 10, 1868	83,863
Steam-generator	W. H. Law	Birmingham, England	May 17, 1870	103,059
Steam-generator	I. N. and S. W. Lesh, J. Deandorff, and Z. Beeson.	Wayne County, Ind	June 27, 1842	2,693
Steam-generator	R. Lighthall	Brooklyn, N. Y	Feb. 2, 1869	86,425
Steam-generator	T. C. Little	Dixon, Ill	May 14, 1867	64,680
Steam-generator	J. Loader and W. H. Child	London, England	June 7, 1870	103,902
Steam-generator	W. Lowe	Bridgeport, Conn	June 4, 1867	65,405
Steam-generator	H. W. Lüders	Philadelphia, Pa	Aug. 31, 1869	94,226
Steam-generator	J. C. Ludwig	Stockton, Cal	Apr. 26, 1870	102,287
Steam-generator	M. N. Lynn	New Albany, Ind	Jan. 10, 1871	110,862
Steam-generator	W. B. Mack	Detroit, Mich	Nov. 30, 1869	97,305
Steam-generator	T. Main	Green Point, N. Y	Nov. 6, 1866	59,424
Steam-generator	J. Mann	Tuscola, Ill	Sept. 5, 1871	118,735
Steam-generator	C. Mason	Chicago, Ill	Feb. 2, 1869	86,429
Steam-generator	C. Mason	Chicago, Ill	June 15, 1869	91,247
Steam-generator	J. Mason and D. Saunders	New York, N. Y	June 14, 1870	104,188
Steam-generator	A. R. McDonald	Chicago, Ill	Jan. 28, 1873	135,236
Steam-generator	B. McGinnis	New York, N. Y	Jan. 31, 1865	46,193
Steam-generator	J. F. McKenzie	Melbourne, Victoria	Dec. 17, 1867	72,216
Steam-generator	W. V. McKenzie	Rahway, N. J	May 7, 1872	126,472
Steam-generator	P. J. McMahon	New Orleans, La	Feb. 18, 1873	135,996
Steam-generator	J. McMurty	Lexington, Ky	Sept. 25, 1866	58,275
Steam-generator	T. E. McNeill and R. N. Pratt	New York, N. Y	Aug. 5, 1873	141,578
Steam-generator	T. Merriam	Milwaukee, Wis	Mar. 26, 1872	125,068
Steam-generator	T. Merriam and A. G. Allen	Waterloo, Wis	Apr. 23, 1867	64,021
Steam-generator	M. B. M. Merryweather and E. Field.	London, England	Nov. 1, 1864	44,877
Steam-generator	J. A. Miller	New York, N. Y	Jan. 8, 1867	61,085
Steam-generator	J. A. Miller	New York, N. Y	Jan. 8, 1867	61,086
Steam-generator	J. A. Miller	New York, N. Y	Feb. 26, 1867	62,494
Steam-generator	J. A. Miller	New York, N. Y	Apr. 16, 1867	63,923
Steam-generator	J. A. Miller	Providence, R. I	Jan. 14, 1868	73,363
Steam-generator	J. A. Miller	Providence, R. I	Jan. 14, 1868	73,364
Steam-generator	J. A. Miller	New York, N. Y	July 5, 1870	104,979
Steam-generator	J. A. Miller	New York, N. Y	Aug. 16, 1870	106,388
Steam-generator	J. A. Miller	Boston, Mass	Nov. 29, 1870	109,645
Steam-generator	J. H. Mills	Boston, Mass	May 4, 1869	89,786
Steam-generator	J. H. Mills	Boston, Mass	Apr. 29, 1873	138,269
Steam-generator	R. B. Mitchell	Chicago, Ill	June 15, 1869	91,254
Steam-generator	T. Mitchell	Albany, N. Y	July 31, 1866	56,778
Steam-generator	T. Mitchell	Albany, N. Y	Oct. 23, 1866	59,051
Steam-generator	T. and T. H. Mitchell	Albany, N. Y	May 21, 1867	64,895
Steam-generator	P. C. Möller	Leipsic, Saxony	Apr. 3, 1866	53,761
Steam-generator	J. Montgomery	Sing Sing, N. Y	Dec. 21, 1869	98,089
Steam-generator	W. Mont Storm	New York, N. Y	Aug. 16, 1859	25,147
Steam-generator	T. Moore	Minneapolis, Minn	Oct. 25, 1859	25,907
Steam-generator	G. H. Moreau	France	Jan. 26, 1844	3,415
Steam-generator	D. A. Morris	New York, N. Y	Aug. 16, 1870	106,392
Steam-generator	T. W. H. Moseley	Hyde Park, Mass	May 9, 1871	114,702
Steam-generator	W. Moses	Buffalo, N. Y	Sept. 1, 1868	81,668
Steam-generator	E. P. Mosman	Norwich, Conn	Oct. 27, 1868	83,527
Steam-generator	T. H. Müller	New York, N. Y	Sept. 15, 1868	82,146
Steam-generator	T. H. Müller	New York, N. Y	Oct. 27, 1868	83,528
Steam-generator	J. S. Mullin	Port Monmouth, N. J	Feb. 11, 1868	74,404
Steam-generator	J. S. Mullin	Newark, N. J	Feb. 2, 1869	86,435
Steam-generator	H. B. Myer	Cleveland, Ohio	Aug. 15, 1865	49,431
Steam-generator	E. Neuman	New York, N. Y	Nov. 29, 1870	109,652
Steam-generator	M. Neumann, V. F. Lassoe, and C. W. MacCord.	New York, Brooklyn, and New York, N. Y.	Feb. 25, 1868	74,930
Steam-generator	A. W. Newell	Bradford, Pa	Dec. 24, 1867	72,530
Steam-generator	A. W. Newell	Bradford, Pa	Jan. 21, 1868	73,634
Steam-generator	W. H. and M. V. Nobles	Saint Paul, Minn., and Elmira, N. Y.	Feb. 11, 1868	74,410
Steam-generator	E. Nott	Schenectady, N. Y	Mar. 19, 1836	....
Steam-generator	S. B. B. Nowlan	New York, N. Y	Oct. 11, 1870	108,174
Steam-generator	R. J. Munn	Savannah, Ga	Apr. 30, 1867	64,355
Steam-generator	I. R. Oakford	Philadelphia, Pa	Dec. 10, 1867	71,903
Steam-generator	W. S. Page and R. East	Nine Elms, England	May 4, 1869	89,595
Steam-generator	H. M. Paine	Worcester, Mass	Sept. 9, 1862	36,440
Steam-generator	Q. Parker	New York, N. Y	Sept. 8, 1868	81,937
Steam-generator	D. Parsell	Saundersfoot, Wales	Apr. 15, 1873	137,953
Steam-generator	R. Patterson	Catskill, N. Y	July 12, 1870	105,243
Steam-generator	H. Pease	Dayton, Ohio	June 17, 1873	140,070
Steam-generator	A. L. Pennock	Philadelphia, Pa	May 24, 1870	103,363
Steam-generator	G. W. Perry	Providence, R. I	Jan. 29, 1867	61,561

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Steam-generator	W. Phelan	Peoria, Ill	July 31, 1866	56, 796
Steam-generator	D. Phelps	Bath, N. Y	Nov. 14, 1826	....
Steam-generator	L. Phleger	Philadelphia, Pa	Sept. 14, 1869	94, 767
Steam-generator	L. Phleger	Philadelphia, Pa	June 4, 1872	127, 511
Steam-generator	H. A. V. Post	Cincinnati, Ohio	Mar. 1, 1870	100, 443
Steam-generator	T. T. Prosser	Chicago, Ill	Apr. 20, 1869	89, 240
Steam-generator	T. T. Prosser	Chicago, Ill	Apr. 20, 1869	89, 241
Steam-generator	H. M. Quackenbush	Herkimer, N. Y	Dec. 16, 1873	145, 682
Steam-generator	P. Quinn	South New Market, N. H	Mar. 10, 1868	75, 296
Steam-generator	J. Quipp and R. Law	Buffalo, N. Y	Aug. 17, 1869	93, 745
Steam-generator	R. Rafael	New York, N. Y	Apr. 24, 1866	54, 205
Steam-generator	W. J. Reed	West Middlesex, Pa	Oct. 19, 1869	95, 934
Steam-generator	J. W. Reid	New York, N. Y	Feb. 5, 1867	61, 869
Steam-generator	D. Renshaw	Syracuse, N. Y	Mar. 12, 1872	124, 513
Steam-generator	D. Renshaw	Syracuse, N. Y	Apr. 23, 1872	125, 907
Steam-generator	D. Renshaw	Syracuse, N. Y	Dec. 10, 1872	133, 723
Steam-generator	E. Reynolds	Boston, Mass	Nov. 20, 1866	59, 780
Steam-generator	G. H. Reynolds	New York, N. Y	Jan. 26, 1869	86, 321
Steam-generator	W. R. Rhodes	Portland, Me	June 29, 1869	91, 869
Steam-generator	W. Rice	Philadelphia, Pa	Jan. 24, 1860	26, 927
Steam-generator	J. T. Rich	Philadelphia, Pa	Nov. 1, 1870	108, 935
Steam-generator	J. T. Rich	Philadelphia, Pa	Nov. 1, 1870	108, 936
Steam-generator	G. A. Riedel	Philadelphia, Pa	Feb. 23, 1869	87, 294
Steam-generator	P. Riley	Lancaster, Pa	May 17, 1870	103, 081
Steam-generator	M. Ritchey	Paterson, N. J	Apr. 12, 1870	101, 767
Steam-generator	R. E. Roberts	Philadelphia, Pa	Aug. 18, 1868	81, 212
Steam-generator	R. E. Rogers	Philadelphia, Pa	Dec. 14, 1858	22, 306
Steam-generator	R. E. Rogers	Philadelphia, Pa	Apr. 17, 1860	27, 930
Steam-generator	R. E. Rogers and J. Black	Philadelphia, Pa	June 12, 1866	55, 539
Steam-generator	R. E. Rogers and J. Black	Philadelphia, Pa	May 28, 1867	65, 280
Steam-generator	R. E. Rogers and J. Black	Philadelphia, Pa	May 28, 1867	65, 281
Steam-generator	R. E. Rogers and J. Black	Philadelphia, Pa	Nov. 12, 1867	70, 746
Steam-generator	J. B. Root	New York, N. Y	Feb. 4, 1868	74, 146
Steam-generator	J. B. Root	New York, N. Y	Jan. 11, 1870	98, 802
Steam-generator	H. Rosbrook	Chicago, Ill	July 2, 1867	66, 397
Steam-generator	M. M. Rounds	New Haven, Conn	June 19, 1866	55, 785
Steam-generator	A. Rowe	Macomb, Ill	Aug. 6, 1867	67, 589
Steam-generator	E. Rowing	Parkersburgh, W. Va	Oct. 9, 1866	58, 678
Steam-generator	H. Ruddick	Boston, Mass	Oct. 29, 1867	70, 364
Steam-generator	S. P. Ruggles	Boston, Mass	May 15, 1866	54, 780
Steam-generator	S. P. Ruggles	Boston, Mass	Apr. 2, 1867	63, 431
Steam-generator	R. M. and J. F. Rulon	Monmouth, Ill	Aug. 1, 1871	117, 569
Steam-generator	S. T. Russell	Springfield, Ohio	Sept. 21, 1869	94, 978
Steam-generator	S. T. Russell	Springfield, Ohio	July 16, 1872	129, 061
Steam-generator	J. Ryan	Saint Louis, Mo	July 29, 1873	141, 239
Steam-generator	J. Ryan	Saint Louis, Mo	Dec. 16, 1873	145, 530
Steam-generator	S. C. Salisbury	New York, N. Y	Aug. 3, 1869	93, 232
Steam-generator	G. O. Sampson	Jamestown, N. Y	May 17, 1870	103, 087
Steam-generator	J. Samuels	Lynn, Mass	Dec. 12, 1865	51, 521
Steam-generator	J. Q. A. Sargent	Manchester, N. H	Aug. 25, 1868	81, 543
Steam-generator	H. S. Saroni	Marietta, Ohio	Aug. 28, 1866	57, 575
Steam-generator	H. S. Saroni	Baltimore, Md	Dec. 18, 1866	60, 562
Steam-generator	W. G. Savage	Knoxville, Iowa	Nov. 29, 1870	109, 763
Steam-generator	S. Sawyer	Fitchburgh, Mass	Mar. 3, 1868	75, 057
Steam-generator	F. E. Schmidt	New York, N. Y	Feb. 5, 1861	31, 329
Steam-generator	G. Scott	Philadelphia, Pa	Apr. 13, 1858	19, 969
Steam-generator	H. C. Sergeant	Columbus, Ohio	Aug. 22, 1865	49, 536
Steam-generator	H. C. Sergeant	New York, N. Y	Mar. 27, 1866	53, 493
Steam-generator	J. Seward and H. Smith	Clitheroe and Endfield, England.	Feb. 5, 1867	61, 881
Steam-generator	T. Sharp and C. S. S. Griffing	Salem, Ohio	Aug. 30, 1870	106, 965
Steam-generator	N. Shaw	Eau Claire, Wis	Sept. 28, 1869	95, 387
Steam-generator	T. Shaw	Philadelphia, Pa	Sept. 14, 1869	94, 781
Steam-generator	A. Shawk	Cincinnati, Ohio	Sept. 20, 1853	10, 041
Steam-generator	G. V. Sheffield	Worcester, Mass	Dec. 24, 1867	72, 689
Steam-generator	J. Sheffield	Buffalo, N. Y	Apr. 20, 1869	89, 249
Steam-generator	E. Sheppard	Philadelphia, Pa	Nov. 23, 1869	97, 237
Steam-generator	S. Sherman	Weston, Mo	Oct. 9, 1866	58, 685
Steam-generator	G. W. Shields	Louisville, Ky	Dec. 20, 1870	110, 298
Steam-generator	O. P. Shiras	Newcastle, Pa	Feb. 2, 1869	86, 464
Steam-generator	G. Sill	Wilkins, Pa	Sept. 26, 1865	50, 174
Steam-generator	E. B. Sintzenich	Rochester, N. Y	June [illegible], 1869	91, 173
Steam-generator	E. B. Sintzenich	Rochester, N. Y	Aug. 9, 1870	106, 222
Steam-generator	W. P. Skiffington	New York, N. Y	May 17, 1870	103, 248
Steam-generator	A. J. Smith	Greenville, Ohio	May 29, 1866	55, 172
Steam-generator	H. B. Smith and J. V. Stevens	Pomeroy, Ohio	Aug. 3, 1869	93, 240
Steam-generator	J. T. Smith and J. Walter	Baltimore, Md	Nov. 12, 1867	70, 757
Steam-generator	S. A. Smith	Philadelphia, Pa	Aug. 28, 1866	57, 643
Steam-generator	J. N. Snowden and H. Wilkins	Brownsville, Pa	Sept. 10, 1867	68, 663
Steam-generator	T. S. Speakman	Camden, N. J	May 11, 1869	90, 033
Steam-generator	O. Spencer	Jacksonsburgh, Ohio	May 5, 1868	77, 670
Steam-generator	C. and A. Spring	Hyde Park and Weston, Mass.	May 31, 1870	103, 793
Steam-generator	S. Stanton	Newburgh, N. Y	Oct. 5, 1869	95, 532
Steam-generator	F. A. Stevens	Chicago, Ill	May 28, 1867	65, 295
Steam-generator	C. J. Stolbrand	Columbia, S. C	Feb. 22, 1870	100, 085
Steam-generator	G. A. Stone	New York, N. Y	July 12, 1870	105, 275
Steam-generator	W. M. Storm	New York, N. Y	Feb. 6, 1855	12, 355
Steam-generator	J. Stuart	San Francisco, Cal	Sept. 7, 1869	94, 666
Steam-generator	J. H. Sturdy	Attleborough, Mass	Jan. 15, 1867	61, 278
Steam-generator	J. W. Summers	Sandy Hill, N. Y	Feb. 19, 1867	62, 162
Steam-generator	J. Sutliff	East Boston, Mass	Apr. 28, 1868	77, 414
Steam-generator	J. Sutliff	East Boston, Mass	Aug. 18, 1868	81, 225
Steam-generator	G. Symmes and T. W. Hayes	Brooklyn, N. Y	May 7, 1867	64, 593
Steam-generator	A. H. Tait and J. W. Avis	New York, N. Y	Oct. 2, 1866	58, 506
Steam-generator	D. B. Tanger	Bellefontaine, Ohio	Dec. 4, 1866	60, 279
Steam-generator	E. Taylor	Tecumseh, Mich	Aug. 25, 1868	81, 433
Steam-generator	W. R. Taylor and J. F. Sloat	Brooklyn, N. Y	July 28, 1868	80, 431

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Steam-generator	E. Thayer	Worcester, Mass	Mar. 28, 1865	47, 054
Steam-generator	E. Thayer	Worcester, Mass	Aug. 1, 1865	49, 172
Steam-generator	E. Thayer	New York, N. Y	Jan. 8, 1867	61, 031
Steam-generator	J. L. Thomas	Alliance, Ohio	Oct. 13, 1868	83, 108
Steam-generator	R. W. Thomson	Edinburgh, Great Britain	Oct. 2, 1866	58, 564
Steam-generator	J. Tiffany	Albany, N. Y	Mar. 30, 1869	88, 345
Steam-generator	S. D. Tillman	Jersey City, N. J	June 21, 1870	104, 511
Steam-generator	C. F. Trill	Baltimore, Md	Oct. 6, 1868	82, 893
Steam-generator	W. P. Trowbridge	New Haven, Conn	Sept. 2, 1873	142, 534
Steam-generator	G. True	Funchal, Madeira	May 24, 1864	42, 904
Steam-generator	M. Turley	Council Bluffs, Iowa	Sept. 29, 1868	82, 567
Steam-generator	J. Turner	Chicago, Ill	July 30, 1872	130, 087
Steam-generator	F. C. Warlich	Kentish Town, England	Oct. 12, 1858	21, 788
Steam-generator	G. I. Washburn	Worcester, Mass	Sept. 5, 1865	49, 810
Steam-generator	F. W. Webb	Bolton, England	Jan. 11, 1870	98, 726
Steam-generator	J. Wells	Baltimore, Md	Aug. 3, 1869	93, 377
Steam-generator	S. West	Elmwood, Ill	Jan. 24, 1871	111, 159
Steam-generator	E. Weston	Buffalo, N. Y	Apr. 20, 1869	89, 258
Steam-generator	E. Weston	Buffalo, N. Y	Apr. 18, 1871	113, 955
Steam-generator	W., W. R., and N. Weston, and B. Brett.	Stevens Point, Wis	Sept. 27, 1870	107, 840
Steam-generator	N. W. Wheeler	Brooklyn, N. Y	June 5, 1866	55, 405
Steam-generator	C. Whittier	Boston, Mass	Nov. 3, 1868	83, 811
Steam-generator	H. Whittingham	New York, N. Y	June 15, 1869	91, 395
Steam-generator	S. L. Wiegand	Philadelphia, Pa.	Apr. 6, 1867	67, 621
Steam-generator	S. L. Wiegand	Philadelphia, Pa.	Aug. 25, 1868	81, 566
Steam-generator	S. L. Wiegand	Philadelphia, Pa	Sept. 22, 1868	82, 460
Steam-generator	S. L. Wiegand	Philadelphia, Pa.	Oct. 19, 1869	96, 067
Steam-generator	S. L. Wiegand	Philadelphia, Pa.	June 21, 1870	104, 522
Steam-generator	S. L. Wiegand	Philadelphia, Pa	Sept. 26, 1871	119, 257
Steam-generator	S. Wilcox, jr	Westerly, R. I	Dec. 5, 1865	51, 395
Steam-generator	R. Wilde	Philadelphia, Pa	June 23, 1868	79, 172
Steam-generator	I. N. Wilfong	Philadelphia, Pa	June 15, 1869	91, 294
Steam-generator	I. N. Wilfong	Philadelphia, Pa	June 11, 1862	127, 724
Steam-generator	J. H. Williams	Brunswick, N. J	July 26, 1810	....
Steam-generator	W. L. and T. Winans	London, England	Sept. 11, 1866	58, 038
Steam-generator	C. O. Winegar	Drytown, Cal	Aug. 20, 1867	67, 935
Steam-generator	M. Wood	Chillicothe, Ill	Dec. 20, 1870	110, 321
Steam-generator	J. Woodford and W. H. Bancroft.	Portland, Wis	Oct. 23, 1866	59, 146
Steam-generator	J. C. Woodhead	Pittsburgh, Pa	Mar. 7, 1871	112, 402
Steam-generator	J. Woodruff	Rahway, N. J	May 21, 1867	64, 929
Steam-generator	H. P. Wright	Bonaparte, Iowa	Aug. 19, 1873	141, 974
Steam-generator	W. Young	Easton, Pa	July 2, 1867	66, 438
Steam-generator	W. Zellner	New York, N. Y	May 8, 1866	54, 654
Steam-generator and air-heater, Combined	O. M. Stillman	Westerly, R. I	Apr. 14, 1868	76, 845
Steam-generator and apparatus for rendering fats	V. D. Anderson	Springfield, Ohio	Aug. 12, 1873	141, 746
Steam generator and condenser, Supplementary	B. F. Bee	Harwich, Mass	Sept. 3, 1872	131, 047
Steam-generator and feed-water heater	M. N. Lynn	New Albany, Ind	Dec. 19, 1871	122, 042
Steam generator and furnace	J. Amory	West Roxbury, Mass	May 24, 1870	103, 408
Steam-generator and hot-water apparatus	J. Rigby and P. A. Palmer	Marietta, Ohio	Oct. 18, 1870	108, 394
Steam generator and refiner	J. L. Hinkle	Hanover, Pa	Feb. 23, 1833	....
Steam-generator and stove, Combined	L. F. Bancroft	Worcester, Mass	Jan. 8, 1869	91, 069
Steam-generator, Annular	G. L. Laflin	Westfield, Mass	Oct. 8, 1872	131, 958
Steam-generator, Aerated	L. W. Werner	Saint Louis, Mo	May 7, 1872	126, 600
Steam-generator, Automatic	C. H. Ford	Baltimore, Md	Jan. 16, 1866	52, 115
Steam-generator, Base-burning	A. Catchpole	Geneva, N. Y	Jan. 2, 1872	122, 360
Steam-generator, Cast-iron	J. Chilcott	Brooklyn, N. Y	July 4, 1865	48, 518
Steam-generator, Domestic	J. T. King	New York, N. Y	Feb. 26, 1856	14, 318
Steam-generator, Drop-tube	J. Nason	New York, N. Y	Sept. 15, 1868	82, 239
Steam-generator, Drop-tube	S. L. Wiegand	Philadelphia, Pa	Feb. 7, 1871	111, 596
Steam-generator feed-device	J. B. Tarr	Fairhaven, Mass	July 27, 1869	93, 021
Steam-generator flue-brush	C., jr., and J. Ross	New York, N. Y	Dec. 18, 1866	60, 560
Steam-generator for combustion	A. J. Warren and D. Wilson	West Eau Claire, Wis	June 22, 1869	91, 800
Steam-generator for cooking	J. Bonis	Baltimore, Md	Sept. 21, 1837	401
Steam-generator for culinary and other purposes, Portable.	S. Atwater	Rochester, N. Y	Jan. 20, 1843	2, 926
Steam-generator for heating	I. E. Craig	Cleveland, Ohio	Mar. 13, 1866	53, 118
Steam-generator for heating purposes	R. F. Crane	Chicago, Ill	Aug. 6, 1867	67, 505
Steam-generator for kitchens, &c	W. B. Scaife	Pittsburgh, Pa	Sept. 14, 1869	94, 779
Steam-generator furnace	W. F. Cox	Philadelphia, Pa	Jan. 2, 1872	122, 365
Steam-generator furnace	I. C. Pennington	Paterson, N. J	June 1, 1869	90, 778
Steam-generator furnace	F. Sulter	Saint Paul, Minn	Aug. 17, 1869	93, 764
Steam-generator furnace, Gas-burning	J. T. Rich	Philadelphia, Pa	Sept. 15, 1868	82, 249
Steam-generator furnaces, Device for burning sawdust in.	E. S. Chase	Eau Claire, Wis	Oct. 18, 1869	95, 985
Steam-generator furnaces, Steam-jet for	D. M. Nichols	New York, N. Y	Oct. 23, 1866	59, 055
Steam-generator gage	E. H. Ashcroft	Lynn, Mass	June 25, 1867	66, 063
Steam-generator heater	T. E. Belton	Buffalo, N. Y	Dec. 4, 1866	60, 124
Steam-generator, High-temperature	J. Babcock	Portsmouth, R. I	May 1, 1824	....
Steam-generator indicator	R. Berryman	Philadelphia, Pa	July 28, 1868	80, 328
Steam-generator indicator	D. M. Greene	Washington, D. C	Oct. 22, 1867	70, 086
Steam-generator indicator	J. H. Springer and W. M. Bartram.	Philadelphia, Pa	June 19, 1866	55, 732
Steam-generator, Oil-burning	A. C. Ellithorp	Chicago, Ill	Sept. 3, 1872	131, 088
Steam-generator, Oil-burning	O. W. Ketchum	Toronto, Canada	Mar. 4, 1873	136, 524
Steam-generator, Portable	W. C. Grimes	Philadelphia, Pa	Apr. 5, 1859	23, 528
Steam-generator, Portable	J. E. Woodruff	Buffalo, N. Y	Mar. 14, 1871	112, 761
Steam-generator, Rotary	N. T. Edson	New Orleans, La	June 27, 1871	116, 283
Steam-generator, Sectional	A. S. Cameron	New York, N. Y	Nov. 30, 1869	97, 353
Steam-generator, Sectional	O. Clarke	Rockford, Ill	Mar. 22, 1870	101, 963
Steam-generator, Sectional	W. W. Crane	Auburn, N. Y	May 13, 1873	138, 791
Steam-generator, Sectional	W. W. Crane	Auburn, N. Y	May 13, 1873	138, 792
Steam-generator, Sectional	M. T. Davidson	Brooklyn, N. Y	May 13, 1873	138, 866
Steam-generator, Sectional	B. Densmore	New York, N. Y	Oct. 18, 1870	108, 333
Steam-generator, Sectional	J. Griffith and G. W. Wundrum	New York, N. Y	Oct. 25, 1870	108, 703
Steam-generator, Sectional	J. Griffith, G. W. Wundrum, and T. H. Müller.	New York, N. Y	Jan. 4, 1870	98, 490

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Steam-generator, Sectional	D. C. Howell	Goshen, N. Y	Dec. 19, 1871	122, 019
Steam-generator, Sectional	W. E. Kelly	New Brunswick, N. J	Aug. 12, 1873	141, 799
Steam-generator, Sectional	J. D. Lynde	Philadelphia, Pa	Dec. 23, 1873	145, 743
Steam-generator, Sectional	D. Renshaw	Syracuse, N. Y	Dec. 17, 1872	134, 003
Steam-generator, Sectional	D. Renshaw	Philadelphia, Pa	Oct. 21, 1873	143, 845
Steam-generator, Sectional	D. Renshaw	Philadelphia, Pa	Oct. 21, 1873	143, 842
Steam-generator, Sectional	D. Renshaw	Philadelphia, Pa	Oct. 21, 1873	143, 843
Steam-generator, Sectional	D. Renshaw	Philadelphia, Pa	Oct. 21, 1873	143, 844
Steam-generator, Sectional	G. W. T. Shaffner	Frederick, Md	July 9, 1872	128, 916
Steam-generator, Sectional	J. B. Sweetland	Pontiac, Mich	Feb. 11, 1873	135, 862
Steam-generator, Sectional	J. A. Westerman	Genoa, Italy	July 30, 1872	130, 092
Steam-generator, Sectional	H. Whittingham	New York, N. Y	Oct. 4, 1870	108, 075
Steam-generator smoke-stack	W. F. Beecher	Morristown, N. Y	Dec. 7, 1869	97, 473
Steam generator smoke-stack	W. W. Dungan	Baltimore, Md	June 8, 1869	91, 103
Steam-generator smoke-stack	W. Holdcraft and D. McLaughlin.	Philadelphia, Pa	Dec. 7, 1869	97, 509
Steam-generator tube	C. H. James	Cincinnati, Ohio	May 7, 1867	64, 424
Steam-generator tube	P. M. Kafer	Trenton, N. J	Mar. 10, 1868	75, 279
Steam-generator tube	J. C. Stevens	South Norwalk, Conn	Feb. 15, 1870	99, 998
Steam-generator tube	G. E. Van Amringe	New York, N. Y	Dec. 22, 1868	85, 149
Steam-generator, Tubular	J. M. Hicks	New York, N. Y	Mar. 28, 1871	113, 052
Steam-generator, Tubular	J. M. Hicks	Summit, N. J	Jan. 14, 1873	134, 803
Steam-generator, Tubular	R. R. Throckmorton	New York, N. Y	Jan. 17, 1828	....
Steam-generators, Apparatus for feeding	H. Griffing	New Haven, Conn	Jan. 5, 1869	85, 655
Steam-generators, Apparatus for inserting fusible plugs in.	J. French	Pittsburgh, Pa	Sept. 18, 1866	58, 092
Steam-generators, Automatic feed-apparatus for	J. B. Collen	Philadelphia, Pa	Jan. 16, 1866	52, 111
Steam-generators, Composition for covering	F. H. Snyder	Jersey City, N. J	June 29, 1869	91, 982
Steam-generators, Covering	E. H. Ashcroft	Lynn, Mass	Nov. 5, 1867	70, 388
Steam-generators, Device for aiding combustion in.	G. W. Rawson	Cambridgeport, Mass	Sept. 7, 1869	94, 512
Steam-generators, Device for changing water in	T. F. Field	Saugerties, N. Y	Jan. 22, 1867	61, 412
Steam-generators, Device for cleaning	D. L. Latourette	New York, N. Y	Dec. 16, 1873	145, 577
Steam-generators, Device for filling	C. Ward	Detroit, Mich	Aug. 31, 1869	94, 260
Steam-generators, Device for generating steam in.	S. A. Hill and C. F. Thumm	Oil City, Pa	Oct. 12, 1869	95, 687
Steam-generators, Device for preventing incrustation in.	R. B. Baker and C. J. A. Dick	Paris, France	Dec. 8, 1868	84, 671
Steam-generators, Device for preventing incrustation in.	J. Webster	Chelsea, England	June 22, 1869	91, 801
Steam-generators, Draft and spark extinguishing device for.	J. S. and L. Patric	Rochester, N. Y	Dec. 28, 1869	98, 293
Steam-generators, Feed-apparatus for	C. H. Ford	Baltimore, Md	Jan. 16, 1866	52, 113
Steam-generators, Feed-water heater for	J. W. Doughty and H. B. Beekman.	Newburgh, N. Y	Nov. 5, 1867	70, 538
Steam-generators, Fire-box for	C. F. Jauriet	Aurora, Ill	Feb. 27, 1866	52, 945
Steam-generators, Fire-box for	E. L. Robbins	Owego, N. Y	Oct. 12, 1869	95, 727
Steam-generators, Furnace for horizontal	S. C. Salisbury	New York, N. Y	Mar. 23, 1869	88, 081
Steam-generators, Furnace for upright	S. C. Salisbury	New York, N. Y	Mar. 23, 1869	88, 080
Steam-generators, Head-hole plate for	H. A. Towne	Chicago, Ill	Mar. 5, 1867	62, 576
Steam-generators of foreign substances, Device for relieving.	F. Armstrong	Pittsburgh, Pa	Aug. 17, 1869	93, 851
Steam-generators, Return bend for	S. L. Wiegand	Philadelphia, Pa	Sept. 26, 1871	119, 256
Steam-generators, Steam-jet device for	D. M. Nichols	New York, N. Y	June 15, 1869	91, 255
Steam-generators, Tube-fastening for	G. P. Hunt	United States Navy	Mar. 8, 1870	100, 531
Steam-generators, Water and steam separator for	R. C. Bristol	Saint Clair, Mich	Dec. 18, 1866	60, 470
Steam-generators, Water-gage for	T. Poore	Scranton, Pa	Jan. 10, 1865	45, 856
Steam-generators, Water-gage for	E. Quinn	Washington, D. C	Aug. 27, 1867	68, 235
Steam-generators, Water-heater for	J. W. Sutton	Detroit, Mich	Sept. 1, 1868	81, 840
Steam, Generating	M. W. Baldwin	Philadelphia, Pa	Oct. 15, 1836	....
Steam, Generating	M. Betts	Wilmington, Del	Nov. 26, 1825	....
Steam, Generating	S. Gwynn	New York, N. Y	Aug. 7, 1860	29, 482
Steam, Generating	J. Hawkins	New York	June 14, 1816	....
Steam, Generating	I. Jennings	Philadelphia, Pa	Dec. 19, 1833	....
Steam, Generating	D. B. Lee	Philadelphia, Pa	June 9, 1824	....
Steam, Generating	J. McCurdy	London, England	July 1, 1826	....
Steam, Generating	J. B. Moinier and P. H. Boutigney.	Paris, France	Aug. 23, 1853	9, 952
Steam, Generating	C. F. Pond	Hartford, Conn	Mar. 3, 1857	16, 747
Steam, Generating	J. Rumsay		Aug. 26, 1791	....
Steam, Generating	W. Scarborough	Savannah, Ga	Apr. 8, 1835	....
Steam, Generating	L. Silliman	Albany, N. Y	Jan. 19, 1827	....
Steam, Generating	T. Spalding	McIntosh County, Ga	Mar. 22, 1834	....
Steam, Generating	J. Truman and J. Cooke	Bridgeport, Pa	Jan. 24, 1833	....
Steam, Generating	J. White	Logan, Ky	Mar. 29, 1830	....
Steam, Generating and applying	S. T. Conn	Washington, D. C	Sept. 29, 1824	....
Steam, Generating and applying	S. T. Conn	New York	Nov. 29, 1825	....
Steam, Generating and applying high	B. Phillips	Philadelphia, Pa	Jan. 31, 1832	....
Steam, Generating and condensing	B. F. Joslin	Schenectady, N. Y	Dec. 16, 1824	....
Steam, Generating and condensing	P. H. Watson	Washington, D. C	Nov. 1, 1853	10, 194
Steam-generating and fluid-evaporating boiler	J. Goulding	Dedham, Mass	Oct. 25, 1834	....
Steam-generating and fluid-evaporating boiler	J. Goulding	Dedham, Mass	Oct. 25, 1834	....
Steam, &c., Generating and utilizing	T. McDonough	New York, N. Y	Apr. 2, 1872	125, 140
Steam, Generating anhydrous	W. M. Storm	New York, N. Y	Nov. 10, 1857	18, 613
Steam-generating apparatus	P. Bennet	New York, N. Y	Aug. 3, 1838	870
Steam-generating apparatus	E. S. Hutchinson	Baltimore, Md	Oct. 9, 1866	58, 727
Steam-generating apparatus for heating buildings	B. Irving	New York, N. Y	Jan. 21, 1868	73, 608
Steam-generating, Applying anthracite coal in	D. Collings and J. D. Gallup	Wilkesbarre, Pa	Oct. 12, 1826	....
Steam-generating boiler	P. M. Hackley	Herkimer, N. Y	Dec. 27, 1831	....
Steam-generating boiler	J. G. E. Larned	Brooklyn, N. Y	Mar. 1, 1859	23, 093
Steam-generating boiler	J. Stevens, jr		Aug. 26, 1791	....
Steam-generating boiler	M. T. Wallace	New York	Apr. 12, 1833	....
Steam-generating boiler and locomotive-engine wheel.	S. H. Long	Philadelphia, Pa	May 6, 1833	....
Steam-generating boilers, Attaching tubes to	G. Freeborn	New York	July 8, 1828	....
Steam-generating, Economy of heat in	T. V. Leroy	Newport, N. Y	Aug. 17, 1835	....
Steam-generating furnace	D. N. Melvin	Buffalo, N. Y	Mar. 3, 1868	75, 039
Steam-generating furnace	M. Tildesley and J. Bird	Willenhall, England	Sept. 14, 1869	94, 793
Steam-generating furnace, Anthracite coal	B. B. Howell	Philadelphia, Pa	Oct. 14, 1828	....
Steam-generating heater	C. A. Buttles	Milwaukee, Wis	Jan. 25, 1870	99, 153

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Steam-generating, Use of flat boilers for	D. Fanshaw and H. Hanks	New York	June 11, 1829	....
Steam-graduator	W. A. Robinson	Auburn, N. Y	Dec. 8, 1868	84, 710
Steam-hammer engine	A. Miller	Racine, Wis	Feb. 16, 1869	86, 996
Steam-heat, Expanding metal by	A. S. Sweet, jr	Detroit, Mich	Oct. 17, 1865	50, 511
Steam-heated evaporator	R. W. Bender	Chicago, Ill	Aug. 26, 1862	36, 267
Steam-heater	A. N. Allen	Pittsfield, Mass	Feb. 16, 1869	86, 964
Steam-heater	B. T. Babbitt	New York, N. Y	Oct. 31, 1871	120, 479
Steam-heater	A. C. Bacon	Bergen, N. J	June 1, 1869	90, 720
Steam-heater	A. C. Baker	Westfield, Mass	Aug. 31, 1869	94, 377
Steam-heater	W. C. Baker	New York, N. Y	Aug. 2, 1870	105, 886
Steam-heater	G. W. Blake	New York, N. Y	June 28, 1870	104, 696
Steam-heater	A. G. Bearup and P. Carraher, jr	New York, N. Y	Sept. 12, 1871	118, 779
Steam-heater	E. Bourne	Pittsburgh, Pa	Dec. 13, 1870	110, 003
Steam-heater	N. Bowen	Columbus, Ohio	May 30, 1871	115, 423
Steam-heater	F. Brackney	Baltimore, Md	Oct. 1, 1872	131, 731
Steam-heater	J. L. Peake	New York, N. Y	Aug. 1, 1871	117, 675
Steam-heater	G. F. Burkhardt	Boston Highlands, Mass	Oct. 10, 1871	119, 819
Steam-heater	B. F. Campbell and C. Whittier	Boston, Mass	July 26, 1870	105, 640
Steam-heater	E. Caulfield	Oswego, N. Y	Aug. 29, 1871	118, 430
Steam-heater	J. Chambers	Boston, Mass	Feb. 4, 1868	74, 042
Steam-heater	E. B., J. S., and W. S. Clark	Philadelphia, Pa	Oct. 8, 1867	69, 545
Steam-heater	J. H. and J. B. Clark	Providence, R. I	Jan. 26, 1869	86, 242
Steam-heater	E. C. Clay	Malden, Mass	Oct. 24, 1871	120, 184
Steam-heater	R. T. Crane	Chicago, Ill	Aug. 6, 1867	67, 503
Steam-heater	R. T. Crane	Chicago, Ill	Aug. 6, 1867	67, 504
Steam-heater	J. Davis	Wilkesbarre, Pa	July 28, 1868	80, 396
Steam-heater	C. A. Dickerman	New Haven, Conn	July 20, 1858	20, 939
Steam-heater	J. L. Frisbie	New York, N. Y	July 9, 1872	128, 721
Steam-heater	W. M. Fuller	New York, N. Y	Nov. 11, 1873	144, 527
Steam-heater	W. M. Fuller	New York, N. Y	Dec. 2, 1873	145, 167
Steam-heater	E. Gibbs	Madison, Wis	Sept. 22, 1857	18, 241
Steam-heater	T. Gordon	Trenton, N. J	July 27, 1858	21, 047
Steam-heater	F. P. Hallberg	Gothenburg, Sweden	Apr. 5, 1870	101, 612
Steam-heater	S. T. Harker	Milwaukee, Wis	June 11, 1867	65, 667
Steam-heater	A. L. Ide	Springfield, Ill	May 2, 1871	114, 440
Steam-heater	A. L. Ide	Springfield, Ill	May 30, 1871	115, 477
Steam-heater	J. Johnson	Saco, Me	Dec. 22, 1868	85, 176
Steam-heater	J. Johnson	Saco, Me	Dec. 22, 1868	85, 177
Steam-heater	J. L. Judge	Milwaukee, Wis	May 18, 1869	90, 176
Steam-heater	P. F. Kessler and J. Carlisle	Dayton, Ohio	May 26, 1868	78, 377
Steam-heater	J. C. Kilgore	Pittsburgh, Pa	Dec. 17, 1872	133, 942
Steam-heater	J. McConn	Philadelphia, Pa	July 25, 1871	117, 310
Steam-heater	F. A. McFarland	Meadville, Pa	May 21, 1867	64, 993
Steam-heater	P. H. Merrill	Pardeeville, Wis	Oct. 7, 1873	143, 525
Steam-heater	F. H. Pulsifer and W. C. Wheeler.	Auburn, N. Y., and Baltimore, Md.	July 18, 1871	117, 111
Steam-heater	G. B. Riggins	New York, N. Y	May 13, 1873	138, 936
Steam-heater	J. J. Roeper	Philadelphia, Pa	June 28, 1870	104, 772
Steam-heater	E. Russell	Brooklyn, N. Y	Apr. 22, 1873	138, 200
Steam-heater	F. W. Schultz and J. A. Wilson	Baltimore, Md	Nov. 10, 1868	83, 885
Steam-heater	J. Shackleton	Rahway, N. J	Feb. 23, 1869	87, 301
Steam-heater	J. Shackleton	Rahway, N. J	Apr. 5, 1870	101, 669
Steam-heater	W. Simpson and W. Howitt	Rosherville and Notting Hill, England.	Apr. 7, 1868	76, 534
Steam-heater	J. J. Smith and S. R. Wood	Cleveland, Ohio	Oct. 22, 1872	132, 418
Steam-heater	D. E. and F. E. Somes	Washington, D. C	Oct. 18, 1870	108, 531
Steam-heater	W. Thompson	Detroit, Mich	Feb. 28, 1871	112, 195
Steam-heater	S. D. Tillman	Jersey City, N. J	June 21, 1870	104, 510
Steam-heater	C. W. Trotter	Rochester, N. Y	May 30, 1871	115, 302
Steam-heater	D. Vaughan	Cincinnati, Ohio	July 18, 1871	117, 127
Steam-heater	P. D. Wesson	Providence, R. I	Dec. 15, 1868	84, 977
Steam-heater	C. Whittier	Boston, Mass	Feb. 2, 1869	86, 480
Steam-heater	C. Whittier	Boston, Mass	Feb. 2, 1869	86, 481
Steam-heater	L. L. Wiegand	Philadelphia, Pa	Feb. 13, 1872	123, 602
Steam-heater	C. A. Wilson	Cincinnati, Ohio	Sept. 4, 1860	29, 932
Steam-heater	J. L. Winslow	Portland, Me	Feb. 7, 1871	111, 598
Steam-heater	C. J. Wood	Baltimore, Md	Mar. 21, 1871	112, 881
Steam-heater	G. M. Woodward	New York, N. Y	Oct. 20, 1868	83, 351
Steam-heater and ventilator	F. Fisher	Cambridge, Mass	May 14, 1867	64, 756
Steam-heater boiler	F. Brackney	Baltimore, Md	Feb. 20, 1872	123, 767
Steam-heater boiler	P. Estes	Leavenworth, Kans	Dec. 17, 1872	134, 044
Steam-heater boiler	J. W. Paige and D. Reynolds	Rochester and Albany, N. Y.	May 24, 1870	103, 492
Steam-heater for brewers and others	T. Williams and J. J. Yates	New York, N. Y	Feb. 11, 1868	74, 469
Steam-heater for buildings	J. H. Blessing	Albany, N. Y	Dec. 12, 1871	121, 748
Steam-heater for buildings	C. Davenport	Watertown, Mass	Oct. 9, 1855	13, 639
Steam-heater for buildings	C. Davenport	Watertown, Mass	Mar. 11, 1856	14, 392
Steam-heater for buildings	S. J. Gold	New Haven, Conn	Jan. 29, 1856	14, 158
Steam-heater for buildings	A. S. Pelton	Clinton, Conn	May 13, 1856	14, 885
Steam-heater for buildings	R. Rogers	South Berwick, Me	June 12, 1835	....
Steam-heater for burnishing iron	J. M. De Lacy	Trenton, N. J	Feb. 22, 1870	100, 017
Steam-heater-regulating apparatus	J. Briggs	Roxbury, Mass	Sept. 13, 1864	44, 158
Steam-heater-regulator, Automatic	C. Gregg	New York, N. Y	June 18, 1861	32, 559
Steam heaters and evaporators, Trap for removing water from.	R. J. Barr	Philadelphia, Pa	Sept. 25, 1866	58, 201
Steam-heaters, Vaporizer for	G. S. Bassett	Holyoke, Mass	Oct. 1, 1872	131, 867
Steam heating and cooking apparatus	F. Milliken	Boston, Mass	Feb. 19, 1867	62, 148
Steam-heating and fire-extinguishing apparatus	C. S. Brown	New York, N. Y	Feb. 14, 1865	46, 328
Steam-heating apparatus	W. C. Baker	New York, N. Y	June 4, 1861	32, 458
Steam-heating apparatus	W. C. Baker	New York, N. Y	July 16, 1872	129, 082
Steam-heating apparatus	E. M. Bosley	Baltimore, Md	May 10, 1870	102, 757
Steam-heating apparatus	H. G. Bulkley	Kalamazoo, Mich	Aug. 17, 1858	21, 185
Steam-heating apparatus	P. E. Chase	Philadelphia, Pa	Nov. 22, 1855	13, 842
Steam-heating apparatus	B. W. Dunkleo and W. B. Moore.	Boston, Mass	July 26, 1859	24, 858
Steam-heating apparatus	J. Elder, jr	New York, N. Y	Oct. 30, 1866	59, 198
Steam-heating apparatus	S. F. Gold and W. A. Foskett	Brooklyn, N. Y., and Meriden, Conn.	July 29, 1862	36, 000

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Steam-heating apparatus	C. C. Hall	Portland, Me	July 14, 1868	79, 826
Steam-heating apparatus	L. W. Leeds and C. Vaux	New York, N. Y	May 29, 1860	28, 493
Steam-heating apparatus	W. H. Towers	Boston, Mass	Mar. 16, 1869	87, 886
Steam-heating apparatus	A. Walker	Portland, Me	July 19, 1870	105, 525
Steam-heating apparatus, Coil for	J. Trageser	New York, N. Y	Feb. 21, 1865	46, 509
Steam-heating apparatus for brewers and others	H. Komp	New York, N. Y	Aug. 27, 1867	68, 210
Steam-heating apparatus for warming buildings	G. W. Richardson	New York, N. Y	May 29, 1860	28, 504
Steam-heating boiler	H. Howard	Westfield, Mass	June 6, 1865	48, 067
Steam-heating boilers, Pressure-regulating apparatus for.	G. S. G. Spencer	Boston, Mass	Apr. 22, 1856	14, 743
Steam-heating device	J. B. Terry	Brooklyn, N. Y	May 4, 1869	89, 706
Steam-heating pipe	W. Mendham	Philadelphia, Pa	Apr. 5, 1870	101, 488
Steam in boilers, Apparatus for generating	S. A. Hill and C. F. Thumm	Oil City, Pa	Oct. 12, 1869	95, 688
Steam in combination with air as a motive-power, Method of generating.	J. Black	Philadelphia, Pa	Mar. 9, 1858	19, 604
Steam in engines, Increasing power of	C. Leek	Ross County, Ohio	Jan. 22, 1820	....
Steam, Increasing the power of	N. P. Goodell	Kirtland, Ohio	June 23, 1832	....
Steam, Induction and eduction of	H. Olney, D. G. Raven, and J. H. Whelpley.	Gouverneur and Champion, N. Y.	June 20, 1846	4, 588
Steam in washing, Application of	J. Smith	London, England	Jan. 28, 1826	....
Steam-jack	J. Bailey	....	Feb. 23, 1792	....
Steam-jet apparatus for forcing and exhausting air and condensing steam.	E. Körting	Vienna, Austria	Sept. 16, 1873	142, 856
Steam-joints, Gasket for	J. S. Colvin	Allegheny, Pa	Oct. 11, 1859	25, 794
Steam-joints, Means for tightening	W. S. Gale	New York, N. Y	July 21, 1857	17, 855
Steam-kiln	G. G. Moore	New York	Dec. 4, 1824	....
Steam-lift and force-pump	J. R. Maxwell and E. Cope	Cincinnati, Ohio	July 13, 1869	92, 627
Steam-lubricator	D. Currie	Belleville, Ill	Jan. 24, 1871	111, 110
Steam-lubricator	R. A. Filkins	Cheshire, Mass	Sept. 2, 1873	142, 385
Steam-lubricator	W. Gowenlock	Susquehanna Depot, Pa	Mar. 25, 1873	137, 070
Steam-lubricator	W. Hamilton	Erie, Pa	Mar. 25, 1873	137, 073
Steam-lubricator	W. Hamilton	Erie, Pa	June 24, 1873	140, 270
Steam-machine, Siphonic	J. Poole	....	Oct. 13, 1801	....
Steam-machinery lubricator	J. Sutton	New York, N. Y	Jan. 23, 1855	12, 290
Steam, Method of constructing cast-iron apparatus for superheating.	C. C. Parsons	Boston, Mass	May 8, 1866	54, 590
Steam, Method of utilizing exhaust	T. T. Prosser	Fond du Lac, Wis	Sept. 22, 1863	40, 063
Steam-motor	H. Crumlisk	Keokuk, Iowa	Jan. 5, 1869	85, 718
Steam-navigation	J. M. Patton	Milton, Pa	Feb. 4, 1830	....
Steam-navigation, Machinery for	F. G. Smith	Lynchburgh, Va	Oct. 12, 1830	....
Steam of engines, Using escape	D. Embree	New Richmond, Ohio	Dec. 3, 1827	....
Steam of steam-engines, Apparatus for reworking the waste.	F. Daticby	Paris, France	Mar. 20, 1860	27, 532
Steam or air brake	S. N. Goodale	Saint Louis, Mo	Jan. 30, 1872	123, 098
Steam or air brake coupling	S. N. Goodale	Saint Louis, Mo	Feb. 20, 1872	123, 776
Steam or hot-air pipe	R. T. Crane	Chicago, Ill	Aug. 12, 1862	36, 141
Steam or power brake	J. C. Wightman	Newton, Mass	July 30, 1872	130, 095
Steam or vapor in extracting spirits and working steam-engines, Application of.	R. Wilcox	New York	Apr. 20, 1820	....
Steam or water engine	L. D. B. Shaw	Boston, Mass	Nov. 25, 1871	121, 427
Steam-pans, Automatic feed for	H. Holcomb	Prinesville, Ohio	July 9, 1867	66, 494
Steam-pipe	G. A. Jasper	Boston, Mass	Dec. 11, 1866	60, 379
Steam pipe and boiler covering	E. C. Little	Saint Louis, Mo	July 31, 1866	56, 856
Steam-pipe couplings for railway-car heaters	G. A. Fullerton	Lynn, Mass	Dec. 29, 1868	85, 377
Steam-pipe for connecting heating-pipes in railway-cars, Flexible.	C. R. Abbott	Elmira, N. Y	Dec. 17, 1867	72, 258
Steam-pipe for reversing steam-engines	J. B. Pedrick	Columbus, Ind	May 11, 1869	90, 019
Steam-pipe supports, Patterns for casting	R. T. Crane	Chicago, Ill	Aug. 6, 1867	67, 502
Steam-pipe trap	M. T. Davidson	Brooklyn, N. Y	Dec. 2, 1873	145, 157
Steam pipes, boilers, &c., Composition for coating	J. Chilcott	Brooklyn, N. Y	Oct. 4, 1864	44, 517
Steam-pipes, Device for preventing radiation of heat from.	J. McFarland	Louisville, Ky	June 22, 1869	91, 652
Steam-power	E. Bates	Mount Pleasant, Ohio	July 27, 1833	....
Steam-power-air-brake device	G. Westinghouse, jr	Pittsburgh, Pa	Aug. 8, 1871	117, 841
Steam-power and boiler	B. B. Gates	Ottawa Township, Mont	Mar. 24, 1835	....
Steam-power-brake device	G. Westinghouse, jr	Schenectady, N. Y	Apr. 13, 1869	88, 929
Steam-power in raising water, Application of	G. Fleming	Goochland Court-House, Va	Apr. 24, 1827	....
Steam-power meter	G. Schuh	Madison, Ind	June 8, 1858	20, 514
Steam-power, Use of heated air, gases, &c., in the aid of.	M. Ward	Baltimore, Md	May 15, 1827	....
Steam-press	A. Baldwin	New York, N. Y	Oct. 15, 1872	132, 131
Steam-press	W. Dobbins	Lowell, Mass	Feb. 9, 1869	86, 654
Steam-press	P. G. Gardiner	New York, N. Y	Mar. 13, 1847	5, 007
Steam-press	A. C. Jones	New Orleans, La	Jan. 26, 1847	4, 942
Steam-press, Cylindrical	E. Barker and J. and A. Hall	Boston, Mass	July 12, 1816	....
Steam-pressure alarm	J. Cone	Bristol, Pa	Feb. 6, 1872	123, 455
Steam-pressure gage	E. G. Allen	Boston, Mass	Jan. 20, 1857	16, 428
Steam-pressure gage	E. G. Allen	Boston, Mass	Oct. 27, 1857	18, 526
Steam-pressure gage	W. H. Allen	Brooklyn, N. Y	June 19, 1860	28, 794
Steam-pressure gage	C. Anderson	Cincinnati, Ohio	July 2, 1872	128, 452
Steam-pressure gage	E. H. Ashcroft	Lynn, Mass	Jan. 3, 1865	45, 685
Steam-pressure gage	E. H. Ashcroft	Lynn, Mass	Apr. 30, 1872	126, 247
Steam-pressure gage	H. Bates	New London, Conn	Sept. 29, 1857	18, 272
Steam-pressure gage	S. W. Brown	Lowell, Mass	June 10, 1856	15, 058
Steam-pressure gage	W. Burnett	Boston, Mass	Feb. 16, 1858	19, 400
Steam-pressure gage	W. Burnett	Boston, Mass	Jan. 29, 1861	31, 279
Steam-pressure gage	H. T. Crocker	New London, Conn	July 23, 1861	32, 911
Steam-pressure gage	J. Davis	Alexandria, Va	May 30, 1865	47, 936
Steam-pressure gage	J. L. Eastman	Boston, Mass	June 16, 1857	17, 560
Steam-pressure gage	G. Faber	Canton, Ohio	Sept. 16, 1851	8, 361
Steam-pressure gage	J. D. Ingram	New York, N. Y	July 25, 1865	49, 033
Steam-pressure gage	J. V. Jepson	New York, N. Y	Nov. 29, 1864	45, 247
Steam-pressure gage	J. Kayser	New York, N. Y	June 25, 1872	128, 401
Steam-pressure gage	T. W. Lane	Meredith, N. H	Feb. 22, 1859	23, 032
Steam-pressure gage	J. H. Miller and J. Kailey	Canton, Ohio	June 16, 1857	17, 607
Steam-pressure gage	J. H. Mosher	New York, N. Y	Apr. 5, 1859	23, 580
Steam-pressure gage	W. P. Parrott	Boston, Mass	July 24, 1860	29, 307
Steam-pressure gage	C. C. Schmidt	New York, N. Y	Sept. 26, 1865	50, 208

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Steam-pressure gage	C. A. Wilson	Cincinnati, Ohio	Sept. 17, 1867	69 057
Steam-pressure gage	E. A. Wood	Utica, N. Y	Jan. 3, 1865	45, 786
Steam-pressure gage	J. E. Wootton	Philadelphia, Pa	Nov. 17, 1857	18, 655
Steam-pressure gage for boilers	G. Bradley	Paterson, N. J	Apr. 16, 1841	2, 049
Steam-pressure-gage tube	E. H. Ashcroft	Boston, Mass	Sept. 8, 1857	18, 129
Steam-pressure indicator	W. M. Davie and C. T. Webber	Janesville, Wis	Apr. 4, 1865	47, 166
Steam-pressure indicator and regulator	W. M. Storm	New York, N. Y	July 1, 1856	15, 259
Steam-pressure indicator or alarm	S. W. Brown	Lowell, Mass	Sept. 20, 1859	25, 486
Steam-pressure, Regulating	F. R. Torbet	Paterson, N. J	Mar. 29, 1841	2, 020
Steam-pressure regulator	A. J. Ballard	Cohoes, N. Y	Feb. 25, 1873	136, 202
Steam-pressure regulator	W. S. Gale	New York, N. Y	July 1, 1856	15, 229
Steam-pressure regulator	L. J. Knowles	Warren, Mass	Aug. 25, 1857	18, 048
Steam-pressure regulator	N. C. Locke	Salem, Mass	Apr. 23, 1872	126, 065
Steam-pressure regulator	N. C. Locke	Salem, Mass	Nov. 26, 1872	133, 459
Steam-pressure regulator	N. C. Locke	Salem, Mass	Nov. 26, 1872	133, 460
Steam-pressure regulator	J. Nason	New York, N. Y	Oct. 20, 1863	40, 354
Steam-pressure regulator	A. P. Pitkin	Hartford, Conn	June 14, 1859	24, 402
Steam-pressure regulator, Elastic diaphragm	J. Woodruff	Rahway, N. J	Oct. 23, 1855	13, 711
Steam, Producing	J. Stevens		Apr. 11, 1803	....
Steam-pump and condenser	E. Reese	Mahanoy City, Pa	Apr. 15, 1873	137, 796
Steam-pump condenser	W. Craig and H. L. Brevoort	Newark, N. J., and Brooklyn, N. Y.	Nov. 8, 1870	109, 113
Steam-pumping engine	P. Doyle	New Comerstown, Ohio	July 4, 1871	116, 572
Steam-shooting	S. Morey	Orford, N. H	Jan. 19, 1819	....
Steam spring-pressure gage	M. M. Young	East Boston, Mass	Jan. 19, 1858	19, 177
Steam-superheating apparatus	T. Krausch	New York, N. Y	June 25, 1872	128, 315
Steam-table	E. Hills	Cincinnati, Ohio	Aug. 14, 1849	6, 646
Steam-tight joints, Making	E. and J. Bourne	Pittsburgh, Pa	Dec. 22, 1863	40, 991
Steam-tilling machine	J. Fowler, jr., and W. Worby	Havering, Essex, and Ipswich, Suffolk, England.	July 9, 1861	32, 810
Steam to machinery and to endless screws, &c., Application of.	J. Ingham and J. Davis	Fabius, N. Y	Feb. 12, 1834	....
Steam to machinery, Application of	M. Musselman	Phelps, N. Y	Dec. 29, 1825	....
Steam to machinery, Applying	S. Boyden	Newark, N. J	Oct. 31, 1832	....
Steam to machinery, Applying	J. Lockwood	Sodus, N. Y	Dec. 28, 1833	....
Steam-trap	J. Ashworth	North Andover, Mass	Mar. 1, 1870	100, 249
Steam-trap	J. G. Baker	Philadelphia, Pa	Apr. 23, 1872	126, 007
Steam-trap	R. J. Barr	Philadelphia, Pa	Dec. 16, 1873	145, 480
Steam-trap	H. W. Bartol	Philadelphia, Pa	May 28, 1867	65, 047
Steam-trap	A. L. Bayley	Amesbury, Mass	July 16, 1861	32, 817
Steam-trap	A. G. Bearup	New York, N. Y	June 13, 1871	115, 809
Steam-trap	W. H. Bechtel	Philadelphia, Pa	Nov. 8, 1870	109, 103
Steam-trap	R. Berryman	Hartford, Conn	July 25, 1871	117, 372
Steam-trap	J. Bishop	Meriden, Conn	Dec. 9, 1873	145, 387
Steam-trap	J. W. Bishop	New Haven, Conn	Apr. 11, 1865	47, 182
Steam-trap	J. H. Blessing	Albany, N. Y	May 2, 1871	114, 257
Steam-trap	J. H. Blessing	Albany, N. Y	June 27, 1871	116, 403
Steam-trap	J. H. Blessing	Albany, N. Y	Feb. 13, 1872	123, 670
Steam-trap	J. H. Blessing	Albany, N. Y	Apr. 1, 1873	137, 285
Steam-trap	J. H. Blessing	Albany, N. Y	Sept. 2, 1873	142, 323
Steam-trap	S. Bonser	Dover, N. H	Nov. 9, 1869	96, 541
Steam-trap	C. H. Brown	Fitchburgh, Mass	June 14, 1864	43, 090
Steam-trap	R. Brown	Norwich, Conn	Aug. 4, 1868	80, 592
Steam-trap	N. H. Bundy	New York, N. Y	Sept. 12, 1871	118, 786
Steam-trap	R. Colburn	Norwich, Conn	June 11, 1867	65, 646
Steam-trap	I. B. Coleman	Detroit, Mich	May 17, 1870	103, 016
Steam-trap	G. H. Corliss	Providence, R. I	Jan. 5, 1869	85, 567
Steam-trap	T. N. Davey	Jeffersonville, Ind	Dec. 18, 1866	60, 622
Steam-trap	D. Dick	New York, N. Y	Aug. 13, 1872	130, 490
Steam-trap	F. Douglas	East Liverpool, Ohio	Nov. 30, 1858	22, 170
Steam-trap	F. Douglas	Norwich, Conn	Feb. 7, 1860	27, 040
Steam-trap	L. Ferguson	Lowell, Mass	Mar. 13, 1860	27, 625
Steam-trap	A. M. Force	Norwich, Conn	July 3, 1866	56, 029
Steam-trap	H. N. Foster	East Greenwich, R. I	Jan. 16, 1866	52, 038
Steam-trap	W. Fuzzard	Chelsea, Mass	May 29, 1866	55, 081
Steam-trap	I. E. Giddings	Springfield, Ill	May 30, 1871	115, 303
Steam-trap	J. E. Gillespie	Boston, Mass	Oct. 16, 1866	58, 808
Steam-trap	M. C. Gove	Lowell, Mass	Nov. 8, 1870	109, 004
Steam-trap	C. M. Gill and J. Brown	New York, N. Y	May 20, 1851	8, 103
Steam-trap	J. Gunn	Worcester, Mass	Apr. 23, 1861	32, 132
Steam-trap	J. Hague	Providence, R. I	Mar. 12, 1867	62, 841
Steam-trap	J. W. Hoard	Providence, R. I	Sept. 7, 1858	21, 472
Steam-trap	J. W. Hoard and G. B. Wiggins	Providence, R. I	Sept. 1, 1863	39, 772
Steam-trap	J. W. Hodges	Baltimore, Md	May 17, 1870	103, 184
Steam-trap	J. W. Hodges	Baltimore, Md	Apr. 25, 1871	114, 141
Steam-trap	J. W. Hodges	New York, N. Y	Oct. 21, 1873	143, 761
Steam-trap	P. Hogg	New York, N. Y	Apr. 18, 1865	47, 304
Steam-trap	E. T. Jenkins and F. B. Polley	Williamsburgh, N. Y	Sept. 20, 1859	25, 510
Steam-trap	A. L. Jones	Philadelphia, Pa	July 9, 1872	128, 887
Steam-trap	J. J. Jordan	Philadelphia, Pa	Apr. 4, 1871	113, 434
Steam-trap	C. Kammerer	Boston, Mass	Apr. 9, 1872	125, 459
Steam-trap	A. Lapham	Brooklyn, N. Y	Jan. 24, 1860	26, 950
Steam-trap	D. Lee	Boston, Mass	Apr. 17, 1860	27, 914
Steam-trap	A. Lapham	Brooklyn, N. Y	Sept. 23, 1862	36, 522
Steam-trap	H. S. Maxim	Brooklyn, N. Y	Dec. 26, 1871	122, 272
Steam-trap	H. S. Maxim and L. P. Hawes	Brooklyn, N. Y	July 22, 1873	141, 063
Steam-trap	J. M. Morehead	Brooklyn, N. Y	May 21, 1872	126, 899
Steam-trap	G. R. Moore	Philadelphia, Pa	July 18, 1871	117, 099
Steam-trap	J. Naylor	Providence, R. I	Mar. 6, 1866	53, 031
Steam-trap	W. Osborne	South Adams, Mass	May 17, 1864	42, 788
Steam-trap	C. E. Palmer	Manchester, N. H	Jan. 7, 1868	73, 032
Steam-trap	B. F. Perkins	Holyoke, Mass	Sept. 17, 1867	68, 897
Steam-trap	E. L. Perkins, J. H. Moulton, and C. E. Sawyer.	Boston, Mass	Aug. 9, 1870	106, 201
Steam-trap	E. L. Perkins, J. H. Moulton, and C. E. Sawyer.	Boston, Mass	Aug. 19, 1873	141, 946
Steam-trap	L. H. Plum	Cincinnati, Ohio	Apr. 19, 1870	102, 037

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Steam-trap	C. B. Richards	Hartford, Conn	Dec. 13, 1864	45, 437
Steam-trap	H. Richmann	Cincinnati, Ohio	Sept. 24, 1872	131, 707
Steam-trap	W. Robinson	Guide Bridge, England	Apr. 9, 1872	125, 487
Steam-trap	D. Saunders	Brooklyn, N. Y	Dec. 10, 1867	72, 088
Steam-trap	C. Schmandt	Baltimore, Md	Feb. 6, 1872	123, 515
Steam-trap	C. Schmandt	Baltimore, Md	Oct. 22, 1872	132, 372
Steam-trap	W. A. Schneider	Albany, N. Y	Jan. 4, 1870	98, 524
Steam-trap	J. C. and G. Shackleton	Lawrence, Mass	Mar. 14, 1865	46, 825
Steam-trap	S. D. Tripp	Lynn, Mass	Oct. 11, 1870	108, 215
Steam-trap	N. Upham	Norwich, Conn	Aug. 28, 1860	29, 833
Steam-trap	H. J. Vaessen	Lüttich, Belgium	June 14, 1864	43, 167
Steam-trap	C. C. Walworth	Boston, Mass	June 19, 1860	28, 795
Steam-trap	J. E. Watts	Lawrence, Mass	Mar. 23, 1869	88, 103
Steam-trap	J. E. Watts	Lawrence, Mass	Dec. 19, 1871	122, 086
Steam-trap	P. D. Wesson	Providence, R. I	Mar. 26, 1861	31, 842
Steam-trap	C. A. Wheelock	Uxbridge, Mass	June 10, 1862	35, 555
Steam-trap	G. B. Wiggin and J. W. Hoard	Providence, R. I	June 4, 1861	32, 492
Steam-trap	J. Wilson	Manchester, N. H	Aug. 28, 1866	57, 613
Steam-trap	L. W. Woodward	North Adams, Mass	Feb. 14, 1865	46, 416
Steam-trap, Automatic	W. E. Prall	Washington, D. C	Dec. 19, 1871	121, 962
Steam-trap, Automatic	J. K. Stayman	Carlisle, Pa	May 28, 1872	127, 382
Steam-trap, Balance	W. M. Davis	Philadelphia, Pa	Mar. 30, 1858	19, 757
Steam-trap for relieving steam-pipes of water	J. Avery, jr	Lowell, Mass	Apr. 21, 1857	17, 069
Steam-tubing for regulating the heating of buildings, Arrangement of.	R. Cornelius	Philadelphia, Pa	Mar. 4, 1856	14, 348
Steam twice over, Plan for working	J. H. Laning	Nashville, Tenn	Aug. 12, 1826	....
Steam, Use and application of	T. Packard and J. E. Strong	Granville, N. Y	Aug. 7, 1829	....
Steam, Utilizing	J. M. Brosius	Liberty, Va	June 26, 1866	55, 810
Steam-vessel for cooking	J. Morris	Derby, Conn	Oct. 28, 1837	447
Steam-vessel, Rotary	G. T. Snyder	Wilmington, Del	Aug. 24, 1869	94, 143
Steam-vessels, &c., Ventilator for	J. G. Woodward	Saint John's, New Brunswick.	Oct. 10, 1865	50, 434
Steam-warming apparatus	E. T. Ingalls and J. R. Nichols	Haverhill, Mass	Apr. 27, 1858	20, 068
Steam-warming apparatus	C. A. Wilson	Cincinnati, Ohio	July 26, 1859	24, 896
Steam-warming apparatus	C. A. Wilson	Cincinnati, Ohio	Aug. 8, 1865	49, 332
Steam-warming apparatus	C. A. Wilson	Cincinnati, Ohio	Oct. 3, 1865	50, 294
Steam, Warming houses by	S. J. Gold	New Haven, Conn	Oct. 3, 1854	11, 747
Steam-washer	C. A. Bradley	Monticello, Fla	Apr. 8, 1873	137, 591
Steam-washer	J. Davis	Florida, Mass	Apr. 1, 1873	137, 296
Steam-washer	J. Truman	Philadelphia, Pa	Aug. 21, 1812	....
Steam-washer, Revolving	J. Barnes	Kingston, Pa	Oct. 14, 1830	....
Steam-washer, Revolving	L. Barney and A. A. Beach	Groton, N. Y	Feb. 5, 1830	....
Steam, Washing by	N. Burton, jr	Annsville, N. Y	Aug. 16, 1826	....
Steam water-elevator	C. Rogers	Allegheny City, Pa	June 21, 1870	104, 650
Steam water-heater	J. Argall	Mineral Point, Wis	July 11, 1871	116, 792
Steam water-power device	W. L. Horne	Batavia, Ill	July 17, 1866	56, 416
Steam-wheel	J. N. Pomert	Greenfield, Ohio	Nov. 29, 1870	109, 659
Steam-wheel	A. Thayor, jr	Albany, N. Y	Aug. 8, 1821	....
Steam-wheel	W. Wilson	Henderson County, Tenn	Mar. 13, 1835	....
Steam, wind, and water as a power, Mode of applying	I. Garretson	Bellefontaine, Ohio	Mar. 25, 1826	....
Steamer, Agricultural	W. M. Gordon	Minonk, Ill	July 23, 1872	129, 729
Steamer, Agricultural	A. T. Manly	Buffalo, N. Y	Sept. 7, 1869	94, 498
Steamer, Agricultural	H. W. Millar	Utica, N. Y	Apr. 19, 1870	102, 028
Steamer and condenser combined	G. W. Lane	Portland, Me	Jan. 17, 1871	111, 067
Steamer and drier, Wheat	C. T. Hanna	Keokuk, Iowa	Sept. 27, 1870	107, 680
Steamer bottom, Culinary	W. S. Potwin	Chicago, Ill	Apr. 23, 1867	64, 142
Steamer cowl or draft accelerator	P. C. Guion	Cincinnati, Ohio	Nov. 4, 1856	16, 010
Steamer, Culinary	I. Forman	Fairmont, W. Va	Apr. 27, 1869	89, 303
Steamer, Culinary	H. J. Gale	Haverhill, Mass	Dec. 17, 1872	134, 046
Steamer, Culinary	J. H. Heritage	Wilmington, Del	Feb. 1, 1870	99, 316
Steamer, Culinary	F. A. Hine	Cleveland, Ohio	June 25, 1872	128, 396
Steamer, Culinary	W. S. McNeil	Springfield, Mass	Mar. 24, 1868	75, 944
Steamer, Culinary	L. F. Noé	New York, N. Y	Apr. 21, 1863	38, 239
Steamer, Culinary	J. S. Ogden	Johnstown, Pa	Sept. 19, 1871	119, 169
Steamer, Culinary	C. E. Wahlgren	Galesburgh, Ill	Dec. 5, 1871	121, 558
Steamer, Culinary	A. L. Whitney	Brooklyn, E. D., N. Y	Apr. 9, 1867	63, 772
Steamer, Culinary	H. and J. Wootton	Rochester, N. Y	May 6, 1873	138, 550
Steamer, Culinary	G. W. Worster	Bangor, Me	Feb. 25, 1868	74, 873
Steamer for boilers, Culinary	F. W. Bacon	Washington, D. C	Aug. 14, 1866	57, 244
Steamer for cooking	M. C. Cronk	Auburn, N. Y	Nov. 26, 1867	71, 284
Steamer, Grain	A. S. Ballard and T. L. Sergent	Mount Pleasant, Iowa	Sept. 13, 1864	44, 151
Steamer, Grain	S. W. Campbell and J. C. Evans	Kansas City, Mo	Apr. 23, 1872	125, 934
Steamer, Grain	W. B. Fisher	Newark, N. J	July 16, 1872	129, 544
Steamer, Grain	J. C. Hunt	Sioux City, Iowa	Aug. 13, 1872	130, 430
Steamer, Grain	J. C. Hunt	Sioux City, Iowa	Aug. 26, 1873	142, 237
Steamer, Oyster	C. S. Collins	Baltimore, Md	Mar. 11, 1873	136, 588
Steamer, Oyster	H. Evans, jr	Baltimore, Md	June 10, 1862	35, 511
Steamer, Oyster	W. A. Jones	Erie, Pa	Mar. 12, 1872	124, 494
Steamer, Partitioned	S. T. McDougall	Brooklyn, N. Y	July 7, 1868	79, 670
Steamer, Revolving vegetable	S. B. Collins	Lyndon, Mich	Feb. 9, 1864	41, 485
Steamer, Seed	W. B. Fisher	Newark, N. J	July 16, 1872	129, 018
Steamer, Side-wheel	A. M. Sprague	Mobile, Ala	Apr. 5, 1859	23, 507
Steamer, Vegetable	H. S. Saroni	Marietta, Ohio	Aug. 28, 1866	57, 577
Steamer, Vegetable	E. Stangeland	Rochester, Minn	Nov. 8, 1864	44, 985
Steamer, Vegetable and fruit	R. D. Jacobus	Verona, N. J	Dec. 24, 1872	134, 143
Steamer, Wheat	A. Agner	Ottawa, Ohio	Oct. 8, 1872	131, 996
Steamers, Arrangement of upper works in river	D. De Haven	New Orleans, La	July 19, 1870	105, 438
Steamers, Construction of ocean	R. and T. Winans	Baltimore, Md	Oct. 26, 1858	21, 919
Steaming and shucking oysters	I. Soloman	Baltimore, Md	Dec. 22, 1863	41, 026
Steaming-apparatus	O. Lehmann	Columbus City, Iowa	Mar. 28, 1871	113, 068
Steaming, boiling, &c., Apparatus for	B. F. Gold	New York, N. Y	Jan. 9, 1838	561
Steaming, filtering, &c., Apparatus for	J. Murdock	South Carver, Mass	June 20, 1871	116, 083
Steaming oysters and preserving fruit, Apparatus for.	J. F. Reeves, jr	Baltimore, Md	Sept. 20, 1864	44, 340
Steaming oysters in the shell, Apparatus for	I. Soloman	Baltimore, Md	Dec. 16, 1862	37, 182
Stearine from elaine, Separating	J. H. Smith	Brooklyn, N. Y	Apr. 1, 1842	2, 534
Steatite articles, Manufacture of	J. Von Schwarz	Nuremburg, Bavaria	July 20, 1858	20, 966

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Steel	T. J. Mayall	Roxbury, Mass	Nov. 29, 1859	26, 277
Steel, and in converting iron articles into steel, Manufacture of.	F. C. Curie	Lancaster, Pa	July 21, 1868	80, 148
Steel and iron, Compound for uniting	B. C. Leavitt	Newport, Me	July 27, 1852	9, 159
Steel and iron, Manufacture of	J. Park, jr	Pittsburgh, Pa	Dec. 31, 1867	72, 755
Steel and iron melting furnace	E. R. Playle	Great Bend, Pa	Sept. 15, 1868	82, 160
Steel and iron plates, Manufacture of	J. Park, jr	Pittsburgh, Pa	June 2, 1868	78, 477
Steel and iron, Method for working	H. J. Dickerson	Appleton, Wis	Dec. 1, 1868	84, 480
Steel and iron, Tempering and hardening	H. Vaughn	Providence, R. I	Mar. 30, 1858	19, 804
Steel and malleable iron, Process of converting cast-iron into cast.	F. Ellerhausen	Montreal, Canada	May 5, 1868	77, 469
Steel and other metals, Gilding and ornamenting	A. H. Dufresne	Paris, France	Apr. 28, 1857	17, 140
Steel and other metals, Process of annealing	E. Savage	West Meriden, Conn	Feb. 13, 1866	52, 612
Steel and other metals to anneal them for punching, &c., Treating Bessemer.	G. W. Billings	Chicago, Ill	July 15, 1873	140, 759
Steel and refined metals, Manufacture of cast	W. Sellers	Philadelphia, Pa	Mar. 19, 1872	124, 700
Steel and treating metals, Process and apparatus for the manufacture of.	I. Hersey	Fort Edward, N. Y	Aug. 20, 1872	130, 637
Steel and wrought-iron, Making blooms of	T. J. Chubb	Williamsburgh, N. Y	June 8, 1869	90, 928
Steel, Apparatus and process for making	T. J. Chubb	Williamsburgh, N. Y	June 30, 1868	79, 313
Steel, Apparatus for hardening	D. O. Paige	Detroit, Mich	Mar. 2, 1869	87, 507
Steel, Apparatus for hardening strips of	R. A. Stratton	Philadelphia, Pa	Aug. 19, 1862	36, 259
Steel, Apparatus for manufacture of Bessemer	H. Chisholm	Cleveland, Ohio	Feb. 14, 1871	111, 815
Steel, Apparatus for manufacture of Bessemer	H. Chisholm	Cleveland, Ohio	Apr. 25, 1871	114, 109
Steel, Apparatus for manufacture of Bessemer	A. L. Holley	Brooklyn, N. Y	Aug. 9, 1870	106, 162
Steel, Apparatus for manufacture of Bessemer	J. B. Pearse	Swatara Township, Pa	Nov. 19, 1872	133, 249
Steel, Apparatus for refining iron and making	J. Absterdam	New York, N. Y	Nov. 24, 1868	84, 333
Steel, Apparatus for refining iron and making	J. Absterdam	New York, N. Y	Nov. 24, 1868	84, 335
Steel beam	R. Montgomery	New York, N. Y	Feb. 23, 1869	87, 278
Steel, Bessemer-converters for converting crude iron into.	H. Bessemer	London, England	July 25, 1871	117, 248
Steel blades, Hardening and straightening	H. Disston	Philadelphia, Pa	Aug. 13, 1867	67, 734
Steel blades, &c., Process of treating	H. Disston	Philadelphia, Pa	May 21, 1867	64, 954
Steel, Butcher's	J. R. Wood	Providence, R. I	June 15, 1869	91, 505
Steel casting	A. Lohage	Unna Westphalia, Prussia	June 5, 1866	55, 442
Steel castings, Making	W. Kelly	Louisville, Ky	Dec. 26, 1871	122, 255
Steel, Composition for refining and hardening	H. Roscoe	New York, N. Y	Sept. 19, 1865	50, 039
Steel, Composition for welding and restoring	T. Fyans	Taunton, Mass	Oct. 11, 1870	108, 129
Steel, Composition for working	H. Vaughn	Providence, R. I	June 17, 1856	15, 161
Steel, Composition of matter to be used in the process of restoring.	B. W. Nichols	Canton, Ohio	July 20, 1869	92, 875
Steel-converter bottom, Bessemer	A. L. Holley	Brooklyn, N. Y	Dec. 17, 1872	133, 938
Steel, Converter for the manufacture of Bessemer	H. Chisholm	Cleveland, Ohio	May 30, 1871	115, 279
Steel, Converting articles made of iron into	H. C. Folsom	Bangor, Me	Mar. 29, 1870	101, 250
Steel, Converting cast-iron and cast-iron articles into.	R. A. Jackson	Alliance, Ohio	Sept. 27, 1870	107, 781
Steel, Converting cast-iron into wrought-iron and	A. Lisk and A. Woolever	Philadelphia and Allentown, Pa.	May 26, 1868	78, 297
Steel, Converting iron into	J. F. Boynton	Syracuse, N. Y	July 9, 1867	66, 452
Steel, Converting iron into	E. R. Playle	Jersey City, N. J	Jan. 19, 1869	85, 958
Steel direct from the ore, Making	T. J. Chubb	Brooklyn, E. D., N. Y	June 4, 1867	65, 473
Steel direct from the ore, Making	T. J. Chubb	Williamsburgh, N. Y	June 30, 1868	79, 314
Steel direct from the ore, Making	G. H. Smith	Rochester, N. Y	July 18, 1854	11, 338
Steel direct from the ore, Manufacture of	R. S. Stenton	Brooklyn, N. Y	Mar. 30, 1869	88, 524
Steel direct from the ore, Manufacture of cast	T. Trafford	Dublin, Md	June 13, 1871	115, 992
Steel-faced iron-plates, Manufacture of	H. McDonald	Pittsburgh, Pa	May 11, 1869	89, 876
Steel, Flux for manufacturing	J. Jameson	Philadelphia, Pa	June 29, 1869	92, 054
Steel for axles, tires, &c., Low-grade	H. B. Woodcock	Low Moor, England	Aug. 3, 1869	93, 385
Steel for boiler-plates, &c., Manufacture of	O. Bolton, jr., and J. Pedder	Chartiers Township and Pittsburgh, Pa.	July 8, 1873	140, 673
Steel for casting—in green-sand molds, Manufacture of.	J. Millwood	Minerva, Ohio	Feb. 6, 1872	123, 503
Steel for corsets, &c., Preparation of	C. Maxwell and I. N. Peirce	Philadelphia, Pa	Dec. 8, 1868	84, 746
Steel for cutting glass, Preparation of	B. Du Val	....	Feb. 14, 1799	....
Steel for safes, Manufacture of	W. K. Marion	New York, N. Y	Apr. 3, 1866	53, 640
Steel for sharpening knives, Making	S. Lee	Taunton, Mass	May 10, 1859	23, 982
Steel from bars of wrought-iron, Manufacture of carbonated.	S. Pope	New York	Nov. 20, 1829	....
Steel from cast or pig iron, Manufacture of	H. M. Baker	Washington, D. C	Apr. 19, 1870	101, 969
Steel from ores, Process and apparatus for making cast.	C. W. Siemens	Westminster, England	Apr. 4, 1871	113, 584
Steel, Furnace for converting bars into	T. S. Blair	Pittsburgh, Pa	Dec. 5, 1865	51, 289
Steel, Furnace for converting iron into	A. G. Cazalat	Paris, France	Feb. 19, 1867	62, 113
Steel, Furnace for decarbonizing pig-iron for the production of.	A. Thoma	New York, N. Y	Mar. 3, 1868	75, 078
Steel, Furnace for the manufacture of	S. Broadmeadow	New York, N. Y	Oct. 9, 1847	5, 326
Steel, Furnace for the manufacture of shear and cast.	S. Broadmeadow	New York, N. Y	Apr. 5, 1837	174
Steel, Hardening	P. Davis	Fall River, Mass	Aug. 4, 1841	2, 209
Steel, Hardening	O. Marland	Boston, Mass	June 8, 1869	91, 142
Steel, Hardening	E. Savage	West Meriden, Conn	Sept. 12, 1871	118, 882
Steel, Hardening and tempering	D. Hartley	....	Feb. 21, 1792	....
Steel, Hardening and tempering	E. Savage and H. Stratton	West Meriden, Conn	June 13, 1865	48, 213
Steel-hardening composition	C. T. J. Hayden	Versailles, Mo	Oct. 29, 1867	70, 210
Steel heating and tempering furnace	B. S. Stokes	Manchester, N. H	June 4, 1867	65, 516
Steel in crucibles, Manufacture of	C. M. Nes	York, Pa	Dec. 12, 1871	121, 889
Steel-ingot flask	Z. S. Durfee	Pittsburgh, Pa	July 17, 1866	56, 388
Steel ingots, &c., Furnace for heating and annealing.	S. C. Salisbury	New York, N. Y	Mar. 23, 1869	88, 084
Steel, Knife-sharpening	A. E. Lee	Akron, Ohio	July 16, 1872	128, 966
Steel knives, Manufacture of solid	J. W. Gardner	Shelburne Falls, Mass	Feb. 25, 1868	74, 907
Steel, Machine for grooving butcher's	J. Surerus	Newark, N. J	Apr. 9, 1872	125, 499
Steel, Making	N. M. Isham and E. E. Marcy	Hartford, Conn	Oct. 2, 1849	6, 760
Steel, Making	J. H. Jenkins	New York, N. Y	Apr. 3, 1866	53, 625
Steel, Making	T. H. Jenkins	Nyack, N. Y	July 23, 1867	67, 121
Steel, Making	J. C. Stock and J. E. Emerson	Trenton, N. J	Jan. 7, 1862	34, 095
Steel, Making	F. Uchatius	Vienna, Austria	May 27, 1856	14, 976
Steel, Making cast	T. J. Chubb	Williamsburgh, N. Y	June 8, 1869	90, 926

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Steel, Making cast	J. Dixon	Jersey City, N. J	Apr. 9, 1850	7, 260
Steel, Making cast	J. Nevill	New York, N. Y	Dec. 9, 1856	16, 214
Steel, Making cast	C. W. Siemens	Westminster, England	Aug. 17, 1869	93, 758
Steel, Making cast	S. W. Wood	Cornwall, N. Y	Jan. 24, 1865	46, 041
Steel, Making cast or wrought	H. G. Spafford	Albany, N. Y	Oct. 30, 1822	....
Steel, Manufacture of	J. Absterdam	New York, N. Y	Dec. 7, 1869	97, 582
Steel, Manufacture of	J. Absterdam	New York, N. Y	June 10, 1873	139, 751
Steel, Manufacture of	F. Asthower	Witten, Prussia	May 19, 1868	78, 041
Steel, Manufacture of	C. Attwood	Durham, England	Apr. 14, 1863	38, 140
Steel, Manufacture of	H. M. Baker	Washington, D. C	Jan. 26, 1869	86, 202
Steel, Manufacture of	J. Baur	Brooklyn, N. Y	May 2, 1865	47, 510
Steel, Manufacture of	J. Baur	New York, N. Y	Aug. 22, 1865	49, 495
Steel, Manufacture of	J. Baur	New York, N. Y	Feb. 8, 1870	99, 624
Steel, Manufacture of	J. Baur	Brooklyn, N. Y	Feb. 6, 1872	123, 443
Steel, Manufacture of	A. B. Bérard	Paris, France	June 4, 1867	65, 333
Steel, Manufacture of	J. N. Bird	New York, N. Y	July 19, 1864	43, 562
Steel, Manufacture of	T. S. Blair	Pittsburgh, Pa	Dec. 22, 1868	85, 053
Steel, Manufacture of	J. G. Blunt	Leavenworth, Kans	Apr. 15, 1873	137, 885
Steel, Manufacture of	J. R. Bradley and M. D. Brown	Chicago, Ill	Dec. 17, 1867	72, 162
Steel, Manufacture of	S. Broadmeadow	New York, N. Y	May 25, 1844	3, 596
Steel, Manufacture of	T. Brooks	Canton, Ohio	Feb. 11, 1873	135, 768
Steel, Manufacture of	W. H. Brunt and J. W. McElroy	Pittsburgh, Pa	Dec. 1, 1863	40, 732
Steel, Manufacture of	C. Burgess	Portsmouth, Ohio	July 29, 1873	141, 320
Steel, Manufacture of	J. Deby, A. Trippel, and E. Gaussoin.	New York and Brooklyn, N. Y., and Baltimore, Md.	Nov. 7, 1865	50, 804
Steel, Manufacture of	W. Dougherty	Philadelphia, Pa	June 10, 1873	139, 778
Steel, Manufacture of	A. K. Eaton	New York, N. Y	Apr. 3, 1860	27, 707
Steel, Manufacture of	A. K. Eaton	Piermont, N. Y	Feb. 23, 1869	87, 153
Steel, Manufacture of	W. Fields	Wilmington, Del	May 10, 1870	102, 796
Steel, Manufacture of	A. L. Fleury	Pittsburgh, Pa	July 3, 1866	56, 026
Steel, Manufacture of	W. Gerhardt	New York, N. Y	Nov. 3, 1863	40, 470
Steel, Manufacture of	J. M. Heath	London, England	Oct. 24, 1846	4, 822
Steel, Manufacture of	E. P. Hudson	Washington, D. C	Jan. 10, 1865	45, 828
Steel, Manufacture of	O. E. Hunter	Keyport, N. J	Apr. 5, 1870	101, 624
Steel, Manufacture of	J. J. Johnston	Columbiana, Ohio	May 14, 1872	126, 708
Steel, Manufacture of	S. W. Kirk	Coatesville, Pa	Mar. 20, 1866	53, 307
Steel, Manufacture of	H. A. Levallois	Paris, France	Jan. 7, 1873	134, 685
Steel, Manufacture of	F. A. Lohage	Unna, Prussia	Jan. 18, 1859	22, 687
Steel, Manufacture of	F. A. Lohage	Unna, Prussia	Mar. 1, 1859	23, 139
Steel, Manufacture of	R. Mushet	Cheltenham, England	Aug. 15, 1865	49, 487
Steel, Manufacture of	C. M. Nes	York, Pa	June 28, 1870	104, 873
Steel, Manufacture of	C. M. Nes	York, Pa	Oct. 11, 1870	108, 287
Steel, Manufacture of	C. M. Nes	York, Pa	June 4, 1872	127, 635
Steel, Manufacture of	C. M. Nes	York, Pa	Nov. 25, 1873	145, 005
Steel, Manufacture of	J. C. Schemmann	Hamburg, Germany	May 12, 1863	38, 504
Steel, Manufacture of	F. J. Slade	Trenton, N. J	May 17, 1870	103, 094
Steel, Manufacture of	F. J. Slade	Trenton, N. J	Apr. 4, 1871	113, 587
Steel, Manufacture of	J. Weisman	Philadelphia, Pa	July 5, 1864	43, 443
Steel, Manufacture of	G. F. Wilson	Providence, R. I	Mar. 26, 1872	125, 107
Steel, Manufacture of	S. W. Young	Providence, R. I	July 25, 1865	49, 050
Steel, Manufacture of cast	D. M. Adee	New York, N. Y	Nov. 15, 1864	45, 008
Steel, Manufacture of cast	F. Ellershausen	Ottawa, Canada	Oct. 1, 1867	69, 417
Steel, Manufacture of cast	P. G. Gardiner	New York, N. Y	Feb. 8, 1859	22, 864
Steel, Manufacture of cast	P. E. Jay and J. A. Rafter	Montreal, Canada	May 2, 1871	114, 299
Steel, Manufacture of cast	L. La Breche-Viger	Montreal, Canada	Sept. 28, 1869	95, 358
Steel, Manufacture of cast	H. McDonald	Pittsburgh, Pa	Mar. 29, 1870	101, 291
Steel, Manufacture of cast	R. F. and E. M. Mushet	Cheltenham, England	Aug. 29, 1871	118, 633
Steel, Manufacture of cast	E. L. Seymour	New York, N. Y	Nov. 19, 1867	71, 230
Steel, Manufacture of silicon	C. M. Nes	York, Pa	Feb. 21, 1871	112, 068
Steel, Manufacturing	J. Dixon	Jersey City, N. J	Nov. 2, 1858	21, 948
Steel, Manufacturing	J. J. Johnston	Allegheny, Pa	Nov. 16, 1869	97, 017
Steel, Manufacturing	B. Treutler	Dale, Pa	Jan. 31, 1860	27, 025
Steel, Manufacturing tools from cast	P. G. Gardiner	New York, N. Y	Feb. 8, 1859	22, 865
Steel-melting and boiler-heating furnace	P. W. Mackenzie	Blauveltville, N. Y	Sept. 10, 1872	131, 287
Steel melting and purifying furnace	A. Thoma	New York, N. Y	Oct. 22, 1867	70, 048
Steel melting and refining furnace	A. Thoma	New York, N. Y	Dec. 29, 1868	85, 410
Steel-melting furnace	W. Swindell	Allegheny City, Pa	Oct. 22, 1867	70, 042
Steel, Mold and core for casting	W. Kelly	Louisville, Ky	Nov. 5, 1872	132, 837
Steel mold, Cast	J. Deere	Moline, Ill	Apr. 5, 1864	42, 172
Steel, Mold for casting	J. Deere	Moline, Ill	Jan. 12, 1864	41, 203
Steel or cast iron with wrought or cast iron surfaces, Process for uniting cast.	J. D. Whelpley and J. I. Storer	Boston, Mass	Nov. 14, 1865	50, 976
Steel or iron pins in wood, Securing	R. Kitson	Lowell, Mass	Feb. 21, 1871	111, 947
Steel or iron plates, Formation of joints of	E. T. Ligon	Demopolis, Ala	Mar. 31, 1868	76, 088
Steel or iron with copper, Mode of uniting	E. T. Ligon	Demopolis, Ala	Sept. 17, 1867	69, 001
Steel or wrought iron, Uniting cast iron with	A. Mallory and C. Miles	Concord, Ohio	Aug. 1, 1831	....
Steel, Plant for the manufacture of Bessemer	J. B. Pearse	Swatara Township, Pa	Dec. 19, 1871	122, 052
Steel-plate-shearing machine	P. G. Gardiner	New York, N. Y	Mar. 10, 1857	16, 794
Steel plates, Manufacture of	O. Bolton, jr	Pittsburgh, Pa	July 15, 1873	140, 762
Steel plates, &c., Process of hardening	G. H. Porter	Bristol, Conn	Apr. 6, 1869	88, 585
Steel plates while being hardened and tempered, Clamp for holding.	C. W. Fillmore	Coral, Ill	Jan. 10, 1854	10, 404
Steel point springs, Edging and drawing	G. Stoudinger	Newark, N. J	Jan. 11, 1831	....
Steel, Process of converting iron into	T. Brooks	Minerva, Ohio	Aug. 15, 1871	118, 100
Steel, Process of converting iron into	E. L. Losey	New Brunswick, N. J	Nov. 20, 1823	....
Steel, Process of converting iron into	E. Savage	West Meriden, Conn	Feb. 20, 1866	52, 796
Steel, Process of converting wrought-iron wire, ribbon, and plates into.	W. A. Shaw	New York, N. Y	May 18, 1869	90, 313
Steel, Process of hardening	H. Brooke	Pittsburgh, Pa	May 18, 1869	90, 075
Steel, Process of hardening	S. W. Etchell	Weatherly, Pa	Jan. 14, 1873	134, 872
Steel, Process of introducing gas fuel into a converter for refining iron and making.	J. Absterdam	New York, N. Y	Nov. 24, 1868	84, 336
Steel, Process of restoring shape and tempering articles of hardened.	J. Silvester	West Bromwick, England	Aug. 31, 1852	9, 237
Steel, Process of shaping and hardening articles of	W. Rowland	Philadelphia, Pa	Nov. 21, 1865	51, 087
Steel, Producing	J. Myers, jr	Brooklyn, N. Y	Dec. 1, 1868	84, 644
Steel-producing furnace	E. L. Seymour	New York, N. Y	Jan. 5, 1869	85, 701
Steel, Refining cast iron and converting it into	E. and P. E. Martin	Paris, France	Dec. 10, 1867	72, 061

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Steel, Refining iron and making	J. Absterdam	New York, N. Y	Nov. 24, 1868	84, 334
Steel, Revolving	B. E. Hoyt	Ipswich, Mass	Aug. 20, 1834	....
Steel, Reworking Bessemer	C. M. Nes	York, Pa	May 10, 1870	102, 960
Steel, Rolling iron or	J. S. Seaman	Pittsburgh, Pa	Aug. 21, 1866	57, 388
Steel rollers, Making	H. Waterman	Brooklyn, N. Y	July 27, 1858	21, 039
Steel, Scraps and bars of iron converted into cast	S. Collins	Troy, N. Y	Apr. 10, 1823	....
Steel-spring fork	C. Goodyear	Philadelphia, Pa	Sept. 7, 1831	....
Steel springs, Apparatus for tempering	I. N. Bevans	Terrysville, Conn	May 28, 1867	65, 156
Steel springs, Composition for tempering	W. A. Meyer	Indianapolis, Ind	Dec. 24, 1867	72, 522
Steel springs, &c., Compound for tempering	L. W. Kelley	Brunswick, Ohio	Dec. 26, 1865	51, 728
Steel springs in the process of tempering, Preserving the shape of.	D. M. Smith	Springfield, Vt	Dec. 19, 1848	5, 979
Steel springs, Machine for coiling	P. G. Gardiner	New York, N. Y	Mar. 10, 1857	16, 793
Steel springs, Tempering	J. H. Deniger	Bridgeport, Conn	Mar. 23, 1869	88, 142
Steel springs, Tempering	W. Hughes	Bloomington, Ill	Aug. 1, 1865	49, 108
Steel springs, Tempering	J. Jenkinson	Williamsburgh, N. Y	Mar. 1, 1859	23, 142
Steel springs, Tempering	C. Manning	West Albany, N. Y	Jan. 1, 1867	60, 762
Steel springs, Tempering	C. G. and H. M. Plympton	Walpole, Mass	June 5, 1860	28, 600
Steel, steely iron, and homogeneous or crystalline iron, Manufacture of.	J. D. Whelpley and J. J. Storer	Boston, Mass	Jan. 31, 1871	111, 504
Steel surfaces on sheet and bar iron, Mode of forming.	J. W. Ells	Pittsburgh, Pa	Aug. 20, 1867	67, 857
Steel, Tempering	J. Wright	Sheffield, England	Jan. 3, 1860	26, 741
Steel tire	J. J. Young	Chicago, Ill	Dec. 10, 1872	133, 739
Steel-tired cast-wheels, Constructing	J. J. Young	Chicago, Ill	Dec. 10, 1872	133, 738
Steel to articles made of iron, Method of applying cast.	W. H. Singer	Pittsburgh, Pa	Dec. 22, 1868	85, 140
Steel to cast-iron, Mold for uniting	C. Peters	Trenton, N. J	Feb. 8, 1853	9, 578
Steel to iron, Method of attaching	T. S. Norton	Chicopee, Mass	Oct. 18, 1864	44, 739
Steel to iron or steel for tools, Preparing and welding cast.	D. Pettibone	Roxbury, Conn	Mar. 22, 1806	....
Steel tools, Process of manufacturing cast	D. Wihl	Brooklyn, N. Y	Aug. 8, 1871	117, 949
Steel tools, Process of manufacturing cast	D. Wihl	Brooklyn, N. Y	Aug. 8, 1871	117, 950
Steel trap	C. P. Goss and A. Rais	Waterbury, Conn	Jan. 21, 1868	73, 526
Steel trap	L. H. Thomas	Waterbury, Vt	Aug. 1, 1865	49, 174
Steel traps, Jaw for	W. Richter	Lansing, Mich	Dec. 3, 1867	71, 644
Steel traps, Manufacture of	A. Shepard	Plantsville, Conn	Sept. 29, 1863	40, 124
Steel traps, Method of setting	W. Jenks	Schroon, N. Y	Sept. 5, 1848	5, 748
Steel, Treating Bessemer	J. Myers, jr	Williamsburgh, N. Y	Dec. 27, 1870	110, 489
Steel tube or ingot, Cast	C. B. Morse	Rhinebeck, N. Y	Dec. 14, 1869	97, 953
Steel, Welding	H. Anderson	Garrattsville, N. Y	Mar. 18, 1856	14, 435
Steel wire and thin sheets of steel, Hardening	A. Benjamin	Newark, N. J	July 22, 1873	141, 105
Steelyard	J. Bartholomew	Middlebury, Vt	Feb. 27, 1819	....
Steelyard	B. Dearborn	....	Feb. 14, 1799	....
Steelyard	J. Edwards	New York	May 19, 1806	....
Steelyard	T. Fairbanks	Saint Johnsbury, Vt	Sept. 15, 1846	4, 761
Steelyard	S. Hills	Lincoln, Mass	Dec. 27, 1815	....
Steelyard	J. Holcomb	Brandon, Vt	Mar. 25, 1862	34, 754
Steelyard	B. Langdon	Saint Albans, Vt	Apr. 23, 1807	....
Steelyard	H. Maranville	Akron, Ohio	Aug. 25, 1868	81, 388
Steelyard	W. B. Preston	North Chelsea, Mass	Feb. 22, 1870	100, 066
Steelyard	W. A. Starratt	Boston, Mass	July 9, 1867	66, 533
Steelyard	P. H. Walker	Boston, Mass	Dec. 14, 1869	97, 839
Steelyard and scales	Z. Phinney	Greene County, N. Y	Jan. 6, 1814	....
Steelyard-balance	C. F. Dahl	Pittsburgh, Pa	Oct. 31, 1835	....
Steelyard-balance	E. and T. Fairbanks	Saint Johnsbury, Vt	Sept. 22, 1832	....
Steelyard-beam, Revolving	H. Kirkwood	Americus, Miss	Sept. 12, 1871	118, 862
Steelyard, Combined	M. Craw	Rush, N. Y	June 13, 1831	....
Steelyard-lever power	S. Andrews	Bridgeton, Me	Mar. 24, 1827	....
Steelyard, Scientific	L. Du Pré	....	May 12, 1802	....
Steelyard, Weighing	T. and W. Flint	Westford and Chelmsford, Mass.	Mar. 20, 1849	6, 194
Steelyard, Weighing	E. Willemin	Leesburgh, Ohio	Aug. 21, 1841	2, 224
Steering and propelling apparatus	H. Kühne	Racine, Wis	June 24, 1862	35, 693
Steering-apparatus	J. E. Andrews	Boston, Mass	Jan. 14, 1851	7, 905
Steering-apparatus	A. Beckers	Hoboken, N. J	Sept. 16, 1862	36, 445
Steering-apparatus	A. Beckers	Hoboken, N. J	Nov. 18, 1862	36, 936
Steering-apparatus	A. T. Boon	Galesburgh, Ill	Apr. 20, 1869	89, 015
Steering-apparatus	C. F. Brown	Warren, R. I	July 22, 1850	7, 516
Steering-apparatus	J. L. Cathcart	Georgetown, D. C	Feb. 4, 1868	73, 951
Steering-apparatus	J. T. Chabot	Buffalo, N. Y	Feb. 28, 1860	27, 270
Steering-apparatus	D. H. Chamberlain	West Roxbury, Mass	July 7, 1857	17, 724
Steering-apparatus	D. N. B. Coffin, jr	Boston, Mass	Jan. 7, 1873	134, 516
Steering-apparatus	E. S. Coffin	Boston, Mass	Jan. 8, 1867	61, 052
Steering-apparatus	G. Coffin	Boston, Mass	Aug. 8, 1865	49, 233
Steering-apparatus	G. A. Colbert	Downsville, Md	Mar. 3, 1868	75, 125
Steering-apparatus	J. S. Colvin	Pittsburgh, Pa	Jan. 3, 1860	26, 652
Steering-apparatus	W. H. Conway	Harrison, Md	May 5, 1868	77, 590
Steering-apparatus	S. B. Cram and C. Weed	Boston, Mass	May 11, 1858	20, 239
Steering-apparatus	A. G. Crossman	Huntington, N. Y	Mar. 28, 1871	113, 025
Steering-apparatus	J. D. Crowell	Boston, Mass	Dec. 5, 1854	12, 021
Steering-apparatus	G. H. Davis	Stony Brook, N. Y	May 4, 1869	89, 635
Steering-apparatus	D. De Haven	New Orleans, La	July 19, 1870	105, 436
Steering-apparatus	E. S. Drew	New Orleans, La	Aug. 15, 1871	118, 176
Steering-apparatus	J. W. Drummond	Norwalk, Conn	Aug. 12, 1856	15, 510
Steering-apparatus	S. M. Dumont, F. Dupraz, and J. Dickason.	Vevay, Ind	June 5, 1866	55, 257
Steering-apparatus	F. Dupraz, S. M. Dumont, and J. Dickason.	Vevay, Ind	Oct. 16, 1866	58, 791
Steering-apparatus	C. Flanders	Boston, Mass	Oct. 18, 1853	10, 129
Steering-apparatus	W. H. Foster	Portsmouth, N. H	Oct. 8, 1867	69, 558
Steering-apparatus	E. Fox	New York, N. Y	Dec. 28, 1869	98, 241
Steering-apparatus	J. Gardner	New York, N. Y	Sept. 12, 1871	118, 923
Steering-apparatus	W. Gilkey	Watertown, Mass	Jan. 19, 1869	86, 065
Steering-apparatus	W. Godsoe	Manchester, Mass	June 7, 1859	24, 351
Steering-apparatus	E. E. Green	East Gloucester, Mass	Mar. 15, 1870	100, 750
Steering-apparatus	S. Groynn	New York, N. Y	Jan. 27, 1863	37, 503
Steering-apparatus	C. G. Gumpel	London, England	Aug. 16, 1870	106, 358

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Steering-apparatus	C. M. Hayden	South Thomaston, Me	July 5, 1870	104, 955
Steering-apparatus	H. F. Hicks	Grand View, Ind	Feb. 12, 1867	61, 937
Steering-apparatus	H. Higgins	Orleans, Mass	Oct. 11, 1859	25, 734
Steering-apparatus	E. F. Howard	Boston, Mass	July 23, 1867	66, 963
Steering-apparatus	W. P. Hunter and J. D. Spaulding.	Boston, Mass	Oct. 8, 1861	33, 465
Steering-apparatus	W. W. Huse	Brooklyn, N. Y	Apr. 10, 1860	27, 875
Steering-apparatus	E. A. Inglefield	London, England	Feb. 7, 1871	111, 546
Steering-apparatus	P. H. Jackson	New York, N. Y	Apr. 28, 1868	77, 288
Steering-apparatus	P. H. Jackson	New York, N. Y	Mar. 23, 1869	88, 170
Steering-apparatus	P. H. Jackson	New York, N. Y	Oct. 22, 1872	132, 467
Steering-apparatus	D. Jones	Boston, Mass	Feb. 21, 1860	27, 223
Steering-apparatus	D. Jones	Boston, Mass	Apr. 5, 1864	42, 198
Steering-apparatus	W. O. Jones	Portland, Me	Apr. 17, 1866	53, 985
Steering-apparatus	R. F. Joynes	Bristol, R. I	May 28, 1861	32, 427
Steering-apparatus	H. Keen	Philadelphia, Pa	Sept. 23, 1873	143, 016
Steering-apparatus	J. S. Lake	Smith's Landing, N. J	Oct. 18, 1859	25, 839
Steering-apparatus	J. J. and J. McCausland	Rondout, N. Y	May 14, 1861	32, 293
Steering-apparatus	G. R. Moore	Westford, Mass	Nov. 5, 1861	33, 683
Steering-apparatus	I. Moore	Brooklyn, N. Y	Mar. 30, 1858	19, 810
Steering-apparatus	F. A. Morley	Sodus Point, N. Y	Aug. 17, 1858	21, 210
Steering-apparatus	F. A. Morley	Sodus Point, N. Y	July 9, 1861	32, 780
Steering-apparatus	T. W. Murray	New York, N. Y	July 9, 1867	66, 615
Steering-apparatus	J. Myers	Jersey City, N. J	Aug. 12, 1873	141, 660
Steering-apparatus	A. H. North	Naubuc, Conn	June 6, 1865	48, 087
Steering-apparatus	J. Perkins	Saco, Me	Oct. 29, 1867	70, 255
Steering-apparatus	M. R. Perkins	Portsmouth, N. H	Nov. 4, 1873	144, 252
Steering-apparatus	C. Perley	New York, N. Y	Feb. 24, 1863	37, 768
Steering-apparatus	T. C. Purington	Vallejo, Cal	Sept. 27, 1870	107, 719
Steering-apparatus	P. P. Quimby	Belfast, Me	Mar. 19, 1850	7, 197
Steering-apparatus	J. Reed	Marshfield, Mass	Aug. 14, 1847	5, 242
Steering-apparatus	J. Reed	Marshfield, Mass	June 5, 1849	6, 507
Steering-apparatus	J. Reed	Marshfield, Mass	Mar. 6, 1855	12, 488
Steering-apparatus	J. Reed	Marshfield, Mass	Dec. 28, 1858	22, 453
Steering-apparatus	S. C. Richards	Saint Louis, Mo	Dec. 15, 1868	85, 027
Steering-apparatus	N. Richardson	Gloucester, Mass	Aug. 1, 1865	49, 196
Steering-apparatus	N. Richardson	Gloucester, Mass	July 27, 1869	93, 122
Steering-apparatus	N. Richardson	Gloucester, Mass	Aug. 8, 1871	117, 929
Steering-apparatus	T. M. Richardson	Searsport, Me	Nov. 17, 1857	18, 663
Steering-apparatus	T. M. Richardson	Stockton, Me	Nov. 16, 1869	96, 964
Steering-apparatus	G. W. Robinson	Boston, Mass	Mar. 15, 1859	23, 265
Steering-apparatus	G. W. Robinson	Somerville, Mass	July 2, 1861	32, 719
Steering-apparatus	P. W. Robinson	New Bedford, Mass	Dec. 12, 1865	51, 481
Steering-apparatus	J. F. Rochow	Brooklyn, N. Y	Sept. 1, 1863	39, 752
Steering-apparatus	A. D. Rollings	Green Point, N. Y	June 19, 1860	28, 813
Steering-apparatus	E. Rouse	Augusta, Me	July 31, 1866	56, 802
Steering-apparatus	M. W. Ruthven	Middlesex, England	Apr. 10, 1866	53, 934
Steering-apparatus	A. Sargent	Brewer, Me	Aug. 18, 1868	81, 114
Steering-apparatus	C. H. Sawyer	Buxton, Me	Mar. 31, 1868	76, 105
Steering-apparatus	A. A. Scank	Nyack, N. Y	Nov. 9, 1869	96, 622
Steering-apparatus	J. C. Schrader and C. A. Mathiesen.	New York, N. Y	Jan. 3, 1871	110, 793
Steering-apparatus	C. A. Seavey	Hodgdon's Mills, Me	Aug. 19, 1873	141, 958
Steering-apparatus	G. Seymour	London, England	Aug. 9, 1870	106, 217
Steering-apparatus	H. F. Shaw	West Roxbury, Mass	June 23, 1868	79, 263
Steering-apparatus	H. F. Shaw	West Roxbury, Mass	Aug. 19, 1873	142, 047
Steering-apparatus	H. E. Skinner	London, England	Sept. 28, 1869	95, 278
Steering-apparatus	A. Smith	Perrysburgh, Ohio	Feb. 17, 1863	37, 710
Steering-apparatus	N. Snow, jr	Boston, Mass	Nov. 1, 1859	25, 983
Steering-apparatus	N. Snow, jr	Boston, Mass	Aug. 14, 1860	29, 630
Steering-apparatus	R. Sparks	Buffalo, N. Y	Dec. 4, 1866	60, 276
Steering-apparatus	J. F. Sparr	Rochester, N. Y	Mar. 4, 1873	136, 464
Steering-apparatus	J. Stowell	Charlestown, Mass	June 13, 1854	11, 088
Steering-apparatus	W. Strange	Bangor, Me	Sept. 26, 1871	119, 425
Steering-apparatus	A. Swingle and N. Hunt	Boston, Mass	Apr. 27, 1852	8, 914
Steering-apparatus	E. W. Tarbell	Boston, Mass	July 31, 1860	29, 447
Steering-apparatus	J. P. Teale and W. J. Brassington.	Brooklyn, N. Y	Aug. 13, 1867	67, 686
Steering-apparatus	A. R. Tewkesbury	Boston, Mass	Jan. 16, 1855	12, 250
Steering-apparatus	W. E. Thomas	Queenstown, Md	Sept. 23, 1873	143, 200
Steering-apparatus	N. L. Tomlinson	New York, N. Y	Jan. 19, 1869	86, 043
Steering-apparatus	E. A. Turner	New York, N. Y	May 15, 1866	54, 824
Steering-apparatus	J. B. Van Deusen	New York, N. Y	June 12, 1866	55, 559
Steering-apparatus	S. L. Walkinshaw	Baden, Pa	Dec. 4, 1866	60, 295
Steering-apparatus	J. H. Weaver	Mauricetown, N. J	Dec. 31, 1867	72, 945
Steering-apparatus	N. W. Wheeler	Buffalo, N. Y	Feb. 3, 1852	8, 712
Steering-apparatus	H. York	Smith's Landing, N. J	July 13, 1869	92, 555
Steering-apparatus for navigable vessels	R. and T. Winans	Baltimore, Md	Mar. 26, 1861	31, 845
Steering-apparatus for sectional boats	W. Frick	Middletown, Pa	Sept. 29, 1868	82, 614
Steering-apparatus for steam-vessels	S. F. Covington	New Albany, Ind	May 10, 1864	42, 642
Steering-apparatus for torpedo-boats	J. A. Ballard	Bombay, India	Sept. 13, 1870	107, 326
Steering-apparatus, Parallelogram	J. Reed	Marshfield, Mass	Feb. 26, 1850	7, 126
Steering-apparatus, Relief	N. T. Edson	New Orleans, La	Apr. 27, 1852	8, 905
Steering-apparatus, Ship's	W. Beers	Milan, Ohio	Mar. 8, 1859	23, 150
Steering-apparatus, Ship's	T. Carr	Liverpool, England	Nov. 11, 1856	16, 045
Steering-apparatus, Ship's	J. B. Holmes	New York, N. Y	Mar. 3, 1857	16, 773
Steering-apparatus, Ship's, &c	S. Nicolson	Boston, Mass	Sept. 12, 1837	381
Steering-apparatus, Ship's	D. W. Smith	Boston, Mass	Dec. 2, 1856	16, 165
Steering-apparatus, Ship's	P. Smith	Patchogue, N. Y	June 9, 1857	17, 525
Steering-apparatus, Ship's	S. N. Smith	New York, N. Y	Apr. 7, 1857	17, 002
Steering-apparatus, Ship's	D. J. Wilcoxson	Milan, Ohio	Apr. 5, 1859	23, 534
Steering apparatus, Steam	J. M. Gray	Liverpool, England	Dec. 28, 1869	98, 371
Steering apparatus, Steam	H. F. Hicks	Grand View, Ind	May 24, 1870	103, 458
Steering apparatus, Steam	C. S. Morrison	Keokuk, Iowa	Jan. 27, 1863	37, 517
Steering brace, Boat	H. Nichols	New Bedford, Mass	Sept. 18, 1841	2, 259
Steering device, Boat	J. D. Willoughby	Washington, D. C	June 6, 1865	48, 124
Steering-device for canal-boats, &c	E. and J. McCreary	Middletown, Pa	Apr. 16, 1872	125, 684
Steering-indicator	N. C. Franzen	Hamburg, Germany	June 11, 1867	65, 740

Index of patents issued from the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Steering-machine, Hydraulic	H. O. Cook	Portland, Me	Mar. 6, 1866	52,970
Steering-propeller	J. L. Cathcart	Washington, D. C	Feb. 4, 1873	135,404
Steering rods or chains, Fair-leader for	A. W. Robinson	Providence, R. I	Nov. 28, 1871	121,423
Steering-screw	F. Liburn	New York, N. Y	Apr. 10, 1866	53,840
Steering ships, &c	E. Soule	Duxbury, Mass	Nov. 3, 1832	....
Steering ships and other vessels, Machine for	M. Pearson	Newburyport, Mass	Apr. 1, 1829	....
Steering steamboats, Apparatus for	R. Evarts	Madison, Conn	Jan. 5, 1841	1,925
Steering submarine vessels	L. D. Phillips	Michigan City, Ind	Nov. 9, 1852	9,389
Steering torpedo-boats, &c., Electro-magnetic apparatus for.	J. G. Foster	Nashua, N. H	Mar. 26, 1872	125,039
Steering vessels	S. G. Clark and G. Stimson	Charlestown, Mass	Apr. 26, 1826	....
Steering vessels	F. N. Gisborne	London, England	Jan. 5, 1864	41,150
Steering vessels	J. B. Holmes	Boston, Mass	Apr. 11, 1834	....
Steering vessels	R. Kingsbury and E. Rowse	Bath, Me	July 10, 1826	....
Steering vessels	J. Philips and J. Smallman	Philadelphia, Pa	Sept. 18, 1810	....
Steering vessels, Apparatus for	B. F. Adams	Boston, Mass	Nov. 19, 1833	....
Steering vessels, Apparatus for	I. L. Blanchard	Weymouth, Mass	Sept. 11, 1847	5,284
Steering vessels, Apparatus for	C. W. Buffington	Cleveland, Ohio	Dec. 9, 1873	145,394
Steering vessels, Apparatus for	C. Henije	Hoboken, N. J	Feb. 13, 1872	123,629
Steering vessels, Apparatus for	L. Hunt	Buffalo, N. Y	May 6, 1873	138,652
Steering vessels, Apparatus for	J. Reed	Marshfield, Mass	Jan. 26, 1847	4,940
Steering vessels, Apparatus for	G. W. and E. B. Robinson	Boston, Mass	Sept. 30, 1842	2,797
Steering vessels, Apparatus for	A. Shermer	Philadelphia, Pa	June 19, 1847	5,162
Steering vessels, Apparatus for	A. Siebenthal	Vevay, Ind	Aug. 5, 1873	141,598
Steering vessels, Apparatus for	H. J. Smith	Boston, Mass	Apr. 8, 1873	137,574
Steering vessels, Apparatus for	C. Weed	Boston, Mass	Dec. 8, 1857	18,835
Steering vessels by steam, Apparatus for	W. W. Dungan	Baltimore, Md	Mar. 4, 1873	136,493
Steering vessels by steam, Apparatus for	W. J. Millar	McKeesport, Pa	Jan. 1, 1867	60,771
Steering vessels by water, Apparatus for	J. H. Foster	Detroit, Mich	Dec. 3, 1861	33,832
Steering vessels, Machinery for	R. C. Holmes and J. J. Springer	Cape May, N. J	July 20, 1846	4,652
Steering vessels, Means of	R. Creuzbaur	New York, N. Y	May 1, 1867	64,846
Steering vessels, Method of	E. Rowse	Augusta, Me	Oct. 3, 1848	5,832
Steering vessels, Mode of	F. E. Sickels	New York, N. Y	July 17, 1860	29,200
Steering-wheel	C. F. E. Blaich and P. A. Bishop	Elyria, Ohio	Mar. 15, 1859	23,284
Steering-wheel	E. S. Coffin	Boston, Mass	July 10, 1826	....
Steering-wheel	D. Knowlton	Camden, Me	Apr. 26, 1859	23,770
Steering-wheel for ships, &c	A. Morse	Boston, Mass	Dec. 1, 1837	494
Steering-wheel for vessels	J. M. Brown	Boston, Mass	Feb. 24, 1826	....
Steering-wheel for vessels	P. T. Share	Baltimore, Md	Nov. 28, 1842	2,865
Steering-wheel stop	I. N. Bunker	Weymouth, Mass	July 14, 1868	79,947
Steering-wheel stopper	W. R. Lavender and A. Smith	Provincetown, Mass	Jan. 15, 1856	14,104
Stern and standard for fragile ware	F. A. Will	San Francisco, Cal	Sept. 3, 1872	131,141
Stench-trap	J. Brown	San Francisco, Cal	Nov. 23, 1869	97,033
Stench-trap	J. F. Dacey	Charlestown, Mass	June 29, 1869	92,020
Stench-trap	P. W. Doherty	Boston, Mass	Jan. 7, 1873	134,652
Stench-trap	M. Gafney	Newark, N. J	Oct. 31, 1871	120,427
Stench-trap	J. S. Haley and S. Morrell	New York, N. Y	July 27, 1869	93,084
Stench-trap	J. P. Hyde	New York, N. Y	Oct. 21, 1873	143,907
Stench-trap	S. Lawrence	New York, N. Y	July 11, 1871	116,967
Stench-trap	T. Ledbeter	Detroit, Mich	June 24, 1873	140,145
Stench-trap	J. Marquis	San Francisco, Cal	June 4, 1872	127,496
Stench-trap	J. Semple	Chicago, Ill	Sept. 9, 1873	142,739
Stench-trap	D. C. Stillson	Charlestown, Mass	Dec. 13, 1870	110,087
Stench-trap	F. H. Williams	Syracuse, N. Y	July 17, 1866	56,478
Stench-trap	F. H. Williams	Syracuse, N. Y	July 17, 1866	56,479
Stench-trap	F. H. Williams	Syracuse, N. Y	Sept. 1, 1868	81,719
Stench-trap and overflow for basins	J. McCloskey	New York, N. Y	Mar. 2, 1869	87,422
Stench-trap, Bell	C. H. Bush	Fall River, Mass	Feb. 5, 1856	14,180
Stench-trap for sinks	A. Carson	New York, N. Y	Sept. 25, 1860	30,121
Stench-trap pipes, Machine for rolling	H. H. Taylor and J. H. Wilson	Rochester, N. Y	July 2, 1867	66,265
Stench-traps, Casting	J. E. White	New York, N. Y	Nov. 29, 1870	109,786
Stench-traps, Construction of	N. Thompson	Brooklyn, N. Y	June 25, 1872	128,263
Stench-traps, Core for casting	M. Gafney	Newark, N. J	Mar. 25, 1873	137,133
Stench-traps, Drain-screw attachment for	J. A. Lowe	New York, N. Y	June 4, 1872	127,620
Stench-traps, Mold for casting	A. H. Hook	New York, N. Y	July 29, 1873	141,353
Stencil	R. A. Adams	Saint Louis, Mo	Dec. 14, 1858	22,272
Stencil, Changeable	J. Bigelow	Brighton, Mass	Sept. 20, 1859	25,481
Stencil-cutting gage	N. Stafford	Brooklyn, N. Y	Mar. 16, 1869	87,983
Stencil-impress	G. V. Metzel	Baltimore, Md	Apr. 13, 1869	88,975
Stencil-numbering apparatus	J. M. Merritt	Buffalo, N. Y	July 24, 1866	56,674
Stencil-pallet	J. H. Merriam	Boston, Mass	Apr. 13, 1858	19,943
Stencil-plate	J. F. W. Dorman	Baltimore, Md	July 16, 1872	129,271
Stencil-plate	J. McCullagh	New York, N. Y	Apr. 2, 1872	125,204
Stencil-plate	F. L. Morrison	New Albany, Ind	Apr. 1, 1873	137,317
Stencil-plate	J. C. Nye	Cincinnati, Ohio	Mar. 8, 1864	41,856
Stencil-plate	W. W. Potter	Buffalo, N. Y	May 12, 1868	77,759
Stencil-plate	G. R. Powers	Kingston, Mass	Apr. 30, 1867	64,252
Stencil-plate	L. Robinson	New Haven, Conn	Oct. 29, 1872	132,691
Stencil-plate	S. C. Sumner	Boston, Mass	Feb. 10, 1863	37,648
Stencil-plate	J. Sykes	Muscatine, Iowa	June 21, 1864	43,237
Stencil-plate	E. L. Tarbox	Nashville, Tenn	Aug. 11, 1868	81,032
Stencil-plate	J. L. and H. L. Tarbox	New York, N. Y	Mar. 9, 1869	87,727
Stencil-plate	J. Wentz	Shelby, Ohio	Jan. 23, 1866	52,234
Stencil-plate, Changeable	J. J. De Barry	Brooklyn, N. Y	Aug. 4, 1868	80,711
Stencil-plate for numbering barrels, &c	J. H. Bradford	Westborough, Mass	Nov. 10, 1868	83,912
Stencil-plate or apparatus for marking boxes, &c	E. Allen	Windham, Conn	Sept. 4, 1840	1,767
Stencil-plates, Device for cutting	H. Bolthoff	Central City, Colo	Oct. 10, 1871	119,737
Stencil-plates, Die for cutting	D. G. Garretson	New York, N. Y	Dec. 1, 1863	40,747
Stenciling	E. B. Foster	Philadelphia, Pa	May 13, 1845	4,045
Stenciling-apparatus	T. E. Fields	Louisville, Ky	June 29, 1869	92,028
Stenciling-apparatus	H. Kimball	Poughkeepsie, N. Y	Dec. 5, 1871	121,634
Stenciling-apparatus	L. Schmidt and F. E. Held	Chicago, Ill	July 13, 1869	92,657
Stenciling-plate	E. B. Foster	Northern Liberties, Pa	Apr. 18, 1848	5,511
Step and holder for blacking-implements, Combined library.	R. G. Elder	New York, N. Y	Nov. 28, 1871	121,345
Step and step-box	J. Watson	Philadelphia, Pa	July 15, 1873	140,977
Step-chair, Library	A. Eliaers	Boston, Mass	Oct. 25, 1853	10,151

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Invention.	Inventor.	Residence.	Date.	No.
Step-cover	D. P. Dieterich and R. M. Popham.	Philadelphia, Pa	June 6, 1871	115, 717
Step-cover and wheel-fender, Combined	F. H. Niemann	Cincinnati, Ohio	June 3, 1873	139, 602
Step-covering	C. E. Kemp and J. N. Patterson.	Philadelphia, Pa	Jan. 18, 1870	98, 978
Step, Folding	B. J. Harrison and J. Condie	New York, N. Y	Dec. 3, 1867	71, 611
Step-ladder chair	H. Willgohs	New York, N. Y	June 3, 1873	139, 488
Step-spindle	E. Dougherty	North Lewisburgh, Ohio	Mar. 22, 1870	101, 109
Steps, Illuminating ventilating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 209
Stereopticon-apparatus	A. G. Buzby	Philadelphia, Pa	Apr. 2, 1872	125, 267
Stereoscope	A. Beckers	New York, N. Y	May 29, 1866	55, 044
Stereoscope	A. Beckers	New York, N. Y	Jan. 25, 1870	99, 136
Stereoscope	F. Dayton and W. S. Kelly	Watertown and Waterbury, Conn.	Sept. 9, 1862	36, 395
Stereoscope	W. B. Glover	Boston, Mass	May 28, 1872	127, 231
Stereoscope	O. Goerke	Brooklyn, N. Y	Dec. 24, 1867	72, 480
Stereoscope	S. D. Goodale	Cincinnati, Ohio	Feb. 5, 1861	31, 310
Stereoscope	S. D. Goodale	Cincinnati, Ohio	July 18, 1865	48, 807
Stereoscope	A. Heilbrun	Cincinnati, Ohio	Dec. 3, 1867	71, 753
Stereoscope	W. M. Kohl	Cincinnati, Ohio	Apr. 7, 1868	76, 472
Stereoscope	W. Loyd	Philadelphia, Pa	Mar. 15, 1859	23, 257
Stereoscope	P. Murphy	New York, N. Y	Feb. 25, 1873	136, 333
Stereoscope	A. Quirolo	New York, N. Y	Feb. 20, 1866	52, 744
Stereoscope	A. Quirolo	New York, N. Y	Nov. 12, 1872	132, 981
Stereoscope	A. Quirolo	New York, N. Y	May 13, 1873	138, 930
Stereoscope	D. S. Rawson	Peru, Ill	Jan. 22, 1867	61, 359
Stereoscope	L. D. Sibley	Chicago, Ill	Aug. 12, 1873	141, 822
Stereoscope	J. W. Storrs	Birmingham, Conn	Jan. 21, 1868	73, 472
Stereoscope	C. H. Wheeler and J. A. Bazin	West Roxbury and Canton, Mass.	Dec. 1, 1863	40, 798
Stereoscope, Box	T. Fugate	Cincinnati, Ohio	Sept. 20, 1870	107, 476
Stereoscope, Box	S. T. Jennings	Cincinnati, Ohio	May 31, 1870	103, 817
Stereoscope, Box	W. M. Kohl	Cincinnati, Ohio	May 16, 1871	114, 829
Stereoscope-case	A. Beckers	New York, N. Y	Apr. 12, 1859	23, 543
Stereoscope-case	W. Loyd	Philadelphia, Pa	Apr. 15, 1856	14, 670
Stereoscope-case	J. Stull	Philadelphia, Pa	Feb. 20, 1855	12, 451
Stereoscope, Convertible	W. H. Jacoby	Xenia, Ohio	Aug. 7, 1866	56, 944
Stereoscope, Folding	J. A. Bazin	Canton, Mass	June 3, 1873	139, 534
Stereoscope, Folding	N. Chase	Enfield, N. H	July 16, 1872	129, 100
Stereoscope, Folding	E. K. Page	Havana, N. Y	July 5, 1870	104, 990
Stereoscope, Hand	A. Beckers	New York, N. Y	May 30, 1871	115, 269
Stereoscope-instrument	J. F. Adams	New York, N. Y	June 29, 1869	91, 997
Stereoscope, Pocket	T. D. Simonton	Saint Paul, Minn	June 29, 1869	91, 975
Stereoscope, Pocket	T. D. Simonton	Saint Paul, Minn	June 29, 1869	91, 976
Stereoscope, Revolving	A. Beckers	New York, N. Y	Jan. 25, 1870	99, 135
Stereoscope, Revolving	J. H. Clark	Rockford, Ill	Aug. 6, 1872	130, 191
Stereoscopic apparatus	G. Beigel	New York, N. Y	Nov. 5, 1867	70, 391
Stereoscopic apparatus	S. D. Goodale	Cincinnati, Ohio	Dec. 1, 1863	40, 794
Stereoscopic apparatus	J. Lee	New York, N. Y	Feb. 1, 1859	22, 838
Stereoscopic apparatus	T. C. Roche	New York, N. Y	Dec. 20, 1859	26, 525
Stereoscopic apparatus	H. Swan	Charing Cross, England	Jan. 2, 1866	51, 906
Stereoscopic camera	W. Harris	Danville, Vt	Dec. 9, 1873	145, 296
Stereoscopic instrument	A. Beckers	New York, N. Y	July 26, 1859	24, 855
Stereoscopic instrument	E. G. Chorman	Philadelphia, Pa	Apr. 14, 1863	38, 196
Stereoscopic instrument	E. G. Chorman	Philadelphia, Pa	Apr. 14, 1863	38, 197
Stereoscopic instrument	W. Loyd	New York, N. Y	Jan. 24, 1860	26, 912
Stereoscopic medallion	J. F. Mascher	Philadelphia, Pa	Jan. 16, 1855	12, 257
Stereoscopic-picture case	H. Glosser	New York, N. Y	May 24, 1859	24, 115
Stereoscopic-picture case	I. F. Woodward	McMinnville, Tenn	Oct. 24, 1871	120, 224
Stereoscopic-picture holder	J. L. Dibble	New York, N. Y	Nov. 7, 1871	120, 724
Stereoscopic-picture holder	S. D. Samson and G. H. Smith	Woburn and Waltham, Mass.	Oct. 7, 1873	143, 467
Stereoscopic pictures, Apparatus for displaying	J. Beckel	New York, N. Y	Jan. 25, 1859	22, 695
Stereoscopic pictures, Apparatus for exhibiting	A. Beckers	New York, N. Y	Apr. 7, 1857	16, 962
Stereoscopic pictures, Apparatus for exhibiting	A. Beckers	New York, N. Y	Apr. 5, 1859	23, 438
Stereoscopic pictures, Apparatus for exhibiting	S. Perry	Newport, N. Y	June 7, 1859	24, 327
Stereoscopic pictures, Apparatus for moving	A. S. Southworth and J. J. Hanes.	Boston, Mass	June 19, 1855	13, 106
Stereoscopic pictures, Case for exhibiting	G. H. Sealey and J. Lee	New York, N. Y	Mar. 20, 1860	27, 572
Stereoscopic pictures of moving objects, Exhibiting	C. Sellers	Philadelphia, Pa	Feb. 5, 1861	31, 357
Stereotype	F. H. Aiken	Franklin, N. H	Nov. 21, 1871	121, 036
Stereotype-block	A. Case	New Haven, Conn	Apr. 24, 1866	54, 110
Stereotype-block	J. Fish	Chicago, Ill	May 16, 1871	114, 786
Stereotype-block	S. G. Goodrich	Boston, Mass	Oct. 11, 1828	....
Stereotype-block	E. Hale	Boston, Mass	Feb. 15, 1833	....
Stereotype-block	W. A. Pinnell	New York, N. Y	June 4, 1872	127, 512
Stereotype-block	S. Sawyer	Boston, Mass	May 28, 1832	....
Stereotype-block	R. P. Tickle	London, England	July 9, 1872	128, 826
Stereotype-block, Extendible	G. W. Grater	New York	Jan. 7, 1831	....
Stereotype-block holder	M. J. Hughes	New York, N. Y	Feb. 25, 1873	136, 244
Stereotype-blocks, Moving forward the "hooker" of	B. Hackett	Boston, Mass	May 21, 1832	....
Stereotype casting	J. M. Willbur	Cleveland, Ohio	Nov. 19, 1867	71, 104
Stereotype composition, Gutta-percha	J. Herriet	New York, N. Y	Oct. 24, 1854	11, 831
Stereotype composition, Gutta-percha	L. Westbrook	New York, N. Y	July 19, 1853	9, 870
Stereotype, Making rubber	G. K. Cooke	New York, N. Y	Apr. 22, 1873	138, 006
Stereotype, Making rubber	H. D. Perky	Washington, D. C	Oct. 17, 1871	120, 096
Stereotype-matrices, Machine for preparing	W. T. Morgans	Youngville, N. Y	Nov. 1, 1870	108, 813
Stereotype-matrices, Machine for producing	R. E. Draper	Sacramento, Cal	May 30, 1871	115, 287
Stereotype-matrices, Machine for producing	A. Shiland	Albany, N. Y	Oct. 3, 1871	119, 537
Stereotype-mold	L. Guex	New York, N. Y	June 27, 1871	116, 304
Stereotype-mold	M. Nelson	New York, N. Y	Apr. 26, 1870	102, 304
Stereotype-molds, Apparatus for forming	J. D. McLean	New York, N. Y	June 28, 1864	43, 323
Stereotype-molds, Machine for making	R. A. Hill	Chicago, Ill	July 15, 1873	140, 921
Stereotype-molds, Machine for producing	J. MacNair	New Orleans, La	Dec. 24, 1867	72, 515
Stereotype-molds, Paste for making	S. Crump	New York, N. Y	Dec. 24, 1872	134, 196
Stereotype or electrotype plates, Machine for forming molds for.	M. Nelson	New York, N. Y	June 4, 1867	65, 501
Stereotype-pan	R. D. Mott	Spring Garden, Pa	Mar. 28, 1854	10, 704

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Invention.	Inventor.	Residence.	Date.	No.
Stereotype-plate	M. S. Beach	Brooklyn, N. Y	July 29, 1862	35,986
Stereotype-plate	N. Hale	Boston, Mass	Nov. 20, 1829	....
Stereotype-plate block	B. Hackett	Boston, Mass	Mar. 8, 1831	....
Stereotype-plate holder	A. T. De Puy	New York, N. Y	Mar. 12, 1867	62,826
Stereotype-plate holder	C. Hurst	Philadelphia, Pa	May 27, 1873	139,393
Stereotype-plate holder	W. Schnauffer	Baltimore, Md	Mar. 11, 1873	136,769
Stereotype-plate holder	F. Scholefield	Chicago, Ill	Apr. 29, 1873	138,290
Stereotype-plates, Apparatus for melting metals for casting.	C. F. Cosfeldt, jr., and T. T. Pears.	Philadelphia, Pa	June 7, 1864	43,071
Stereotype-plates, Apparatus for punching	D. B. Ray	Galena, Ill	July 5, 1859	24,662
Stereotype-plates, Block for holding	A. N. Kellogg	Chicago, Ill	Mar. 23, 1869	88,180
Stereotype-plates, Cam and spring block for fastening.	A. Chandler	Concord, Mass	July 13, 1832	....
Stereotype plates, Casting	W. Blanchard	Washington, D. C	Feb. 22, 1859	23,009
Stereotype plates, Casting	H. P. Cook	Albany, N. Y	Aug. 3, 1852	9,166
Stereotype plates, Casting	J. M. Mahan	Philadelphia, Pa	Sept. 24, 1850	7,669
Stereotype plates, Composition for	J. Warren	New Harmony, Ind	Apr. 25, 1846	4,479
Stereotype plates, Compound for	J. L. Kingsley	New York, N. Y	Jan. 18, 1853	9,548
Stereotype-plates, Construction of papier-maché matrices for.	W. Nelson	Boston, Mass	Feb. 12, 1867	62,058
Stereotype-plates, Device for	W. F. Draper	Andover, Mass	Dec. 12, 1865	51,437
Stereotype-plates in casting, Blocking	M. J. Hughes	New York, N. Y	Dec. 2, 1873	145,179
Stereotype-plates, Machine for forming	J. M. Willbur	Cleveland, Ohio	Sept. 22, 1868	82,463
Stereotype-plates, Machine for making matrices for	J. A. Marquez	New York, N. Y	Mar. 4, 1873	136,442
Stereotype-plates, Machine for planing	H. Barth	Cincinnati, Ohio	Feb. 25, 1873	136,204
Stereotype-plates, Machine for planing and squaring the ends of segmental.	W. Bullock	Philadelphia, Pa	Mar. 1, 1870	100,368
Stereotype-plates, Mechanism for setting type in making.	J. Paulding	New York, N. Y	Jan. 16, 1866	52,073
Stereotype-plates, Method of preparing	J. McElheran	Brooklyn, N. Y	Apr. 27, 1858	20,081
Stereotype-plates, Molding and casting	C. Hobbs	New York, N. Y	Sept. 2, 1851	8,333
Stereotype-plates, Molding gutta-percha	J. L. Kingsley	New York, N. Y	June 14, 1853	9,790
Stereotype-plates, Process for making	S. H. Mix	Schoharie, N. Y	July 10, 1860	29,091
Stereotype-printing block	M. Smith	New York	Jan. 20, 1819	....
Stereotypers' putty	J. M. Willbur	Cleveland, Ohio	Sept. 22, 1868	82,464
Stereotyping	A. Chace	Ithaca, N. Y	Nov. 1, 1870	108,879
Stereotyping	C. Davison	Saratoga, N. Y	Nov. 26, 1844	3,836
Stereotyping and telegraphing machine, Combined	M. Gally	Rochester, N. Y	July 16, 1872	129,331
Stereotyping and telegraphing machine, Combined	M. Gally	Rochester, N. Y	July 23, 1872	129,725
Stereotyping-apparatus	W. Cowles	Washington, D. C	Jan. 2, 1855	12,157
Stern-wheel for boats, Double	J. L. Sullivan	Boston, Mass	Dec. 10, 1818	....
Stethoscope	N. B. Marsh	Cincinnati, Ohio	Dec. 16, 1857	8,591
Stew-pan	G. W. Griswold	Factoryville, Pa	Mar. 11, 1873	136,596
Stick and quoin, Side	T. McGrath	Albany, N. Y	Dec. 17, 1872	133,948
Stick, Compressed-air defense	P. Giffard	Paris, France	Feb. 25, 1873	136,316
Sticks, Machine for tapering	H. S. Hall, A. D. Hunt, and C. J. Winchester.	Jamestown, N. Y	Apr. 12, 1859	23,570
Still	G. O. Baldwin	Hillsborough, Ohio	Sept. 8, 1868	81,867
Still	G. W. Bookwalter	Roanoke, Ohio	Nov. 26, 1867	71,270
Still	F. P. Bush	Cincinnati, Ohio	Mar. 31, 1868	76,156
Still	J. A. Campbell	Dayton, Va	Mar. 21, 1871	112,900
Still	H. Clements	Warsaw, Ky	June 2, 1863	38,729
Still	C. K. Dutton	New Berne, N. C	Sept. 7, 1869	94,584
Still	C. F. Fisher	York, Pa	July 12, 1813	....
Still	P. Gillespie	Seneca, N. Y	Jan. 31, 1815	....
Still	J. J. Giraud	Baltimore, Md	June 26, 1813	....
Still	S. Godfrey, L. Barnes, H. Blish, and S. S. Smith.	North Fairfield, Ohio	June 26, 1860	28,939
Still	H. Grogan	Flatbush, N. Y	Aug. 31, 1869	94,409
Still	G. Hadley	Buffalo, N. Y	June 11, 1867	65,564
Still	E. Herr	Lampeter Township, Pa	Dec. 24, 1833	....
Still	N. Hotz	Green Point, N. Y	Sept. 22, 1868	82,318
Still	G. Johnston	San Francisco, Cal	Apr. 20, 1869	89,225
Still	B. I. Kallenback	Philadelphia, Pa	Oct. 17, 1822	....
Still	J. Kincaid	....	Nov. 25, 1794	....
Still	H. C. Lloyd	Cincinnati, Ohio	July 21, 1868	80,192
Still	M. McGregor	New York	June 15, 1827	....
Still	J. Moffat	....	Feb. 1, 1803	....
Still	W. Paine	....	Aug. 24, 1802	....
Still	A. C. Rand	Union Mills, Pa	Feb. 26, 1867	62,362
Still	E. Richardson	Frederick's Town	Oct. 3, 1807	....
Still	G. W. Robson and M. T. Hughes	Cincinnati, Ohio, and Paris, Ky.	Mar. 16, 1869	87,971
Still	J. Staples	....	Dec. 15, 1802	....
Still	B. P. Stebbins	Corry, Pa	Nov. 27, 1866	60,079
Still	M. Stevens	New York	June 7, 1816	....
Still	S. Steward	Walpole, N. H	June 20, 1807	....
Still	E. Talmage	Richmond, Va	Apr. 9, 1814	....
Still	W. Thornton	Washington, D. C	Dec. 13, 1807	....
Still	I. P. Tice	New York, N. Y	Dec. 17, 1867	72,241
Still	J. R. Van Marter	Lyons, N. Y	Apr. 27, 1869	89,449
Still	J. Weitzell	Lancaster, Pa	Jan. 30, 1834	....
Still	H. Whisler and J. S. Berry	New Market, Ohio	May 26, 1868	78,247
Still	H. Whitcomb	Cornwall, Conn	Nov. 24, 1812	....
Still	J. White	Baltimore, Md	Jan. 15, 1816	....
Still	H. Wittmer	Lancaster, Pa	Sept. 19, 1811	....
Still	J. Wright	New York, N. Y	Feb. 20, 1836	....
Still-alarm attachment	J. C. Leistner	Cincinnati, Ohio	Aug. 31, 1869	94,222
Still, Alcohol	G. Clarkson	Elgin, Ill	Feb. 7, 1871	111,609
Still, Alcohol	E. G. Starck	Chicago, Ill	June 1, 1869	90,886
Still, Alcohol	J. Wright	New York	Oct. 22, 1834	....
Still, Alcohol and spirit	J. Dawson	Alexandria, Va	July 26, 1870	105,783
Still, Alcohol and spirit	H. G. Dayton	Maysville, Ky	Dec. 31, 1867	72,816
Still and boiler	J. Decker	Greene, N. Y	Sept. 2, 1811	....
Still and boiler	J. Naylor	....	Mar. 31, 1804	....
Still and condenser	B. Hall	New Haven, Conn	May 13, 1814	....
Still and condenser	R. Sealy	Newark, N. J	July 25, 1811	....
Still and condensing box, Wooden	R. W. Adams	Marlborough, Vt.	Mar. 27, 1812	....

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Invention.	Inventor.	Residence.	Date.	No.
Still and condensing tub	J. Wheatley	Fauquier County, Va	Nov. 13, 1813	....
Still and evaporator, Perpetual	R. Gillespie	Seneca County, N. Y	Apr. 2, 1810	....
Still and rotary steam-engine	S. Adams		Nov. 21, 1808	....
Still and water-boiler, Perpetual steam	P. M. Hackley	Herkimer County, N. Y	Jan. 11, 1811	....
Still and water-boiler, Steam	P. Bernard	Whitestown, N. Y	Nov. 17, 1810	....
Still-attachment to prevent fraud	W. J. Walker	Baltimore, Md	Dec. 4, 1866	60, 294
Still-attachment to prevent fraud in the revenue	W. J. Walker	Baltimore, Md	Nov. 13, 1866	59, 688
Still-attachment to test the proof of spirits	W. James	Richmond, Va	Jan. 8, 1867	61, 072
Still, Beer, &c	C. B. Jarvis and J. W. Goff	Cincinnati, Ohio	Aug. 8, 1871	117, 890
Still boiler and worm	T. Weston	Peacham, Vt	Feb. 13, 1815	....
Still-casing	J. Merrill	Boston, Mass	July 30, 1861	32, 951
Still, Coal-oil	S. G. Clark	Cleveland, Ohio	Apr. 1, 1862	34, 816
Still-condenser	P. Coats	Cincinnati, Ohio	May 12, 1868	77, 718
Still, Copper	J. Wright and D. Polley	New York	Apr. 4, 1833	....
Still, Double perpetual	J. J. Giraud	Baltimore, Md	Dec. 22, 1810	....
Still, Double steam-bath	J. J. Giraud		Apr. 18, 1804	....
Still for alcoholic and other liquids, Cold-cap	J. B. Mason	Chapel Hill, N. C	May 17, 1870	103, 064
Still for alcoholic spirits	W. and G. W. Robson	Cincinnati, Ohio	July 13, 1869	92, 477
Still for alcoholic spirits	C. E. Werner	Brookfield, Mo	Dec. 16, 1873	145, 704
Still for continuous distillation, Tubular	P. H. Vander Weyde	Philadelphia, Pa	Feb. 12, 1867	62, 096
Still for distilling fatty bodies	S. Childs	New York, N. Y	June 13, 1854	11, 059
Still for refining and distilling oil	S. Gibbons	Binghamton, N. Y	Sept. 17, 1867	68, 974
Still for refining and distilling oil	S. Gibbons	Binghamton, N. Y	Jan. 12, 1869	85, 810
Still, Fruit and alcohol	J. A. Campbell	Rockingham County, Va	July 19, 1870	105, 547
Still furnace, Coal-oil	J. Reese	Pittsburgh, Pa	July 8, 1862	35, 838
Still-head and condenser	E. Richardson		Dec. 16, 1803	....
Still head, Wooden	C. Jenks	East Windsor, Conn	Apr. 25, 1812	....
Still heads, Quilted clothing for copper	C. Jenks	East Windsor, Conn	Apr. 25, 1812	....
Still, Hydrocarbon	J. B. Edwards	North Greenbush, N. Y	Mar. 15, 1870	100, 874
Still, Hydrocarbon, &c	J. Gracie	Pittsburgh, Pa	Jan. 25, 1870	99, 081
Still, Hydrocarbon	J. Gracie	Pittsburgh, Pa	May 16, 1871	114, 802
Still, Hydrocarbon	S. A. Hill and C. F. Thuman	Oil City, Pa	Mar. 29, 1870	101, 364
Still, Hydrocarbon	S. A. Hill and C. F. Thuman	Oil City, Pa	Mar. 29, 1870	101, 365
Still, Hydrocarbon	C. Lockart and J. Gracie	Pittsburgh, Pa	July 28, 1868	80, 294
Still, Hydrocarbon	C. W. Requa	Albany, N. Y	Apr. 21, 1868	77, 094
Still-indicators, Oil and other	W. Hart	Philadelphia, Pa	May 28, 1867	65, 078
Still, Naphtha and petroleum	A. H. Tait	Jersey City, N. J	Nov. 16, 1869	96, 997
Still, Oil	J. Gracie	Pittsburgh, Pa	May 16, 1871	114, 803
Still, Oil	J. Gracie	Pittsburgh, Pa	July 25, 1871	117, 405
Still, Oil	J. Gracie	Pittsburgh, Pa	July 25, 1871	117, 406
Still, Oil	C. A. Hardy	Pittsburgh, Pa	Oct. 6, 1863	40, 168
Still, Oil, &c	C. A. Hardy	Pittsburgh, Pa	Mar. 21, 1865	46, 899
Still, Oil	C. A. Hardy	Pittsburgh, Pa	Nov. 21, 1865	51, 042
Still, Oil	J. Hofferberth	Baltimore, Md	July 26, 1870	105, 683
Still, Oil	J. Reese	Pittsburgh, Pa	May 19, 1863	38, 602
Still, Oil	E. Schalk	New York, N. Y	Feb. 18, 1873	136, 008
Still, Oil	J. D. Smedley	Chicago, Ill	Feb. 17, 1863	37, 709
Still, Oil	W. B. Snow	Brooklyn, N. Y	Apr. 1, 1873	137, 496
Still, Oil	J. L. Stewart and J. B. Dubler	Philadelphia, Pa	Mar. 4, 1873	136, 557
Still, Oil	D. Symonds	Lowell, Mass	May 28, 1867	65, 136
Still, Oil	W. G. Warden and T. K. Petty	Pittsburgh, Pa	Dec. 23, 1862	37, 263
Still, Oil, &c	J. Warren	Flushing, N. Y	Dec. 14, 1869	97, 998
Still or boiler	L. Beatty		Jan. 19, 1804	....
Still, Perpetual	S. Emery	Philadelphia, Pa	Apr. 9, 1833	....
Still, Perpetual proof	B. J. Kallenback	Philadelphia, Pa	Aug. 6, 1821	....
Still, Perpetual steam	J. J. Giraud	Baltimore, Md	Mar. 24, 1814	....
Still, Perpetual steam	J. J. Jiraud	Baltimore, Md	May 15, 1811	....
Still, Petroleum	J. Bibby and A. Tapham	Brooklyn, N. Y	July 25, 1865	48, 896
Still, Petroleum	E. G. Kelley	New York, N. Y	Aug. 20, 1867	67, 988
Still, Petroleum	E. G. Kelley	New York, N. Y	Nov. 17, 1868	84, 195
Still, Petroleum	A. Lapham	Brooklyn, N. Y	Oct. 30, 1866	59, 317
Still, Petroleum, &c	C. Lockhart and J. Gracie	Pittsburgh, Pa	Nov. 17, 1863	40, 632
Still, Petroleum	J. Rogers	New York, N. Y	Oct. 3, 1865	50, 276
Still, Petroleum	J. S. Shapter	New York, N. Y	Jan. 22, 1867	61, 474
Still, Petroleum	J. L. Stewart and J. P. Logan	Philadelphia, Pa	Apr. 18, 1871	113, 811
Still, Petroleum, &c	A. H. Tait and G. W. Avis	JerseyCity, N. J., and Matteawan, N. Y.	Feb. 11, 1873	135, 673
Still, Petroleum	P. H. Vander Weyde	Philadelphia, Pa	Mar. 6, 1866	53, 062
Still, Petroleum, &c	S. Van Syckel	Titusville, Pa	Dec. 27, 1870	110, 516
Still, Petroleum	J. Warren	Flushing, N. Y	Apr. 19, 1870	102, 186
Still, Petroleum	W. C. Welles	Parkersburgh, W. Va	Jan. 15, 1867	61, 291
Still, Petroleum double	P. H. Vander Weyde	Philadelphia, Pa	Oct. 2, 1866	58, 512
Still, Portable	L. A. De Lime	Saint Louis, Mo	Nov. 23, 1869	97, 058
Still, Rosin	F. Bowman	Somerville, Mass	May 15, 1855	12, 852
Still, Salt-water	N. W. Wheeler	Brooklyn, N. Y	Feb. 6, 1866	52, 176
Still-slop, Making spirituous liquors from	D. White	Fredonia, N. Y	June 17, 1828	....
Still, Spirit	A. Booze	Buchanan, Va	Nov. 7, 1871	120, 701
Still, Spirit	E. Herring	Walton-upon-Thames, England.	Sept. 1, 1857	18, 094
Still, Spirit	G. Kaiser	New York, N. Y	June 2, 1868	78, 596
Still, Spirit, &c	W. Makely	Alexandria, Va	June 6, 1871	115, 751
Still, Spirit	E. Metton	Flemingsburgh, Ky	June 28, 1870	104, 752
Still, Spirit	J. E. Morris	Baltimore, Md	July 25, 1871	117, 445
Still, Spirit	J. C. Thompson	Brooklyn, N. Y	Aug. 6, 1872	130, 336
Still, Steam	A. Anderson		Sept. 2, 1794	....
Still, Steam	S. Bacon	Lanesborough, Mass	Feb. 9, 1811	....
Still, Steam	J. G. Foley	Harrisburgh, Pa	Feb. 23, 1826	....
Still, steam, and water baths, Pharmaceutical	R. P. Buckland, jr., and G. A. Gessner.	Fremont, Ohio	Aug. 8, 1871	117, 738
Still, Steam or stove	J. Stone, jr	Worthington, Mass	Dec. 8, 1814	....
Still-tub	I. Bennitt	Newtown, Conn	Dec. 12, 1808	....
Still, Turpentine, &c	R. W. Lamb	Wilmington, N. C	Apr. 20, 1869	89, 051
Still, Turpentine	A. K. Lee	Galveston, Tex	May 6, 1873	138, 508
Still, Turpentine	J. E. Winants and J. F. Griffen	New York, N. Y	Sept. 15, 1868	82, 263
Still, Vacuum	H. Grogan	Flatbush, N. Y	Sept. 14, 1869	94, 884
Still, Vacuum, &c	C. G. C. Simpson	Montreal, Canada	May 28, 1872	127, 197
Still, Vinegar	R. L. Vance	Saint Louis, Mo	Feb. 4, 1868	74, 174
Still, Whisky, &c	H. G. Dayton	Dayton, Ohio	Jan. 18, 1870	98, 853

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Invention.	Inventor.	Residence.	Date.	No.
Still, Whisky	J. G. and B. F. Mattingly	Louisville, Ky	June 30, 1868	79, 373
Stills and other large kettles, Setting	I. Wood		Feb. 21, 1804	
Stills and process of distilling spirits, Construction of.	W. Wigton		Jan. 30, 1804	
Stills and still-bottoms, Constructing	J. Merrill	Boston, Mass	Dec. 17, 1861	33, 955
Stills, boilers, &c., Setting	J. Miller and B. Clemmons	Clemmonsville, N. C	June 24, 1828	
Stills, Condensing-column for	A. Hazzard	Saint Louis, Mo	Dec. 14, 1869	97, 914
Stills, Construction of	E. Capen	Boston, Mass	Jan. 17, 1827	
Stills, Construction of	L. Geanty		Aug. 4, 1803	
Stills, Construction of	M. Krafft		Oct. 28, 1801	
Stills, Construction of	J. Merrill	Boston, Mass	July 2, 1861	32, 706
Stills, Doubler for	E. A. Müller and T. Stock	Chicago, Ill	May 19, 1868	78, 118
Stills for oil, &c., Construction of	J. Huntington	Cleveland, Ohio	Mar. 12, 1867	62, 750
Stills in furnaces, Setting	A. Gibbs	Lancaster, Pa	Aug. 31, 1813	
Stills, Making worms for	C. Cook	Paris, N. Y	Jan. 11, 1823	
Stills, Measuring-receiver for	W. M. Blume	New York, N. Y	Jan. 28, 1868	73, 869
Stills, Meter-attachment for	I. P. Tice	New York, N. Y	Mar. 26, 1867	63, 336
Stills, Method of setting	L. S. Fales	Boston, Mass	Sept. 5, 1865	49, 740
Stills, Mode of heating	H. G. Dayton	Maysville, Ky	Oct. 18, 1864	44, 711
Stills of gas, &c., Relieving oil	S. Van Syckel	Titusville, Pa	May 7, 1872	126, 503
Stills, Rectifier for	A. Werné	New York, N. Y	Jan. 1, 1867	60, 975
Stills, Registering-apparatus for	J. Minor and M. W. and G. W. Nesmith.	Peoria and Metamora, Ill	Mar. 9, 1869	87, 698
Stills, Securing bottom to	J. G. Collins	Boston, Mass	June 18, 1861	32, 557
Stills, Setting	G. T. Sawyer, W. Howland, jr., and T. C. Hatch.	New Bedford, Mass	Dec. 10, 1861	33, 905
Stills, Worm for	J. G. Webb	Waterford, N. Y	Feb. 11, 1834	
Stills, Worm-tub of	G. Johnston	Farmington, Iowa	May 25, 1852	8, 969
Stilts	N. U. Ainée	New York, N. Y	Nov. 11, 1873	144, 491
Stilts	M. C. Ames	Hartford, Conn	Oct. 26, 1869	96, 072
Stilts	G. N. Cummings	Meriden, Conn	Mar. 26, 1861	31, 787
Stilts	J. Emmert	Dunleith, Ill	Nov. 14, 1871	120, 952
Stilts	J. Johnson	New York, N. Y	Jan. 22, 1861	31, 210
Stilts	L. A. Kimberly	New Haven, Conn	Nov. 2, 1869	96, 443
Stilts	G. Murray	Cambridgeport, Mass	Feb. 19, 1867	62, 284
Stilts	C. Page and G. W. Miller	Meriden, Conn	Apr. 13, 1869	88, 803
Stilts	T. J. Sheears	Ypsilanti, Mich	Nov. 18, 1873	144, 799
Stilts	G. J. Stevens	Charlestown, Mass	Apr. 15, 1873	137, 869
Stilts, Boys'	L. A. Kimberly	New Haven, Conn	Sept. 12, 1871	118, 861
Stirring and cooling apparatus	A. G. Knapp	New York, N. Y	Feb. 21, 1865	46, 476
Stirring and mixing apparatus	G. L. Witsil	Philadelphia, Pa	Oct. 7, 1862	36, 633
Stirrup	E. S. Bennett	New York, N. Y	Nov. 10, 1868	83, 822
Stirrup	A. H. Blossom	Miamisburgh, Ohio	Aug. 2, 1870	105, 893
Stirrup	J. Bond	Versailles, Ill	Oct. 27, 1868	83, 450
Stirrup	D. W. Clark	Stratford, Conn	Sept. 11, 1860	29, 953
Stirrup	D. W. Clark	Stratford, Conn	Oct. 9, 1860	30, 299
Stirrup	J. S. Fee	Rockford, Ind	Apr. 8, 1873	137, 668
Stirrup	J. S. Gould	Allegheny, Pa	Aug. 1, 1865	49, 103
Stirrup	W. J. Hamersley	Hartford, Conn	Apr. 12, 1859	23, 572
Stirrup	A. J. Herring	Mauch Chunk, Pa	Dec. 23, 1873	145, 869
Stirrup	A. A. Livingston	Cedar Rapids, Iowa	Sept. 24, 1861	33, 354
Stirrup	J. Loudon and H. Iversen	New York, N. Y	Oct. 12, 1858	21, 764
Stirrup	F. N. Martin	Cincinnati, Ohio	May 1, 1866	54, 380
Stirrup	B. T. Nichols	Newark, N. J	Feb. 13, 1866	52, 589
Stirrup	E. Pond	New Haven, Conn	Dec. 17, 1867	72, 417
Stirrup	C. Ray	Boston, Mass	Nov. 19, 1861	33, 753
Stirrup	N. L. Revere	Worcester, Mass	June 25, 1867	66, 106
Stirrup	C. W. Saladee	Paducah, Ky	Apr. 26, 1864	42, 511
Stirrup	C. W. Saladee	Paducah, Ky	Apr. 26, 1864	42, 512
Stirrup	C. W. Saladee	Putnam, Ohio	Mar. 7, 1865	46, 711
Stirrup	C. W. Saladee	Putnam, Ohio	Mar. 7, 1865	46, 712
Stirrup	N. C. Thompson	San Francisco, Cal	Oct. 14, 1873	143, 732
Stirrup	W. H. Towers	New York, N. Y	June 23, 1863	38, 995
Stirrup	C. K. Van Osdel	Chicago, Ill	Oct. 12, 1869	95, 857
Stirrup	J. R. Williamson	Washington, D. C	Oct. 9, 1860	30, 369
Stirrup and hood, Riding	R. N. Eagle	Washington, D. C	July 7, 1863	39, 133
Stirrup and its cover	R. N. Eagle	United States Army	Dec. 17, 1861	33, 930
Stirrup and spur, Saddle	H. Fellows	Bloomington, Ind	Feb. 15, 1870	99, 767
Stirrup-attachment	J. L. Landis	Lancaster, Pa	Oct. 15, 1867	69, 920
Stirrup-bending machine	D. Forest	Mottomosa, Tex	Feb. 1, 1870	99, 308
Stirrup-bending machine, Metal	J. H. De Valin	Baltimore, Md	Jan. 3, 1871	110, 748
Stirrup-fastening	C. H. Wellman	New York, N. Y	Sept. 5, 1865	49, 813
Stirrup-fastening, Safety	W. Fawcett	New York, N. Y	Dec. 26, 1865	51, 708
Stirrup-iron	D. Powles	Baltimore, Md	Jan. 26, 1827	
Stirrup-loop	J. B. Gathwright	Louisville, Ky	Mar. 21, 1871	112, 800
Stirrup, Open	O. D. Vosmus	Mount Sterling, Ky	July 10, 1855	13, 240
Stirrup, Riding	R. N. Eagle	New York, N. Y	Dec. 16, 1862	37, 158
Stirrup, Riding	R. N. Eagle	Washington, D. C	Apr. 5, 1864	42, 180
Stirrup, Riding	R. N. Eagle	Washington, D. C	Sept. 20, 1864	44, 291
Stirrup, Riding	R. N. Eagle	Washington, D. C	Sept. 20, 1864	44, 292
Stirrup, Riding	A. J. Herring	Mauch Chunk, Pa	Feb. 4, 1873	135, 547
Stirrup, Riding-saddle	J. Neil	Yorkville, N. Y	Sept. 22, 1857	18, 246
Stirrup, Riding-saddle	L. S. Taylor	Sigel, Mo	Mar. 14, 1871	112, 652
Stirrup, Riding-saddle	R. Trussell	Brooklyn, N. Y	Nov. 4, 1856	16, 032
Stirrup, Saddle	D. Adams	Keene, N. H	Feb. 3, 1819	
Stirrup, Saddle	J. Carrel	Petersburgh, Va	June 7, 1839	1, 165
Stirrup, Saddle	J. A. Dunnagan	Mexico, Mo	May 17, 1870	103, 031
Stirrup, Saddle	J. Fichter	Newark, N. J	June 28, 1864	43, 300
Stirrup, Saddle	A. Irion	Femme Osage, Mo	Sept. 19, 1865	50, 007
Stirrup, Safety	S. F. Clark	Middletown, Conn	Sept. 10, 1867	68, 604
Stirrup, Safety	L. R. Jones	Carthage, Ind	May 20, 1873	139, 160
Stirrup, Safety	A. Pawling	Philadelphia, Pa	June 16, 1846	4, 577
Stirrup, Safety	N. Post	East Cleveland, Ohio	June 18, 1850	7, 444
Stirrup, Safety	W. Weddington	Alexandria, Ind	Oct. 22, 1867	70, 053
Stirrup-strap loop	A. B. Zellner	Monticello, Ark	Mar. 9, 1869	87, 749
Stirrups, Hanging	P. Selby	San Francisco, Cal	July 30, 1867	67, 357
Stirrups, Machine for trimming	P. Feeman	Lima, Ohio	July 16, 1872	129, 273
Stitch	A. F. Johnson	Boston, Mass	Jan. 24, 1860	26, 906

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Invention.	Inventor.	Residence.	Date.	No.
Stitch-holes, Machine for piercing	R. Blackwood	Philadelphia, Pa	Jan. 5, 1869	85, 558
Stitch, Machine-made	A. Harroun, jr	Onondaga County, N. Y	May 11, 1869	90, 045
Stitch, Machine-made	T. K. Reed	East Bridgewater, Mass	Jan. 12, 1869	85, 891
Stitch, Single-thread	J. S. McCurdy	Brooklyn, N. Y	May 10, 1859	23, 984
Stitching-clamp	N. Holden	New York, N. Y	July 5, 1864	43, 408
Stitching-clamp	W. W. Taylor	Newark, N. J	Oct. 23, 1866	59, 094
Stitching-clamp	J. Temple	Terre Haute, Ind	Dec. 3, 1867	71, 818
Stitching-horse	G. F. Brockway	Washington, D. C	Dec. 13, 1864	45, 386
Stitching-horse	O. A. Dean	Champaign, Ill	July 16, 1867	66, 808
Stitching-horse	T. Depp	San Marcos, Tex	Oct. 27, 1868	83, 477
Stitching-horse	H. E. Paine	Troy, N. Y	May 17, 1864	42, 822
Stitching-horse, Saddler's	J. H. Pitezel	Three Rivers, Mich	Mar. 22, 1864	42, 020
Stitching-machine	J. W. Briggs	Cleveland, Ohio	Apr. 15, 1862	34, 938
Stitching-work holder for rolled work	W. M. McCoy	Bloomingdale, Ind	Sept. 18, 1866	58, 117
Stock	J. Towson	Baltimore, Md	May 14, 1827	....
Stock and die	J. W. Hardie	New York, N. Y	Dec. 16, 1873	145, 500
Stock, Drill	E. A. Stockton	San Francisco, Cal	Feb. 9, 1869	86, 880
Stock-feeder	U. Borel	Sue City, Mo	Dec. 30, 1873	145, 984
Stock, Frame of hair	W. Merriam	New Haven County, Conn	Mar. 14, 1833	....
Stock-gallows	M. Brenner	Baltimore, Md	Nov. 19, 1872	133, 077
Stock-gate for water-course	W. Donnan	Burgettstown, Pa	June 17, 1862	35, 591
Stock, Gentleman's dress, hinge, and plain	D. Williams	Albany, N. Y	Oct. 1, 1830	....
Stock-guard gate	W. C. Gault	Ruggles, Ohio	July 21, 1868	80, 064
Stock-holder	G. H. Aylworth	Brighton, Ill	May 28, 1872	127, 212
Stock-marker	D. A. Griffith	Saint Charles, Mo	May 9, 1871	114, 974
Stock, Marking	J. Merry	El Dorado County, Cal	Aug. 14, 1860	29, 619
Stock, Neck	E. Badger	Philadelphia, Pa	Apr. 5, 1832	....
Stock, Neck	W. Carlock	Baltimore, Md	Aug. 9, 1831	....
Stock, Neck	T. Goodrum	New York	Aug. 27, 1835	....
Stock shed and rack	T. B. Myers	Palatine, W. Va	July 20, 1869	92, 742
Stock-yard	A. Morley	Delaware Township, Iowa	July 10, 1866	56, 249
Stocks, Shaping neck	T. Goodrum	New York, N. Y	July 2, 1836	....
Stocking	E. L. Daniels	Boston, Mass	Aug. 25, 1868	81, 479
Stocking	E. Harmon	Washington, D. C	Aug. 18, 1863	39, 569
Stocking	E. Harmon	Washington, D. C	Aug. 18, 1863	39, 570
Stocking	M. Landenberger, jr	Philadelphia, Pa	July 16, 1872	129, 146
Stocking	E. V. Sears	Boston, Mass	Oct. 3, 1865	50, 279
Stocking	F. Woodward	Sacramento, Cal	Aug. 2, 1870	106, 017
Stocking-darner	S. R. Bolton	Prescott, Wis	Aug. 4, 1868	80, 588
Stocking-darning machine	B. Arnold	East Greenwich, R. I	May 20, 1873	138, 981
Stocking-darning machine	B. Arnold	East Greenwich, R. I	May 20, 1873	138, 982
Stocking-heel protector	S. J. Baker	Chicago, Ill	Apr. 24, 1866	54, 094
Stocking-heel protector	J. N. C. Savels	Stoughton, Mass	Apr. 7, 1863	38, 134
Stocking, Knitted	A. G. Davis, C. W. Blakesley, and E. B. Beecher.	Watertown and New Haven, Conn.	Sept. 7, 1869	94, 575
Stocking-mending machine	B. Arnold,	East Greenwich, R. I	Jan. 26, 1869	86, 121
Stocking-mending machine	B. Arnold	East Greenwich, R. I	Jan. 26, 1869	86, 122
Stocking-mending machine	B. Arnold	East Greenwich, R. I	Aug. 10, 1869	93, 394
Stocking-stretcher	R. R. Chandler	Ruther Glen, Va	Sept. 8, 1868	81, 981
Stocking-supporter	A. C. Adams	Cambridge, Mass	Nov. 4, 1873	144, 302
Stocking-supporter	A. C. Adams	Cambridge, Mass	Nov. 4, 1873	144, 303
Stocking-supporter	E. F. Putnam	New York, N. Y	May 19, 1863	38, 639
Stocking-supporter	E. K. Rand	Boston, Mass	Aug. 26, 1873	142, 118
Stocking-supporter	J. A. Robbins	Boston, Mass	Apr. 13, 1869	88, 984
Stocking-supporter and skeleton-waist, Combined	A. M. Stiger	Brooklyn, N. Y	Aug 30, 1870	106, 885
Stocking-supporter clasp	S. K. Ellis	Waltham, Mass	Apr. 8, 1873	137, 539
Stockings, &c., Clasp for supporting	J. E. Treat	Boston, Mass	Dec. 2, 1873	145, 074
Stockings, Method of footing	B. F. Peaslee	Lake Village, N. H	Aug. 6, 1872	130, 149
Stockings, Method of forming	E. O. Potter	Chicopee, Mass	Aug. 11, 1868	80, 999
Stockings, Producing selvage on machine-knit	H. A. House	Bridgeport, Conn	Mar. 22, 1870	101, 016
Stone-adz	W. Covart	Claytonville, Kans	Sept. 13, 1870	107, 227
Stone and concrete, Making artificial	F. Coignet	Paris, France	Dec. 21, 1869	98, 034
Stone and earthen ware, Manufacture of	J. and F. Wise	Fredericktown, Pa	Nov. 30, 1852	9, 437
Stone and for coating stone, bricks, &c., Compound for making artificial.	J. Tattersall	Indianapolis, Ind	May 7, 1867	64, 594
Stone and for other purposes, Composition for manufacturing.	A. Pelletier	Washington, D. C	Feb. 18, 1868	74, 587
Stone and glass polishing machine	J. Meisse	New Albany, Ind	July 15, 1873	140, 937
Stone and glass polishing machine	G. H. Wood	Green Bay, Wis	Aug. 11, 1857	17, 983
Stone and marble cutting machine	T. S. Howard	Savannah, Mo	July 20, 1869	92, 827
Stone and marble sawing machine	W. Palmer	....	Dec. 31, 1802	....
Stone and marble sawing machine	A. H. Tingley	Providence, R. I	July 18, 1854	11, 357
Stone and metal planing machine	J. M. Smith	New York, N. Y	July 11, 1854	11, 275
Stone and monolithic structure, Making artificial	F. Coignet	Paris, France	Apr. 6, 1869	88, 547
Stone and other hard substances, Machine for breaking.	J. Reidy	Cork, Ireland	Oct. 15, 1861	33, 493
Stone and other substances, Machine for facing and polishing.	A. Eames	Springfield, Mass	June 10, 1851	8, 150
Stone and root digger	C. F. Smith	Litchfield, Conn	Apr. 17, 1866	54, 030
Stone and root grubber	J. B. Lyons	Milton, Conn	Mar. 29, 1864	42, 094
Stone and stump extractor	J. B. Lyons	Milton, Conn	Feb. 22, 1870	100. 165
Stone and stump extractor	M. Wieand and G. Gorr	Emaus, Pa	Jan. 21, 1868	73, 558
Stone and stump raising machine	H. Fleming	Vienna, N. J	Jan. 12, 1869	85, 735
Stone and wood sawing machine	E. Jones	Alfred, Mass	June 20, 1808	....
Stone, Annular	J. Morley	New York	Nov. 28, 1832	....
Stone, Applying colors to	H. Tucker	Cambridgeport, Mass	Feb. 21, 1854	10, 561
Stone, Artificial	J. J. Bartlett	New York, N. Y	June 24, 1873	140, 239
Stone, Artificial	A. Casadey	Philadelphia, Pa	Feb. 6, 1866	52, 386
Stone, Artificial	T. Chrimes	Jackson, Mich	Dec. 9, 1873	145, 277
Stone, Artificial	H. A. Cooke	Fall River, Mass	May 28, 1872	127, 309
Stone, Artificial	P. Daniels	Jackson City, Mich	Mar. 18, 1873	136, 964
Stone, Artificial	G. L. Eagan	San Francisco, Cal	Apr. 9, 1872	125, 552
Stone, Artificial	J. W. Hopkins	Fayetteville, N. C	Apr. 30, 1872	126, 297
Stone, Artificial	J. Hornig and S. Suess	Union Hill, N. J	June 7, 1853	9, 775
Stone, Artificial	F. J. Huber	Cleveland, Ohio	Aug. 12, 1862	36, 153
Stone, Artificial	F. J. Huber	Cleveland, Ohio	Aug. 12, 1862	36, 154
Stone, Artificial	R. Semare	New York, N. Y	Mar. 11, 1873	136, 604
Stone, Artificial	W. H. Lewis	Philadelphia, Pa	May 20, 1873	139, 167

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Stone, Artificial	T. Madeley	Rochester, N. Y	May 9, 1871	114, 577
Stone, Artificial	A. Ott	New York, N. Y	Apr. 15, 1873	137, 859
Stone, Artificial	St. J. Ravenel	Charleston, S. C	Aug. 12, 1856	15, 526
Stone, Artificial	W. W. Reeves	Braddock's Field, Pa	June 11, 1872	127, 923
Stone, Artificial	G. E. Van Derburgh	New York, N. Y	July 11, 1865	48, 746
Stone, Artificial	I. L. G. Ward	Adrian, Mich	June 12, 1859	24, 769
Stone, Bed	W. Bennet	Chesterville, Me	Oct. 25, 1832	....
Stone blocks and walls, Artificial	J. E. Dickson	Worcester, Mass	Feb. 27, 1872	123, 983
Stone boiler for refining sulphur and for chemical purposes.	A. H. Quincy	Boston, Mass	June 13, 1812	....
Stone-breaker	P. W. Gates and D. R. Frazer	Chicago, Ill	Nov. 7, 1865	50, 813
Stone-breaker	H. H. Scoville	Chicago, Ill	May 26, 1868	78, 332
Stone-breaker for macadamizing roads	N. Cooper, jr., T. McConnel, and W. E. Lukens.	Wheeling Township and Short Creek, Ohio.	June 27, 1840	1, 660
Stone breaking and cubing machine	H. J. Browne and A. Hope	Melbourne and Prahran, Australia.	July 23, 1872	129, 784
Stone breaking and crushing machine	J. Comly	Philadelphia, Pa	June 4, 1872	127, 574
Stone-breaking and grain-thrashing	W. H. Bell and T. P. Andrews	Fortress Monroe, Va., and Washington, D. C.	July 9, 1830	....
Stone-breaking machine	E. W. Blake	New Haven, Conn	Apr. 17, 1860	27, 882
Stone-breaking machine	A. Dietz	New York, N. Y	Nov. 1, 1870	108, 769
Stone, &c., breaking machine	A. Hope	Prahran, Victoria, Australia.	Jan. 16, 1872	122, 832
Stone-breaking machine	B. F. Lodge and E. T. Cox	Zanesville, Ohio	Apr. 13, 1831	....
Stone-breaking machine	J. R. Ord and H. Maddison	Darlington, Great Britain	Feb. 27, 1872	124, 150
Stone, brick, &c., Preserving and hardening	E. J. Salisbury	San Francisco, Cal	May 10, 1870	102, 869
Stone-carving machinery	E. Allen	South Windham, Conn	Nov. 14, 1854	11, 922
Stone, cement, and plaster, Manufacture of	F. Ransome	Ipswich, England	June 12, 1866	55, 545
Stone, cement, wood, &c., Indurating and preserving	J. C. Coombe	Hoxton, England	Apr. 28, 1863	38, 287
Stone-channeling drill	N. H. Hand	Pittsford, Vt	July 16, 1872	129, 407
Stone-channeling machine	V. W. Blanchard	Bridport, Vt	June 4, 1867	65, 469
Stone-channeling machine	V. W. Blanchard	Bridport, Vt	Jan. 25, 1870	99, 139
Stone-channeling machine	A. S. Gear	Boston, Mass	Aug. 26, 1873	142, 096
Stone-channeling machine	E. G. Lamson	Windsor, Vt	Apr. 20, 1869	89, 265
Stone-channeling machine	E. G. Lamson	Windsor, Vt	Dec. 20, 1870	110, 376
Stone-channeling machine	A. T. Merriman and T. Ross	Rutland and Middlebury, Vt.	Nov. 20, 1866	59, 856
Stone-channeling machine	H. J. Ruggles	Poultney, Vt	Oct. 22, 1867	70, 123
Stone-channeling machine	J. Taggart	Roxbury, Mass	Dec. 4, 1855	13, 896
Stone-channeling machine	F. Townsend	Albany, N. Y	Aug. 31, 1869	94, 256
Stone-channeling machine	F. C. Treadwell, jr., and E. G. Lamson.	New York, N. Y., and Windsor, Vt.	Dec. 20, 1870	110, 404
Stone-channeling machine	G. J. Wardwell	Rutland, Vt	Oct. 12, 1869	95, 860
Stone-channeling machine	G. J. Wardwell	Rutland, Vt	July 12, 1870	105, 391
Stone-channeling machines, Elastic pitman for	G. J. Wardwell	Rutland, Vt	Aug. 10, 1869	93, 650
Stone-channeling machinery	G. J. Wardwell	Rutland, Vt	May 18, 1869	90, 325
Stone-channeling machinery, Cutter for	G. J. Wardwell	Rutland, Vt	Nov. 28, 1865	51, 273
Stone, &c., cleaning compound	M. L. Ivers and G. L. Cooley	Oneco and Plainfield, Conn	June 1, 1869	90, 754
Stone, Compositions for artificial	W. Hedley	Medina, N. Y	Feb. 25, 1873	136, 160
Stone, Composition for artificial	C. B. Hutchins	Ann Arbor, Mich	Jan. 5, 1869	85, 667
Stone, Composition for artificial	C. B. Hutchins	Ann Arbor, Mich	Apr. 13, 1869	88, 877
Stone, Composition for artificial	C. D. Page	Rochester, N. Y	Mar. 20, 1860	27, 563
Stone, Composition for artificial	J. N. B. D. Ponilly	New Orleans, La	Jan. 30, 1872	123, 090
Stone, Composition for artificial	W. H. Sherwood	Greenwich, Conn	Mar. 13, 1860	27, 480
Stone, Composition for artificial	G. E. Van Derburgh	New York, N. Y	Feb. 19, 1867	62, 165
Stone, Composition for artificial	E. Westermayr	Chicago, Ill	Jan. 5, 1869	85, 713
Stone, Composition for cleaning and refacing	I. W. Haggett	Charlestown, Mass	Nov. 19, 1872	133, 095
Stone-crusher	A. Dietz	New York, N. Y	Mar. 14, 1871	112, 560
Stone-crusher	H. R. Marsden	Leeds, England	Apr. 15, 1873	137, 939
Stone-crusher	G. W. Rawson	Cambridgeport, Mass	Oct. 12, 1869	95, 836
Stone-crusher	A. H. Smith	Brooklyn, N. Y	June 17, 1873	140, 085
Stone-crusher	P. Wood	Jersey City, N. J	Nov. 21, 1871	121, 143
Stone crushing and pulverizing apparatus	F. E. Hoffman	Berlin, Prussia	Mar. 24, 1868	75, 912
Stone-crushing apparatus	A. H. Smith	Brooklyn, N. Y	Nov. 7, 1871	120, 784
Stone-crushing machine	E. W. Blake	New Haven, Conn	June 15, 1858	20, 542
Stone-crushing machine	C. L. Desmolins	Avallon, France	Oct. 31, 1871	120, 502
Stone-crushing machine	L. G. Marshall	New York, N. Y	Aug. 16, 1864	43, 882
Stone-crushing machine	G. A. Rollins	Nashua, N. H	July 17, 1860	29, 197
Stone-crushing machine	G. H. Wood	Green Bay, Wis	Apr. 24, 1860	28, 031
Stone-cutter	J. Jenks	Roscoe, Ill	June 24, 1844	3, 642
Stone-cutter	G. Stacy	Nanuet, N. Y	Nov. 18, 1873	144, 640
Stone cutter and dresser	T. Sharp	Carlisle, Pa	Oct. 19, 1869	96, 040
Stone-cutter's and other tools, Mode of fastening cutters in.	G. Stacy	Nanuet, N. Y	Nov. 18, 1873	144, 639
Stone, Cutting	J. R. Abbe	Providence, R. I	Feb. 9, 1869	86, 623
Stone, Cutting	A. S. Gear	Boston, Mass	Apr. 16, 1872	125, 804
Stone, &c., Cutting	B. C. Tilghman	Philadelphia, Pa	Nov. 26, 1872	133, 501
Stone, Cutting	C. Wilson	Springfield, Mass	Mar. 13, 1847	5, 012
Stone cutting and channeling machine	E. G. Lamson	Windsor, Vt	Feb. 16, 1869	87, 053
Stone cutting and chiseling machine	L. Z. Parke and I. Brewster	Schoharie, N. Y	Oct. 10, 1831	....
Stone cutting and dressing machine	G. M. and J. M. Alger	South Strafford, Vt	Mar. 3, 1838	623
Stone cutting and dressing machine	L. Barnum	Bridgeport, Conn	July 7, 1868	79, 627
Stone cutting and dressing machine	T. J. Cornell	Worcester, Mass	Nov. 3, 1841	2, 329
Stone cutting and dressing machine	W. A. Forman	Geneseo, N. Y	Apr. 1, 1873	137, 354
Stone cutting and dressing machine	J. Hedrick, W. Tash, and H. Kreidler.	York, Pa	Jan. 24, 1871	111, 206
Stone cutting and dressing machine	A. Munro and W. Anderson	Glasgow, North Britain	June 7, 1870	104, 055
Stone cutting and dressing machine	M. Nutting	Portland, Me	May 15, 1837	195
Stone cutting and dressing machine	J. B. West and J. C. Fish	Geneseo, N. Y	Dec. 9, 1873	145, 376
Stone cutting and planing	A. Clark and C. H. Boynton	West Stockbridge, Mass	June 20, 1836	....
Stone cutting and working machine	H. Cottrell	Newark, N. J	Nov. 4, 1873	144, 316
Stone, Cutting, dressing, and polishing	J. D. Buzzell	Cape Elizabeth, Me	May 15, 1837	192
Stone-cutting machine	J. W. Cochran	Williamsburgh, N. Y	Apr. 6, 1852	8, 854
Stone-cutting machine	G. Cuppers	New York, N. Y	Dec. 27, 1864	45, 501
Stone-cutting machine	A. S. Gear	Boston, Mass	Feb. 11, 1873	135, 642
Stone-cutting machine	J. W. Maloy	Boston, Mass	Jan. 15, 1867	61, 220
Stone-cutting machine	J. W. Maloy	Boston, Mass	Nov. 5, 1867	70, 449
Stone-cutting machine	D. H. Merriam	Fitchburgh, Mass	Aug. 25, 1868	81, 522

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Stone-cutting machine	G. Morgan	Brooklyn, N. Y	Jan. 11, 1859	22, 569
Stone-cutting machine	C. E. Odgers	Bloomfield, N. J	Feb. 18, 1873	136, 001
Stone-cutting machine	M. M. Parish	Pleasantville, N. Y	July 2, 1861	32, 711
Stone-cutting machine	J. and J. Sutton	Reading, N. Y	June 20, 1836	....
Stone-cutting machine	D. Tillson	Rockland, Me	Oct. 1, 1872	131, 797
Stone-cutting machine	F. Townsend	Albany, N. Y	Oct. 19, 1869	95, 955
Stone-cutting machine	G. J. Wardwell	Coaticook, Canada	Nov. 10, 1863	40, 584
Stone-cutting machine	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Feb. 1, 1870	99, 513
Stone-cutting machine	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Sept. 27, 1870	107, 847
Stone-cutting machine	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Oct. 11, 1870	108, 228
Stone-cutting machine	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Oct. 18, 1870	108, 424
Stone-cutting machine	H. and J. L. Young	Stamford, Conn., and New York, N. Y.	Oct. 10, 1871	119, 910
Stone-cutting machinery	G. J. Wardwell	Rutland, Vt	Nov. 28, 1865	51, 271
Stone-cutting machinery	G. J. Wardwell	Rutland, Vt	Nov. 28, 1865	51, 272
Stone cutting, rubbing, and drilling machine	P. H. Hopkins	Brooklyn, N. Y	Aug. 19, 1873	142, 019
Stone-cutting tool	H. Cottrell	Newark, N. J	Nov. 4, 1873	144, 318
Stone-cutting tool	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Feb. 1, 1870	99, 514
Stone-cutting tool	H. and J. L. Young	Middletown, Conn., and New York, N. Y.	Oct. 18, 1870	108, 425
Stone, Doublet	S. Bruhl	New York, N. Y	Apr. 29, 1873	138, 314
Stone-drag	E. C. Allen	Deerfield, Mass	Jan. 3, 1871	110, 619
Stone-drag	G. N. Palmer	Greene, N. Y	Nov. 3, 1868	83, 726
Stone dress, Hulling	J. A. Wilson	Dover, N. J	June 15, 1858	20, 601
Stone-dresser	B. S. Hunt	Philadelphia, Pa	Jan. 8, 1867	61, 009
Stone, Dressing	J. Keefer	Williamsport, Pa	Jan. 13, 1832	....
Stone, Dressing	D. B. Napier	Casey County, Ky	Sept. 18, 1835	....
Stone dressing and carving machinery	E. A. Swan and D. C. Smiley	Brooklyn and New York, N. Y.	July 24, 1855	13, 343
Stone, Dressing and drilling	H. Bourne	Salem, Mass	Aug. 3, 1827	....
Stone dressing and polishing machine	D. Hinman	Berea, Ohio	Feb. 3, 1857	16, 545
Stone dressing and shaping machine	J. E. Holmes	New York, N. Y	Jan. 19, 1869	86, 015
Stone-dressing, Diamond-holding tool for	J. Dickinson	Bay Ridge, N. Y	June 15, 1869	91, 312
Stone dressing, drilling, and finishing machine	W. H. Daniels and J. H. Willett	Bryan, Ohio	Jan. 30, 1872	123, 244
Stone-dressing machine	W. Adams	Edinburgh, North Britain	June 27, 1871	116, 390
Stone-dressing machine	A. G. Anderson	Quincy, Ill	July 12, 1870	105, 159
Stone-dressing machine	J. Armstrong	Bucyrus, Ohio	Apr. 17, 1866	53, 940
Stone-dressing machine	J. P. Avery	Norwich, Conn	Nov. 7, 1854	11, 921
Stone-dressing machine	M. H. Bacon	Mystic, Conn	Nov. 6, 1860	30, 557
Stone-dressing machine	T. W. Baxter	Chicago, Ill	Oct. 31, 1871	120, 482
Stone-dressing machine	J. D. Brunton	Kentish Town, England	Apr. 2, 1872	125, 263
Stone-dressing machine	H. Chancey	Perry, Ga	Aug. 16, 1859	25, 093
Stone-dressing machine	W. Cooper	Mount Gilead, Ohio	Oct. 12, 1858	21, 742
Stone-dressing machine	J. Coulter and H. Harpin	Huddersfield, England	Jan. 18, 1870	98, 850
Stone-dressing machine	J. T. Cree	Worcester, Mass	June 1, 1869	90, 822
Stone-dressing machine	S. W. and R. M. Draper	Boxborough, Mass	May 25, 1852	8, 967
Stone-dressing machine	A. Eames	Springfield, Mass	Jan. 13, 1852	8, 652
Stone-dressing machine	R. Eastman	Concord, N. H	June 18, 1850	7, 438
Stone-dressing machine	R. Eastman	Concord, N. H	July 20, 1852	9, 132
Stone-dressing machine	W. Eayrs	Concord, N. H	Dec. 4, 1849	6, 919
Stone-dressing machine	I. Freligh	Bardstown, Ky	Sept. 3, 1861	33, 191
Stone-dressing machine	G. A. Fullerton	Boston, Mass	June 4, 1872	127, 589
Stone-dressing machine	A. M. George	New York, N. Y	July 15, 1856	15, 335
Stone-dressing machine	A. M. George	Nashua, N. H	Mar. 2, 1869	87, 483
Stone-dressing machine	E. G. Hastings	Brooklyn, N. Y	Mar. 14, 1854	10, 636
Stone-dressing machine	F. L. King	Worcester, Mass	July 16, 1867	66, 716
Stone-dressing machine	F. L. King	Worcester, Mass	July 14, 1868	79, 838
Stone-dressing machine	F. L. King	Worcester, Mass	July 28, 1868	80, 286
Stone-dressing machine	J. Kinman	Mifflinsburgh, Pa	May 16, 1848	5, 577
Stone-dressing machine	T. H. Leavitt	Boston, Mass	Sept. 28, 1869	95, 238
Stone-dressing machine	W. O. Leslie	Philadelphia, Pa	May 12, 1868	77, 895
Stone-dressing machine	E. H. Lewis	Kingston, N. Y	Sept. 10, 1861	33, 253
Stone-dressing machine	I. Lindsley	Pawtucket, R. I	Feb. 27, 1872	124, 002
Stone-dressing machine	E. G. Matthews	Troy, N. Y	Oct. 25, 1853	10, 156
Stone-dressing machine	W. M. Murrey	Tiffin, Ohio	Feb. 12, 1867	62, 056
Stone-dressing machine	O. Nichols and A. M. George	Lowell, Mass., and Nashua, N. H.	Dec. 18, 1855	13, 952
Stone-dressing machine	C. T. Porter	New York, N. Y	Aug. 8, 1854	11, 492
Stone-dressing machine	G. R. Ray	Bridgeport, Conn	Apr. 22, 1873	138, 100
Stone-dressing machine	W. H. Robertson	Hartford, Conn	Oct. 3, 1854	11, 754
Stone-dressing machine	T. Ross	Rutland, Vt	Oct. 24, 1871	120, 169
Stone-dressing machine	F. Schwalm	Joliet, Ill	July 10, 1860	29, 106
Stone-dressing machine	A. Smith	Kingston, N. Y	Oct. 23, 1860	30, 504
Stone-dressing machine	J. V. Tilton	Marcellus N. Y	Oct. 21, 1851	8, 458
Stone-dressing machine	T. R. Timby	Auburn, N. Y	Apr. 23, 1842	2, 582
Stone-dressing machine	L. E. Truesdell	Warren, Mass	Sept. 24, 1872	131, 579
Stone-dressing machine	H. Ward	Charlton, Mass	Apr. 10, 1844	3, 528
Stone-dressing machine	G. J. Wardwell	Barnston, Canada	Jan. 10, 1860	26, 802
Stone-dressing machine	W. Wheeler	West Poultney, Vt	Dec. 23, 1851	8, 618
Stone-dressing machine	C. Wilson	Springfield, Mass	Apr. 10, 1849	6, 287
Stone-dressing machine	T. Woods	Nicholasville, Ky	Aug. 22, 1871	118, 323
Stone dressing or working machine	J. F. Gilmore	Painesville, Ohio	May 26, 1863	38, 670
Stone-dressing pick	J. C. Dexter	Ionia, Mich	Mar. 12, 1845	3, 941
Stone-dressing tool	J. Oman	Edinburgh, Scotland	July 9, 1872	128, 899
Stone-drill	W. C. Edenfield	Savannah, Mo	Oct. 12, 1869	95, 672
Stone-drill	W. D. McClure	Constitution, Ohio	Mar. 29, 1870	101, 290
Stone-drill	T. Woods	Jessamine County, Ky	Dec. 4, 1866	60, 314
Stone-drilling	J. Crane	Schenectady, N. Y	June 13, 1831	....
St ne drilling and channeling machine	E. G. Lamson	Windsor, Vt	Dec. 20, 1870	110, 375
Stone drilling and dressing machine	W. M. Barton	Russellville, Tenn	Aug. 19, 1856	15, 591
Stone, &c., Drilling and quarrying	E. G. Lamson	Shelburne Falls, Mass	Oct. 2, 1866	58, 435
Stone drilling and splitting machine	J. H. Lyon	Baltimore, Md	July 13, 1858	20, 885
Stone-drilling machine	W. C. Bright	Boston, Mass	Mar. 7, 1854	10, 618

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Stone-drilling machine	A. Catlin	Burlington, Vt	Aug. 10, 1852	9,179
Stone-drilling machine	J. J. Couch	Philadelphia, Pa	Nov. 23, 1852	9,415
Stone-drilling machine	F. Davison	Petersburgh, Va	Nov. 7, 1854	11,889
Stone-drilling machine	J. Echols	Columbus, Ga	Mar. 25, 1856	14,495
Stone-drilling machine	G. Fletcher, sr	Greensburgh, Ind	Apr. 23, 1850	7,301
Stone-drilling machine	J. P. Frizell	Keokuk, Iowa	Aug. 24, 1869	94,097
Stone-drilling machine	H. Goulding	Boston, Mass	Sept. 16, 1851	8,363
Stone-drilling machine	H. Goulding	Boston, Mass	Jan. 20, 1852	8,672
Stone-drilling machine	C. W. Hermance	Saratoga, N. Y	Jan. 28, 1868	73,717
Stone-drilling machine	C. W. Hermance	Schuylersville, N. Y	Nov. 17, 1868	84,188
Stone-drilling machine	L. Hermance	Hudson, N. Y	Mar. 31, 1868	76,189
Stone-drilling machine	J. W. Page	West Roxbury, Mass	Nov. 2, 1852	9,379
Stone-drilling machine	S. Pettes	New York, N. Y	Mar. 14, 1854	10,635
Stone-drilling machine	A. M. Southard	Savannah, Mo	Sept. 3, 1867	68,580
Stone-drilling machine	A. M. Southard and W. J. Hobson.	Savannah, Mo	Apr. 28, 1868	77,330
Stone-drilling, Mode for attaching diamonds for	H. J. Smith	Boston, Mass	Oct. 19, 1869	96,045
Stone drilling or boring machine	W. Holdredge	Albany, N. Y	Nov. 10, 1831	....
Stone-eradicator	J. C. Blauvelt	Newton, Conn	Mar. 2, 1835	....
Stone facing and dressing machine	D. Hull and J. Critcherton	Portland, Me	May 8, 1837	191
Stone-facing machine	D. Bunnel	Xenia, Ohio	July 16, 1838	843
Stone-facing machine, Cobble	L. Dutertre	San Francisco, Cal	Aug. 26, 1873	142,089
Stone-finishing machine	A. F. Davis	Rutland, Vt	Sept. 24, 1872	131,602
Stone-finishing machine	A. F. Davis	Rutland, Vt	Dec. 24, 1872	134,197
Stone, Fire-proof	T. Hodgson	Brooklyn, N. Y	Mar. 10, 1857	16,799
Stone for building, Artificial	J. J. Johnston	Columbiana, Ohio	May 16, 1871	114,946
Stone for building, Artificial	G. E. Van Derburgh	New York, N. Y	Feb. 19, 1867	62,166
Stone for building-purposes, Imitation	T. F. Hamilton	New Haven, Conn	Dec. 8, 1868	84,822
Stone for filtering and other purposes, Composition for porous.	F. C. Krause	New York, N. Y	Feb. 17, 1863	37,696
Stone for grinding and polishing, Forming artificial.	W. Tanner, I. S. Hyatt, and J. W. Hyatt, jr.	Chicago and Rockford, Ill., and Albany, N. Y.	Mar. 6, 1866	53,056
Stone for grinding and polishing metal, Manufacturing artificial.	H. Van Unwerth	New York, N. Y	May 8, 1866	54,628
Stone for grinding, Artificial	J. Fitzgerald	New York	Sept. 12, 1846	4,755
Stone for pavements, floors, walks, &c., Artificial	C. B. Hutchins	Ann Arbor, Mich	Jan. 10, 1871	110,852
Stone for power-printing, Mode of preparing	U. M. Buflinton	Fall River, Mass	May 8, 1866	54,499
Stone from blast-furnace cinders, Manufacture of artificial.	F. Lürmann	Georgemarienhütte, Prussia.	Apr. 2, 1872	125,312
Stone-gatherer	P. S. Brewster and C. M. Hines	Lime Hill, Pa	Jan. 24, 1865	45,970
Stone-gatherer	O. Davis	Battle Creek, Mich	Feb. 27, 1872	124,122
Stone-gatherer	W. H. De Groat	New York, N. Y	Jan. 19, 1864	41,283
Stone-gatherer	J. L. Quimby	Pleasant Grove, Pa	May 2, 1865	47,566
Stone-gatherer	B. R. Tupper	Odessa, Mich	July 23, 1872	129,767
Stone-gathering machine	G. W. Bishop	Brooklyn, N. Y	July 6, 1858	20,774
Stone-gathering machine	J. H. Maydole	Eaton, N. Y	Feb. 23, 1858	19,430
Stone-gathering machine	G. N. Palmer	Greene, N. Y	May 12, 1868	77,833
Stone, glass, &c., Grinding and polishing	P. Cooper	New York	Mar. 24, 1835	....
Stone grinding and polishing machine	J. Finn	Boston, Mass	Feb. 4, 1873	135,535
Stone grinding and polishing machine	J. Harsha	Circleville, Ohio	June 6, 1865	48,062
Stone-grooving machine	G. W. Bishup	Brooklyn, N. Y	Jan. 27, 1857	16,460
Stone," Hardening and washing " Ransome concrete	R. Norris, jr	Baltimore, Md	May 11, 1869	89,884
Stone-hardening apparatus	E. P. Taylor	Saint Louis, Mo	July 7, 1868	79,612
Stone, Hardening artificial	G. Richardson	Milwaukee, Wis	Dec. 3, 1872	133,666
Stone, hay, &c., Machine for gathering and loading.	G. W. Holley	Niagara, N. Y	June 13, 1865	48,175
Stone hewing and hammering machine	C. B. Reed	West Bridgewater, Mass	June 27, 1827	....
Stone, Hewing, drilling, and picking	L. Yale	Salisbury, N. Y	Jan. 20, 1830	....
Stone-holding machine	E. B. Knight	Malden, N. Y	Sept. 14, 1858	21,539
Stone-holding machine	E. B. Knight	Malden, N. Y	Aug. 30, 1859	25,268
Stone, Imitation	C. Iles	Birmingham, England	June 15, 1852	9,026
Stone in foundations, Mode of securing	J. P. Avery	Stonington, Conn	Apr. 25, 1854	10,819
Stone in imitation of marble, Preparing	H. Tucker	Cambridgeport, Mass	Sept. 7, 1852	9,255
Stone in taper forms, Machine for sawing	H. J. Behrens	New York, N. Y	July 29, 1856	15,410
Stone, Instrument for cutting out	H. I. Brunner	Nazareth, Pa	Jan. 23, 1855	12,270
Stone into regular forms, Machine for breaking slabs or blocks of.	I. Merrill	Shelburne Falls, Mass	Mar. 24, 1857	16,878
Stone, Kiln for making artificial	D. M. Sprogle	Annapolis, Md	Dec. 3, 1872	133,547
Stone, Kiln for the manufacture of artificial	D. M. Sprogle	Annapolis, Md	Nov. 14, 1871	120,834
Stone, Lewis for attaching tackle to blocks of	E. Duchamp	Saint Martinsville, La	Jan. 11, 1859	22,551
Stone-lifter and stump-extractor	J. Knoop	Casstown, Ohio	Feb. 20, 1872	123,916
Stone, Machine for making artificial	J. S. Elliott	Boston, Mass	Feb. 21, 1871	111,921
Stone, &c., Machine for mixing the material to form artificial.	J. S. Elliott	Boston, Mass	Dec. 13, 1870	110,023
Stone, Malaxator for materials for artificial	F. Coignet	Paris, France	Dec. 21, 1869	98,035
Stone, Manufacture of artificial	C. J. Bandman	Union, N. J	Apr. 2, 1872	125,254
Stone, Manufacture of artificial	W. A. Battersby	Brooklyn, N. Y	Aug. 2, 1870	105,889
Stone, Manufacture of artificial	W. K. Boyle	Brookville, Md	Sept. 15, 1868	82,202
Stone, Manufacture of artificial	F. Coignet	Paris, France	Apr. 6, 1869	88,545
Stone, Manufacture of artificial	F. Coignet	Paris, France	Jan. 25, 1870	99,062
Stone, Manufacture of artificial	I. Coleman	New York	Oct. 31, 1871	120,369
Stone, Manufacture of artificial	A. J. Crawford	Brooklyn, N. Y	June 25, 1872	128,365
Stone, Manufacture of artificial	W. H. Foye	San Francisco, Cal	Nov. 29, 1870	109,607
Stone, Manufacture of artificial	A. H. Frear	Chicago, Ill	Mar. 29, 1870	101,253
Stone, Manufacture of artificial	M. T. Hagen	Brooklyn, N. Y	Dec. 10, 1872	133,774
Stone, Manufacture of artificial	T. Hodgson	Brooklyn, N. Y	June 19, 1855	13,116
Stone, Manufacture of artificial	J. F. Hoffman	Chicago, Ill	Sept. 17, 1872	131,348
Stone, Manufacture of artificial	T. A. Jebb	Buffalo, N. Y	Mar. 12, 1872	124,583
Stone, Manufacture of artificial	W. Kirrage	London, England	June 26, 1866	55,969
Stone, Manufacture of artificial	O. Loew	New York, N. Y	Apr. 30, 1872	126,311
Stone, Manufacture of artificial	A. H. Marret	Water-Works, Ky	Oct. 6, 1868	82,731
Stone, Manufacture of artificial	D. and W. McCaine	Groton, Mass	Dec. 17, 1867	72,412
Stone, Manufacture of artificial	D. Mindeleff	Washington, D. C	Sept. 15, 1868	82,260
Stone, Manufacture of artificial	J. Nagele	Duncansville, Pa	Mar. 12, 1867	62,770
Stone, Manufacture of artificial	J. O'Friel	Brooklyn, N. Y	Sept. 26, 1871	119,394
Stone, Manufacture of artificial	J. M. Ordway	Jamaica Plains, Mass	Jan. 4, 1870	98,517
Stone, Manufacture of artificial	A. Ott	New York, N. Y	Aug. 29, 1871	118,477
Stone, Manufacture of artificial	J. E. Park	Rutherford County, Tenn	May 28, 1872	127,264

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Stone, Manufacture of artificial	A. Quesnot	Bloomington, Ill	July 6, 1869	92,358
Stone, Manufacture of artificial	E. L. Ransome	San Francisco, Cal	Dec. 10, 1872	133,887
Stone, Manufacture of artificial	F. Ransome	Ipswich, England	Oct. 3, 1865	50,315
Stone, Manufacture of artificial	F. Ransome	Ipswich, England	Oct. 3, 1865	50,316
Stone, Manufacture of artificial	F. Ransome	London, England	Dec. 10, 1872	133,888
Stone, Manufacture of artificial	F. Ransome, H. Bessemer, and E. L. Ransome.	London and Greenwich, England.	Sept. 24, 1872	131,564
Stone, Manufacture of artificial	J. L. Rowland	Milwaukee, Wis	May 26, 1868	78,327
Stone, Manufacture of artificial	J. L. Rowland	Milwaukee, Wis	Nov. 29, 1870	109,669
Stone, Manufacture of artificial	J. L. Rowland	Milwaukee, Wis	Apr. 1, 1873	137,322
Stone, Manufacture of artificial	F. M. Ruschhaupt	New York, N. Y	Dec. 15, 1863	40,984
Stone, Manufacture of artificial	C. Schaeffer	Elizabeth, N. J	Nov. 10, 1868	84,003
Stone, Manufacture of artificial	C. Schaeffer	Elizabeth, N. J	July 5, 1870	105,132
Stone, Man facture of artificial	J. J. Schillinger	New York, N. Y	Apr. 6, 1869	88,742
Stone, Manufacture of artificial	J. J. Schillinger	New York, N. Y	Feb. 13, 1872	123,722
Stone, Manufacture of artificial	J. W. Snyder	Chicago, Ill	July 23, 1872	129,689
Stone, Manufacture of artificial	S. Sorel	Paris, France	Mar. 15, 1870	100,945
Stone, Manufacture of artificial	D. M. Sprogle	Annapolis, Md	Aug. 27, 1872	130,952
Stone, Manufacture of artificial	D. M. Sprogle and J. D. Pierce	Annapolis, Md., and Milwaukee, Wis.	Aug. 27, 1872	130,953
Stone, Manufacture of artificial	C. Stephens	New Orleans, La	May 24, 1870	103,520
Stone, Manufacture of artificial	E. Westermayr	Saint Louis, Mo	Oct. 29, 1872	132,550
Stone, Manufacture of cement for artificial	S. Sorel	Paris, France	Mar. 15, 1870	100,944
Stone, Manufacturing artificial	R. McKay, D. McKensie, and J. Woodhull.	Caledonia, N. Y	Jan. 16, 1828	....
Stone, Manufacturing artificial	J. Woodhull	Wheatland, N. Y	Dec. 15, 1837	517
Stone, Marbleized composition	T. Carson	Brooklyn, N. Y	Mar. 25, 1873	137,127
Stone, metal, and glass, Cutting and engraving	B. C. Tilghman	Philadelphia, Pa	Oct. 18, 1870	108,408
Stone, Metal-clad artificial	F. Coignet	Paris, France	Dec. 21, 1869	98,033
Stone, Method of securing letters to	J. Vennall	Boston, Mass	Sept. 2, 1873	142,421
Stone, "Mode of hardening and washing" Ransome concrete.	R. Norris, jr	Baltimore, Md	July 6, 1869	92,345
Stone, Mode of treating and manipulating cement in the manufacture of artificial.	F. Coignet	Paris, France	Apr. 6, 1869	88,548
Stone or marble dressing machine	C. Miller, jr	Williamsport, Pa	Feb. 14, 1832	....
Stone or marble sawing machine	M. J. McBird	Logansport, Ind	July 22, 1856	15,380
Stone-pick	J. U. Houston	Conway, Mass	Dec. 14, 1852	9,465
Stone-picking machine	J. T. Foster	Jersey City, N. J	Feb. 21, 1854	10,542
Stone-planing machine	A. T. Merriman	Chicago, Ill	Jan. 25, 1870	99,218
Stone-planing machine	A. T. Merriman	Chicago, Ill	May 27, 1873	139,409
Stone polishing and dressing machine	E. H. Lewis	Kingston, N. Y	May 23, 1865	47,909
Stone-polishing machine	C. H. Fitch	Syracuse, N. Y	Dec. 7, 1869	97,494
Stone-polishing machine	G. Fletcher, sr	Greensburgh, Ind	Apr. 24, 1849	6,383
Stone-polishing machine	E. H. Lewis	Wilbur, N. Y	July 9, 1861	32,766
Stone-polishing machine	L. S. Robbins	New York, N. Y	Apr. 24, 1855	12,766
Stone-polishing machine	A. W. Roberts	Hartford, Conn	July 30, 1872	129,905
Stone-polishing machine	A. Saffer	New York, N. Y	Sept. 26, 1871	119,282
Stone-polishing machine	H. Schofield	Philadelphia, Pa	Dec. 14, 1869	97,847
Stone-polishing machine	A. Walter	Middletown Ind	May 7, 1850	7,354
Stone-polishing machinery	A. Broughton	Malone, N. Y	Nov. 7, 1854	11,886
Stone post	J. B. Reynolds	Rutland, Vt	Oct. 8, 1872	131,971
Stone, Preparing artificial	R. Neisch	New York, N. Y	May 6, 1856	14,824
Stone, Press for the manufacture of artificial	L. Dodge	Chicago, Ill	Nov. 22, 1870	109,397
Stone, Process and implement for expelling air from compositions for artificial.	G. A. Frear	Chicago, Ill	Mar. 25, 1873	137,193
Stone, Process for the manufacture of artificial	H. M. Wilcox	Chicago, Ill	Sept. 17, 1872	131,382
Stone, Process of forming artificial	F. Coignet	Paris, France	Apr. 6, 1869	88,549
Stone, Process of making artificial	D. M. Sprogle	Annapolis, Md	May 27, 1873	139,274
Stone, Process of manufacturing artificial	E. L. Ransome	San Francisco, Cal	Dec. 9, 1873	145,363
Stone, Process of removing soluble matters from artificial. (Surrendered.)	E. T. Steen and W. B. May	San Francisco, Cal	May 4, 1869	89,805
Stone-puller	G. Sprinkle	North Leverett, Mass	Dec. 12, 1871	121,820
Stone-puller	G. Sprinkle	North Leverett, Mass	Mar. 18, 1873	136,941
Stone quarrying and cutting machine	C. Frost and A. W. Webster	Waterbury, Conn	July 8, 1856	15,289
Stone quarrying and dressing machine	F. Townsend	Albany, N. Y	Dec. 28, 1869	98,317
Stone, &c., quarrying machine	J. Ellis	Warrington, England	Apr. 12, 1859	33,667
Stone-quarrying machine	C. O. Luce and C. W. Green	Brandon, Vt	Dec. 29, 1863	85,317
Stone-quarrying machine	E. Norton	Boston, Mass	Nov. 12, 1872	132,976
Stone-quarrying machine	G. J. Wardwell	Rutland, Vt	Sept. 24, 1867	69,282
Stone-quarrying machine	G. J. Wardwell	Rutland, Vt	Sept. 24, 1867	69,283
Stone, Raising and transporting	R. T. Hathaway	New Bedford, Mass	June 17, 1862	35,607
Stone raising and transporting machine	S. E. Bolles	Rochester, Mass	Apr. 10, 1855	12,666
Stone, Removing soluble salts from artificial	E. L. Ransome	Greenwich, England	Oct. 25, 1870	108,637
Stone, &c., Rotary cutter for molding	R. Ardrey	Frankford, Pa	May 21, 1872	127,011
Stone, Rubbing and polishing	A. Olcott	Millstone, N. J	July 30, 1850	7,530
Stone-rubbing machine	P. E. Royse	New Albany, Ind	July 20, 1852	9,142
Stone-rubbing machine	P. E. Royse and J. Reynolds	New Albany, Ind., and Republic, Ohio.	July 6, 1852	9,104
Stone, Sad	H. W. Hopkins	Milford, N. H	Jan. 1, 1867	60,720
Stone-sawing	J. North	Middletown, Conn	Oct. 14, 1856	15,892
Stone, Sawing and dressing	D. Pfister	Manedorf, Switzerland	Apr. 10, 1845	3,991
Stone-sawing machine	J. Adams	Fair Haven, Vt	June 19, 1855	13,074
Stone-sawing machine	H. L. Arnold	Elk Horn, Wis	July 27, 1858	20,981
Stone sawing machine	L. E. Baldwin	Windham, Conn	June 22, 1869	91,507
Stone-sawing machine	V. G. Barney	Minneapolis, Minn	Jan. 30, 1872	123,217
Stone-sawing machine	C. Bateman	Baltimore, Md	Aug. 16, 1870	106,308
Stone-sawing machine	C. G. Brietel and H. J. Brunner	Nazareth, Pa	Sept. 25, 1855	13,591
Stone-sawing machine	J. T. Bruen and J. G. Wilson	Hastings, N. Y	Jan. 4, 1853	9,513
Stone-sawing machine	A. M. Burnham	Montpelier, Vt	Aug. 21, 1860	29,667
Stone-sawing machine	H. Cottrell	Newark, N. J	Nov. 4, 1873	144,317
Stone-sawing machine	G. A. Davidson	Malden, N. Y	Aug. 27, 1872	130,845
Stone-sawing machine	J. Dindinger and C. Henri	New Orleans, La	Dec. 26, 1871	122,234
Stone-sawing machine	J. L. Dutton	Philadelphia, Pa	May 22, 1835	....
Stone-sawing machine	J. and S. Dwight	Boston, Mass	June 17, 1818	....
Stone-sawing machine	H. S. Gillette	New Preston, Conn	Dec. 12, 1871	121,753
Stone-sawing machine	J. Grason	Queenstown, Md	July 1, 1856	15,220
Stone-sawing machine	N. Holmes	Barnstable, Mass	Jan. 24, 1823	....
Stone-sawing machine	J. Maydwell	Memphis, Tenn	Apr. 23, 1872	126,065

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Stone-sawing machine	A. T. Merriman	Chicago, Ill	June 21, 1859	24, 478
Stone-sawing machine	G. Morgan	Brooklyn, N. Y	July 12, 1870	105, 359
Stone-sawing machine	F. S. Packard	Springfield, Mass	Nov. 20, 1866	59, 747
Stone-sawing machine	A. Rothwell	Baltimore, Md	Jan. 19, 1869	86, 102
Stone-sawing machine	S. Sherman	Weston, Mo	Aug. 28, 1866	57, 586
Stone-sawing machine	S. Stanton	Syracuse, N. Y	July 7, 1866	79, 608
Stone-sawing machine	T. H. Stevens	Dover, N. Y	June 8, 1869	90, 969
Stone-sawing machine	L. Ward	Trenton, N. Y	Oct. 11, 1870	108, 307
Stone sawing, polishing, and molding machine	S. B. Willard	Bloomfield, N. Y	Nov. 3, 1813	....
Stone-sawing mill	D. Bunnel	Xenia, Ohio	Oct. 27, 1835	....
Stone-sawing mill	C. A. Mills	Dubuque, Iowa	July 8, 1856	15, 299
Stone-sawing mill	D. V. Rannells	Washington, Ky	Feb. 8, 1840	1, 487
Stone-separator	H. Aiken	Philadelphia, Pa	Dec. 28, 1869	98, 329
Stone-setting	W. Riker	Newark, N. J	Jan. 24, 1871	111, 253
Stone, Solution for saturating natural and artificial	G. E. Van Derburgh	New York, N. Y	July 11, 1865	48, 747
Stone, Splitting	P. Croghan	Cockeysville, Md	July 8, 1873	140, 681
Stone-staining composition	P. B. Laird	Saint Johnsbury, Vt	Sept. 12, 1871	118, 865
Stone, stucco, cement, &c., Manufacture of artificial.	G. A. Frear	Chicago, Ill	Feb. 4, 1868	73, 965
Stone tile-pavements, &c., Composition for artificial.	A. Pelletier	Washington, D. C	Mar. 18, 1873	136, 862
Stone-tool	I. Curtner	Dayton, Ohio	Dec. 30, 1873	146, 051
Stone, Treatment of lime for the manufacture of artificial.	J. L. Rowland	Milwaukee, Wis	Apr. 1, 1873	137, 323
Stone-turning machine	J. D. Brunton	Kentish Town, England	Dec. 26, 1871	122, 222
Stone-turning machine	A. S. Gear	Boston, Mass	Mar. 4, 1873	136, 432
Stone-turning tool	J. E. Mitchell	Philadelphia, Pa	Apr. 9, 1872	125, 403
Stone-unloading apparatus	J. B. and E. G. Moore	McDonough, N. Y	Nov. 3, 1868	83, 721
Stone-ware for the use of chemists and others, Manufacture of.	R. C. Remmey	Philadelphia, Pa	Jan. 12, 1869	85, 766
Stone-ware gage	A. W. Loomis	Atwater, Ohio	Oct. 27, 1868	83, 515
Stone-ware, Manufacture of	E. T. Chapman	Middlebury, Ohio	Mar. 26, 1867	63, 138
Stone-ware without the use of salt, Burning	S. S. Berry	Troy, N. Y	Sept. 12, 1826	....
Stone-work, Composition to be used as putty for	J. R. Williams	Taunton, Mass	May 28, 1867	65, 321
Stone-working machine	A. S. Gear	Boston, Mass	Apr. 23, 1872	125, 949
Stone-working machine	C. F. Schlickeysen	Berlin, Prussia	Sept. 27, 1870	107, 820
Stones, Asphaltic paving or flag	A. and I. Straub	Milton, Pa., and Cincinnati, Ohio.	Nov. 17, 1863	40, 651
Stones, Boring	A. Turney	Reading, Conn	Mar. 30, 1836	....
Stones, Boring and drilling	E. C. Everts and W. Lockwood	Colesville, N. Y	July 20, 1831	....
Stones for ballasting railways and turnpikes, Machine for breaking.	A. C. Ellithorpe and I. Scoville	Chicago, Ill	Nov. 23, 1858	22, 113
Stones, &c., Composition for forming	J. J. Bartlett	New York, N. Y	Jan. 7, 1873	134, 628
Stones, Composition for making sharpening	R. R. Miller and A. W. Carver	Philadelphia, Pa	Dec. 18, 1866	60, 536
Stones, Compound for making artificial	W. E. Ferslew	New Orleans, La	Oct. 14, 1873	143, 563
Stones for turnpike roads, Machine for breaking	T. Adams	Harrisburgh, Pa	July 12, 1859	24, 783
Stones for turnpike roads, &c., Machine for breaking	I. Scoville	Chicago, Ill	Sept. 6, 1859	25, 371
Stones, Fork-tine scoop for gathering	N. S. Barnum	Ridgefield, Conn	Oct. 24, 1871	120, 146
Stones, &c., from clay, Machine for separating	C. Ramberg and R. Blaser	Chicago, Ill	May 10, 1859	23, 888
Stones from clay, Machine for separating	D. Wellington	Boston, Mass	Aug. 18, 1868	81, 314
Stones from clay, Separating	D. J. Hunter	Boston, Mass	Sept. 6, 1870	107, 053
Stones, Machine for cutting cobble	H. Lombard, J. P. Morrill, and L. A. Sweatt.	San Francisco, Cal	Nov. 11, 1873	144, 398
Stones, Machine to cut cobble	J. Bolliger	San Francisco, Cal	Sept. 17, 1872	131, 389
Stones, Mounting precious	T. J. Linton	Providence, R. I	Dec. 6, 1859	26, 371
Stones, Treating carbonic acid for hardening	D. M. Sprogle	Annapolis, Md	Aug. 27, 1872	130, 951
Stones, &c., under water, Method of laying	W. P. Parrott	Boston, Mass	Mar. 18, 1862	34, 692
Stoner, Cherry	C. A. Fisher	Philadelphia, Pa	May 24, 1870	103, 317
Stool	C. B. Sheldon	New York, N. Y	July 29, 1873	141, 391
Stool, Adjustable	A. Doll	Cleveland, Ohio	July 29, 1873	141, 208
Stool and book-holder, Combined kneeling	G. Watson	Detroit, Mich	May 7, 1872	126, 430
Stool and book-rack, Combined music	J. K. Lomas	New Haven, Conn	May 30, 1871	115, 332
Stool and chair, Combined	E. Worch	New York, N. Y	Mar. 26, 1872	125, 110
Stool and chair, Folding	L. Hirsh	Philadelphia, Pa	June 4, 1872	127, 484
Stool and closet, Close	C. True	Pecatonica, Ill	Nov. 23, 1869	97, 135
Stool and pail-holder, Milking	L. B. Hoit	Cedar Falls, Iowa	Apr. 28, 1868	77, 376
Stool and rack, Music	A. N. Towne	Chicago, Ill	Nov. 3, 1868	83, 801
Stool and traveling-bag	J. Salisbury and B. Wilbur	Scituate, R. I	Nov. 8, 1870	109, 058
Stool and warmer, Foot	J. Jacquet	Newark, N. J	Mar. 30, 1869	88, 388
Stool, Camp	E. G. Belknap	Philadelphia, Pa	Sept. 27, 1859	25, 555
Stool, Camp	H. Free	Lewiston, Me	June 6, 1871	115, 598
Stool, Camp	R. M. Garrettson	Rhinebeck, N. Y	Aug. 14, 1860	29, 520
Stool, Camp	A. Hallowell, E. Elliott, and C. A. Blodgett.	Lowell, Mass	July 25, 1871	117, 277
Stool, Camp	C. G. Herbert	New York, N. Y	Feb. 6, 1866	52, 412
Stool, Camp	N. Johnson	New York, N. Y	July 2, 1861	32, 698
Stool, Camp	J. W. Willett	Wareham, Mass	May 22, 1860	28, 430
Stool, Dentist's	I. W. Lyon	Brooklyn, N. Y	Feb. 4, 1873	135, 435
Stool, Dentist's	I. W. Lyon	New York, N. Y	Feb. 18, 1873	135, 924
Stool, Folding	W. E. Cameron	Green Island, N. Y	May 26, 1868	78, 259
Stool, Folding	C. B. Turnbull	Baltimore, Md	May 21, 1872	126, 914
Stool, Folding camp	J. Ingram	Troy, N. Y	Oct. 13, 1868	82, 955
Stool, Folding counter	J. L. Young	New York, N. Y	July 26, 1870	105, 761
Stool, Foot and kneeling	R. H. Mathews	Alliance, Ohio	Jan. 5, 1864	41, 163
Stool for churches, Foot and kneeling	J. P. Tibbits	New York, N. Y	Dec. 14, 1869	97, 993
Stool, Gardener's	E. Whittlesey	Mullica, N. J	Oct. 13, 1863	40, 301
Stool, Milking	L. O. Allen	Gardiner, Me	June 13, 1871	115, 803
Stool, Milking	I. Barrows	Hermon, N. Y	Mar. 23, 1869	88, 115
Stool, Milking	D. D. Chittenden	Baldwinsville, N. Y	July 6, 1869	92, 165
Stool, Milking	S. P. Clemons	Dansville, N. Y	Oct. 12, 1869	95, 770
Stool, Milking	D. Conner	Fulton, Ill	Jan. 15, 1867	61, 165
Stool, Milking	O. Earl	Hermon, N. Y	Aug. 25, 1868	81, 352
Stool, Milking	G. W. Haviland	Fort Dodge, Iowa	June 21, 1870	104, 452
Stool, Milking	E. W. Hopkins	Oneonta, N. Y	June 15, 1869	91, 336
Stool, Milking	R. W. Jones and J. B. Baker	Syracuse, N. Y	Jan. 3, 1871	110, 661
Stool, Milking	J. N. Knapp	Syracuse, N. Y	Apr. 25, 1871	114, 153
Stool, Milking	G. T. Lincoln	Leominster, Mass	Aug. 26, 1873	142, 247
Stool, Milking	L. Loring	Saco, Me	Nov. 6, 1860	30, 583

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Invention.	Inventor.	Residence.	Date.	No.
Stool, Milking	E. Martin and S. M. Chittenden	Baldwinsville, N. Y	Jan. 25, 1870	99, 098
Stool, Milking	C. F. Pollock and N. Trickey	Theresa, N. Y	May 4, 1869	89, 684
Stool, Milking	E. W. Scott	Wauregan, Conn	Apr. 13, 1869	88, 813
Stool, Milking	G. Smith	Syracuse, N. Y	Dec. 6, 1870	109, 847
Stool, Milking	G. Smith	Rochester, N. Y	Apr. 18, 1871	113, 806
Stool, Music	E. Leach	Norwich, Conn	Aug. 24, 1858	21, 262
Stool, Office and counting-house	A. D. Cartwright	Oakland, Cal	Nov. 11, 1873	144, 441
Stool or chair	H. Ocorr	Milwaukee, Wis	June 10, 1873	139, 730
Stool or chair, Camp	A. D. Whitmore	Housatonic, Mass	Sept. 15, 1863	40, 002
Stool or chair, Revolving	J. J. Vollrath	Sheboygan, Wis	Nov. 18, 1873	144, 806
Stool or table	A. O. Crane	Boston, Mass	Apr. 4, 1871	113, 266
Stool, Ottoman piano	J. Briggs	Peterborough, N. H	Aug. 31, 1869	94, 388
Stool, Piano	S. W. Babbitt	West Meriden, Conn	July 16, 1872	129, 510
Stool, Piano	J. Bramble and H. M. Deihl	Fort Wayne, Ind	Mar. 31, 1868	76, 044
Stool, Piano	J. Briggs	Peterborough, N. H	Oct. 23, 1866	58, 979
Stool, Piano	J. Briggs	Peterborough, N. H	Dec. 10, 1867	71, 967
Stool, Piano	W. A. Ingalls	Chicago, Ill	May 8, 1866	54, 551
Stool, Piano	C. A. Schindler	West Hoboken, N. J	Oct. 10, 1871	119, 793
Stool, Piano	C. A. Schindler	West Hoboken, N. J	Aug. 6, 1872	130, 247
Stool, Piano	G. A. Sherlock	New York, N. Y	Sept. 19, 1865	50, 042
Stool, Piano	H. and V. Vogel	Saint Louis, Mo	May 25, 1869	90, 613
Stool, Piano-forte	J. Briggs	Peterborough, N. H	Apr. 28, 1868	77, 164
Stool, Piano-forte	J. Briggs	Peterborough, N. H	Aug. 31, 1869	94, 387
Stool, Piano-forte	G. Schmidt	Dobb's Ferry, N. Y	July 9, 1867	66, 522
Stool, Piano-forte	L. Van Hoesen	New Haven, Conn	Oct. 3, 1854	11, 771
Stool, Pivot	H. Earl, jr	New York, N. Y	Nov. 26, 1872	133, 310
Stool, Portable	O. D. Abbott	Chelsea, Mass	Oct. 6, 1863	40, 208
Stool, Rotary	G. H. Spencer	Fitchburgh, Mass	Nov. 5, 1872	132, 871
Stool screw, Music	L. Horn	Wolfborough, N. H	Sept. 27, 1864	44, 423
Stool screw, Piano	J. Krieg	New York, N. Y	Dec. 29, 1868	85, 454
Stool, Scrubbing	F. Deike and M. Helmstadt	New York, N. Y	May 14, 1872	126, 789
Stool, stand, and work-table, Adjustable music	G. W. Griswold	Factoryville, Pa	Nov. 14, 1871	120, 872
Stool, Store	A. A. Murphy	Montreal, Canada	Apr. 29, 1873	138, 271
Stools, Adjustable back for	T. J. Ross	Union, N. Y	Nov. 6, 1866	59, 457
Stools and tables, Pedestal for	J. R. Lomas	New Haven, Conn	June 17, 1873	140, 054
Stools, Base for piano-forte	F. Odell	New York, N. Y	Oct. 17, 1865	50, 488
Stools, Means for attaching legs to music	E. D. Castelow	Meriden, Conn	Apr. 3, 1866	53, 571
Stools, Piano and other	R. W. Archer	Rochester, N. Y	May 6, 1873	138, 600
Stools, tables, &c., Standard for	S. H. Newcomb	Port Williams, Nova Scotia	Oct. 21, 1873	143, 836
Stop-cock, check-valve, and blow-off, Combined	E. G. Cushing	Oswego, N. Y	Apr. 22, 1873	138, 077
Stop-device	P. Rodier	Detroit, Mich	Oct. 27, 1868	83, 411
Stop-gate for canals, &c	J. W. Sprague	Rochester, N. Y	Nov. 30, 1858	22, 204
Stop-motion spring for braiding-machines	G. K. Winchester	Providence, R. I	July 5, 1870	105, 022
Stopper:				
See Anchor-stopper. Jar and bottle stopper.				
Bottle-stopper. Milk-can stopper.				
Cable-stopper. Oil-can stopper.				
Can-stopper. Oyster-keg stopper.				
Chain-stopper. Pipe-leak stopper.				
Chain-cable stopper. Port-stopper.				
Decanter-stopper. Rigging-stopper.				
Fruit-jar stopper. Sash-stopper.				
Hawse-pipe stopper. Sealed-can stopper.				
Hose-leak stopper. Tobacco-stopper.				
Jar-stopper. Tube-stopper.				
Stopper for bottles containing inflammable liquid	L. G. Chaput	New York, N. Y	Aug. 12, 1873	141, 628
Store, building, &c	I. Knight	Baltimore, Md	May 23, 1836	....
Store-counter	E. O. Thomas	Philadelphia, Pa	July 9, 1850	7, 500
Store-counter, Portable	J. H. Davis	Danville, Ky	May 28, 1872	127, 223
Store-drawer	R. J. Roberts	New York, N. Y	Jan. 10, 1871	110, 870
Store-house	C. Wright	New York, N. Y	Feb. 26, 1867	62, 515
Store-house elevator	W. H. Allen	Brooklyn, N. Y	Aug. 28, 1860	29, 751
Store-room and pantry, Portable	T. A. Barrell	Marva, Ill	Dec. 27, 1870	110, 538
Store-seat	D. Christian	Chagrin Falls, Ohio	June 20, 1871	116, 023
Store-shelving	W. and G. Koch	Cass, Pa	July 20, 1869	92, 731
Store shelving	R. Murdock	Baltimore, Md	Nov. 1, 1870	108, 930
Stores, Mode of constructing	W. L. Johnson	Peytonsville, Tenn	June 23, 1857	17, 627
Stove	J. G. Abbott and A. Lawrence	Philadelphia, Pa	Oct. 4, 1859	25, 612
Stove	F. E. Adams	Baltimore, Md	Mar. 20, 1866	53, 252
Stove	B. Allison	Philadelphia, Pa	Apr. 10, 1818	....
Stove	J. Atwater	New Haven, Conn	June 30, 1836	....
Stove	A. Atwood	Troy, N. Y	May 14, 1850	7, 356
Stove	E. Backus	Brooklyn, N. Y	July 28, 1846	4, 669
Stove	E Backus	Coxsackie, N. Y	Mar. 10, 1863	37, 847
Stove	L. Bailey	Boston, Mass	Mar. 26, 1844	3, 508
Stove	W. Bamford and J. F. Tate, jr	Milwaukie, Wis	June 6, 1865	48, 037
Stove	W. A. Barlow	Elkhorn, Wis	June 3, 1862	35, 494
Stove	C. Barney	Warren, R. I	Dec. 27, 1815	....
Stove	J. Barron	Norfolk, Va	May 14, 1822	....
Stove	W. F. Beecher	Chicago, Ill	Aug. 27, 1861	33, 127
Stove	R. W. Belson	Danville, Pa	June 1, 1843	3, 113
Stove	R. W. Belson	Philadelphia, Pa	Dec. 21, 1858	22, 342
Stove	R. W. Belson	Philadelphia, Pa	Apr. 26, 1859	23, 748
Stove	R. W. Belson	Philadelphia, Pa	Apr. 26, 1859	23, 749
Stove	B. C. Bibb and H. Augee	Baltimore, Md	Apr. 30, 1861	32, 176
Stove	W. Bickel	Pottsville, Pa	Oct. 14, 1862	36, 639
Stove	W. Bickel	Pottsville, Pa	Feb. 16, 1864	41, 596
Stove	G. D. Boyce	West Wareham, Mass	Dec. 27, 1839	1, 444
Stove	W. A. Boynton	New York, N. Y	June 23, 1863	38, 942
Stove	M. Bratt	Maysville, Ky	May 24, 1864	42, 833
Stove	M. Bratt	Maysville, Ky	Sept. 5, 1865	49, 707
Stove	J. S. Brown	Washington, D. C	June 1, 1858	20, 466
Stove	J. D. Bruner	Alton, Ill	Feb. 15, 1859	22, 933
Stove	I. H. Buchanan	New Concord, Ohio	Nov. 2, 1858	21, 938
Stove	F. Bucher	Columbia, Pa	May 31, 1859	24, 192
Stove	P. N. Burke	Buffalo, N. Y	July 19, 1859	24, 791
Stove	O. M. Buttles	Milwaukee, Wis	May 6, 1862	35, 135
Stove	W. I. Cantelo	Burlington, N. J	June 28, 1859	24, 539

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Stove	W. I. Cantelo	Philadelphia, Pa	Apr. 24, 1860	28,035
Stove	W. M. Carmichael	Hempstead, N. Y	Mar. 23, 1836	......
Stove	R. Chester	Chicago, Ill	May 24, 1864	42,837
Stove	G. Chilson	Boston, Mass	Sept. 16, 1851	8,366
Stove	J. S. Clark	Philadelphia, Pa	Dec. 14, 1858	22,276
Stove	J. S. Clark and W. Harris	Philadelphia, Pa	Dec. 14, 1858	22,277
Stove	P. J. Clute	Schenectady, N. Y	Sept. 19, 1845	4,179
Stove	J. Cole	Cincinnati, Ohio	Oct. 30, 1849	6,824
Stove	J. W. Coleman	Medway, Mass	Feb. 14, 1860	27,111
Stove	J. Collins and J. Knox	Conshohocken, Pa	Apr. 7, 1868	76,400
Stove	J. Collum	Grafton, Mass	July 31, 1837	340
Stove	C. C. Converse	Dubuque, Iowa	Jan. 12, 1864	41,198
Stove	A. Cornell and N. R. Merchant	Guilford, N. Y	July 16, 1842	2,724
Stove	E. Cory	Milton, N. Y	May 30, 1816	......
Stove	D. B. Cox	Troy, N. Y	Dec. 20, 1864	45,478
Stove	J. T. Davy	Troy, N. Y	May 13, 1862	35,221
Stove	R. Dawes	Washington, D. C	Feb. 2, 1858	19,240
Stove	R. Dawes and W. C. Choate	Washington, D. C	July 19, 1859	24,798
Stove	S. Dickey	Oxford, Pa	Mar. 7, 1806	......
Stove	P. Dodge	Francestown, N. H	Feb. 1, 1850	22,787
Stove	B. Düerstock	Cincinnati, Ohio	Aug. 12, 1873	141,771
Stove	J. Easterly	Albany, N. Y	Feb. 25, 1862	34,548
Stove	N. Edwards	Chittenden County, Vt	Dec. 28, 1858	22,416
Stove	R. Elmendorf	Kingston, N. Y	Apr. 25, 1843	3,078
Stove	J. Fales	Newport, R. I	Feb. 22, 1809	......
Stove	D. W. C. Farrington	Lowell, Mass	Oct. 25, 1859	25,931
Stove	H. B. Fay	New York, N. Y	Jan. 10, 1860	26,756
Stove	J. D. Field	Davenport, Iowa	July 19, 1859	24,800
Stove	T. N. Fisher and J. H. Zinn	Newport, Pa	Aug. 20, 1861	33,079
Stove	C. O. Foley	Troy, N. Y	Aug. 17, 1858	21,191
Stove	H. D. and J. M. Fouse	Baltimore, Md	June 27, 1846	4,601
Stove	C. Fownes	Pittsburgh, Pa	Apr. 18, 1865	47,291
Stove	Frazier, Blanchard, and Gill	New York, N. Y	Apr. 28, 1836	......
Stove	F. Frickards	Easton, Pa	Apr. 28, 1836	......
Stove	J. B. B. Galpin	New Haven, Conn	Aug. 14, 1839	1,287
Stove	J. C. Gaston	Cincinnati, Ohio	Jan. 28, 1868	73,886
Stove	W. F. George	Cincinnati, Ohio	Aug. 21, 1860	29,687
Stove	P. Gillett	New Hartford, Conn	June 30, 1838	816
Stove	F. Gilliland	Port Jackson, N. Y	Mar. 29, 1859	23,363
Stove	L. Gleason	Milford, Mass	June 28, 1870	104,844
Stove	J. W. Godfrey and W. Lane		July 14, 1798	......
Stove	W. H. Goewey	Albany, N. Y	May 26, 1863	38,673
Stove	S. R. Going	Brooklyn, N. Y	June 17, 1862	35,658
Stove	T. S. Gore	Jersey City, N. J	Aug. 30, 1853	9,969
Stove	A. Graham	Fredericktown, Md	Nov. 6, 1810	......
Stove	R. D. Granger	Albany, N. Y	Sept. 24, 1861	33,345
Stove	S. Groom	Troy, N. Y	Apr. 8, 1862	34,929
Stove	S. Groom	Troy, N. Y	June 10, 1862	35,574
Stove	E. Guyer	Walcott, Vt	Mar. 18, 1862	34,683
Stove	J. Hafer	Bedford, Pa	Oct. 27, 1863	40,405
Stove	J. Hafer	Bedford, Pa	Jan. 5, 1864	41,152
Stove	W. E. Hagan	Troy, N. Y	Mar. 8, 1864	41,897
Stove	G. Hamel	Abington, Pa	Oct. 22, 1861	33,525
Stove	S. W. Hanks	Lowell, Mass	Oct. 12, 1842	2,810
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 7, 1859	24,352
Stove	C. Hartwell	Boston, Mass	Dec. 7, 1858	22,250
Stove	S. T. Harvey	Baltimore, Md	Mar. 19, 1861	31,716
Stove	J. R. Hawkins	Syracuse, N. Y	Sept. 20, 1864	44,307
Stove	F. L. Hedenburg	New York, N. Y	May 7, 1845	4,032
Stove	D. Heilig	Nebraska City, Nebr	Apr. 15, 1862	34,959
Stove	J. Henderson	Horseheads, N. Y	July 5, 1859	24,634
Stove	J. C. Henderson	Albany, N. Y	May 18, 1858	20,274
Stove	J. C. Henderson	Albany, N. Y	July 19, 1859	24,844
Stove	J. C. Henderson	Albany, N. Y	May 29, 1860	28,482
Stove	J. C. Henderson	Albany, N. Y	July 2, 1861	32,691
Stove	J. I. Herrick	Milwaukee, Wis	Mar. 25, 1862	34,732
Stove	S. E. Hewes	Albany, N. Y	July 12, 1859	24,738
Stove	T. Hirst		Mar. 11, 1797	......
Stove	C. Hooffstatter	Rome, N. Y	May 25, 1858	20,389
Stove	G. F. Hopkins	New York, N. Y	Sept. 8, 1837	380
Stove	M. L. Horton	Lebanon, N. H	June 28, 1859	24,559
Stove	F. Hogos	Paris, France	Apr. 26, 1864	42,457
Stove	G. G. Hunt	Quincy, Ill	June 9, 1863	38,828
Stove	J. R. Hyde	Troy, N. Y	June 10, 1862	35,564
Stove	J. R. Hyde	Troy, N. Y	Mar. 24, 1863	37,966
Stove	W. T. James	Union Village, N. Y	Apr. 26, 1815	......
Stove	A. James	Hartford, Conn	Mar. 1, 1813	......
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	Sept. 3, 1850	7,619
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	June 14, 1853	9,780
Stove	E. Johnson and D. B. Cox	Troy, N. Y	July 22, 1845	4,119
Stove, &c	J. Johnson and J. E. Crane	Lowell, Mass	Apr. 24, 1855	12,758
Stove	C. Jones	Philadelphia, Pa	July 17, 1860	29,175
Stove	G. W. Kennison	Newburyport, Mass	May 18, 1852	8,949
Stove	M. Ketchum	Boston, Mass	May 25, 1839	1,159
Stove	J. H. Keyser	New York, N. Y	Sept. 22, 1868	82,327
Stove	W. B. Kimball	Peterborough, N. H	June 28, 1864	43,314
Stove	G. J. Kingsbury	Rochester, N. Y	Apr. 12, 1859	23,587
Stove	A. Lane		May 11, 1815	......
Stove	A. Lane	New York, N. Y	Sept. 15, 1818	......
Stove	J. H. B. Latrobe	Baltimore, Md	Sept. 5, 1846	4,744
Stove	H. F. Liebenau	New York	Sept. 7, 1816	......
Stove	R. Little	Canton, Ohio	Feb. 14, 1865	46,422
Stove	D. G. Littlefield	Lowell, Mass	Jan. 24, 1854	10,448
Stove	D. G. Littlefield	Albany, N. Y	Dec. 9, 1862	37,103
Stove	N. Lloyd	Philadelphia, Pa	Feb. 29, 1812	......
Stove	A. Lotze	Cincinnati, Ohio	Oct. 30, 1849	6,833
Stove	W. J. Lyman	East Hampton, Mass	Oct. 4, 1864	44,538

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Stove	J. B. Mabury	Jeffersonville, Ind	Mar. 18, 1856	14, 4 1
Stove	J. Magee	Lawrence, Mass	Aug. 16, 1859	25, 128
Stove	J. Magee	Lawrence, Mass	Apr. 23, 1861	32, 164
Stove	J. Magee and W. J. Towne	Lawrence and Newton, Mass.	Aug. 14, 1860	29, 608
Stove	F. Maguire	Boston, Mass	Mar. 8, 1864	41, 892
Stove	E. M. Manigle	Philadelphia, Pa	Sept. 6, 1859	25, 343
Stove	J. S. Marll and W. J. Ogden	Georgetown, D. C	Mar. 13, 1847	5, 014
Stove, etc	A. B. Martin	Hagerstown, Md	Dec. 26, 1816	....
Stove	D. N. Martin	Lawrence, Mass	Feb. 15, 1859	22, 963
Stove	J. Martino	Philadelphia, Pa	Sept. 6, 1859	25, 365
Stove	J. McCailmont	....	Feb. 20, 1797	....
Stove	W. L. McDowell	Philadelphia, Pa	Apr. 28, 1863	38, 318
Stove and oven, Camp	D. C. McNeil	De Witt, Iowa	Aug. 11, 1868	80, 987
Stove	D. H. Metcalf and C. F. Bock	Battle Creek, Mich	Apr. 28, 1863	38, 319
Stove	T. Mills	Havanna, N. Y	Sept. 25, 1837	411
Stove	E. Mingay	Boston, Mass	Mar. 29, 1864	42, 144
Stove	W. Mootry	New York, N. Y	Oct. 30, 1855	13, 728
Stove	B. Morrison	Philadelphia, Pa	June 28, 1864	43, 328
Stove	J. Morrison	Newark, N. J	Mar. 12, 1845	3, 946
Stove	J. Morrison, jr	Troy, N. Y	Apr. 14, 1863	38, 174
Stove	J. L. Mott	New York	Dec. 30, 1833	....
Stove	J. L. Mott	New York	July 21, 1835	....
Stove	J. L. Mott	Mott Haven, N. Y	Nov. 28, 1854	11, 909
Stove	R. and J. Mount	New York	Apr. 11, 1818	....
Stove	W. Naylor	New York	June 11, 1829	....
Stove	G. Nelson	Boston, Mass	Sept. 17, 1842	2, 778
Stove	N. W. Northup	Greene, N. Y	Feb. 8, 1859	22, 886
Stove	B. Nott	Albany, N. Y	Jan. 18, 1870	98, 879
Stove	E. Nott	Schenectady, N. Y	July 26, 1839	1, 260
Stove	O. Paddock	Watertown, N. Y	Sept. 27, 1859	25, 579
Stove	N. Parish	Mendon, N. Y	Nov. 2, 1832	....
Stove	E. A. Parker	Horseheads, N. Y	Apr. 11, 1865	47, 218
Stove	T. H. Parker	York, Pa	Dec. 26, 1848	5, 991
Stove	H. Parmalee	Watervliet, N. Y	July 2, 1836	....
Stove	G. J. Payne	Erie, N. Y	Mar. 6, 1835	....
Stove	J. Pearson, jr	Newburyport, Mass	Aug. 13, 1861	33, 048
Stove	J. S. and M. Peckham	Utica, N. Y	Aug. 7, 1860	29, 517
Stove	P. Phillips	Middletown Point, N. J	Nov. 12, 1842	2, 851
Stove	S. Pierce	Peekskill, N. Y	June 27, 1846	4, 598
Stove	M. Pond	Boston, Mass	Jan. 7, 1862	34, 120
Stove	M. Pond	Boston, Mass	Nov. 15, 1864	45, 074
Stove	M. Pond	Boston, Mass	Oct. 15, 1867	69, 837
Stove	C. Postley	New York	Apr. 26, 1815	....
Stove	T. Power	New York	Sept. 27, 1811	....
Stove	T. and I. Power	Hudson, N. Y	Aug. 31, 1816	....
Stove	R. B. Pullan	Cincinnati, Ohio	May 24, 1859	24, 148
Stove	A. Ralston	West Middleton, Pa	Aug. 3, 1858	21, 084
Stove	A. Ransom	Albany, N. Y	Dec. 20, 1859	26, 522
Stove	S. H. Ransom	Albany, N. Y	July 24, 1860	29, 312
Stove	J. Robb	Lewiston, Pa	Aug. 4, 1843	3, 211
Stove	H. R. Robbins	Baltimore, Md	Mar. 29, 1859	23, 396
Stove	C. H. Robinson	Uniontown, Pa	Feb. 13, 1841	1, 978
Stove	C. H. Rogers and S. H. Hancox	Troy, N. Y	Oct. 10, 1846	4, 811
Stove	H. R. Rose	Guilford, Vt	Nov. 8, 1851	8, 534
Stove	H. H. Routh	Norwich, Conn	Nov. 4, 1837	454
Stove	G. H. Russell	Baltimore, Md	May 31, 1859	24, 241
Stove	N. Russell	Waterville, Me	May 14, 1836	....
Stove	S. T. Savage	Albany, N. Y	Mar. 30, 1858	19, 796
Stove	S. T. Savage	Albany, N. Y	Sept. 7, 1858	21, 446
Stove	S. T. Savage	Albany, N. Y	Feb. 19, 1861	31, 480
Stove	J. Scheeper	New York, N. Y	Aug. 16, 1859	25, 143
Stove	C. C. Schieferdecker	Baltimore, Md	Nov. 8, 1859	26, 058
Stove	T. Scott	Carrollton, Ill	June 13, 1865	48, 240
Stove	J. Scott	Philadelphia, Pa	Apr. 8, 1840	1, 540
Stove	S. B. Sexton	Baltimore, Md	Apr. 19, 1859	23, 716
Stove	B. Seymore and A. C. Bettis	Utica, N. Y	May 25, 1822	....
Stove	S. Shadbolt	Scottsville, N. Y	May 8, 1860	28, 203
Stove	J. Shavor	Troy, N. Y	June 23, 1863	38, 989
Stove	T. Shaw	Philadelphia, Pa	Sept. 20, 1859	25, 549
Stove	P. Schreiner	Columbia, Pa	Jan. 25, 1859	22, 754
Stove	N. Silverthorn	Prescott, Wis	July 23, 1861	32, 100
Stove	J. P. Simpson	New York	Apr. 5, 1817	....
Stove	H. Slade	Chelsea, Mass	June 6, 1846	4, 559
Stove	J. Smart	Philadelphia, Pa	Mar. 28, 1844	3, 515
Stove	E. Smith	Albany, N. Y	Jan. 28, 1851	7, 914
Stove	W. H. Smith	Newport, R. I	Apr. 19, 1859	23, 720
Stove	W. H. Smith	Newport, R. I	June 19, 1860	28, 786
Stove	G. S. G. Spence	Boston, Mass	Aug. 16, 1859	25, 222
Stove	A. D. Spoor	Coxsackie, N. Y	Jan. 7, 1835	....
Stove	P. Stackhouse	Philadelphia, Pa	Dec. 22, 1831	....
Stove	D. G. Stafford	Syracuse, N. Y	Sept. 26, 1859	25, 351
Stove	M. B. Stafford	New York, N. Y	Mar. 19, 1861	31, 751
Stove	P. P. Stewart	Troy, N. Y	Apr. 12, 1859	23, 622
Stove	P. P. Stewart	Troy, N. Y	Apr. 28, 1863	38, 361
Stove	D. L. Stiles	Rochester, N. Y	Nov. 17, 1863	40, 663
Stove	H. H. Stimson	Boston, Mass	Jan. 20, 1843	2, 916
Stove	D. Stuart	Philadelphia, Pa	Apr. 12, 1859	23, 624
Stove	J. Stuber, F. Frank, and P. D. Tobie.	Utica, N. Y	Aug. 7, 1860	29, 530
Stove	T. L. Sturtevant	Boston, Mass	Mar. 7, 1865	46, 729
Stove	J. H. B. Swanzey	Lynn, Mass.	Mar. 30, 1836	....
Stove	P. Sweeney	Buffalo, N. Y	Feb. 26, 1850	7, 127
Stove	J. Tasker	Philadelphia, Pa	Feb. 3, 1823	....
Stove	J. Taylor	Peekskill, N. Y	May 2, 1843	3, 064
Stove	G. H. Thatcher	Albany, N. Y	Jan. 21, 1851	7, 909
Stove	J. S. Tilton	Philadelphia, Pa	Sept. 13, 1864	44, 235
Stove	E. Treadwell	Boston, Mass	Apr. 26, 1817	....

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Invention.	Inventor.	Residence.	Date.	No.
Stove	J. G. Treadwell	Albany, N. Y	July 19, 1859	24,832
Stove	J. G. Treadwell	Albany, N. Y	July 19, 1859	24,833
Stove	J. G. Treadwell	Albany, N. Y	Nov. 1, 1859	25,987
Stove	J. G. Treadwell	Albany, N. Y	Nov. 29, 1859	26,308
Stove	J. G. Treadwell	Albany, N. Y	Dec. 27, 1859	26,631
Stove	J. G. Treadwell	Albany, N. Y	May 29, 1860	28,522
Stove	J. G. Treadwell and W. Hailes	Albany, N. Y	May 7, 1861	32,257
Stove	W. B. Treadwell	Albany, N. Y	Sept. 18, 1860	30,097
Stove	W. B. Treadwell	Albany, N. Y	Nov. 18, 1862	36,974
Stove	J. Tuley	Frederick County, Va	May 17, 1814	....
Stove	F. E. Tupper	Nashua, N. H	Mar. 29, 1859	23,412
Stove	J. J. Updegraff	Selin's Grove, Pa	Apr. 5, 1853	9,656
Stove	S. Utter	New York, N. Y	May 1, 1845	4,031
Stove	J. Van and H. V. Barringer	Cincinnati, Ohio	May 10, 1859	23,963
Stove	E. Vance	Cincinnati, Ohio	Oct. 14, 1851	8,432
Stove	J. Van Wormer	Albany, N. Y	Jan. 24, 1860	26,938
Stove	O. W. Wade	Versailles, N. Y	Oct. 24, 1854	11,844
Stove	J. Walch	New York, N. Y	Mar. 13, 1860	27,488
Stove	G. W. Walker	Boston, Mass	Mar. 25, 1862	34,796
Stove	G. W. Walker	Boston, Mass	Apr. 25, 1865	47,474
Stove	G. Warrall	Philadelphia, Pa	Mar. 30, 1813	....
Stove	W. Watson	Weymouth, N. J	Mar. 2, 1811	....
Stove	D. Wells	Lowell, Mass	Dec. 21, 1858	22,392
Stove	West and Van Seclen	Hudson, N. Y	July 21, 1835	....
Stove	C. Wheaton	....	Mar. 29, 1797	....
Stove	C. R. Wheeler	Boston, Mass	July 18, 1840	1,693
Stove	W. Wheeler	Poultney, Vt	Jan. 13, 1863	37,416
Stove	W. Wheeler	Poultney, Vt	Jan. 3, 1865	45,783
Stove	J. White	Milton, Pa	June 10, 1844	3,624
Stove	T. J. Whitehead	South Paris, Me	Mar. 29, 1859	23,418
Stove	C. L. Whitney and S. Reed	Geneseo, Ill	Sept. 27, 1859	25,596
Stove	J. G. Widmann	New York, N. Y	May 10, 1859	23,970
Stove	E. Wilbur	Albion, N. Y	May 24, 1864	42,893
Stove	J. H. Wilkinson	Concord, N. H	Aug. 3, 1858	21,103
Stove	A. O. Willcox	Port Richmond, N. Y	Oct. 10, 1865	50,408
Stove	A. C. Williams	Albany, N. Y	May 19, 1863	38,636
Stove	R. Wilson	Columbus City, Iowa	July 3, 1855	13,194
Stove	T. W. Wisner	Howell, Mich	Dec. 10, 1867	72,145
Stove	G. G. Wolfe	Troy, N. Y	June 10, 1852	35,557
Stove	L. Wood	New York	Aug. 28, 1846	4,722
Stove	F. Woods	Chicago, Ill	June 30, 1863	39,088
Stove	W. C. Wright	Saint Louis, Mo	Sept. 22, 1863	40,073
Stove adapted to open fire-places, Anthracite coal	E. Nott	Schenectady, N. Y	Oct. 25, 1832	....
Stove, Air-funnel	H. Wales	Randolph, Mass	May 18, 1827	....
Stove, Air-furnace oven	O. Davison	Johnstown, N. Y	Aug. 25, 1829	....
Stove, Air-heating	C. A. Bogert	West Dresden, N. Y	Oct. 21, 1851	8,441
Stove, Air-heating	C. B. Boynton	Housatonic, Mass	Feb. 20, 1843	2,965
Stove, Air-heating	N. A. Boynton	New York, N. Y	Aug. 8, 1854	11,469
Stove, Air-heating	J. L. Cathcart	Washington, D. C	May 7, 1850	7,338
Stove, Air-heating	H. G. Clark	Boston, Mass	Aug. 10, 1848	5,704
Stove, Air-heating	P. Goodhue	Cincinnati, Ohio	Mar. 12, 1850	7,164
Stove, Air-heating	S. F. Kellogg	Norwalk, Ohio	Apr. 16, 1842	2,556
Stove, Air-heating	C. B. Sawyer	Fitchburgh, Mass	July 7, 1857	17,750
Stove, Air heating	B. Sheppard	Boston, Mass	Dec. 23, 1846	4,905
Stove, Air-heating	I. M. Thatcher	Lansingburgh, N. Y	Mar. 23, 1852	8,832
Stove, Air-heating	G. Williston	Charlestown, Mass	Oct. 14, 1851	8,435
Stove, Air heating and cooking	J. Woolley	Springfield, Mass	Mar. 16, 1844	3,492
Stove, Air-heating cook	C. B. Loveless	Boston, Mass	May 22, 1855	12,913
Stove, Air-tight	J. G. Allen	Philadelphia, Pa	June 13, 1865	48,144
Stove, Air-tight	S. M. Allen	Boston, Mass	Jan. 17, 1842	2,427
Stove, Air-tight	A. Atwood	Troy, N. Y	Mar. 26, 1845	3,975
Stove, Air-tight	Z. Bosworth	Marietta, Ohio	Apr. 6, 1842	2,538
Stove, Air-tight	J. Cline	Norwalk, Ohio	Jan. 6, 1844	3,400
Stove, Air-tight	T. M. Jones	Boston, Mass	Aug. 11, 1841	2,218
Stove, Air-tight	I. Orr	Washington, D. C	Jan. 20, 1836	....
Stove, Air-tight	S. B. Sexton	Baltimore, Md	June 19, 1847	5 158
Stove, Air-tight coal	J. S. Todd	Macon City, Mo	May 9, 1865	47,670
Stove, Air-tight Franklin	R. D. Granger	Albany, N. Y	Mar. 11, 1851	7,973
Stove, Air-tight or Arnott	J. E. Fisk	Salem, Mass	Nov. 3, 1841	2,324
Stove, Air-tight self-regulating	J. Saxton and G. Elliot	Philadelphia, Pa	Oct. 30, 1844	3,806
Stove and boiler	G. N. Phillips	Goshen, N. Y	Feb. 6, 1813	....
Stove and boiler, Combined	U. J. Duffield	Wheeling, W. Va	Mar. 5, 1872	124,345
Stove and camp-chest, Combined cook	H. W. Ball	New York, N. Y	Nov. 5, 1861	33,630
Stove and drum, Heating	L. R. Comstock	Philadelphia, Pa	Oct. 29, 1872	132,635
Stove and drum, Heating	W. H. Nobles	Saint Paul, Minn	Jan. 3, 1871	110,781
Stove and drum, Radiating	G. D. Greenleaf	Depawville, N. Y	Oct. 16, 1866	58,811
Stove and fire-place	L. Hitchcock	Weathersfield, Vt	May 4, 1822	....
Stove and fire-place	J. L. Mott	New York, N. Y	Oct. 11, 1836	....
Stove and fire-place	J. L. Mott	New York, N. Y	Oct. 11, 1836	50
Stove and fire-place, Cooking	J. Douglass	South Durham, Me	Nov. 14, 1835	....
Stove and fire-place, Cooking	E. Potter	Providence, R. I	May 8, 1832	....
Stove and fire-place, Heating	A. J. Haswell	Circleville, Ohio	Oct. 13, 1868	82,945
Stove and fire-place heating and ventilating attachment.	E. S. and B. R. Potter	Boston, Mass	May 3, 1870	102,590
Stove and furnace	T. Cook	Springfield, Mass	Dec. 23, 1856	16,268
Stove and furnace	J. B. Driscole	New York, N. Y	Nov. 26, 1867	71,465
Stove and furnace	W. P. Hall	Piqua, Ohio	Apr. 13, 1869	88,867
Stove and furnace	S. T. Savage	Albany, N. Y	Oct. 28, 1856	15,984
Stove and furnace, Base-burning	C. B. Gregory	Beverly, N. J	Nov. 28, 1871	121,361
Stove and furnace, door	F. S. Bissell	Pittsburgh, Pa	Aug. 20, 1867	67,942
Stove and furnace for coal	E. Baldwin	Gibbonsville, N. Y	July 19, 1832	....
Stove and furnace for railway-cars, &c	D. G. Littlefield	Albany, N. Y	Mar. 4, 1856	14,362
Stove and furnace grate	E. W. Newton	Middletown, Conn	Jan. 9, 1835	....
Stove and furnace, Heating	S. J. Gold	Cornwall, Conn	Aug. 1, 1871	117,532
Stove and furnace, Heating	W. C. Googins	Portland, Me	Mar. 24, 1868	75,748
Stove and furnace lining	W. B. Treadwell	Albany, N. Y	Oct. 5, 1858	21,707
Stove and furniture leg	H. R. Robbins	Baltimore, Md	June 28, 1870	104,771
Stove and grate	O. Evans	....	Jan. 16, 1800	....

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Invention.	Inventor.	Residence.	Date.	No.
Stove and grate for burning coal	E. C. Robinson	Troy, N. Y	June 30, 1838	813
Stove and grate for parlor and kitchen	E. Ingalls	Providence, R. I	Apr. 22, 1835	......
Stove and grate, Heat preserving and diffusing	W. Mix	Prospect, Conn	May 14, 1834	......
Stove and heater, Railway-car	J. Q. C. Searle	Topeka, Kans	Mar. 11, 1873	136, 773
Stove and heating-furnace, Laundry	C. J. Shepard	Brooklyn, N. Y	Sept. 28, 1869	95, 276
Stove and lantern, Combination of foot	F. Arnold	Haddam, Conn	Apr. 11, 1854	10, 769
Stove and lantern, Combined foot	D. P. and M. P. Farnham	Janesville, Wis	Jan. 1, 1867	60, 869
Stove and oven, Cooking	J. R. Smith	New Haven, Conn	Mar. 10, 1838	633
Stove and preventing the waste of heat of, Cooking	E. Nott	Schenectady, N. Y	Jan. 9, 1834	......
Stove and range broiler-attachment	J. S. York	Brooklyn, N. Y	Mar. 25, 1873	137, 278
Stove and range, Cooking	R. E. Deane	New York, N. Y	Oct. 27, 1863	40, 399
Stove and range, Cooking	W. and G. Gardner	Glen Gardner Station, N. J	Mar. 22, 1870	101, 116
Stove and range, Cooking	R. D. Granger	Albany, N. Y	Feb. 7, 1860	27, 047
Stove and range, Cooking	J. MacGregor, jr	New York, N. Y	Sept. 12, 1854	11, 673
Stove and range, Cooking	B. Nott	Albany, N. Y	Mar. 3, 1868	75, 046
Stove and range, Cooking	J. S. Peckham	Utica, N. Y	May 2, 1871	114, 336
Stove and range, Cooking	J. J. Richardson	Brooklyn, N. Y	Mar. 5, 1872	124, 388
Stove and range, Cooking	S. B. Sexton	Baltimore, Md	Oct. 2, 1860	30, 254
Stove and range, Cooking	J. Spear	Philadelphia, Pa	Feb. 19, 1861	31, 489
Stove and range, Cooking	J. Spear	Philadelphia, Pa	June 30, 1868	79, 510
Stove and range, Cooking	D. Stuart	Philadelphia, Pa	May 5, 1863	38, 426
Stove and range, Cooking	W. B. Treadwell	Albany, N. Y	Aug. 11, 1863	39, 508
Stove and range fire-box	M. L. Horton	Windsor, Vt	Dec. 27, 1870	110, 467
Stove and range gridiron	J. M. Read	Boston, Mass	June 21, 1870	104, 497
Stove and range oven door	G. D. Sanford	Peekskill, N. Y	June 25, 1872	128, 254
Stove and range oven door, Cooking	G. North	Philadelphia, Pa	Aug. 16, 1853	9, 948
Stove and range water-back	S. Wilks	Chicago, Ill	Dec. 15, 1868	84, 978
Stove and register, Furnace	E. Spaulding	Ionia, Mich	Mar. 2, 1869	87, 519
Stove and steam heater, Combined cooking	E. Backus	Rochester, N. Y	Oct. 15, 1872	132, 129
Stove and water-heater	H. Howard	Springfield, Mass	Nov. 30, 1869	97, 402
Stove and water-heater, Combined cooking	C. Comstock	New Canaan, Conn	Apr. 30, 1872	126, 185
Stove, Anthracite-coal	J. L. Mott	New York	May 30, 1832	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	......
Stove, Anthracite-coal	A. O. Price	Newark, N. J	June 14, 1837	236
Stove, Anthracite-coal	A. Savage	Pottsville, Pa	June 10, 1830	......
Stove, Anthracite-coal	A. D. Spoor	Coxsackie, N. Y	Mar. 15, 1834	......
Stove, Anthracite-coal combination	J. Atwater	New Haven, Conn	Aug. 23, 1833	......
Stove, Anthracite-coal cooking	H. Steel	Hudson, N. Y	Nov. 19, 1833	......
Stove, Anthracite-coal or wood cooking	W. Shaw	Albany, N. Y	Dec. 31, 1833	......
Stove, Anthracite cooking	W. Bryent	Boston, Mass	Sept. 13, 1831	......
Stove apparatus for cooking and distilling, &c., Caboose.	G. Youle	New York	May 21, 1806	......
Stove, Army	R. Kingsland	New York, N. Y	Dec. 2, 1862	37, 043
Stove, Army cooking	H. L. Duncklee	Boston, Mass	Sept. 8, 1863	39, 802
Stove ash-box	C. J. Woolson	Cleveland, Ohio	Apr. 21, 1863	38, 256
Stove ash-pit	W. Butcher	Philadelphia, Pa	Nov. 29, 1845	4, 295
Stove-ash-pit cover	W. L. McDowell	Philadelphia, Pa	Jan. 28, 1868	73, 737
Stove-attachment	M. E. Capen	Aurora, Ill	Aug. 10, 1869	93, 517
Stove attachment, Cook	J. Garrison	New York, N. Y	Sept. 24, 1867	69, 203
Stove attachment, Cooking	N. S. Minniss	Oil City, Pa	Feb. 21, 1871	111, 963
Stove attachment, Cooking	R. I. Rathburn	Poplar Ridge, N. Y	July 10, 1866	56, 266
Stove attachment, Cooking	J. A. Talpey	Somerville, Mass	Mar. 27, 1866	53, 503
Stove attachment, Cooking	J. Thorniley	Fallston, Pa	Apr. 7, 1868	76, 554
Stove attachment, Heating	J. L. Pfau, jr	Quincy, Ill	Apr. 19, 1870	102 036
Stove, Automatic ventilating	R. Eaton	London, England	Nov. 19, 1867	70, 979
Stove-back plate	G. F. Filley	Saint Louis, Mo	Dec. 17, 1867	72, 179
Stove, Bake	H. Cadwell	Oswego, N. Y	Oct. 14, 1834	......
Stove baker, Cooking	P. P. Stewart	Troy, N. Y	Aug. 18, 1857	18, 024
Stove, Baking and drying	F. S. Reefy and S. M. Zent	Roanoke, Ind	Oct. 12, 1869	95, 725
Stove, Baking, boiling, and steaming	E. B. Coleman	New Haven, Conn	May 13, 1814	......
Stove, Base-burning	R. Backus	Albany, N. Y	Sept. 28, 1869	95, 182
Stove, Base-burning	R. Backus	Albany, N. Y	Oct. 24, 1871	120, 229
Stove, Base-burning	M. R. Barr and W. T. Black	Erie, Pa	Aug. 24, 1869	93, 948
Stove, Base-burning	R. Batting	Albany, N. Y	Oct. 12, 1869	95, 636
Stove, Base-burning	W. T. Black	Erie, Pa	July 25, 1871	117, 373
Stove, Base-burning	F. W. Born	Cleveland, Ohio	May 27, 1873	139, 231
Stove, Base-burning	N. A. Boynton	New York, N. Y	Oct. 9, 1866	58, 582
Stove, Base-burning	N. A. Boynton	New York, N. Y	Jan. 18, 1870	98, 915
Stove, Base-burning	W. S. Bronson	Hartford, Conn	May 5, 1868	77, 444
Stove, Base-burning	W. S. Bronson	Hartford, Conn	Dec. 22, 1868	85, 062
Stove, Base-burning	W. S. Bronson	Hartford, Conn	Aug. 10, 1869	93, 515
Stove, Base-burning	W. M. Bush and T. B. Richards	Cincinnati, Ohio	June 22, 1869	91, 517
Stove, Base-burning	E. Bussey and C. A. Hamlin	Troy, N. Y	May 2, 1871	114, 260
Stove, Base-burning	A. C. Corse	Troy, N. Y	May 16, 1871	114, 928
Stove, Base-burning	A. C. Corse	Troy, N. Y	July 16, 1872	129, 534
Stove, Base-burning	D. B. Cox	Troy, N. Y	Apr. 13, 1869	88, 946
Stove, Base-burning	S. Culver	Newark, N. Y	Dec. 1, 1868	84, 537
Stove, Base-burning	M. A. Cushing	Aurora, Ill	Oct. 22, 1872	132, 389
Stove, Base-burning	E. M. Deey	New York, N. Y	Feb. 21, 1871	111, 914
Stove, Base-burning	T. P. Dickerman	New Haven, Conn	Aug. 4, 1868	80, 712
Stove, Base-burning	R. Diven	Williamsburgh, N. Y	May 9, 1871	114, 533
Stove, Base-burning	W. Doyle	Albany, N. Y	Aug. 15, 1871	117, 996
Stove, Base-burning	W. Doyle	Albany, N. Y	Nov. 14, 1871	120, 811
Stove, Base-burning	W. Doyle	Albany, N. Y	Aug. 12, 1873	141, 770
Stove, Base-burning	W. C. Durant	West Troy, N. Y	May 28, 1867	65, 184
Stove, Base-burning	J. Y. Durkee	Janesville, Wis	July 23, 1872	129, 721
Stove, Base-burning	M. G. Fagan	Troy, N. Y	Nov. 16, 1869	96, 902
Stove, Base-burning	C. H. Frost	Peekskill, N. Y	July 30, 1867	67, 283
Stove, Base-burning	S. W. Gibbs	Albany, N. Y	July 7, 1868	79, 650
Stove, Base-burning	I. H. Gildersleeve	Whitewater, Wis	Aug. 15, 1868	81, 360
Stove, Base-burning	H. G. Giles	Troy, N. Y	Mar. 21, 1865	46, 895
Stove, Base-burning	H. G. Giles	Troy, N. Y	Mar. 22, 1870	101, 000
Stove, Base-burning	H. G. Giles	Troy, N. Y	Mar. 22, 1870	101, 001

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Stove, Base-burning	J. H. Goodfellow	Troy, N. Y	Apr. 20, 1869	89, 141
Stove, Base-burning	J. H Goodfellow	Troy, N. Y	Feb. 22, 1870	100, 138
Stove, Base-burning	J. Gray	Albany, N. Y	Oct. 18, 1864	44, 719
Stove, Base-burning	W. Hailes	Albany, N. Y	May 25, 1869	90, 357
Stove, Base-burning	L. W. Harwood	Troy, N. Y	Aug. 17, 1869	93, 821
Stove, Base-burning	A. Hathaway	Freetown, Mass	Oct. 14, 1873	143, 693
Stove, Base-burning	J. C. Henderson	Troy, N. Y	June 22, 1869	91, 536
Stove, Base-burning	J. C. Henderson	Troy, N. Y	Oct. 12, 1869	95, 685
Stove, Base-burning	G. W. Herrick	Stuyvesant, N. Y	Oct. 26, 1869	96, 110
Stove, Base-burning	S. E. Hewes	Albany, N. Y	June 13, 1871	115, 959
Stove, Base-burning	R. Holmes	Detroit, Mich	Apr. 7, 1868	76, 326
Stove, Base-burning	E. Hosford	Chicago, Ill	Jan. 19, 1869	86, 072
Stove, Base-burning	G. G. Hunt	Bridgeport, Conn	Nov. 26, 1867	71, 306
Stove, Base-burning	G. G. Hunt	Chicago, Ill	Feb. 21, 1871	112, 044
Stove, Base-burning	G. G. Hunt	Chicago, Ill	July 25, 1871	117, 292
Stove, Base-burning	Z. Hunt	Hudson, N. Y	Jan. 19, 1869	86, 017
Stove, Base-burning	Z. Hunt	Hudson, N. Y	May 16, 1871	114, 943
Stove, Base-burning	F. H. Husted	Buffalo, N. Y	Apr. 21, 1868	76, 922
Stove, Base-burning	W. M. Jones	Horicon, Wis	May 16, 1871	114, 947
Stove, Base-burning	W. Kaiser	Wilkesbarre, Pa	Dec. 27, 1870	110, 472
Stove, Base-burning	W. J. Keep	Troy, N. Y	Mar. 29, 1870	101, 368
Stove, Base-burning	W. J. Keep	Troy, N. Y	May 3, 1870	102, 682
Stove, Base-burning	W. J. Keep	Troy, N. Y	July 16, 1872	129, 348
Stove, Base-burning	J. H. Keyser	New York, N. Y	Jan. 25, 1870	99, 691
Stove, Base-burning	S. H. La Rue	Allentown, Pa	Apr. 4, 1871	113, 535
Stove, Base-burning	S. H. La Rue	Allentown, Pa	Oct. 15, 1872	132, 211
Stove, Base-burning	S. H. La Rue	Allentown, Pa	Nov. 11, 1873	144, 461
Stove, Base-burning	M. W. Lester	Chicago, Ill	Aug. 31, 1869	94, 223
Stove, Base-burning	G. W. Lewin	Worcester, Mass	Dec. 7, 1869	97, 529
Stove, Base-burning	L. Litchfield	Gouverneur, N. Y	Mar. 21, 1871	112, 936
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Apr. 17, 1866	53, 995
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Feb. 21, 1871	111, 951
Stove, Base-burning	D.G. Littlefield and G. H. Johnson.	Albany, N. Y..and Erie, Pa	Apr. 5, 1870	101, 476
Stove, Base-burning	D. Madden	Penn Yan, N. Y	Mar. 14, 1871	112, 609
Stove, Base-burning	W. Magill	Port Deposit, Md	Mar. 1, 1870	100, 427
Stove, Base-burning	H. C. March	Limerick Station, Pa	Jan. 1, 1869	90, 860
Stove, Base-burning	H. C. March	Limerick Station, Pa	Sept. 28, 1869	95, 364
Stove, Base-burning	H. C. March	Limerick Station, Pa	Dec. 20, 1870	110, 258
Stove, Base-burning	J. H. Meissner	Pittsburgh, Pa	July 19, 1870	105, 587
Stove, Base-burning	B. Nott	Albany, N. Y	Aug. 23, 1870	106, 609
Stove, Base-burning	F. Z. Obermeyer and W. Halle	Milwaukee, Wis	Jan. 25, 1870	99, 225
Stove, Base-burning	M. Peckham	Utica, N. Y	Aug. 16, 1870	106, 503
Stove, Base-burning	J. S. Perry	Albany, N. Y	July 7, 1868	79, 594
Stove, Base-burning	J. S. Perry	Albany, N. Y	Feb. 16, 1869	86, 940
Stove, Base-burning	J. S Perry and A. Dickey	Albany, N. Y	Mar. 1, 1870	100, 322
Stove, Base-burning	S. Pierce	Boston, Mass	July 14, 1868	80, 007
Stove, Base-burning	J. A. Price	Scranton, Pa	Feb. 8, 1870	99, 590
Stove, Base-burning	A. C. Rand	Aurora, Ill	July 16, 1872	129, 365
Stove, Base-burning	S. H. Ransom	Albany, N. Y	Dec. 28, 1869	98, 416
Stove, Base-burning	H. Remsen	Newtonville, N. Y	May 30, 1871	115, 359
Stove, Base-burning	E. Y. Robbins	Cincinnati, Ohio	June 25, 1872	128, 425
Stove, Base-burning	J. J. Roeper	Philadelphia, Pa	Dec. 28, 1869	98, 301
Stove, Base-burning	A. K. Sanders	Brooklyn, N. Y	July 14, 1868	80, 016
Stove, Base-burning	W. Sanford	New York, N. Y	Dec. 14, 1869	97, 967
Stove, Base-burning	J. Q. C. Searle	Topeka, Kans	Apr. 20, 1869	89, 248
Stove, Base-burning	J. Q. C. Searle	Topeka, Kans	Jan. 11, 1870	98, 806
Stove, Base-burning	J. Q. C. Searle	New Albany, Kans	Jan. 31, 1871	111, 389
Stove, Base-burning	J. Q. C. Searle	Topeka, Kans	Mar. 11, 1873	136, 772
Stove, Base-burning	S. B. Sexton	Baltimore, Md	Sept. 20, 1864	44, 345
Stove, Base-burning	S. B. Sexton	Baltimore, Md	Apr. 4, 1865	47, 136
Stove, Base-burning	S. B. Sexton	Baltimore, Md	Mar. 17, 1868	75, 585
Stove, Base-burning	S. B. Sexton	Baltimore, Md	June 30, 1868	79, 505
Stove, Base-burning	C. J. Shepard	Brooklyn, N. Y	Jan. 22, 1867	61, 365
Stove, Base-burning	D. Smith	Albany, N. Y	July 11, 1871	117, 006
Stove, Base-burning	E. Smith	Albany, N. Y	Apr. 13, 1869	88, 986
Stove, Base-burning	E. Smith	Albany, N. Y	Apr. 13, 1869	88, 987
Stove, Base-burning	E. Smith	Albany, N. Y	June 4, 1872	127, 653
Stove, Base-burning	I. Snyder and P. C. Garrett	Cedar Rapids, Iowa	Dec. 13, 1870	110, 083
Stove, Base-burning	J. Spear	Philadelphia, Pa	July 7, 1868	79, 696
Stove, Base-burning	J. Spear	Philadelphia, Pa	Apr. 20, 1869	89, 180
Stove, Base-burning	J. Spear	Philadelphia, Pa	Mar. 1, 1870	100, 335
Stove, Base-burning	A. Spitzmiller	Buffalo, N. Y	Nov. 28, 1871	121, 433
Stove, Base-burning	S. Spoor	Phelps, N. Y	Jan. 31, 1871	111, 485
Stove, Base-burning	G. S. Stanard	Buffalo, N. Y	June 1, 1869	90, 885
Stove, Base-burning	D. Stuart and L. Bridge	Philadelphia, Pa	May 5, 1868	77, 549
Stove, Base-burning	J. W. Tefft	Des Moines, Iowa	Aug. 1, 1871	117, 696
Stove, Base-burning	J. M. Thatcher	Jersey City, N. J	June 18, 1872	128, 188
Stove, Base-burning	R. B. Thompson	New York, N. Y	Mar. 24, 1868	76, 005
Stove, Base-burning	J. Tiffany	Albany, N. Y	Dec. 17, 1867	72, 339
Stove, Base-burning	W. B. Treadwell	Albany, N. Y	May 23, 1865	47, 881
Stove, Base-burning	H. B. Van Benthuysen	Emporium, Pa	Dec. 15, 1868	84, 920
Stove, Base-burning	H. B. Van Benthuysen	Lockhaven, Pa	Feb. 1, 1870	99, 375
Stove, Base-burning	H. B. Van Benthuysen	Lockhaven, Pa	Aug. 8, 1871	117, 833
Stove, Base-burning	J. Van Wormer	Albany, N. Y	Apr. 4, 1871	113, 473
Stove, Base-burning	J. Van Wormer and M. M. Garvey.	Albany, N. Y	May 1, 1866	54, 447
Stove, Base-burning	A. G. Webster	Troy, N. Y	Aug. 16, 1870	106, 435
Stove, Base-burning	C. O. Westland	Troy, N. Y	Dec. 3, 1872	133, 608
Stove, Base-burning	C. M. Wheldon	Pittsfield, Mass	Nov. 26, 1867	71, 347
Stove, Base-burning	A. White	Geneseo, Ill	Apr. 5, 1870	101, 688
Stove, Base-burning	A. White	Rock Island, Ill	May 9, 1871	114, 738
Stove, Base-burning	R. B. Willis	Rochester, N. Y	Apr. 20, 1869	89, 260
Stove, Base-burning	G. A. Wing	Albany, N. Y	Aug. 17, 1869	93, 782
Stove, Base-burning	G. A. Wing	Albany, N. Y	July 19, 1870	105, 535
Stove, Base-burning coal	A. C. Corse	Troy, N. Y	Sept. 20, 1870	107, 597
Stove, Base-burning coal	D. B. Cox	Troy, N. Y	Dec. 19, 1865	51, 649
Stove, Base-burning cook	W. S. Bronson	Hartford, Conn	Aug. 10, 1869	93, 516
Stove, Base-burning cooking	A. J. Caywood	Poughkeepsie, N. Y	June 25, 1872	128, 284

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Stove, Base-burning cooking	W. Clark	Shelburne, Vt	Dec. 26, 1871	122, 156
Stove, Base-burning cooking	H. Ingraham	Naples, N. Y	June 24, 1873	140, 138
Stove, Base-burning cooking	T. P. Rossiter	Cold Spring, N. Y	Apr. 27, 1869	89, 505
Stove, Base-burning cooking	T. P. Rossiter	Cold Spring, N. Y	Sept. 20, 1870	107, 629
Stove, Base-burning cooking	H. E. Wolcott	Elbridge, N. Y	Sept. 5, 1871	118, 771
Stove, Base-burning fire-place	S. B. Sexton	Baltimore, Md	Sept. 28, 1869	95, 274
Stove, Base-burning fire-place	S. B. Sexton	Baltimore, Md	Mar. 29, 1870	101, 385
Stove, Base-burning fire-place	S. B. Sexton	Baltimore, Md	May 24, 1870	103, 510
Stove, Base-burning fire-place	S. B. Sexton	Baltimore, Md	Aug. 12, 1873	141, 821
Stove, Base-burning fire-place	D. Stuart and L. Bridge	Philadelphia, Pa	June 23, 1868	79, 275
Stove, Base-burning fire-place	W. E. Wood	Baltimore, Md	Mar. 29, 1870	101, 341
Stove, Base-burning heating and cooking	J. V. B. Carter and J. Dwyer	Detroit, Mich	Oct. 8, 1872	131, 936
Stove, Base-burning parlor cook	D. L. Stiles	Rochester, N. Y	Feb. 1, 1870	99, 491
Stove, Base-burning parlor cooking	W. Doyle	Albany, N. Y	Mar. 22, 1870	100, 992
Stove, Base-burning wood	E. Hosford	Chicago, Ill	Jan. 19, 1869	86, 073
Stove-blacking	W. Thomas, jr.	Hingham, Mass	Oct. 21, 1856	15, 956
Stove-blacking box	W. W. Armington	New Haven, Conn	May 3, 1870	102, 646
Stove-blacking composition	R. W. Bailey	New York, N. Y	July 4, 1871	116, 533
Stove-blacking cutter	W. W. Armington	Meriden, Conn	Apr. 3, 1866	53, 724
Stove blacking or polish	W. H. Trissler	Burr Oak, Mich	Oct. 28, 1862	36, 873
Stove-board	J. S. Brooks	Rochester, N. Y	June 4, 1872	127, 455
Stove-board	A. D. McMaster	Rochester, N. Y	Dec. 24, 1872	134, 299
Stove-board and floor-protector, Metallic	P. H. Rose	Canandaigua, N. Y	Jan. 7, 1873	134, 563
Stove-boiler	M. Pratt	Boston, Mass	Dec. 11, 1866	60, 419
Stove-boiler, chimney, &c., Steam	J. J. Giraud	Baltimore, Md	Mar. 8, 1830	....
Stove boiler, Cooking	R. W. Belson	Philadelphia, Pa	June 7, 1853	9, 766
Stove boiler, Cooking	E. Bussey	Troy, N. Y	July 17, 1866	56, 488
Stove boiler, Cooking	H. R. Robbins	Baltimore, Md	Oct. 5, 1869	95, 623
Stove boiler, Cooking	A. S. Sterling	Buffalo, N. Y	June 19, 1860	28, 789
Stove-boiler, Upright	T. E. Barker	Greene County, N. Y	Feb. 19, 1819	....
Stove boilers, Cover for cooking	T. F. Hall and G. Eckel	Richmond, Ind	Aug. 27, 1867	68, 300
Stove-boilers, Forming and double-seaming	B. S. Gleason	Kalamazoo, Mich	Sept. 27, 1864	44, 417
Stove-boilers, Forming and double-seaming	H. B. Whitlock and C. E. Toan	Plymouth, Ind	May 19, 1863	38, 616
Stove, Boiling	H. Abbett	Philadelphia, Pa	Mar. 30, 1813	....
Stove, Boiling and steam	E. Warner	....	Sept. 12, 1815	....
Stove, Boston cooking	S. Beals	Boston, Mass	Oct. 1, 1831	....
Stove-bottom	D. Schuyler	Titusville, Pa	Dec. 5, 1871	121, 667
Stove-bottom boiler	B. Simonds, jr	Bedford, Mass	Oct. 15, 1821	....
Stove burner, Gas	W. A. Thompson	Brooklyn, N. Y	Oct. 17, 1865	50, 515
Stove, Caboose cooking	G. Youle	New York	Apr. 1, 1807	....
Stove, Camp	G. Benns	Rockford, Ill	July 20, 1869	92, 779
Stove, Camp	F. Chandler	Charlestown, Mass	Feb. 25, 1862	34, 546
Stove, Camp	J. Dunton	Philadelphia, Pa	Oct. 11, 1864	44, 617
Stove, Camp	G. A. Biggins	New York, N. Y	Nov. 12, 1861	33, 705
Stove, Camp	J. Hope	Castleton, Vt	Jan. 13, 1853	37, 399
Stove, Camp	T. S. Lambert	Peekskill, N. Y	Feb. 18, 1862	34, 433
Stove, Camp	A. Oot	Minetto, N. Y	Feb. 18, 1862	34, 468
Stove, Camp	L. H. Smith	Owensville, Ohio	Mar. 17, 1863	37, 926
Stove, Camp	I. S. Williams	Philadelphia, Pa	Feb. 11, 1862	34, 385
Stove, Camp	S. D. Woodbury	Lynn, Mass	Feb. 18, 1862	34, 457
Stove, Camp cooking	O. Foote	Indianapolis, Ind	Sept. 13, 1864	44, 175
Stove-cap, Rotary	M. French	Albany, N. Y	Mar. 2, 1836	....
Stove, Car-heating	E. Sanger	Alton, Ill	Nov. 24, 1868	84, 308
Stove, Carriage	A. McWilliams	Washington, D. C	Apr. 21, 1836	....
Stove, Cast-iron	R. Heterick	....	June 11, 1793	....
Stone, Cast-iron cooking	A. Swain	Hudson, N. Y	Feb. 1, 1817	....
Stove, Cast-iron foot	G. W. Robinson	New York, N. Y	June 2, 1827	....
Stove-casting pattern	B. H. Menke	Cincinnati, Ohio	Nov. 9, 1869	96, 717
Stove, chimney, furnace, &c	J. J. Giraud	Baltimore, Md	Feb. 10, 1828	....
Stove-cleaning composition	F. Baumann	Chicago, Ill	Oct. 19, 1869	95, 970
Stove, Close or open	H. Seitz	Saint Mary's, Va	May 5, 1857	17, 235
Stove, Coal	H. Abbott	....	Jan. 24, 1799	....
Stove, Coal	F. C. Adams and J. Peckover	Cincinnati, Ohio	Dec. 24, 1867	72, 580
Stove, Coal	C. Babcock	East Haddam, Conn	June 10, 1845	4, 077
Stove, Coal	R. Bailey	Cleveland, Ohio	June 20, 1865	48, 252
Stove, Coal	R. Bailey	Cleveland, Ohio	Dec. 26, 1865	51, 681
Stove, Coal	I. J. Baxter	Peekskill, N. Y	July 13, 1869	92, 511
Stove, Coal	C. N. Bennett	Cincinnati, Ohio	June 22, 1869	91, 509
Stove, Coal	W. W. Binny	Seneca Falls, N. Y	Apr. 15, 1856	14, 648
Stove, Coal	N. A. Boynton	New York, N. Y	July 3, 1866	55, 997
Stove, Coal	N. A. Boynton	New York, N. Y	Jan. 29, 1867	61, 602
Stove, Coal	M. Breen	Troy, N. Y	June 29, 1869	91, 821
Stove, Coal	A. Brown	Troy, N. Y	Feb. 12, 1867	61, 922
Stove, Coal	W. M. Bush and T. B. Richards	Cincinnati, Ohio	Nov. 19, 1867	71, 129
Stove, Coal	L. W. Campbell	Aurora, Ill	Nov. 28, 1865	51, 143
Stove, Coal	G. Chilson	Boston, Mass	Dec. 12, 1865	51, 424
Stove, Coal	D. C. Clark and H. W. Cady	Sioux City, Iowa	June 14, 1870	104, 269
Stove, Coal	J. D. Conner	Bloomington, Ill	Jan. 16, 1866	52, 033
Stove, Coal	J. Cooper	Dublin, Ind	July 28, 1868	80, 275
Stove, Coal	D. B. Cox	Troy, N. Y	Aug. 4, 1868	80, 532
Stove, Coal	D. B. Cox and A. Brown	Troy, N. Y	July 6, 1869	92, 172
Stove, Coal	L. Crandall	Plainfield, N. J	July 24, 1860	29, 249
Stove, Coal	T. Crane	Fort Atkinson, Wis	May 19, 1868	77, 962
Stove, Coal	A. Dart	Carbondale, Pa	Dec. 24, 1867	72, 610
Stove, Coal	J. A. Davis	Syracuse, N. Y	Aug. 4, 1857	17, 919
Stove, Coal	J. T. Davy	Troy, N. Y	Mar. 6, 1847	4, 996
Stove, Coal	H. G. Dayton	Maysville, Ky	Nov. 13, 1866	59, 563
Stove, Coal	E. A. De Camp	Saint Louis, Mo	Feb. 25, 1868	74, 753
Stove, Coal	R. S. Dillon	Detroit, Mich	Sept. 28, 1869	95, 206
Stove, Coal	C. S. Doolitell	Mansfield, Ohio	Oct. 13, 1868	83, 049
Stove, Coal	B. W. Dunklee	Boston, Mass	Jan. 1, 1867	60, 840
Stove, Coal	W. C. Durant	West Troy, N. Y	July 23, 1867	66, 957
Stove, Coal	J. Ekin	Xenia, Ohio	Jan. 2, 1866	51, 816
Stove, Coal	J. Fahrney	Boonsborough, Md	Aug. 25, 1868	81, 484
Stove, Coal	G. F. Filley	Saint Louis, Mo	Aug. 11, 1868	80, 935
Stove, Coal	H. J. Frizelle	East Saginaw, Mich	Jan. 4, 1870	98, 580

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Stove, Coal	W. H. Gandey	Lambertsville, N. Y	May 8, 1866	54, 526
Stove, Coal	F. Gilman	Minneapolis, Minn	Sept. 10, 1867	68, 731
Stove, Coal	W. H. Goeway	Albany, N. Y	Feb. 2, 1864	41, 430
Stove, Coal	J. H. Goodfellow	Troy, N. Y	May 25, 1869	90, 524
Stove, Coal	R. D. Granger	Philadelphia, Pa	Jan. 18, 1859	22, 643
Stove, Coal	A. F. Graves and T. J. Clark	Red Wing, Minn	June 1, 1869	90, 660
Stove, Coal	C. B. Gregory	Beverly, N. J	Apr. 21, 1868	77, 032
Stove, Coal	J. Hackett	Louisville, Ky	July 26, 1870	105, 672
Stove, Coal	W. Hailes	Albany, N. Y	June 29, 1869	92, 043
Stove, Coal	J. L. Hanson	Boston, Mass	July 16, 1867	66, 707
Stove, Coal	B. R. Hawley	Normal, Ill	Dec. 14, 1869	97, 912
Stove, Coal	J. H. Helm	Pittsburgh, Pa	May 25, 1869	90, 537
Stove, Coal	M. L. Horton	Windsor, Vt	Mar. 1, 1870	100, 406
Stove, Coal	E. Hosford	Chicago, Ill	Apr. 7, 1868	76, 455
Stove, Coal	W. Hosmer	Auburn, N. Y	Sept. 27, 1864	44, 424
Stove, Coal	E. D. Hunt	New York, N. Y	Oct. 8, 1872	132, 083
Stove, Coal	Z. Hunt	Hudson, N. Y	Sept. 19, 1865	50, 073
Stove, Coal	G. A. Huntley	Quincy, Ill	July 20, 1869	92, 829
Stove, Coal	J. C. Keller	Philadelphia, Pa	May 12, 1857	17, 283
Stove, Coal	J. H. Keyser	New York, N. Y	July 23, 1867	66, 969
Stove, Coal	J. H. Keyser	New York, N. Y	Jan. 25, 1870	99, 092
Stove, Coal	N. Keyser	Newton, Iowa	June 1, 1869	90, 852
Stove, Coal	A. Knobel	Monroe, Wis	Mar. 31, 1868	76, 204
Stove, Coal	J. B. Kohler	Philadelphia, Pa	June 9, 1857	17, 510
Stove, Coal	J. Laforge and J. T. Crane	Rahway, N. J	May 9, 1870	102, 558
Stove, Coal	M. Lehmer	Oregon, Mo	May 4, 1869	89, 670
Stove, Coal	D. G. Littlefield	Albany, N. Y	Aug. 18, 1863	39, 582
Stove, Coal	D. G. Littlefield	Albany, N. Y	Apr. 21, 1868	77, 056
Stove, Coal	J. J. Low	Cleveland, Ohio	Apr. 2, 1867	63, 538
Stove, Coal	J. J. Low	Cleveland, Ohio	Apr. 2, 1867	63, 539
Stove, Coal	G. H. Magersuppe	New York, N. Y	Sept. 15, 1863	39, 939
Stove, Coal	J. S. Marsh	Lewisburgh, Pa	Nov. 20, 1866	59, 775
Stove, Coal	O. F. Mahew	Indianapolis, Ind	June 29, 1869	91, 857
Stove, Coal	H. D. McGeorge	Rochester, N. Y	Sept. 7, 1869	94, 625
Stove, Coal	J. McNeight	Wakefield, Mass	Oct. 26, 1869	96, 135
Stove, Coal	H. Meidinger	Carlsruhe, Germany	Apr. 15, 1873	137, 855
Stove, Coal	G. R. Moore	Lyons, Iowa	Apr. 16, 1867	63, 926
Stove, Coal	G. R. Moore	Lyons, Iowa	July 9, 1867	66, 610
Stove, Coal	G. R. Moore	Philadelphia, Pa	Jan. 25, 1870	99, 100
Stove, Coal	J. Morrison, jr	Troy, N. Y	Feb. 21, 1865	46, 483
Stove, Coal	J. L. Mott	New York, N. Y	Nov. 1, 1845	4, 247
Stove, Coal	B. Oertly and X. Feudrich	Washington, D. C	Aug. 18, 1868	81, 197
Stove, Coal	J. W. Paige	Corning, N. Y	July 3, 1866	56, 148
Stove, Coal	P. Paradis	Rochester, N. Y	Dec 22, 1868	85, 122
Stove, Coal	E. A. Parker	Horseheads, N. Y	May 5, 1868	77, 519
Stove, Coal	S. E. Parsons	Wilkesbarre, Pa	Oct. 25, 1864	44, 816
Stove, Coal	C. Pepper	Norfolk, Va	Sept. 24, 1867	69, 242
Stove, Coal	J. S. Platt	Philadelphia, Pa	Aug. 17, 1869	93, 742
Stove, Coal	D. S. Quimby	Brooklyn, N. Y	Aug. 1, 1865	49, 153
Stove, Coal	F. Raith	Calumet, Mich	May 25, 1869	90, 464
Stove, Coal	A. C. Rand	New York, N. Y	June 30, 1868	79, 390
Stove, Coal	L. Rathbone and W. Hailes	Albany, N. Y	Nov. 21, 1865	51, 085
Stove, Coal	D. C. Raub	Davenport, Iowa	Oct. 20, 1857	18, 469
Stove, Coal	A. J. Redway	Cincinnati, Ohio	Sept. 29, 1868	82, 637
Stove, Coal	B. T. Roney	Bristol, Pa	Sept. 24, 1861	33, 367
Stove, Coal	G. D. Sanford	Peekskill, N. Y	Nov. 2, 1869	96, 485
Stove, Coal	W. Sanford	New York, N. Y	Dec. 14, 1869	97, 966
Stove, Coal	S. T. Savage	Albany, N. Y	Sept. 7, 1858	21, 445
Stove, Coal	E. Schwiedter	Hoboken, N. J	Sept. 28, 1869	95, 273
Stove, Coal	J. Shields and S. Pierce	New York and Troy, N. Y	Jan. 7, 1851	7, 891
Stove, Coal	H. D. Snyder	Carbondale, Pa	Sept. 15, 1868	82, 169
Stove, Coal	J. Spear	Philadelphia, Pa	Aug. 1, 1865	49, 165
Stove, Coal	J. Spear	Philadelphia, Pa	Apr. 26, 1870	102, 328
Stove, Coal	H. Stanley	Poultney, Vt	Jan. 4, 1845	3, 876
Stove, Coal	P. P. Stewart	Troy, N. Y	June 6, 1865	48, 143
Stove, Coal	S. B. Stewart	Brush Valley, Pa	Sept. 22, 1868	82, 449
Stove, Coal	H. Stickney	Cleveland, Ohio	Oct. 19, 1869	95, 949
Stove, Coal	W. H. Stinson	Baltimore, Md	Oct. 6, 1857	18, 362
Stove, Coal	J. H. Stone	Philadelphia, Pa	July 16, 1867	66, 907
Stove, Coal	T. L. Sturtevant	Boston, Mass	July 11, 1865	48, 738
Stove, Coal	J. G. Treadwell and W. Hailes	Albany, N. Y	Aug. 11, 1863	39, 535
Stove, Coal	W. B. Treadwell	Albany, N. Y	Sept. 29, 1863	40, 132
Stove, Coal	W. B. Treadwell	Albany, N. Y	May 3, 1864	42, 610
Stove, Coal	W. B. Treadwell	Albany, N. Y	June 6, 1865	48, 115
Stove, Coal	J. S. Van Buren	Norwich, Conn	Apr. 20, 1860	89, 185
Stove, Coal	H. B. Van Voorhis	Pittsburgh, Pa	Mar. 3, 1868	75, 223
Stove, Coal	J. Van Wormer and M. McGarvey.	Albany, N. Y	Mar. 10, 1868	75, 491
Stove, Coal	R. B. Varden	Uniontown, Md	June 8, 1869	91, 186
Stove, Coal	S. D. Vose	Milwaukee, Wis	Dec. 7, 1869	97, 732
Stove, Coal	F. Walker	Memphis, Tenn	Apr. 7, 1868	76, 565
Stove, Coal	J. R. Webber	Morris, Ill	Aug. 23, 1870	106, 750
Stove, Coal	M. D. Wellman and J. Old	Pittsburgh, Pa	July 11, 1865	48, 751
Stove, Coal	D. Wells	Lowell, Mass	May 18, 1869	90, 141
Stove, Coal	C. Williams	Manchester, N. H	Mar. 17, 1868	75, 715
Stove, Coal	S. H. Williams	Baltimore, Md	Sept. 28, 1869	95, 39[illegible]
Stove, Coal	G. G. Wolfe	Troy, N. Y	Aug. 8, 1865	49, 333
Stove, Coal	G. O. Woodcock	Claremont, N. H	Aug. 11, 1868	81, 053
Stove, Coal box	A. N. Towne	Chicago, Ill	Jan. 21, 1868	73, 477
Stove, Coal-burning	A. Smith	North Providence, R. I	Aug. 27, 1834	....
Stove, Coal-burning	J. H. Keyser	New York, N. Y	Mar. 19, 1867	62, 961
Stove, Coal cook	H. Pease	Brockport, N. Y	June 9, 1868	78, 822
Stove, Coal cooking	W. Davis and R. W. Lord	New York	Nov. 23, 1829	....
Stove, Coal cooking	D. Gassner	New York	July 11, 1832	....
Stove, Coal cooking	W. Kinney	Louisville, Ky	July 29, 1837	306
Stove, Coal cooking	C. Schermerhorn	New York	June 23, 1829	....
Stove, Coal-oil	W. B. Billings	New York, N. Y	Jan. 17, 1865	45, 957
Stove, Coal-oil	F. H. Brown	Chicago, Ill	Jan. 1, 1867	60, 680

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Invention.	Inventor.	Residence.	Date.	No.
Stove, Coal-oil	J. A. Frey	Washington, D. C	Aug. 22, 1871	118, 358
Stove, Coal-oil	E. McKinney	Clarksville, Tenn	Oct. 16, 1866	58, 862
Stove, Coal-oil	C. H. Reichmann	New York, N. Y	Jan. 31, 1865	46, 141
Stove, Coal-oil	J. H. Thorp	New York, N. Y	May 24, 1870	103, 526
Stove, Coal-oil	J. H. Thorp	New York, N. Y	July 16, 1872	129, 436
Stove, Coal-oil	J. H. Thorp	New York, N. Y	July 8, 1873	140, 743
Stove, Coal or heating	J. V. Meigs	Washington, D. C	Oct. 25, 1864	44, 812
Stove collar and damper	J. Spear	Philadelphia, Pa	Apr. 20, 1869	89, 179
Stove, Columbian	J. Tallcott and J. McCulloch	Smyrna, N. Y	Jan. 26, 1824	....
Stove, Combination cooking	J. L. Mott	New York, N. Y	Nov. 20, 1837	466
Stove, Combined	O. S. Hartshorn, H. M. Payson, and A. Ring.	Portland, Me	Sept. 3, 1846	4, 732
Stove, Combined cooking and Franklin	T. Wentworth	Oswego, N. Y	May 18, 1825	....
Stove, Combined dumb and parlor	A. L. Blanchard	Albany, N. Y	Nov. 12, 1841	2, 355
Stove, Combined heating and cooking	B. McConnell	Philadelphia, Pa	May 20, 1873	139, 172
Stove, Combined parlor and cooking	N. Smith	New Hampton, N. H	Oct. 27, 1836	71
Stove, Combined steam and hot-air cooking	J. Shopland	Honesdale, Pa	Aug. 5, 1856	15, 495
Stove, Combustion-chamber in coal	W. H. Whitehead	Chicago, Ill	Aug. 11, 1868	81, 043
Stove, Common	L. Gonjon	Philadelphia, Pa	Sept. 22, 1823	....
Stove, Conical	R. Robertson	Albany, N. Y	June 16, 1836	....
Stove, Conical	S. C. Roe	New York	Mar. 3, 1831	....
Stove, Cook	J. J. Anderson	Beaver, Pa	Mar. 6, 1855	12, 474
Stove, Cook	W. C. Davis	Cincinnati, Ohio	Oct. 11, 1870	108, 240
Stove, Cook	S. Dickinson	Richmond, Ind	Aug. 15, 1835	....
Stove, Cook	A. S. Dunham	Taunton, Mass	Oct. 3, 1865	50, 231
Stove, Cook	M. L. Horton	Claremont, N. H	Sept. 19, 1865	50, 072
Stove, Cook	E. Kirk, jr	New York, N. Y	Dec. 10, 1861	33, 890
Stove, Cook	H. Mitchell	Richmond, Ind	May 23, 1865	47, 845
Stove, Cook	Resor, Wade, and Resor	Cincinnati, Ohio	May 29, 1835	....
Stove, Cook	J. G. Treadwell	Albany, N. Y	Feb. 4, 1862	34, 322
Stove, Cook	C. Vale	Newark, N. J	Mar. 18, 1836	....
Stove, Cook	J. Van	Cincinnati, Ohio	Oct. 17, 1865	50, 519
Stove, Cooking	A. Abbott	Portland, Me	Apr. 2, 1845	....
Stove, Cooking	W. Abendroth	Port Chester, N. Y	Apr. 23, 1850	7, 297
Stove, Cooking	F. C. Adams and J. Peckover	Cincinnati, Ohio	Dec. 7, 1858	22, 223
Stove, Cooking	F. C. Adams and J. Peckover	Cincinnati, Ohio	July 30, 1861	32, 953
Stove, Cooking	F. C. Adams and J. Peckover	Cincinnati, Ohio	Feb. 5, 1867	61, 790
Stove, Cooking	F. C. Adams and J. Peckover	Cincinnati, Ohio	Feb. 4, 1868	73, 949
Stove, Cooking	J. Adams	Hudson, N. Y	Apr. 16, 1818	....
Stove, Cooking	D. N. Allard	Chester Hill, Ohio	Sept. 7, 1869	94, 537
Stove, Cooking	W. H. Allen and J. Slocum	Wellsburgh, Va., and Brownsville, Pa.	Sept. 10, 1846	4, 749
Stove, Cooking	J. J. Anderson	Putnam, Ohio	Aug. 17, 1843	3, 225
Stove, Cooking	J. J. Anderson	Rochester, Pa	Mar. 23, 1869	88, 112
Stove, Cooking	E. Andrews and S. Austin	Bradford, Pa	July 1, 1836	....
Stove, Cooking	M. Armstrong	West Alexander, Pa	June 1, 1869	90, 719
Stove, Cooking	W. A. Arnold	Northampton, Mass	June 16, 1836	....
Stove, Cooking	A. Atwood	Troy, N. Y	May 4, 1842	2, 607
Stove, Cooking	F. R. Babcock	Westfield, Mass	Apr. 10, 1849	6, 292
Stove, Cooking	L. S. Bacon	Le Roy, N. Y	Jan. 23, 1846	4, 365
Stove, Cooking	L. S. Bacon	Le Roy, N. Y	Apr. 11, 1848	5, 504
Stove, Cooking	F. M. Baker	South Reading, Mass	Oct. 31, 1865	50, 765
Stove, Cooking	F. M. Baker	South Reading, Mass	Dec. 4, 1866	60, 118
Stove, Cooking	J. Barnes	Burlington, Vt	July 2, 1812	128, 524
Stove, Cooking	A. and J. Barnett	Louisville, Ky	June 11, 1829	....
Stove, Cooking	A. C. Barstow	Providence, R. I	Mar. 20, 1860	27, 513
Stove, Cooking	A. C. Barstow	Providence, R. I	Apr. 30, 1861	32, 228
Stove, Cooking	A. C. Barstow	Providence, R. I	June 5, 1866	55, 225
Stove, Cooking	A. C. Barstow	Providence, R. I	Apr. 22, 1873	137, 996
Stove, Cooking	H. Bartlett	Bridgeport, Conn	May 12, 1832	....
Stove, Cooking	H. Bartlett	Carmel, N. Y	Aug. 1, 1834	....
Stove, Cooking	W. D. Bartlett	Amesbury, Mass	Apr. 8, 1862	34, 871
Stove, Cooking	E. Bates and D. Updegraff	Mount Pleasant, Ohio	July 20, 1831	....
Stove, Cooking	B. A. Beardsley	Waterville, N. Y	Feb. 4, 1851	7, 923
Stove, Cooking	W. Beebe	New York	July 8, 1842	2, 710
Stove, Cooking	E. E. Bennett	Sandy Hill, N. Y	July 17, 1829	....
Stove, Cooking	T. Bent	Cincinnati, Ohio	June 5, 1844	3, 613
Stove, Cooking	S. Bentz	Boonsborough, Md	Mar. 9, 1844	3, 470
Stove, Cooking	A. C. Bettis and E. M. Gibbs	Norwich, N. Y	June 22, 1830	....
Stove, Cooking	F. S. Bissell	Pittsburgh, Pa	Feb. 15, 1870	99, 732
Stove, Cooking	J. B. Bissell	Oakville, N. Y	Apr. 16, 1841	2, 050
Stove, Cooking	H. Blanchard	Acquackanonck, N. J	Apr. 27, 1841	2, 069
Stove, Cooking	R. J. Blanchard	Albany, N. Y	Aug. 24, 1852	9, 212
Stove, Cooking	W. E. Bleecker	Albany, N. Y	Mar. 27, 1849	6, 222
Stove, Cooking	W. E. and H. Bleecker and S. D. Vose.	Albany, N. Y	July 3, 1849	6, 564
Stove, Cooking	S. Blue	Danville, Pa	Jan. 31, 1871	111, 427
Stove, Cooking	N. O. Bond	Fairfax Court House, Va	Jan. 30, 1872	123, 225
Stove, Cooking	G. S. Bosworth	Boston, Mass	Feb. 8, 1848	5, 419
Stove, Cooking	G. S. Bosworth	Troy, N. Y	June 8, 1869	91, 076
Stove, Cooking	N. Bosworth, jr	Troy, N. Y	Aug. 28, 1847	5, 260
Stove, Cooking	M. A. Boughton	Norwalk, Conn	Sept. 26, 1871	4, 568
Stove, Cooking	M. A. Boughton	Bridgeport, Conn	Apr. 18, 1871	113, 842
Stove, Cooking	N. A. Boynton	New York, N. Y	Feb. 2, 1869	86, 499
Stove, Cooking	D. Brix	Geneseo, Ill	Apr. 18, 1871	113, 846
Stove, Cooking	J. P. Broadmeadow	New York, N. Y	Nov. 6, 1866	59, 351
Stove, Cooking	A. Bronson	Peekskill, N. Y	Aug. 22, 1848	5, 791
Stove, Cooking	H. Brown	Harlem, N. Y	Nov. 3, 1868	83, 688
Stove, Cooking	N. S. Brown	Litchfield, N. Y	Mar. 29, 1864	42, 070
Stove, Cooking	R. H. Brown	Linneus, Mo	Dec. 2, 1872	145, 089
Stove, Cooking	C. H. Buck	Saint Louis, Mo	Oct. 8, 1867	69, 536
Stove, Cooking	D. Buck	Albany, N. Y	May 20, 1839	1, 157
Stove, Cooking	D. Buck	Albany, N. Y	Dec. 12, 1848	5, 967
Stove, Cooking	E. Buck	Nunda, N. Y	Aug. 6, 1842	2, 750
Stove, Cooking	T. Budington	Bridgeport, Conn	Jan. 25, 1833	....
Stove, Cooking	P. N. Burke	Brooklyn, N. Y	Apr. 9, 1872	125, 377
Stove, Cooking	L. Burnell	Elyria, Ohio	Nov. 25, 1834	....
Stove, Cooking	A. Burnham	Albany, N. Y	Feb. 19, 1856	14, 278

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Stove, Cooking	T. D. Burrall	Geneva, N. Y	June 26, 1835	......
Stove, Cooking	R. Bush	Rochester, N. Y	Apr. 4, 1844	3,519
Stove, Cooking	E. Bussey	Troy, N. Y	Dec. 5, 1865	51,292
Stove, Cooking	E. Bussey	Troy, N. Y	July 24, 1866	56,525
Stove, Cooking	E. Bussey	Troy, N. Y	July 24, 1866	56,686
Stove, Cooking	E. Bussey	Troy, N. Y	Feb. 14, 1871	111,811
Stove, Cooking	E. Bussey	Troy, N. Y	Feb. 14, 1871	111,812
Stove, Cooking	E. A. Butts and R. F. Stevens.	Syracuse, N. Y	Mar. 14, 1848	5,474
Stove, Cooking	E. Buys	New York, N. Y	May 31, 1870	103,715
Stove, Cooking	H. W. Camp	Owego, N. Y	Oct. 14, 1834	......
Stove, Cooking	H. W. Camp	Owego, N. Y	June 24, 1844	3,640
Stove, Cooking	G. W. Carlton	Brunswick, Me	Nov. 25, 1851	8,542
Stove, Cooking	R. K. Cavanaugh and H. Y. Lazear.	Jersey City, N. J	July 24, 1860	29,244
Stove, Cooking	A. E. Chamberlain	Cincinnati, Ohio	Apr. 19, 1864	42,432
Stove, Cooking	A. E. Chamberlain and W. Caven.	Cincinnati, Ohio	Aug. 18, 1863	39,549
Stove, Cooking	A. E. Chamberlain and J. B. Crowley.	Cincinnati, Ohio	June 22, 1869	91,520
Stove, Cooking	A. E. Chamberlain and J. B. Crowley.	Cincinnati, Ohio	Nov. 5, 1872	132,711
Stove, Cooking	J. Chambers	Boonsborough, Md	Sept. 18, 1866	58,061
Stove, Cooking	S. L. Chase	Woodstock, Vt	Sept. 25, 1840	1,799
Stove, Cooking	S. L. Chase	Woodstock, Vt	Aug. 11, 1841	2,216
Stove, Cooking	J. Childs	Henniker, N. H	Dec. 17, 1834	......
Stove, Cooking	G. Chilson	Boston, Mass	June 12, 1866	55,466
Stove, Cooking	G. Chilson	Boston, Mass	Mar. 17, 1868	75,665
Stove, Cooking	J. B. Chollar, E. Jones, and P. Low.	Troy, N. Y	Nov. 8, 1845	4,260
Stove, Cooking	O. E. Clark	Waterford, Mich	Mar. 23, 1869	88,011
Stove, Cooking	B. F. Clement	Saint Louis, Mo	Oct. 5, 1869	95,429
Stove, Cooking	F. Clement	Saint Louis, Mo	Apr. 18, 1871	113,742
Stove, Cooking	T. G. Clinton and G. H. and E H. Knight.	Cincinnati, Ohio	Oct. 16, 1849	6,798
Stove, Cooking	L. E. Clow	Saint Louis, Mo	Dec. 9, 1873	145,276
Stove, Cooking	J. B. Clute	Schenectady, N. Y	May 28, 1846	4,543
Stove, Cooking	W. Cobb	Albany, N. Y	June 16, 1846	4,585
Stove, Cooking	W. Cobb	Albany, N. Y	Feb. 6, 1849	6,089
Stove, Cooking	R. G. Cochran	Francistown, N. H	Feb. 3, 1836	......
Stove, Cooking	R. G. Cochran	Francistown, N. H	Oct. 10, 1840	1,814
Stove, Cooking	J. H. Codding	Taunton, Mass	Oct. 24, 1871	120,244
Stove, Cooking	S. W. Cole	Chelsea, Mass	Aug. 25, 1840	1,730
Stove, Cooking	T. Colwell	Troy, N. Y	Aug. 11, 1868	80,916
Stove, Cooking	J. Conant	Brandon, Vt	Dec. 13, 1823	......
Stove, Cooking	A. C. Conde	Schenectady, N. Y	Oct. 3, 1846	4,785
Stove, Cooking	J. H. Conklin	Peekskill, N. Y	Feb. 20, 1847	4,974
Stove, Cooking	J. D. Conner	Bloomington, Ill	Oct. 10, 1865	50,339
Stove, Cooking	S. and G. I. Conrad	Berlin, Pa	Dec. 3, 1846	4,871
Stove, Cooking	A. Cooper	Danville, Pa	Oct. 25, 1843	3,314
Stove, Cooking	J. Cornelison	Danville, Pa	Sept. 26, 1846	4,771
Stove, Cooking	A. C. Corse	Troy, N. Y	May 18, 1869	90,331
Stove, Cooking	A. P. Corse	Troy, N. Y	Oct. 31, 1871	120,497
Stove, Cooking	J. Cox	Philadelphia, Pa	May 3, 1859	23,829
Stove, Cooking	A. Crafts	Auburn, Ohio	May 22, 1847	5,125
Stove, Cooking	E. J. Cridge	Troy, N. Y	Jan. 24, 1860	26,886
Stove, Cooking	E. J. Cridge	Troy, N. Y	May 6, 1862	35,141
Stove, Cooking	E. J. Cridge	Troy, N. Y	May 25, 1869	90,342
Stove, Cooking	J. Cross	Eaton, N. Y	June 27, 1838	817
Stove, Cooking	J. B. Crowley	Cincinnati, Ohio	Apr. 3, 1866	53,732
Stove, Cooking	J. B. Crowley and A. E. Chamberlain	Cincinnati, Ohio	Feb. 7, 1871	111,517
Stove, Cooking	E. G. Currier	Warner, N. H	June 2, 1836	......
Stove, Cooking	E. G. Currier	Warner, N. H	June 2, 1836	......
Stove, Cooking	D. Curtis	Mishawaka, Iowa	Mar. 7, 1871	112,425
Stove, Cooking	J. Curtis	Auburn, N. Y	Jan. 27, 1843	2,933
Stove, Cooking	S. S. Curtis	Croton Corners, N. Y	Feb. 21, 1860	27,207
Stove, Cooking	E. Dabull	North Canaan, Conn	Sept. 26, 1835	......
Stove, Cooking	W. C. Davis	Cincinnati, Ohio	Oct. 15, 1867	69,902
Stove, Cooking	W. C. Davis and J. W. Garrison	Cincinnati, Ohio	May 24, 1870	103,306
Stove, Cooking	J. T. Davy	Troy, N. Y	Mar. 12, 1845	3,939
Stove, Cooking	J. T. Davy	Troy, N. Y	Oct. 9, 1847	5,324
Stove, Cooking	J. De Frain	Philadelphia, Pa	Oct. 12, 1869	95,664
Stove, Cooking	J. Devine	Rochester, N. Y	Aug. 24, 1839	1,302
Stove, Cooking	B. F. De Wolf	Lansingburgh, N. Y	Jan. 15, 1846	4,358
Stove, Cooking	W. S. Diesher	Hamburgh, Pa	July 7, 1863	39,127
Stove, Cooking	J. W. H. Doubler	Stephenson County, Ill	Oct. 28, 1856	15,971
Stove, Cooking	B. Douglas	Albany, N. Y	June 30, 1836	......
Stove, Cooking	C. H. Douglas	Hartford, Conn	July 22, 1873	140,906
Stove, Cooking	W. Doyle	Albany, N. Y	June 2, 1868	78,517
Stove, Cooking	J. Duffy	Quincy, Ill	June 25, 1872	128,374
Stove, Cooking	N. Duncan	Beaver Falls, Pa	June 13, 1871	115,831
Stove, Cooking	D. Dunham	Pawtucket, R. I	May 29, 1849	6,478
Stove, Cooking	L. Dunham	Lincoln Centre, Me	Feb. 28, 1871	112,132
Stove, Cooking	W. C. Durant	West Troy, N. Y	Apr. 27, 1869	89,391
Stove, Cooking	J. Easterly	Albany, N. Y	Apr. 4, 1871	113,643
Stove, Cooking	R. Eaton and J. Marks	London, England, and Boston, Mass.	Nov. 23, 1869	97,066
Stove, Cooking	G. M. Eckert	Saint Louis, Mo	Feb. 1, 1870	99,419
Stove, Cooking	L. Eddy	Taunton, Mass	Oct. 18, 1843	3,307
Stove, Cooking	P. P. Ellis	Saint Louis, Mo	Nov. 7, 1871	120,728
Stove, Cooking	P. Emmitt	York, Pa	June 14, 1843	3,138
Stove, Cooking	E. L. Evans	Mount Holly, N. J	Jan. 30, 1849	6,061
Stove, Cooking	M. E. A. W. Evard	Leesburgh, Va	Apr. 7, 1868	76,315
Stove, Cooking	M. G. Fagan	Troy, N. Y	Aug. 31, 1869	94,193
Stove, Cooking	M. G. Fagan	Troy, N. Y	Jan. 28, 1873	135,325
Stove, Cooking	T. Fairbanks	Caledonia County, Vt	Apr. 14, 1835	......
Stove, Cooking	L. Fairman	Orleans County, N. Y	June 26, 1835	......
Stove, Cooking	S. Fares and W. Miller	Cincinnati, Ohio	May 31, 1864	42,935

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Stove, Cooking	D. C. Farrington	Lowell, Mass	Nov. 20, 1860	30, 674
Stove, Cooking	J. Feinour	Philadelphia, Pa	Jan. 30, 1849	6, 067
Stove, Cooking	J. T. Ferrand	Port Byron, N. Y	Aug. 4, 1845	4, 137
Stove, Cooking	L. B. Field	West Sparta, N. Y	Nov. 28, 1848	5, 943
Stove, Cooking	G. F. Filley	Saint Louis, Mo	June 14, 1853	9, 788
Stove, Cooking	A. Fisher	Claremont, N. H	May 9, 1828	......
Stove, Cooking	B. G. Fitzhugh	Frederick, Md	May 16, 1871	114, 788
Stove, Cooking	J. D. Flansburgh	Philadelphia, Pa	Nov. 3, 1863	40, 465
Stove, Cooking	J. Fleming	Erie, Pa	Aug. 10, 1869	93, 427
Stove, Cooking	H. A. Foot	Dover, N. H	Dec. 7, 1832	......
Stove, Cooking	H. J. Frizelle	Syracuse, N. Y	Sept. 13, 1864	44, 255
Stove, Cooking	C. Fulton	Rochester, N. Y	June 10, 1844	3, 626
Stove, Cooking	C. Gage	Saint Louis, Mo	Jan. 2, 1872	122, 451
Stove, Cooking	W. Gallup	Norwalk, Ohio	June 10, 1840	1, 624
Stove, Cooking	W. Gallup	Damascus, Ohio	May 30, 1848	5, 604
Stove, Cooking	D. G. Garnsey	Pomfret, N. Y	Mar. 3, 1828	......
Stove, Cooking	R. Gass	Troy, N. Y	June 27, 1871	116, 426
Stove, Cooking	G. Geer	Troy, N. Y	Apr. 11, 1843	5, 502
Stove, Cooking	C. P. Geissenhainer	Pittsburgh, Pa	July 9, 1861	32, 764
Stove, Cooking	H. S. George	Syracuse, N. Y	July 8, 1856	15, 318
Stove, Cooking	J. L. Gerow	Marlborough, N. Y	Jan. 30, 1849	6, 070
Stove, Cooking	P. Getz	Lancaster, Pa	Oct. 4, 1859	25, 637
Stove, Cooking	H. G. Giles	Troy, N. Y	May 3, 1870	102, 533
Stove, Cooking	B. Gill	New York, N. Y	Dec. 9, 1835	......
Stove, Cooking	S. Godley	Lockport, N. Y	Aug. 18, 1857	18, 012
Stove, Cooking	B. F. Gold	Reading, Pa	July 16, 1861	32, 829
Stove, Cooking	J. H. Goodfellow	Troy, N. Y	Aug. 23, 1870	106, 688
Stove, Cooking	J. H Goodfellow	Troy, N. Y	Oct. 3, 1871	119, 514
Stove, Cooking	E. Gore, jr	Guilford, Vt	Aug. 17, 1835	......
Stove, Cooking	C. Granger	Pottsford, Vt	July 2, 1836	......
Stove, Cooking	R. D Granger	Albany, N. Y	Feb. 20, 1846	4, 390
Stove, Cooking	R. D. Granger	Albany, N. Y	Mar. 7, 1846	4, 394
Stove, Cooking	R. D. Granger	Albany, N. Y	June 13, 1846	4, 567
Stove, Cooking	R. D Granger	Albany, N. Y	Mar. 21, 1848	5, 478
Stove, Cooking	R. D. Granger	Albany, N. Y	Jan. 30, 1849	6, 068
Stove, Cooking	R. D. Granger	Albany, N. Y	Jan. 30, 1849	6, 069
Stove, Cooking	R. D. Granger	Philadelphia, Pa	Dec. 1, 1857	18, 737
Stove, Cooking	R. D. Granger	Philadelphia, Pa	May 18, 1858	20, 265
Stove, Cooking	R. D. Granger	Philadelphia, Pa	Aug. 23, 1859	25, 193
Stove, Cooking	R. D. Granger	Albany, N. Y	Jan. 13, 1863	37, 396
Stove, Cooking	C. W. Grannis	Gowanda, N. Y	Apr. 22, 1851	8, 050
Stove, Cooking	D. Graves	Seneca, Ill	Oct. 9, 1866	58, 638
Stove, Cooking	S. Graves	Auburn, N. Y	Feb. 10, 1846	4, 380
Stove, Cooking	C. Green	Vincentown, N. J	May 18, 1869	90, 258
Stove, Cooking	J. Green	Rochester, N. Y	Dec. 28, 1840	1, 913
Stove, Cooking	J. Green	Rochester, N. Y	Aug. 11, 1843	3, 214
Stove, Cooking	C. O. Greene	Troy, N. Y	Feb. 21, 1860	27, 216
Stove, Cooking	C. O. Greene	Troy, N. Y	Feb. 23, 1869	87, 165
Stove, Cooking	W. A. Greene	Troy, N. Y	June 4, 1867	65, 375
Stove, Cooking	W. A. Greene	Medford, Mass	Jan. 28, 1873	135, 273
Stove, Cooking	J. Greer	Dayton, Ohio	May 12, 1843	3, 084
Stove, Cooking	J. Greer and R. J. King	Dayton, Ohio	Mar. 11, 1851	7, 975
Stove, Cooking	J. Greer and R. J. King	Dayton, Ohio	Mar. 16, 1869	87, 925
Stove, Cooking	J. Greer and R. J. King	Dayton, Ohio	May 24, 1870	103, 449
Stove, Cooking	J. H. Green	Rochester, Pa	July 7, 1868	79, 652
Stove, Cooking	S. Gregory	South Norwalk, Conn	July 11, 1871	116, 832
Stove, Cooking	J. Grimes	Portsmouth, Ohio	Nov. 16, 1869	96, 799
Stove, Cooking	H. N. Gros	Palatine Bridge, N. Y	May 13, 1845	4, 044
Stove, Cooking	J. Hackett	Louisville, Ky	May 26, 1857	17, 371
Stove, Cooking	W. Hailes	Albany, N. Y	May 25, 1869	90, 358
Stove, Cooking	W. Hailes	Albany, N. Y	June 7, 1870	104, 121
Stove, Cooking	W. Hailes	Albany, N. Y	Dec. 20, 1870	110, 230
Stove, Cooking	H. Halbert	Utica, N. Y	May 29, 1849	6, 479
Stove, Cooking	P. Holley	Red Hook, N. Y	Mar. 1, 1822	......
Stove, Cooking	R. Ham	Troy, N. Y	May 4, 1869	89, 655
Stove, Cooking	J. D. Harden	Troy, N. Y	Nov. 23, 1869	97, 084
Stove, Cooking	J. D. Harden	Troy, N. Y	Apr. 23, 1872	125, 953
Stove, Cooking	J. Harriman	Haverhill, Mass	Mar. 31, 1834	......
Stove, Cooking	A. D. Hart	Pittsfield, Mass	July 8, 1843	3, 164
Stove, Cooking	L. W. Harwood	Troy, N. Y	Aug. 27, 1867	68, 072
Stove, Cooking	D. Hastings and S. Sikes	Deerfield, Mass	Nov. 23, 1837	470
Stove, Cooking	D. Heilig	Chicago, Ill	May 15, 1866	54, 721
Stove, Cooking	M. Heim	Cincinnati, Ohio	May 17, 1853	9, 728
Stove, Cooking	J. C. Henderson	Albany, N. Y	May 1, 1860	28, 081
Stove, Cooking	C. W. Hermance	Schuylersville, N. Y	Nov. 2, 1869	96, 429
Stove, Cooking	C. W. Hermance	Schuylersville, N. Y	Jan. 18, 1870	98, 964
Stove, Cooking	G. G. Hermance	Poughkeepsie, N. Y	July 24, 1838	852
Stove, Cooking	J. C. Hermance	Schenectady, N. Y	June 13, 1844	3, 628
Stove, Cooking	L. Hermance	Lansingburgh, N. Y	Feb. 1, 1870	99, 436
Stove, Cooking	L. Hermance	Lansingburgh, N. Y	July 25, 1871	117, 417
Stove, Cooking	L. Hermance	Lansingburgh, N. Y	Nov. 21, 1871	121, 101
Stove, Cooking	R. M. Hermance	Stillwater, N. Y	Nov. 23, 1858	22, 121
Stove, Cooking	R. M. Hermance	Troy, N. Y	Apr. 26, 1870	10[illegible], 462
Stove, Cooking	R. M. Hermance	Troy, N. Y	July 30, 1872	130, 045
Stove, Cooking	P. W. Hertick	Louisville, Ky	Mar. 22, 1870	101, 127
Stove, Cooking	J. J. Hess	Philadelphia, Pa	Mar. 19, 1829	......
Stove, Cooking	S. Heywood and L. P. Fisher	Claremont, N. H	Aug. 29, 1838	896
Stove, Cooking	C. Higgins	Turner, Me	June 2, 1836	......
Stove, Cooking	D. H. Hilliard	Cornish, N. H	Nov. 26, 1840	1, 858
Stove, Cooking	M. Holdener	Belleville, Ill	Feb. 9, 1869	86, 671
Stove, Cooking	H. T Holmes and W. H. Priest	Little Falls, N. Y	June 27, 1871	116, 444
Stove, Cooking	G. E. Hopkin	Philadelphia, Pa	Aug. 29, 1871	118, 534
Stove, Cooking	G. P. Hopkins	Albion, N. Y	June 2, 1863	38, 744
Stove, Cooking	W. A. Hopkins	New York	Sept. 30, 1834	......
Stove, Cooking	M. L. Horton	Claremont, N. H	June 1, 1858	20, 430
Stove, Cooking	M. L. Horton	Claremont, N. H	Sept. 19, 1865	50, 071
Stove, Cooking	A. Hotchkin	Maryland, N. Y	Feb. 20, 1844	3, 447
Stove, Cooking	G. Z. House	New York, N. Y	Oct. 31, 1871	120, 439

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Stove, Cooking	C. Hoxie	Hudson, N. Y	May 3, 1816	....
Stove, Cooking	W. J. Hoxworth and S. H. La Rue.	Allentown, Pa	June 20, 1871	116,058
Stove, Cooking	H. A. Hummer	Frenchtown, N. J	Sept. 2, 1873	142,467
Stove, Cooking	Z. Hunt	Hudson, N. Y	Sept. 25, 1860	30,142
Stove, Cooking	Z. Hunt	Hudson, N. Y	Feb. 9, 1864	41,579
Stove, Cooking	H. Huntley	Rochester, N. Y	Aug. 16, 1845	4,152
Stove, Cooking	H. Huntley	Cincinnati, Ohio	Oct. 26, 1852	9,359
Stove, Cooking	H. Huntley and W. Caven	Cincinnati, Ohio	Nov. 27, 1860	30,733
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	Mar. 19, 1850	7,191
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	Aug. 19, 1851	8,300
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	Nov. 25, 1851	8,541
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	Apr. 2, 1861	31,930
Stove, Cooking	J. Hurd, jr	Boston, Mass	Nov. 10, 1829	....
Stove, Cooking	J. Hutchinson, jr	Lynn, Mass	Dec. 20, 1837	528
Stove, Cooking	J. R. Hyde	Troy, N. Y	May 7, 1850	7,345
Stove, Cooking	J. R. Hyde	Troy, N. Y	Nov. 10, 1857	18,586
Stove, Cooking	J. R. Hyde	Troy, N. Y	Sept. 29, 1863	40,104
Stove, Cooking	J. R. Hyde	Troy, N. Y	June 11, 1873	140,044
Stove, Cooking	H. Ingraham	Naples, N. Y	Aug. 20, 1872	130,580
Stove, Cooking	W. Jackson	Syracuse, N. Y	Jan. 18, 1848	5,415
Stove, Cooking	W. Jeanes	Philadelphia, Pa	May 25, 1840	1,621
Stove, Cooking	P. Jenkins	Hepborn, N. Y	Feb. 6, 1819	....
Stove, Cooking	S. S. Jewett	Buffalo, N. Y	May 17, 1859	24,028
Stove, Cooking	S. S. Jewett	Buffalo, N. Y	June 12, 1860	28,673
Stove, Cooking	S. S. Jewett and F. H. Root	Buffalo, N. Y	June 21, 1870	104,461
Stove, Cooking	B. F. Johnson	Troy, N. Y	June 29, 1869	92,055
Stove, Cooking	B. F. Johnson	Troy, N. Y	May 31, 1870	103,621
Stove, Cooking	E. Johnson, jr	Cleveland, Ohio	Oct. 21, 1862	36,714
Stove, Cooking	R. Johnson	Lawrence, Kans	Feb. 6, 1872	123,481
Stove, Cooking	W. Johnson and H. Wansbrough.	Cincinnati, Ohio	July 31, 1860	29,381
Stove, Cooking	D. Johnston	Amsterdam, Ohio	Sept. 4, 1849	6,700
Stove, Cooking	J. H. Jones	Memphis, Tenn	Oct. 11, 1870	108,152
Stove, Cooking	S. S. Jones	Philadelphia, Pa	Feb. 20, 1844	3,441
Stove, Cooking	E. Kaighn	Camden, N. J	Sept. 18, 1849	6,721
Stove, Cooking	W. W. Karshner	Aubrey, Kans	Aug. 5, 1873	141,508
Stove, Cooking	J. L. Kastendicke	Albany, N. Y	Feb. 11, 1868	74,228
Stove, Cooking	D. P. Kayner	Erie, Pa	June 22, 1869	91,542
Stove, Cooking	A. Keagy	Middle Woodbury, Pa	June 25, 1850	7,459
Stove, Cooking	W. J. Keep	Troy, N. Y	June 1, 1869	90,756
Stove, Cooking	W. J. Keep	Troy, N. Y	June 1, 1869	90,850
Stove, Cooking	W. J. Keep	Troy, N. Y	Dec. 12, 1871	121,876
Stove, Cooking	E. N. Kent	Portland, Me	Aug. 17, 1835	....
Stove, Cooking	F. Kesselmeier	Wooster, Ohio	Apr. 13, 1844	3,535
Stove, Cooking	S. Ketchum	Macon, Ill	Nov. 21, 1871	121,053
Stove, Cooking	A. Ketler	Philadelphia, Pa	Dec. 7, 1844	3,848
Stove, Cooking	I. Keyes	Putney County, Vt	Feb. 23, 1820	....
Stove, Cooking	J. H. Keyser	New York, N. Y	Apr. 25, 1871	114,018
Stove, Cooking	W. B. Kimball	Peterborough, N. H	Aug. 8, 1865	49,278
Stove, Cooking	T. King	West Farms, N. Y	Apr. 21, 1857	17,100
Stove, Cooking	L. Kingsbury	Livonia, N. Y	Sept. 19, 1833	....
Stove, Cooking	E. Kirk	Sharon, Pa	May 3, 1870	102,683
Stove, Cooking	W. F. Kistler	Chicago, Ill	Aug. 4, 1868	80,636
Stove, Cooking	S. H. Laciar	Mucungy, Pa	June 28, 1836	....
Stove, Cooking	T. S. Lambert	Peekskill, N. Y	Apr. 8, 1862	34,930
Stove, Cooking	T. S. Lambert	Peekskill, N. Y	Oct. 6, 1863	40,174
Stove, Cooking	J. R. Lancaster	Tampa, Fla	Dec. 18, 1855	13,971
Stove, Cooking	S. H. La Rue	Allentown, Pa	May 17, 1870	103,204
Stove, Cooking	J. Laubach	Harrisburgh, Pa	Feb. 10, 1846	4,373
Stove, Cooking	J. A. Lawson	Troy, N. Y	June 23, 1863	38,967
Stove, Cooking	A. Lear	Wendall, N. H	July 1, 1836	....
Stove, Cooking	D. S. Leavitt	Grand Rapids, Mich	Jan. 5, 1869	85,678
Stove, Cooking	J. S. Leavitt	Turner, Me	Aug. 31, 1837	370
Stove, Cooking	J. Lee	Wellsville, Ohio	May 16, 1846	4,520
Stove, Cooking	J. Leeds	Philadelphia, Pa	Mar. 28, 1854	10,716
Stove, Cooking	J. Leffel	Springfield, Ohio	Oct. 9, 1849	6,775
Stove, Cooking	A. Leland	Milton, Pa	Apr. 4, 1844	3,526
Stove, Cooking	H. G. Leonard	Taunton, Mass	May 10, 1859	23,983
Stove, Cooking	J. Lewis	Amsterdam, N. Y	Sept. 20, 1844	3,753
Stove, Cooking	J. Liddle	Schoharie, Ohio	Mar. 12, 1836	....
Stove, Cooking	D. Little	Hagerstown, Md	Feb. 1, 1826	....
Stove, Cooking	R. Little	Canton, Ohio	June 21, 1864	41,216
Stove, Cooking	E. C. Little and D. H. Nation	Saint Louis, Mo	Apr. 4, 1871	113,437
Stove, Cooking	D. G. Littlefield	Lowell, Mass	Apr. 15, 1851	8,047
Stove, Cooking	D. G. Littlefield	Albany, N. Y	Apr. 22, 1873	138,093
Stove, Cooking	B. F. Livingston	Chicago, Ill	June 4, 1867	65,493
Stove, Cooking	W. D. C. Lloyd	Louisville, Ky	Apr. 25, 1871	114,160
Stove, Cooking	Z. Lockwood	Saratoga Springs, N. Y	Dec. 7, 1869	97,660
Stove, Cooking	S. Long	Mayville, Ohio	Dec. 9, 1873	145,355
Stove, Cooking	G. W. C. Lowell	Clarksville, Tenn	Aug. 6, 1872	130,228
Stove, Cooking	F. L. Low and J. S. Leake	Albany, N. Y	Aug. 20, 1845	4,159
Stove, Cooking	J. Low	Fitchburgh, Mass	Feb. 24, 1812	....
Stove, Cooking	P. Low	Cleveland, Ohio	Aug. 6, 1867	67,560
Stove, Cooking	P. Low	Cleveland, Ohio	Feb. 7, 1871	111,657
Stove, Cooking	J. W. Lowrey	Dayton, Ohio	July 28, 1868	80,416
Stove, Cooking	E. Lyman	East Hampton, Mass	July 2, 1836	....
Stove, Cooking	J. H. Lyon	Schenectady, N. Y	Nov. 18, 1844	3,830
Stove, Cooking	J. MacGregor, jr	Saratoga, N. Y	Sept. 18, 1847	5,296
Stove, Cooking	W. B. Mackenzie	Cincinnati, Ohio	Aug. 30, 1870	106,946
Stove, Cooking	T. S. Mackey	Milton, Pa	Aug. 22, 1848	5,727
Stove, Cooking	J. Magee	Chelsea, Mass	Apr. 15, 1862	35,000
Stove, Cooking	J. Magee	Chelsea, Mass	May 26, 1868	78,217
Stove, Cooking	J. Magee	Chelsea, Mass	July 21, 1868	80,194
Stove, Cooking	J. Magee	Chelsea, Mass	Aug. 11, 1868	80,867
Stove, Cooking	C. Maguire	Chicago, Ill	July 13, 1869	92,623
Stove, Cooking	A. S. Markham	Bushnell, Ill	Nov. 29, 1864	45,256
Stove, Cooking	J. S. Marsh	Lewisburgh, Pa	Apr. 15, 1851	8,040

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Stove, Cooking	J. Marshall	New Orleans, La	Feb. 12, 1867	61,945
Stove, Cooking	E. F. Martin	Rockport, Mass	June 19, 1849	6,534
Stove, Cooking	J. A. Marvin and S. D. Vose	Milwaukee, Wis	Mar. 30, 1869	88,313
Stove, Cooking	N. Mason	Roxbury, Mass	Aug. 7, 1849	6,638
Stove, Cooking	H. Mathews	Cincinnati, Ohio	Oct. 16, 1849	6,787
Stove, Cooking	G. Mayer	Cincinnati, Ohio	June 15, 1869	91,357
Stove, Cooking	G. McAdams	Vevay, Ind	June 24, 1873	140,210
Stove, Cooking	C. McClain	Carlyle, Ill	Aug. 31, 1869	94,327
Stove, Cooking	E. McCollum	Weare, N. H	Sept. 20, 1839	1,330
Stove, Cooking	J. H. McConnell	Newcastle, Pa	July 13, 1869	92,464
Stove, Cooking	J. H. McConnell	Beaver Falls, Pa	Sept. 13, 1870	107,394
Stove, Cooking	W. L. McDowell	Philadelphia, Pa	May 16, 1871	114,838
Stove, Cooking	J. McMaster	Dayton, Ohio	Nov. 4, 1873	144,279
Stove, Cooking	M. Mead	Lowell, Mass	Oct. 1, 1867	69,355
Stove, Cooking	J. L. Meafoy	Middletown, N. Y	Sept. 27, 1859	25,573
Stove, Cooking	J. V. Meigs	Nashville, Tenn	Mar. 8, 1859	23,185
Stove, Cooking	M. Mellinger	Upper Leacock Township, Pa.	Feb. 9, 1869	86,854
Stove, Cooking	W. Melsheimer	Philadelphia, Pa	Dec. 19, 1840	1,911
Stove, Cooking	B. H. Menke	Cincinnati, Ohio	Oct. 5, 1869	95,501
Stove, Cooking	P. Mills	Binghamton, N. Y	Apr. 30, 1844	3,570
Stove, Cooking	J. H. and T. S. Mitchell	Pittsburgh, Pa	Dec. 21, 1869	98,086
Stove, Cooking	A. T. Mixsell	Belvidere, N. J	July 19, 1837	289
Stove, Cooking	J. Moffatt	Buffalo, N. Y	Aug. 13, 1834	....
Stove, Cooking	J. Moore	Ackworth, N. H	May 7, 1830	....
Stove, Cooking	W. N. Moore	Neenah, Wis	Nov. 16, 1869	96,926
Stove, Cooking	W. N. Moore	Neenah, Wis	Mar. 7, 1871	112,371
Stove, Cooking	B. Morehouse and W. W. Willard	Syracuse, N. Y	May 1, 1847	5,089
Stove, Cooking	H. W. Mosher	Coeymans, N. Y	Feb. 4, 1862	34,315
Stove, Cooking	M. J. Mosher	Troy, N. Y	Jan. 5, 1869	85,603
Stove, Cooking	M. J. Mosher	Troy, N. Y	Jan. 18, 1870	98,994
Stove, Cooking	B. L. Mott, jr	Pawtucket, R. I	May 12, 1868	77,751
Stove, Cooking	J. L. Mott	New York	Dec. 17, 1840	1,905
Stove, Cooking	J. L. Mott	New York, N. Y	Feb. 12, 1844	3,432
Stove, Cooking	J. L. Mott	New York, N. Y	Aug. 22, 1848	5,729
Stove, Cooking	J. L. Mott	New York, N. Y	June 12, 1849	6,530
Stove, Cooking	J. L. Mott	New York, N. Y	May 7, 1850	7,347
Stove, Cooking	J. L. Mott	New York, N. Y	May 14, 1850	7,366
Stove, Cooking	J. L. Mott	New York, N. Y	Sept. 27, 1853	10,048
Stove, Cooking	S. Myers	Schenectady, N. Y	Dec. 31, 1845	4,338
Stove, Cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Mar. 5, 1872	124,377
Stove, Cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Sept. 16, 1873	142,935
Stove, Cooking	C. M. Nelson	Cincinnati, Ohio	Mar. 5, 1850	7,144
Stove, Cooking	B. Newbury	Coxsackie, N. Y	May 26, 1868	78,315
Stove, Cooking	G. North	Philadelphia, Pa	Nov. 23, 1858	22,147
Stove, Cooking	G. M. Norton	Rochester, N. Y	July 2, 1846	4,614
Stove, Cooking	J. L. Norton	Perry Township, Pa	Feb. 27, 1849	6,137
Stove, Cooking	S. Nowlan	New York, N. Y	Dec. 6, 1864	45,338
Stove, Cooking	C. Olhaber	Cincinnati, Ohio	Feb. 2, 1869	86,578
Stove, Cooking	J. N. Olney	New York, N. Y	Nov. 20, 1837	467
Stove, Cooking	L. A. Orcutt	Albany, N. Y	Dec. 26, 1848	5,987
Stove, Cooking	J. R. Page	Philadelphia	Mar. 24, 1827	....
Stove, Cooking	C. J. Paine	Painesville, Ohio	Oct. 3, 1865	50,268
Stove, Cooking	R. K. Paine	Cincinnati, Ohio	Apr. 8, 1851	8,034
Stove, Cooking	P. Paradis	Rochester, N. Y	May 18, 1869	90,293
Stove, Cooking	D. E. Paris	Troy, N. Y	Dec. 27, 1864	45,627
Stove, Cooking	D. E. Paris	Troy, N. Y	July 9, 1867	66,620
Stove, Cooking	D. E. Paris	Troy, N. Y	July 30, 1867	67,344
Stove, Cooking	D. E. Paris	Troy, N. Y	Aug. 13, 1867	67,670
Stove, Cooking	D. E. Paris	Troy, N. Y	Mar. 28, 1871	113,086
Stove, Cooking	D. E. Paris	Troy, N. Y	Apr. 4, 1871	113,556
Stove, Cooking	D. E. Paris	Troy, N. Y	Apr. 18, 1871	113,790
Stove, Cooking	D. E. Paris	Troy, N. Y	Sept. 19, 1871	119,045
Stove, Cooking	J. Park	Joliet, Ill	Apr. 5, 1864	42,221
Stove, Cooking	J. Parmelo	Ogden, N. Y	Oct. 14, 1840	1,827
Stove, Cooking	E. L. Parshley and B. Furbish	Brunswick, Me	Jan. 9, 1838	566
Stove, Cooking	L. M. Parsons	Waukau, Wis	May 12, 1868	77,835
Stove, Cooking	A. G. Patton	Troy, N. Y	Oct. 13, 1868	83,085
Stove, Cooking	A. G. Patton	Troy, N. Y	Oct. 13, 1868	83,086
Stove, Cooking	A. G. Patton	Troy, N. Y	May 17, 1870	103,235
Stove, Cooking	J. M. Patton and S. D. Ball	Milton, Pa	July 25, 1848	5,680
Stove, Cooking	E. D. Payne	New York	Mar. 8, 1834	....
Stove, Cooking	D. F. Payson, N. Burch, and R. M. Davis.	Eaton Village, N. Y	Nov. 24, 1846	4,863
Stove, Cooking	B. H. Pearson	Warner, N. H	Mar. 31, 1836	....
Stove, Cooking	J. Pearson, jr	Newburyport, Mass	Oct. 26, 1858	21,900
Stove, Cooking	H. Pease	Brockport, N. Y	Nov. 3, 1868	83,657
Stove, Cooking	N. Peck	Carmel, N. Y	Sept. 30, 1839	1,352
Stove, Cooking	R. Peck and J. W. Cockran	Attica, N. Y	Nov. 12, 1845	4,269
Stove, Cooking	G. Perkins	Burlington, Vt	Sept. 17, 1867	68,898
Stove, Cooking	J. Perkins	Ipswich, Mass	Apr. 28, 1836	....
Stove, Cooking	J. S. Perry and A. Dickey	Albany, N. Y	Oct. 17, 1871	119,949
Stove, Cooking	P. F. Perry	Rockingham, Vt	June 28, 1836	....
Stove, Cooking	R. Peterson	Philadelphia, Pa	Mar. 8, 1859	23,191
Stove, Cooking	L. and P. Peterson	Pittsburgh, Pa	May 29, 1830	....
Stove, Cooking	S. Pettes	Schenectady, N. Y	Feb. 12, 1844	3,431
Stove, Cooking	G. H. Phillips	Troy, N. Y	Feb. 2, 1869	86,585
Stove, Cooking	G. H. Phillips	Troy, N. Y	Mar. 22, 1870	101,159
Stove, Cooking	S. Pierce	Peekskill, N. Y	Dec. 6, 1845	4,299
Stove, Cooking	S. Pierce	Troy, Y. Y	Nov. 12, 1850	7,775
Stove, Cooking	S. Pierce	Troy, N. Y	Oct. 21, 1856	15,952
Stove, Cooking	S. Pierce	Troy, N. Y	Dec. 15, 1857	18,859
Stove, Cooking	S. Pierce	Troy, N. Y	Nov. 17, 1863	40,635
Stove, Cooking	S. Pierce	Cambridge, Mass	May 1, 1866	54,400
Stove, Cooking	S. Pierce	Boston, Mass	Mar. 7, 1871	112,377
Stove, Cooking	S. G. Piper	Lynn, Mass	Nov. 27, 1866	60,054
Stove, Cooking	M. Pond	Boston, Mass	June 9, 1863	38,888

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Stove, Cooking	M. Pond	Boston, Mass	Dec. 13, 1864	45, 432
Stove, Cooking	J. Porter	Gettysburgh, Pa	Nov. 18, 1845	4, 274
Stove, Cooking	C. Postley	New York	June 9, 1843	3, 128
Stove, Cooking	W. L. Potter	Clifton Park, N. Y	Dec. 19, 1844	3, 861
Stove, Cooking	E. N. Pratt	Albany, N. Y	July 1, 1836	......
Stove, Cooking	J. Pratt and J. H. Wentworth	Boston, Mass	Dec. 20, 1870	110, 282
Stove, Cooking	M. Pratt	Watertown, Mass	Oct. 23, 1860	30, 499
Stove, Cooking	M. Pratt	Watertown, Mass	Dec. 27, 1870	110, 588
Stove, Cooking	J. A. Price	Scranton, Pa	Feb. 6, 1872	123, 419
Stove, Cooking	L. T. Pyott	Philadelphia, Pa	Mar. 24, 1868	75, 791
Stove, Cooking	J. F. Quimby	Troy, N. Y	July 2, 1872	128, 655
Stove, Cooking	S. H. Ransom	Albany, N. Y	June 22, 1869	91, 563
Stove, Cooking	L. Rathbone and W. Hailes	Albany, N. Y	May 2, 1865	47, 567
Stove, Cooking	C. Raub	Davenport, Iowa	Mar. 16, 1858	19, 650
Stove, Cooking	C. Raub	Davenport, Iowa	Mar. 16, 1858	19, 651
Stove, Cooking	J. M. Read	Boston, Mass	May 31, 1870	103, 655
Stove, Cooking	A. J. Redway	Cincinnati, Ohio	Sept. 29, 1868	82, 638
Stove, Cooking	A. J. Redway	Cincinnati, Ohio	July 11, 1871	116, 992
Stove, Cooking	A. J. Redway	Cincinnati, Ohio	Sept. 17, 1872	131, 409
Stove, Cooking	E. Reed	West Bridgewater, Mass	July 29, 1837	303
Stove, Cooking	W. Resor	Cincinnati, Ohio	July 7, 1857	17, 748
Stove, Cooking	W. Resor	Cincinnati, Ohio	Apr. 16, 1861	32, 081
Stove, Cooking	J. Richardson	Poultney, Vt	July 29, 1837	310
Stove, Cooking	A. Richmond	Brooklyn, Conn	Sept. 14, 1858	21, 518
Stove, Cooking	G. G. Richmond and G. W. Pittock.	Troy, N. Y	June 22, 1858	20, 682
Stove, Cooking	J. W. Riggs	Fort Plain, N. Y	Oct. 30, 1844	3, 807
Stove, Cooking	A. K. Ring	Parma, N. Y	Dec. 12, 1839	1, 427
Stove, Cooking	F. Ritchie	Troy, N. Y	June 29, 1869	91, 968
Stove, Cooking	F. Ritchie	Troy, N. Y	Aug. 9, 1870	106, 208
Stove, Cooking	G. Roberts	Montreal, Canada	Oct. 17, 1871	119, 990
Stove, Cooking	E. C. Robinson	Troy, N. Y	Nov. 26, 1845	4, 284
Stove, Cooking	B. T. Roney	Milton, Pa	Oct. 25, 1843	3, 313
Stove, Cooking	B. T. Roney	Attleborough, Pa	Sept. 11, 1845	4, 188
Stove, Cooking	B. T. Roney	Newtown, Pa	Apr. 17, 1849	6, 349
Stove, Cooking	F. H. Root	Buffalo, N. Y	May 17, 1870	103, 083
Stove, Cooking	J. Root	Cincinnati, Ohio	Sept. 11, 1841	2, 250
Stove, Cooking	J. Root	Cincinnati, Ohio	July 18, 1848	5, 669
Stove, Cooking	R. C. Rouse	Athens, N. Y	Jan. 26, 1828	......
Stove, Cooking	H. J. Ruggles	West Poultney, Vt	Nov. 30, 1852	9, 436
Stove, Cooking	R. B. Ruggles and E. W. Francis.	Hartford, Conn	Oct. 15, 1872	132, 182
Stove, Cooking	H. J. Ruttan	Coburg, Canada	Dec. 3, 1872	133, 597
Stove, Cooking	G. Ryder	Chicago, Ill	Feb. 20, 1872	123, 842
Stove, Cooking	M. C. Sadler	Rockport, N. Y	Apr. 10, 1841	2, 046
Stove, Cooking	M. C. Sadler	Rockport, N. Y	Nov. 2, 1852	9, 371
Stove, Cooking	E. Samson	Pierpont, N. Y	Oct. 10, 1835	......
Stove, Cooking	J. J. Savage	Troy, N. Y	Nov. 28, 1865	51, 224
Stove, Cooking	J. J. Savage	Troy, N. Y	Feb. 12, 1867	61, 956
Stove, Cooking	J. J. Savage	Troy, N. Y	June 29, 1869	91, 875
Stove, Cooking	S. T. Savage	Albany, N. Y	June 29, 1858	20, 733
Stove, Cooking	A. C. Schwanke	La Prairie, Ill	June 15, 1869	91, 275
Stove, Cooking	R. Scorer	Troy, N. Y	Sept. 14, 1869	94, 845
Stove, Cooking	J. Segondy and M. Ravold	Saint Louis, Mo	Apr. 25, 1871	114, 208
Stove, Cooking	W. G. Semple	Cincinnati, Ouio	Apr. 13, 1869	88, 914
Stove, Cooking	W. G. Semple	Cincinnati, Ohio	July 13, 1869	92, 660
Stove, Cooking	S. B. Sexton	Philadelphia, Pa	Aug. 14, 1834	......
Stove, Cooking	S. B. Sexton	Baltimore, Md	Apr. 29, 1842	2, 587
Stove, Cooking	S. B. Sexton	Baltimore, Md	Sept. 23, 1843	3, 273
Stove, Cooking	J. Shavor and A. C. Corse	Troy, N. Y	June 16, 1863	38, 918
Stove, Cooking	T. Shaw	North Yarmouth, Me	June 25, 1836	......
Stove, Cooking	W. Shaw	Albany, N. Y	June 27, 1846	4, 592
Stove, Cooking	J. H. Shear	Albany, N. Y	May 5, 1863	38, 423
Stove, Cooking	J. H. Shear	Albany, N. Y	Sept. 7, 1869	94, 658
Stove, Cooking	J. H. Shear and J. Packard	Albany, N. Y	Feb. 23, 1869	87, 302
Stove, Cooking	W. A. Shepard	Waterville, Me	Aug. 11, 1841	2, 213
Stove, Cooking	J. Sholl	Burlington, N. J	Feb. 16, 1864	41, 645
Stove, Cooking	S. Shreve	Shrevesville, N. Y	Aug. 28, 1847	5, 265
Stove, Cooking	J. S. Silver	New York, N. Y	Dec. 22, 1846	4, 899
Stove, Cooking	E. Skinner	Sandwich, N. H	June 12, 1835	......
Stove, Cooking	E. Skinner	Sandwich, N. H	Oct. 18, 1837	429
Stove, Cooking	C. W. Smith	Hornellsville, N. Y	July 21, 1868	80, 230
Stove, Cooking	D. Smith and A. Selkirk	Albany, N. Y	Dec. 24, 1872	134, 172
Stove, Cooking	E. Smith	Troy, N. Y	Aug. 9, 1839	1, 281
Stove, Cooking	E. Smith	Whitestown, N. Y	Feb. 15, 1848	45, 449
Stove, Cooking	E. Smith	Albany, N. Y	July 13, 1869	92, 665
Stove, Cooking	S. Smith	Philadelphia, Pa	Nov. 29, 1859	26, 298
Stove, Cooking	S. Smith	Philadelphia, Pa	Oct. 2, 1866	58, 493
Stove, Cooking	S. Smith	Philadelphia, Pa	Apr. 18, 1871	113, 807
Stove, Cooking	T. Smith	Galway, N. Y	June 10, 1845	4, 078
Stove, Cooking	A. Snyder	Richmond, Va	Nov. 2, 1869	96, 497
Stove, Cooking	W. Sours	Mount Jackson, Va	Sept. 18, 1849	6, 720
Stove, Cooking	W. Sours	Mount Jackson, Va	Feb. 25, 1851	7, 955
Stove, Cooking	S. B. Spaulding	Brandon, Vt	Nov. 17, 1836	83
Stove, Cooking	S. B. Spaulding	Brandon, Vt	June 22, 1858	20, 668
Stove, Cooking	J. Speaker and W. Dorn	Chicago, Ill	July 4, 1871	116, 768
Stove, Cooking	J. Spear	Philadelphia, Pa	Apr. 13, 1858	19, 956
Stove, Cooking	J. Spear	Philadelphia, Pa	June 1, 1858	20, 450
Stove, Cooking	J. Spear	Philadelphia, Pa	Mar. 27, 1866	53, 497
Stove, Cooking	D. G. Stafford	Syracuse, N. Y	Aug. 26, 1846	4, 711
Stove, Cooking	J. R. Stafford	Cleveland, Ohio	Dec. 28, 1846	4, 910
Stove, Cooking	J. R. Stafford	Cleveland, Ohio	Mar. 28, 1848	5, 488
Stove, Cooking	J. R. Stafford	Cleveland, Ohio	Oct. 23, 1849	6, 807
Stove, Cooking	H. Stanley	Poultney, Vt	Dec. 17, 1832	......
Stove, Cooking	W. Stevenson	Cincinnati, Ohio	Jan. 30, 1849	6, 080
Stove, Cooking	W. S. Stevenson	Philadelphia, Pa	Mar. 22, 1870	101, 177
Stove, Cooking	J. L. Stewart	Nashville, Tenn	Aug. 10, 1858	21, 171
Stove, Cooking	M. Stewart	Philadelphia, Pa	July 23, 1841	2, 188

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Stove, Cooking	P. P. Stewart	Elyria, Ohio	June 19, 1834	....
Stove, Cooking	P. P. Stewart	Troy, N. Y	Jan. 18, 1859	22, 681
Stove, Cooking	P. P. Stewart	Troy, N. Y	June 23, 1863	39, 022
Stove, Cooking	H. Stickney	Reno, Pa	Nov. 26, 1867	71, 421
Stove, Cooking	D. L. Stiles	Rochester, N. Y	Feb. 24, 1863	37, 778
Stove, Cooking	J. Still	Zanesville, Ohio	Sept. 19, 1840	1, 793
Stove, Cooking	I. Straub	Cincinnati, Ohio	June 5, 1844	3, 612
Stove, Cooking	D. Stuart	Philadelphia, Pa	Sept. 13, 1859	25, 451
Stove, Cooking	D. Stuart	Philadelphia, Pa	Feb. 15, 1870	99, 969
Stove, Cooking	D. Stuart	Philadelphia, Pa	Feb. 7, 1871	111, 698
Stove, Cooking	D. Stuart	Philadelphia, Pa	Apr. 2, 1872	125, 347
Stove, Cooking	D. Stuart and L. Bridge	Philadelphia, Pa	Nov. 3, 1868	83, 798
Stove, Cooking	D. Stuart and L. Bridge	Philadelphia, Pa	Dec. 20, 1870	110, 305
Stove, Cooking	D. Stuart and L. Bridge	Philadelphia, Pa	Dec. 20, 1870	110, 400
Stove, Cooking	L. E. Süffert	Saint Louis, Mo	Dec. 8, 1863	40, 863
Stove, Cooking	G. W. Swett	Troy, N. Y	Jan. 1, 1869	90, 889
Stove, Cooking	G. W. Swett	Troy, N. Y	July 6, 1869	92, 223
Stove, Cooking	H. V. Teall	Canajoharie, N. Y	Jan. 20, 1838	579
Stove, Cooking	C. Temme	Saint Louis, Mo	May 24, 1870	103, 389
Stove, Cooking	J. M. Thatcher	Danville, Pa	June 12, 1847	5, 154
Stove, Cooking	E. O. Thomas	Jersey City, N. J	July 21, 1868	80, 240
Stove, Cooking	J. E. Thomas	Albany, N. Y	Nov. 6, 1843	3, 330
Stove, Cooking	E. L. Thompson and A. Hush	Philadelphia, Pa	Oct. 11, 1870	108, 211
Stove, Cooking	G. Thorp	New York, N. Y	June 25, 1836	....
Stove, Cooking	G. Thorp	New York, N. Y	Mar. 26, 1845	3, 976
Stove, Cooking	W. Tinsley	New York, N. Y	June 21, 1864	43, 243
Stove, Cooking	B. and A. Titus	Marshall, N. Y	Feb. 25, 1836	....
Stove, Cooking	E. Town	Montpelier, Vt	Dec. 16, 1833	....
Stove, Cooking	E. Town	Montpelier, Vt	Sept. 28, 1836	....
Stove, Cooking	A. Traver	Troy, N. Y	Oct. 18, 1870	108, 410
Stove, Cooking	P. C. Traver	West Troy, N. Y	July 2, 1836	....
Stove, Cooking	J. G. Treadwell	Albany, N. Y	Jan. 23, 1834	....
Stove, Cooking	J. G. Treadwell	Albany, N. Y	Jan. 20, 1857	16, 455
Stove, Cooking	J. G. Treadwell	Albany, N. Y	Jan. 29, 1861	31, 270
Stove, Cooking	W. B. Treadwell	Albany, N. Y	Oct. 7, 1846	4, 804
Stove, Cooking	W. B. Treadwell	Albany, N. Y	June 3, 1856	15, 023
Stove, Cooking	W. B. Treadwell	Albany, N. Y	Dec. 31, 1867	72, 937
Stove, Cooking	W. B. Treadwell	Albany, N. Y	Dec. 31, 1867	72, 938
Stove, Cooking	J. L. Tucker and L. C. Dimond	Laconia and Gilford, N. H	Feb. 13, 1872	123, 596
Stove, Cooking	S. Utter	New York, N. Y	Aug. 8, 1837	349
Stove, Cooking	S. S. Utter	New York, N. Y	Jan. 15, 1867	61, 285
Stove, Cooking	C. Vale	Newark, N. J	Apr. 13, 1836	....
Stove, Cooking	J. Van	Saint Louis, Mo	Sept. 18, 1855	13, 589
Stove, Cooking	J. Van	Cincinnati, Ohio	Oct. 6, 1863	40, 201
Stove, Cooking	E. Vance	Wilmington, Ohio	Feb. 6, 1849	6, 086
Stove, Cooking	C. Van De Mark	Phelps, N. Y	July 30, 1867	67, 383
Stove, Cooking	C. Van De Mark	Phelps, N. Y	Dec. 24, 1867	72, 571
Stove, Cooking	C. Van De Mark	Phelps, N. Y	Jan. 25, 1870	99, 264
Stove, Cooking	N. S. Vedder	Troy, N. Y	Mar. 6, 1860	27, 398
Stove, Cooking	N. S. Vedder	Troy, N. Y	Aug. 11, 1868	81, 039
Stove, Cooking	N. S. Vedder	Troy, N. Y	Oct. 6, 1868	82, 897
Stove, Cooking	N. S. Vedder	Troy, N. Y	Aug. 17, 1869	93, 929
Stove, Cooking	N. S. Vedder	Troy, N. Y	Sept. 7, 1869	94, 675
Stove, Cooking	N. S. Vedder	Troy, N. Y	Sept. 21, 1869	95, 170
Stove, Cooking	N. S. Vedder	Troy, N. Y	Dec. 7, 1869	97, 731
Stove, Cooking	N. S. Vedder	Troy, N. Y	Feb. 14, 1871	111, 887
Stove, Cooking	N. S. Vedder	Troy, N. Y	Jan. 16, 1872	122, 871
Stove, Cooking	H. B. Wade	Cincinnati, Ohio	Oct. 17, 1835	....
Stove, Cooking	J. Wager	Troy, N. Y	July 9, 1844	3, 635
Stove, Cooking	G. W. Walker	Boston, Mass	July 15, 1862	35, 905
Stove, Cooking	G. W. Walker	Boston, Mass	July 22, 1862	35, 962
Stove, Cooking	G. W. Walker	Boston, Mass	Dec. 11, 1866	60, 446
Stove, Cooking	G. W. Walker	Boston, Mass	Feb. 12, 1867	62, 100
Stove, Cooking	G. W. Walker	Boston, Mass	Dec. 17, 1867	72, 342
Stove, Cooking	G. W. Walker	Malden, Mass	Nov. 1, 1870	108, 852
Stove, Cooking	G. W. Walker	Boston, Mass	Mar. 21, 1871	112, 993
Stove, Cooking	N. Walker	Dighton, Mass	Dec. 1, 1837	493
Stove, Cooking	T. B. Walker	Wakefield, Mass	May 11, 1869	89, 903
Stove, Cooking	E. Walter	Syracuse, N. Y	May 1, 1847	5, 094
Stove, Cooking	G. E. Waring	Stamford, Conn	Mar. 13, 1849	6, 177
Stove, Cooking	A. Warren	Swanton, Ohio	Mar. 7, 1871	112, 397
Stove, Cooking	B. F. Warren	Fishkill, N. Y	July 26, 1870	105, 746
Stove, Cooking	J. A. Weakley	Indianapolis, Ind	Dec. 5, 1871	121, 566
Stove, Cooking	J. W. O. Webb	Cedar Rapids, Iowa	Nov. 14, 1871	120, 840
Stove, Cooking	L. D. Webber	La Porte, Ind	Oct. 11, 1870	108, 219
Stove, Cooking	G. Wellhouse	Akron, Ohio	Nov. 16, 1869	96, 855
Stove, Cooking	M. D. Wellman	Pittsburgh, Pa	Apr. 12, 1864	42, 321
Stove, Cooking	M. D. Wellman	Pittsburgh, Pa	Dec. 18, 1866	60, 602
Stove, Cooking	A. Wemyss	Philadelphia, Pa	Oct. 11, 1870	108, 2 0
Stove, Cooking	E. D. Weston	Taunton, Mass	May 5, 1868	77, 688
Stove, Cooking	E. D. Weston	Taunton, Mass	Oct. 6, 1868	82, 910
Stove, Cooking	W. Wheeler	Troy, N. Y	Sept. 18, 1849	6, 719
Stove, Cooking	A. White	Geneseo, Ill	Feb. 8, 1870	99, 613
Stove, Cooking	J. White	Milton, Pa	Feb. 6, 1849	6, 081
Stove, Cooking	J. White	Milton, Pa	Aug. 6, 1850	7, 555
Stove, Cooking	T. White	Quincy, Ill	May 14, 1872	126, 763
Stove, Cooking	W. H. Whitehead	Chicago, Ill	Feb. 23, 1869	87, 127
Stove, Cooking	G. B. Whiteside	Brockport, N. Y	Feb. 6, 1849	6, 083
Stove, Cooking	P. Whiteside	Weedsport, N. Y	Aug. 28, 1847	5, 258
Stove, Cooking	J. Whiting	Boston, Mass	Oct. 20, 1836	62
Stove, Cooking	J. Whiting and J. Mears	Boston, Mass	Sept. 9, 1835	....
Stove, Cooking	T. Whitson	Roxbury, Mass	Apr. 11, 1834	....
Stove, Cooking	C. F. Whorf	Saint Louis, Mo	Nov. 3, 1863	40, 527
Stove, Cooking	A. Wieting	Middletown, Pa	Dec. 16, 1844	3, 860
Stove, Cooking	A. Wieting	Fort Plain, N. Y	Apr. 2, 1872	125, 367
Stove, Cooking	J. Wilder	Detroit, Mich	July 11, 1871	116, 905
Stove, Cooking	J. B. Wilkinson	Troy, N. Y	June 29, 1869	91, 992
Stove, Cooking	J. B. Wilkinson	Troy, N. Y	June 29, 1869	91, 993

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Stove, Cooking	J. B. Wilkinson	Troy, N. Y	July 20, 1869	92,920
Stove, Cooking	J. B. Wilkinson	Troy, N. Y	June 28, 1870	104,807
Stove, Cooking	A. C. Williams	Albany, N. Y	Dec. 5, 1865	51,406
Stove, Cooking	C. Williams	Manchester, N. H	Apr. 30, 1867	64,267
Stove, Cooking	C. Williams	Manchester, N. H	Sept. 29, 1868	82,574
Stove, Cooking	D. Williams	Schaghticoke, N. Y	Feb. 3, 1836	....
Stove, Cooking	W. F. Williams	East Birmingham, Pa	Aug. 17, 1869	93,938
Stove, Cooking	C. Wilson	New York	Oct. 10, 1834	....
Stove, Cooking	C. Wilson, jr	New York, N. Y	Dec. 29, 1837	543
Stove, Cooking	J. Wilson	New York, N. Y	Aug. 15, 1837	351
Stove, Cooking	J. Wilson	New York, N. Y	May 16, 1846	4,528
Stove, Cooking	O. Wilson	Concord, Mass	Mar. 23, 1836	....
Stove, Cooking	R. Wilson	Williamsport, Pa	Feb. 20, 1845	3,919
Stove, Cooking	R. Wilson	Albany, N. Y	June 19, 1849	6,547
Stove, Cooking	W. Wilson	Boston, Mass	Oct. 9, 1866	58,705
Stove, Cooking	P. Wing	Grafton, Mass	Feb. 25, 1835	....
Stove, Cooking	S. Winrott	Littlestown, Pa	Dec. 15, 1846	4,890
Stove, Cooking	N. Winslow	Portland, Me	May 23, 1820	....
Stove, Cooking	G. G. Wolfe	Troy, N. Y	Oct. 23, 1860	30,514
Stove, Cooking	C. Wolff	Cincinnati, Ohio	Jan. 10, 1845	3,877
Stove, Cooking	B. H. Wood	Bath, N. Y	Jan. 31, 1837	114
Stove, Cooking	H. G. Wood	Buffalo, N. Y	Dec. 1, 1863	40,788
Stove, Cooking	L. Wood	New York	Aug. 11, 1841	2,214
Stove, Cooking	L. Wood	New York	Aug. 26, 1846	4,719
Stove, Cooking	L. Wood	New York, N. Y	Nov. 26, 1850	7,805
Stove, Cooking	B. Woodcock	Wheeling, Va	Aug. 12, 1846	4,691
Stove, Cooking	M. Woolley	Brooklyn, N. Y	July 7, 1868	79,619
Stove, Cooking	C. J. Woolson	Cleveland, Ohio	Sept. 9, 1845	4,184
Stove, Cooking	C. J. Woolson	Cleveland, Ohio	Mar. 11, 1862	34,658
Stove, Cooking	C. J. Woolson	Cleveland, Ohio	June 3, 1862	35,483
Stove, Cooking	C. J Woolson	Cleveland, Ohio	May 23, 1865	47,820
Stove, Cooking	T. Woolson	Claremont, N. H	July 20, 1831	....
Stove, Cooking	E. Young	Cincinnati, Ohio	June 17, 1851	8,160
Stove, Cooking	J. Young and E. Parker	Philadelphia, Pa	Feb. 12, 1844	3,4[illegible]0
Stove, Cooking	W. B. Zeigler	Huntingdon, Pa	Feb. 21, 1842	2,468
Stove, Cooking and air-heating	B. Shepard	Boston, Mass	Sept. 1, 1843	3,242
Stove, Cooking and baking	H. G. Phelps	Johnstown, N. Y	May 29, 1835	....
Stove, Cooking and fire-place	T. McCarty	Elmira, N. Y	Jan. 23, 1833	....
Stove, Cooking and heating	A. F. Bean	Woodstock, Vt	July 8, 1841	2,156
Stove, Cooking and heating	H. Decker	Duncansville, Pa	Oct. 11, 1864	44,612
Stove, Cooking and heating	M. Gilmore	Morning Sun, Iowa	May 16, 1865	47,713
Stove, Cooking and heating	W. B. Kimball	Peterborough, N. H	July 19, 1837	290
Stove, Cooking and heating	C. Postley	New York, N. Y	Mar. 7, 1814	....
Stove, Cooking and warming	J. Morris	Derby, Conn	Nov. 4, 1837	455
Stove, Cooking, heating, and illuminating	A. Walker, jr	Unity, N. H	June 27, 1842	2,695
Stove-cover	O. B. Bartlett	Lewiston, Me	June 8, 1869	90,983
Stove-cover	I. G. Johnson	Spuyten Duyvil, N. Y	Apr. 12, 1859	23,784
Stove-cover	J. Russell	Troy, N. Y	Dec. 18, 1860	30,988
Stove-cover	S. D. Vose	Milwaukee, Wis	July 13, 1869	92,674
Stove cover, Cooking	G. Himrod and C. G. Moulton	Chicago, Ill	Aug. 9, 1864	43,815
Stove cover, Cooking	S. Raymond	Middletown, Pa	Mar. 19, 1867	63,093
Stove cover, Cooking	J. Shavor and A. C. Corse	Troy, N. Y	May 31, 1864	42,968
Stove-cover, dish, and kettle lifter	C. Cole	Havana, N. Y	June 14, 1870	104,272
Stove-cover for fuel-reservoirs	J. V. Vrooman	Schenectady, N. Y	Sept. 26, 1871	119,434
Stove-cover holder	J. E. Blodgett	Oswego, N. Y	Apr. 27, 1869	89,278
Stove-cover, &c., lifter	P. A. Gladwin	Boston, Mass	July 11, 1865	48,676
Stove-cover lifter	B. R. Hathaway	Mormon Island, Cal	Feb. 26, 1861	31,541
Stove-cover lifter	G. W. Hunt	Winchendon, Mass	Nov. 26, 1867	71,388
Stove-cover lifter	R. W. Huston	Providence, R. I	Nov. 26, 1861	33,784
Stove-cover lifter	L. D. Lathrop	Dover, N. H	July 23, 1872	129,740
Stove-cover lifter	J. C. Longshore	Mansfield, Ohio	Oct. 23, 1866	59,131
Stove-cover lifter	S. Maltby and J. R. Brown	Dayton, Ohio	Oct. 2, 1866	58,442
Stove-cover lifter	C. H. Porter	Providence, R. I	Aug. 21, 1866	57,373
Stove-cover lifter	C. E. Seavey	Boston, Mass	Oct. 31, 1865	50,737
Stove-cover lifter	A. Shepard	Plantsville, Conn	Mar. 19, 1867	63,110
Stove-cover lifter	S. Walker	Tremont, N. Y	Dec. 20, 1864	45,541
Stove-cover lifter	S. Walker	New York, N. Y	Sept. 14, 1869	94,794
Stove-cover litter	J. P. Williams	Somerville, Mass	Apr. 26, 1864	42,522
Stove-cover lifter and poker	G. J. Huling and A. Taplin	Providence, R. I	Oct. 29, 1861	33,587
Stove-cover lifter, Cooking	P. P. Stewart	Troy, N. Y	Apr. 12, 1859	23,625
Stove-cover lifter, hammer, &c., Combined	J. B. Oky	Indianapolis, Ind	Apr. 30, 1867	64,247
Stove-cover lifters, Composition handle for	E. A. Beardsley	Binghamton, N. Y	May 7, 1872	126,512
Stove cover, Magazine	J. A. Buckwalter	Royer's Ford, Pa	June 4, 1872	127,458
Stove cover or shield, Cooking	H. W. De Puy	Jalapa, Nebr	Aug. 18, 1863	39,555
Stove-cover, pot, and pan lifter	J. B. Oakey	Indianapolis, Ind	Oct. 23, 1866	59,038
Stove-cover stand	H. Carsley	Lynn, Mass	Oct. 6, 1857	18,321
Stove-covers and culinary vessels, Lifter for	J. Old	Reading, Pa	June 26, 1866	55,894
Stove-covers, Molding	D. L. Stiles	Rochester, N. Y	Oct. 4, 1859	25,707
Stove-covers, Pattern for casting	C. Tuesdale and A. J. Sennett	Cincinnati, Ohio	June 21, 1859	24,527
Stove, Crane cooking	E. Town	Montpelier, Vt	Sept. 28, 1836	37
Stove-cricket	F. Bowman	Waltham, Mass	Nov. 20, 1866	59,814
Stove, Culinary and air-heating	B. Shepard	Boston, Mass	May 30, 1842	2,629
Stove, Cylinder	J. Currier and A. Pevey	Lowell, Mass	July 12, 1870	105,179
Stove, Dairy	J. Stevens and H. J. Ruggles	West Poultney, Vt	Oct. 28, 1851	8,472
Stove, Detachable flat top and elevated cooking	J. McKnight	Philadelphia, Pa	Jan. 17, 1865	45,930
Stove-dexter	E. Reynolds	Corunna, Mich	Dec. 27, 1864	45,635
Stove, Dining-room	J. Bamber	Rochester, N. Y	Sept. 27, 1864	44,383
Stove-dome	A. Taylor	Newtown, Conn	Apr. 15, 1873	137,976
Stove, Dome-top	P. D. Beckwith	Dowagiac, Mich	Oct. 18, 1870	108,316
Stove-door	S. C. Batchelor	Cincinnati, Ohio	Oct. 23, 1866	59,119
Stove-door	D. N. Martin	Lawrence, Mass	June 27, 1871	116,334
Stove-door	W. Resor	Cincinnati, Ohio	June 30, 1868	79,322
Stove-door	A. S. Shontz	Quincy, Ill	Nov. 4, 1873	144,259
Stove-door	R. Simpson	Boston, Mass	May 22, 1866	55,020
Stove-door	G. W. Smith	New York, N. Y	June 13, 1871	115,902
Stove-door	J. Spear	Philadelphia, Pa	June 10, 1862	35,551
Stove-door	J. Van	Cincinnati, Ohio	July 4, 1871	116,646
Stove-door	E. Weston	Buffalo, N. Y	July 12, 1870	105,393

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Invention.	Inventor.	Residence.	Date.	No.
Stove door and fender, Convertible	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 18, 1867	65, 906
Stove and hearth, Combined	J. A. Price	Scranton, Pa	June 21, 1870	104, 493
Stove-door frame	S. Smith	Philadelphia, Pa	Apr. 1, 1873	137, 328
Stove-door handle	W. F. Redding	Saratoga Springs, N. Y	Dec. 15, 1868	84, 966
Stove-door handle	W. F. Redding	Saratoga Springs, N. Y	Mar. 16, 1869	87, 969
Stove-door handle	C. H. Roberts	Troy, N. Y	Oct. 15, 1867	69, 841
Stove-door linings, Fastening	H. G. Giles	Troy, N. Y	Feb. 8, 1870	99, 556
Stove-doors, Attachment for	W. O. Smith	Boston, Mass	Dec. 2, 1873	145, 132
Stove-doors, &c., Bolt for	W. A. Robinson	Auburn, N. Y	Feb. 2, 1869	86, 454
Stove-doors to frames, Mode of attaching	S. Smith	Philadelphia, Pa	June 10, 1873	139, 740
Stove, Double cooking	H. Jackson	Evansville, Ind	Apr. 23, 1850	7, 304
Stove, Double-furnace cooking	J. Richards	Claremont, N. H	Aug. 5, 1829	......
Stove, Double-oven	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Sept. 2, 1851	8, 332
Stove, Double-oven cooking	E. Card	Providence, R. I	Oct. 27, 1868	83, 458
Stove, Double-oven cooking	J. MacGregor, jr	Wilton, N. Y	Mar. 19, 1850	7, 193
Stove-draft regulator	W. W. Waddell	Hillsborough, Ohio	May 2, 1871	114, 497
Stove, Drum	A. S. Ballard	Mount Pleasant, Iowa	Jan. 26, 1864	41, 354
Stove, Drum	I. L. Holmes	Haydenville, Mass	Aug. 30, 1864	43, 992
Stove, Drum	D. M. Younkman	Fremont, Ohio	June 13, 1865	48, 231
Stove, Drum cooking	A. Sherwood	New York	Apr. 25, 1811	......
Stove, Economical	J. Graham	New York	Nov. 9, 1815	......
Stove-fastener	J. C. Burdin	Ladoga, Ind	Oct. 11, 1870	108, 105
Stove-fastening	W. P. Ware	New York, N. Y	Sept. 20, 1870	107, 572
Stove-feeding device	B. Connelly	Williamsburgh, N. Y	Jan. 28, 1873	135, 265
Stove fender, Fire-place	J. Martino	Philadelphia, Pa	Feb. 8, 1870	99, 579
Stove fender, Fire-place	J. Martino	Philadelphia, Pa	Feb. 8, 1870	99, 580
Stove fender, Heating	N. A. Boynton	New York, N. Y	Jan. 18, 1870	98, 914
Stove, Fire-board	J. Spear	Philadelphia, Pa	July 30, 1861	32, 928
Stove fire-box, Heating	W. L. McDowell	Philadelphia, Pa	May 16, 1871	114, 837
Stove fire-chambers, Attachment to cooking	J. Harrison	Whitewater, Wis	June 2, 1868	78, 522
Stove fire-door	J. S. Clark and W. Harris	Philadelphia, Pa	Oct. 20, 1863	40, 326
Stove, Fire-place	J. Benner	Pittsburgh, Pa	Oct. 19, 1869	95, 972
Stove, Fire-place	B. C. Bibb	Baltimore, Md	Nov. 23, 1869	97, 027
Stove, Fire-place	B. C. Bibb and P. Klotz	Baltimore, Md	Nov. 23, 1869	97, 028
Stove, Fire-place	B. C. Bibb and P. Klotz	Baltimore, Md	Nov. 23, 1869	97, 029
Stove, Fire-place	A. Carson	New York, N. Y	Mar. 29, 1864	42, 074
Stove, Fire-place	H. Katussowski and F. P. Wierzbicki.	New York, N. Y	Dec. 11, 1845	4, 303
Stove, Fire-place	P. Klotz	Baltimore, Md	Nov. 23, 1869	97, 094
Stove, Fire-place	P. Klotz	Baltimore, Md	Nov. 8, 1870	109, 022
Stove, Fire-place	J. Schmedinghoff	Cincinnati, Ohio	Nov. 3, 1863	40, 503
Stove, Fire-place	D. Stuart and L. Bridge	Philadelphia, Pa	Jan. 1, 1869	90, 910
Stove, Fire-place	M. D. Wellman	Pittsburgh, Pa	Apr. 12, 1864	42, 312
Stove, fire-place, and oven	J. Rice	Hartland, Vt	Dec. 6, 1817	......
Stove, Fire-place heating	C. H. Blanchard	Saint Louis, Mo	Aug. 20, 1872	130, 692
Stove, Fire-place fuel-magazine	J. J. Myers	Baltimore, Md	Dec. 14, 1869	97, 956
Stove fire-plate	E. Boileou	Saint Louis, Mo	July 6, 1869	92, 253
Stove fire-pot	W. Ennis	New York, N. Y	May 23, 1865	47, 895
Stove fire-pot	D. L. Stiles	Rochester, N. Y	Mar. 17, 1868	75, 594
Stove, Fire-proof-stone	A. H. Quincy	Boston, Mass	May 21, 1812	......
Stove, Flat cook	J. Rathbone	Albany, N. Y	Mar. 6, 1835	......
Stove-flue	W. E. Bleecker and S. D. Vose.	Albany, N. Y	Dec. 5, 1848	5, 954
Stove-flue plate	G. Smith and H. Brown	Philadelphia, Pa	May 15, 1847	5, 113
Stove-flue supporter	A. J. Stover	Sandyville, Iowa	Feb. 11, 1868	74, 444
Stove-flues, Extension for	F. Warriner	Troy, N. Y	Oct. 7, 1873	143, 547
Stove, Foot	S. Ackley	Hudson, Mich	Apr. 28, 1863	38, 271
Stove, Foot	E. Daboll	Canaan, Conn	July 1, 1836	......
Stove, Foot	A. Greely	Oxford, Mass	Dec. 23, 1815	......
Stove, Foot	S. Hunt	Danville, Ind	Feb. 25, 1862	34, 501
Stove, Foot	J. W. Lefferts	Brooklyn, N. Y	June 16, 1857	17, 578
Stove, Foot	J. H. Maydole	Eaton, N. Y	July 19, 1859	24, 813
Stove, Foot	M. Mellinger	Dayton, Ohio	Nov. 27, 1866	60, 032
Stove, Foot	J. Plantou	Philadelphia, Pa	Nov. 4, 1822	......
Stove, Foot	E. H. Reynolds	Rising Sun, Md	May 16, 1865	47, 749
Stove, Foot	G. H. Thatcher	Ballston, N. Y	Mar. 20, 1847	5, 029
Stove, Foot	J. Thompson	Brooklyn, N. Y	Apr. 5, 1864	42, 261
Stove, Foot	A. S. Upham	Canton, Mass	Mar. 8, 1864	41, 876
Stove, Foot	M. B. Wright	West Meriden, Conn	May 15, 1866	54, 808
Stove-foot rest	J. H. Keyser	New York, N. Y	Aug. 27, 1867	68, 086
Stove-foot shoe	A. D. Coles	Newark, N. J	Dec. 3, 1872	133, 520
Stove-foot shoe	A. D. Coles	Newark, N. J	July 8, 1873	140, 576
Stove for boiling sap	S. B. Spaulding	Brandon, Vt	Jan. 20, 1863	37, 464
Stove for burning anthracite	A. Jones	Hartford, Conn	June 2, 1836	......
Stove for burning anthracite coal	J. J. Janeway	New Brunswick, N. J	Jan. 27, 1835	......
Stove for burning anthracite coal, Wrought-iron	T. M. Southwick	Troy, N. Y	June 6, 1835	......
Stove for burning anthracite, Cylindrical sheet-iron.	E. Steinhauer	Philadelphia, Pa	Feb. 3, 1831	......
Stove for burning anthracite, Furnace of	E. Eaton	Troy, N. Y	Jan. 20, 1838	576
Stove for burning bituminous coal, and mode of cleaning the flues surrounding ovens of same, &c., Cooking.	W. B. Lawrence	Cincinnati, Ohio	Oct. 14, 1840	1, 821
Stove for coal, Open-burning	D. Petree	Little Falls, N. Y	Mar. 23, 1842	2, 506
Stove for burning fine fuel	L. Morse and W. T. Lewis	Athol, Mass	May 16, 1846	4, 522
Stove for burning Lehigh coal	J. Lovatt	Philadelphia, Pa	June 16, 1825	......
Stove for burning Lehigh coal, &c	R. McMinn	Philadelphia, Pa	June 24, 1822	......
Stove for burning Lehigh coal	P. S. Minglo	Philadelphia, Pa	Oct. 24, 1822	......
Stove for burning soft coal	M. P. Dorsch	New York, N. Y	July 27, 1858	21, 046
Stove for burning stone-coal	P. Benedict	Lancaster, Pa	Oct. 27, 1835	......
Stove for burning stone-coal	G. J. Fougeray	Philadelphia, Pa	Sept. 11, 1823	......
Stove for burning stumps	H. Williard	Grand Rapids, Mich	Feb. 15, 1870	99, 801
Stove for burning tan, sawdust, &c	S. Fisher	Canton, Mass	Nov. 10, 1857	18, 589
Stove for carpenter's use	H. Dietz	New York, N. Y	July 2, 1867	66, 226
Stove for cooking and heating buildings	W. Auld and J. Cox	Philadelphia, Pa	May 30, 1837	211
Stove for cooking and warming rooms	E. G. Augustin	New York	July 6, 1835	......
Stove for heating air, steam, &c., Hot-blast	C. W. Siemens, E. A. Cowper, and C. Cochrane.	Westminster and Upper Gornal, England.	Feb. 7, 1871	111, 691
Stove for heating apartments	J. Shields and J. Cole	New York, N. Y., and Cincinnati, Ohio.	Mar. 10, 1849	6, 156

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Invention.	Inventor.	Residence.	Date.	No.
Stove for heating apartments, Close	W. Beach	Philadelphia, Pa	Oct. 19, 1838	986
Stove for heating, Double	J. Dunley	Richmond, Va	Jan. 24, 1833	....
Stove for heating, Gas	D. G. Haskins	Cambridge, Mass	June 19, 1866	55,652
Stove for heating sad-irons	J. P. Troxell	Hancock, Md	Dec. 17, 1867	72,242
Stove for heating soldering-irons, Tinner's	C. A. Buttles	Milwaukee, Wis	Apr. 15, 1873	137,890
Stove for heating soldering-irons, Tinner's	C. A. Buttles and J. Cowles	Milwaukee, Wis	June 4, 1867	65,341
Stove for heating soldering-irons, Vapor	D. Berkey	Huntington, Ind	Jan. 7, 1873	134,583
Stove for heating tailor's and hatter's irons	J. Lewis	Derby, Conn	Aug. 17, 1835	....
Stove for heating tailor's and hatter's irons, &c.	B. W. Tabor	Falmouth, Mass	June 10, 1837	231
Stove for heating tailor's and hatter's irons	C. Woodbury	Boston, Mass	Dec. 19, 1865	51,641
Stove for heating water	E. Bourne	Pittsburgh, Pa	July 30, 1872	129,922
Stove for heating water	T. Woolsen	Amherst, N. H	July 3, 1812	....
Stove for heating water and cooking, Portable	G. H. Ferris	Chicago, Ill	Mar. 5, 1872	124,347
Stove for parlors, Dumb	J. G. Treadwell	Albany, N. Y	June 30, 1838	820
Stove for railway-cars	G. Beeman	Ironton, Ohio	Apr. 19, 1870	102,080
Stove for railway-cars	H. G. Dayton	Maysville, Ky	May 22, 1866	54,872
Stove for railway-cars	M. T. Hitchcock	Springfield, Mass	Mar. 1, 1870	100,404
Stove for railway-cars	G. W. Thompson	Bordentown, N. J	Mar. 31, 1857	16,939
Stove for railway-cars	F. H. Whitman	Harrison, Me	July 28, 1868	80,525
Stove for railway-cars	A. P. Winslow	Cleveland, Ohio	Dec. 29, 1868	85,348
Stove for railway-cars, Safety	A. J. Pyle	New Galilee, Pa	Apr. 27, 1869	89,340
Stove for railway-cars, Safety	C. J. Smith	Norfolk, Va	June 29, 1869	92,115
Stove for railway-cars, Ventilating	R. Eaton	London, England	May 15, 1866	54,830
Stove for roasting, baking, and broiling, Coal	T. G. Clinton and G. H. and E. H. Knight	Cincinnati, Ohio	Aug. 27, 1850	7,595
Stove for roasting, boiling, and baking, Steam	J. Noyes	Herkimer County, N. Y	June 21, 1811	....
Stove for shavings, &c., Base-burning	O. Clarke	Rockford, Ill	Mar. 22, 1870	100,982
Stove for ships, &c., Galley or cooking	J. Banon	Philadelphia, Pa	Oct. 6, 1837	422
Stove for smoke-houses	I. N. Deardorff	Canal Dover, Ohio	Oct. 15, 1872	132,143
Stove for smoke-houses	I. N. Deardorff	Canal Dover, Ohio	Dec. 2, 1873	145,074
Stove for steam-heating boilers, Base-burning	W. B. Dunning	Geneva, N. Y	Apr. 12, 1870	101,718
Stove for stone-coal	P. Benedict	Lancaster, Pa	Feb. 27, 1830	....
Stove for vessels, &c., Galley and cooking	B. Spratley	Portsmouth, Va	Sept. 25, 1837	402
Stove for warming rooms	C. W. Peckham	New Haven, Conn	May 16, 1835	....
Stove for wood or coal, Cooking	L. Gotta	Huntingdon, Pa	Feb. 18, 1833	....
Stove fountain, Oil	J. Funk	Beverly, Ill	Apr. 19, 1864	42,361
Stove, Franklin	N. Cradit	Ripley, Ohio	Dec. 12, 1848	5,965
Stove, Franklin	J. Harriman	Haverhill, Mass	Sept. 29, 1836	....
Stove, Franklin	D. Stuart	Philadelphia, Pa	Jan. 4, 1859	22,518
Stove, Franklin	J. F. Van Sicler	Poughkeepsie, N. Y	July 3, 1816	....
Stove, Franklin	J. Wilson	Poughkeepsie, N. Y	Mar. 9, 1816	....
Stove, Franklin cook	I. McNavy	Stafford, Conn	Mar. 24, 1835	....
Stove, Franklin cooking	J. Harriman	Haverhill, Mass	Sept. 29, 1836	33
Stove, Franklin cooking	J. Houghton	Ogden, N. Y	May 12, 1840	1,601
Stove, Franklin cooking	R. B. Houghton	Clarkson, N. Y	Aug. 25, 1840	1,734
Stove, Franklin or open	W. Cowan	Watertown, N. Y	June 16, 1828	....
Stove-funnels, tin or copper ware, Manufacturing	O. Hubbard	Claremont, N. H	Nov. 12, 1829	....
Stove, Furnace	J. Atwater	New Haven, Conn	Apr. 19, 1834	....
Stove-furnace	J. Atwater	New Haven, Conn	June 20, 1835	....
Stove-furnace	H. Hubbard	Berlin, Conn	Mar. 25, 1835	....
Stove, Furnace	J. Old	Pittsburgh, Pa	Dec. 20, 1870	110,274
Stove, Furnace cooking	G. Richards	Providence, R. I	Sept. 9, 1829	....
Stove, Gas	C. E. Alden	Philadelphia, Pa	Nov. 5, 1867	70,424
Stove, Gas	J. Q. Birkey	Philadelphia, Pa	Nov. 5, 1867	70,395
Stove, Gas	A. L. Bogart	New York, N. Y	Nov. 26, 1867	71,269
Stove, Gas	E. W. Bullinger	New York, N. Y	Mar. 29, 1864	42,071
Stove, Gas	E. J. Caldwell	New York, N. Y	Aug. 15, 1865	49,469
Stove, Gas	I. Cressman	Philadelphia, Pa	Nov. 20, 1860	30,669
Stove, Gas	I. N. Elwell	Flint, Mich	Aug. 31, 1869	94,192
Stove, Gas	L. Ewing	Brooklyn, N. Y	Mar. 7, 1865	46,651
Stove, Gas	L. Ewing	Brooklyn, N. Y	Dec. 12, 1865	51,441
Stove, Gas	J. S. Gray	New York, N. Y	Feb. 23, 1864	41,697
Stove, Gas	J. P. Hayes	Philadelphia, Pa	Oct. 8, 1872	131,951
Stove, Gas	W. J. Hays	New York, N. Y	Dec. 14, 1869	97,913
Stove, Gas	M. W. Kidder	Lowell, Mass	Aug. 3, 1858	21,075
Stove, Gas	E. A. Leland	Jacksonville, Ill	Mar. 20, 1860	27,595
Stove, Gas	E. A. Leland	New York, N. Y	Sept. 20, 1864	44,372
Stove, Gas	A. M. Lesley and W. Craig	New York and Brooklyn, N. Y.	Jan. 30, 1866	52,299
Stove, Gas	A. M. Lesley and W. Craig	New York and Brooklyn, N. Y.	Jan. 30, 1866	52,300
Stove, Gas	J. L. Mahan	Philadelphia, Pa	Dec. 18, 1860	30,947
Stove, Gas	M. S. Marshall	Melrose, Mass	July 16, 1867	66,862
Stove, Gas	A. Mayer	Philadelphia, Pa	July 11, 1854	11,259
Stove, Gas	S. T. McDougall	Brooklyn, N. Y	July 1, 1862	35,769
Stove, Gas	S. T. McDougall	New York, N. Y	July 5, 1864	43,419
Stove, Gas	P. Mihan	Boston, Mass	June 16, 1857	17,608
Stove, Gas	P. Mihan	Boston, Mass	July 7, 1857	17,767
Stove, Gas	P. Mihan	Boston, Mass	Jan. 12, 1858	19,114
Stove, Gas	H. Pennie and E. A. Leland	New York, N. Y	July 24, 1866	56,677
Stove, Gas	J. D. Spang	Dayton, Ohio	June 16, 1868	79,022
Stove, Gas	J. Starrett and N. J. Wier	Lowell, Mass	May 13, 1856	14,888
Stove, Gas	W. H. Tayler	Surrey, England	Feb. 27, 1872	124,097
Stove, Gas	L. and W. H. Trowbridge	New York, N. Y	June 15, 1869	91,496
Stove, Gas	T. Watters	Boston, Mass	July 7, 1857	17,771
Stove, Gas	C. M. Young and E. M. Benster	Detroit, Mich	Feb. 5, 1867	61,788
Stove, Gas-burning	H. Howson	Philadelphia, Pa	Feb. 28, 1865	46,605
Stove, Gas-burning	T. Shaw	Philadelphia, Pa	Dec. 14, 1858	22,335
Stove, Gas-burning	J. Spear	Philadelphia, Pa	Mar. 22, 1859	23,318
Stove, Gas cooking	J. B. Blake	Worcester, Mass	Feb. 27, 1855	12,434
Stove, Gas cooking	E. A. Leland	New York, N. Y	May 9, 1865	47,650
Stove, Gas cooking	A. Mayer	Philadelphia, Pa	Apr. 17, 1855	12,741
Stove, Gas cooking	H. B. Musgrave	Cincinnati, Ohio	Jan. 8, 1856	14,064
Stove, Gas cooking	G. O. Sanderson	Boston, Mass	Apr. 16, 1867	63,815
Stove, Gasoline cook	J. D. Spang	Dayton, Ohio	Nov. 5, 1867	70,641
Stove, Gasoline cook	J. D. Spang	Dayton, Ohio	Jan. 19, 1869	86,041
Stove, Globe	G. W. Herrick	Stuyvesant, N. Y	May 30, 1867	48,019
Stove, Globe or radiator	W. Hunt	New York	Feb. 8, 1834	....

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Stove-governor	R. Blum	Champaign, Ill	Apr. 27, 1869	89, 280
Stove-grate	J. Spear	Philadelphia, Pa	Feb. 13, 1872	123, 588
Stove, grate, boiler, and oven	C. Slade	Troy, N. Y	Nov. 11, 1837	457
Stove-griddles, Molding	M. C. Burleigh	Somersworth, N. H	June 4, 1861	32, 465
Stove-handle	J. U. Mueller	Detroit, Mich	Sept. 25, 1866	58, 279
Stove-handle, &c., Suspender for	D. N. Beard	Cleveland, Ohio	Apr. 21, 1868	76, 977
Stove-hearth	W. J. Fryer	West Troy, N. Y	Feb. 25, 1868	74, 906
Stove-hearth and ash-pit, Combined	C. Cook	Mount Vernon, Ind	Apr. 23, 1872	126, 028
Stove hearth and ash-sifter, Cooking	D. E. Paris	Troy, N. Y	June 16, 1868	78, 891
Stove hearth, Cooking	G. Himrod	Chicago, Ill	Aug. 9, 1864	43, 771
Stove-hearth plate, Cooking	D. B. Cox	Troy, N. Y	July 6, 1869	92, 272
Stove, Heating	W. R. Akers and J. E. Johnson	Malcolm, Iowa	Apr. 15, 1873	137, 818
Stove, Heating	D. S. Baker	East Bloomfield, N. Y	Sept. 24, 1872	131, 493
Stove, Heating	J. F. Baldwin	Lockport, N. Y	June 11, 1872	127, 830
Stove, Heating	W. Bamford	Milwaukee, Wis	Mar. 12, 1867	62, 726
Stove, Heating	F. Barclay	Aurora, Ill	May 23, 1871	115, 014
Stove, Heating	W. A. Barlow	Elkhorn, Wis	Jan. 1, 1867	60, 844
Stove, Heating	W. A. Barlow	Elkhorn, Wis	Jan. 1, 1867	60, 845
Stove, Heating	A. W. Beach	Winsted, Conn	May 15, 1866	54, 814
Stove, Heating	G. W. Beard	Baltimore, Md	Feb. 5, 1867	61, 795
Stove, Heating	P. D. Beckwith	Dowagiac, Mich	Jan. 30, 1872	123, 142
Stove, Heating	P. D. Beckwith	Dowagiac, Mich	Feb. 11, 1873	135, 621
Stove, Heating	H. Besse	Delaware, Ohio	Apr. 5, 1870	101, 420
Stove, Heating	G. A. Blake and W. B. Taylor	Calais, Me	July 5, 1870	104, 925
Stove, Heating	N. A. Boynton	New York, N. Y	July 4, 1871	116, 674
Stove, Heating	P. Brecher	Louisville, Ky	Jan. 2, 1872	122, 433
Stove, Heating	L. Bridge	York, Pa	Dec. 4, 1866	60, 132
Stove, Heating	L. Bridge and G. W. Ruby	York, Pa	Apr. 24, 1866	54, 102
Stove, Heating	A. Brightman	New Bedford, Mass	Oct. 1, 1872	131, 734
Stove, Heating	T. Brockmann	Davenport, Iowa	Apr. 27, 1869	89, 463
Stove, Heating	L. A. Brooks	La Porte, Ind	July 11, 1871	116, 927
Stove, Heating	A. Brown	Troy, N. Y	May 21, 1867	64, 943
Stove, Heating	R. H. Brown	Linneus, Mo	Aug. 26, 1873	142, 078
Stove, Heating	R. H. Brown	Linneus, Mo	Aug. 26, 1873	142, 079
Stove, Heating	C. H. Buck	Saint Louis, Mo	Oct. 8, 1867	69, 537
Stove, Heating	M. C. Burleigh	Somersworth, N. H	May 10, 1870	102, 767
Stove, Heating	E. Bussey	Troy, N. Y	Apr. 4, 1871	113, 492
Stove, Heating	G. Candee	Berea, Ky	May 28, 1872	127, 306
Stove, Heating	W. W. Carpenter	Middletown, N. Y	Apr. 30, 1867	64, 282
Stove, Heating	J. V. B. Carter	Detroit, Mich	July 16, 1872	129, 315
Stove, Heating	J. C. Chapman	Waltham, Mass	Jan. 23, 1872	122, 993
Stove, Heating	F. E. Chatard, jr	Baltimore, Md	Jan. 16, 1872	122, 812
Stove, Heating	F. G. Cochran	Saint Louis, Mo	May 10, 1870	102, 777
Stove, Heating	J. Cochran	Minneapolis, Minn	Oct. 8, 1872	132, 055
Stove, Heating	J. C. Cochrane	Rochester, N. Y	Feb. 13, 1866	52, 535
Stove, Heating	L. R. Comstock	Baltimore, Md	Aug. 12, 1873	141, 765
Stove, Heating	W. Cottingham and J. W. Stafford.	Troy, Ohio	Mar. 14, 1871	112, 555
Stove, Heating	T. J. Coulston	Royer's Ford, Pa	June 14, 1870	104, 274
Stove, Heating	J. Crea	Allegheny City, Pa	June 27, 1865	48, 501
Stove, Heating	D. M. Cummings	Enfield, N. H	July 3, 1866	56, 015
Stove, Heating	E. N. Cummings	Colebrook, N. H.	Oct. 16, 1866	58, 782
Stove, Heating	M. A. Cushing	Aurora, Ill	Dec. 26, 1871	122, 160
Stove, Heating	H. G. Dayton	Maysville, Ky	May 10, 1864	42, 645
Stove, Heating	E. M. Deey	New York, N. Y	Dec. 17, 1872	133, 928
Stove, Heating	I. De Haven	Allegheny City, Pa	Oct. 18, 1870	108, 459
Stove, Heating	A. Dickey	Albany, N. Y	Nov. 22, 1870	109, 396
Stove, Heating	S. H. Emery, jr., and C. H. Castle	Quincy, Ill	Feb. 7, 1871	111, 622
Stove, Heating	T. J. Frazier	Saint Paul, Minn	Jan. 28, 1868	73, 793
Stove, Heating	J. H. Green	Christiansburgh, Iowa	May 7, 1867	64, 526
Stove, Heating	J. Grossius	Cincinnati, Ohio	Aug. 27, 1867	68, 299
Stove, Heating	J. Grossius	Cincinnati, Ohio	June 21, 1870	104, 581
Stove, Heating	J. L. Hanson	Boston, Mass	Sept. 6, 1864	44, 089
Stove, Heating	D. J. Happersett	Coatesville, Pa	Feb. 26, 1867	62, 416
Stove, Heating	W. H. Harbaugh	Piqua, Ohio	May 8, 1866	54, 532
Stove, Heating	E. Harmon	Saco, Me	July 9, 1872	128, 878
Stove, Heating	E. Hawks	Vineland, N. J	Dec. 1, 1868	84, 626
Stove, Heating	C. Hempel and J. Schaum	Detroit, Mich	Nov. 16, 1869	96, 806
Stove, Heating	T. Henney	Dubuque, Iowa	Feb. 12, 1867	61, 031
Stove, Heating	S. E. Howes	Albany, N. Y	June 13, 1871	115, 957
Stove, Heating	S. E. Howes	Albany, N. Y	June 13, 1871	115, 958
Stove, Heating	R. Hillson	Albany, N. Y	June 7, 1870	103, 884
Stove, Heating	G. C. Howe	New York	July 10, 1840	1, 677
Stove, Heating	M. C. Hull	New York, N. Y	Nov. 19, 1867	71, 176
Stove, Heating	M. C. Hull	New York, N. Y	Apr. 12, 1870	101, 733
Stove, Heating	Z. Hussey	Wilmington, Ill	Jan. 1, 1867	60, 734
Stove, Heating	G. B. Isham	Burlington, Vt	Nov. 29, 1870	109, 627
Stove, Heating	J. Johnson	Harrisburgh, Pa	Oct. 28, 1873	144, 105
Stove, Heating	J. Johnson	Spring City, Pa	Dec. 9, 1873	145, 424
Stove, Heating	W. Kissinger	Cincinnati, Ohio	Sept. 17, 1872	131, 403
Stove, Heating	L. Lakin and N. Hall	Brodhead, Wis	May 22, 1866	54, 924
Stove, Heating	W. H. Landon	Princeton, Canada	Mar. 12, 1872	124, 496
Stove, Heating	S. H. La Rue	Allentown, Pa	July 26, 1870	105, 816
Stove, Heating	A. Lee	Saint Paul, Minn	May 21, 1867	64, 884
Stove, Heating	E. C. Little and D. H. Nation	Saint Louis, Mo	Sept. 9, 1873	142, 707
Stove, Heating	A. Lotze	Cincinnati, Ohio	Sept. 27, 1870	107, 696
Stove, Heating	I. G. Macfarlane	Pittsburgh, Pa	Dec. 23, 1873	145, 744
Stove, Heating	J. Macgregor, jr	Welton, N. Y	Jan. 7, 1846	4, 350
Stove, Heating	W. Magill	Port Deposit, Md	Oct. 11, 1870	108, 163
Stove, Heating	H. Maranville	Akron, Ohio	July 23, 1872	129, 672
Stove, Heating	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Apr. 9, 1867	63, 646
Stove, Heating	D. N. Mason	Indianola, Iowa	May 27, 1873	139, 256
Stove, Heating	J. McCoy	Philadelphia, Pa	May 23, 1871	115, 079
Stove, Heating	H. C. Miles	Saint Joseph, Mich	Aug. 29, 1871	118, 629
Stove, Heating	J. D. Miller	Detroit, Mich	Oct. 3, 1871	119, 634
Stove, Heating	G. Moody and W. P. Hall	Piqua, Ohio	Aug. 7, 1866	56, 979
Stove, Heating	G. R. Moore	Lyons, Iowa	May 22, 1866	54, 938

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Stove, Heating	G. R. Moore	Lyons, Iowa	Mar. 26, 1867	63, 287
Stove, Heating	G. R. Moore	Philadelphia, Pa	Apr. 1, 1873	137, 467
Stove, Heating	G. R. Moore	Philadelphia, Pa	June 24, 1873	140, 155
Stove, Heating	J. Moore	Ergineth, Ireland	Mar. 29, 1870	101, 375
Stove, Heating	L. A. Morse	Battle Creek, Mich	Nov. 29, 1870	109, 749
Stove, Heating	J. Orr	Reading, Pa	Oct. 1, 1872	131, 774
Stove, Heating	P. P. Parkhurst	Milford, Mass	Sept. 27, 1864	44, 449
Stove, Heating	N. Parrish	Kalamazoo, Mich	Sept. 27, 1870	107, 806
Stove, Heating	S. B. Patterson	Phillipsburgh, N. J	Aug. 26, 1873	142, 270
Stove, Heating	D. Pettebone	Roxbury, Conn	Oct. 28, 1808	....
Stove, Heating	W. M. Phelps and S. J. Burpee	Marshall, Mich	Jan. 18, 1870	98, 882
Stove, Heating	A. Pollock	Boston, Mass	June 17, 1808	....
Stove, Heating	J. J. Prendergast	Saint Paul, Minn	June 25, 1872	128, 247
Stove, Heating	A. C. Rand	Chicago, Ill	Oct. 10, 1871	119, 718
Stove, Heating	A. C. Rand	Chicago, Ill	Oct. 10, 1871	119, 719
Stove, Heating	W. Resor	Cincinnati, Ohio	Oct. 2, 1866	58, 477
Stove, Heating	J. L. Ring	Mount Pulaski, Ill	July 15, 1873	140, 843
Stove, Heating	P. Rohdin and C. Ostergren	Chicago, Ill	Apr. 25, 1871	114, 046
Stove, Heating	I. N. Ross	Worcester, Mass	Dec. 1, 1868	84, 511
Stove, Heating	W. F. Ross	Davenport, Iowa	Feb. 15, 1870	99, 954
Stove, Heating	W. F. Ross	Davenport, Iowa	Oct. 3, 1871	119, 535
Stove, Heating	H. J. Ruttan	Coburg, Canada	Sept. 17, 1872	131, 466
Stove, Heating	T. H. Salmon	Brooklyn, N. Y	June 3, 1873	139, 618
Stove, Heating	T. Scantlin	Evansville, Ind	July 30, 1872	129, 986
Stove, Heating	A. S. Shontz	Quincy, Ill	Apr. 25, 1871	114, 055
Stove, Heating	E. B. Smith	Westfield, Mass	May 21, 1872	126, 990
Stove, Heating	S. Smith	Greenfield, Mass	Apr. 17, 1866	54, 631
Stove, Heating	S. Smith	Philadelphia, Pa	June 19, 1866	55, 728
Stove, Heating	S. Smith	Philadelphia, Pa	May 9, 1871	114, 614
Stove, Heating	S. Smith	Philadelphia, Pa	Feb. 4, 1873	135, 449
Stove, Heating	W. Stark and J. G. Fisher	Toledo, Ohio	Mar. 28, 1871	113, 290
Stove, Heating	D. L. Stiles	Rochester, N. Y	May 3, 1870	102, 726
Stove, Heating	J. F. Still	West Farms, N. Y	June 14, 1870	104, 245
Stove, Heating	C. L. Svensson	Topeka, Kans	July 26, 1870	105, 737
Stove, Heating	C. G. Thompson	Memphis, Tenn	May 20, 1873	139, 035
Stove, Heating	S. D. Tillman	Jersey City, N. J	Aug. 20, 1872	130, 605
Stove, Heating	A. Traver	Troy, N. Y	Oct. 11, 1870	108, 212
Stove, Heating	A. Traver	Troy, N. Y	Dec. 20, 1870	110, 312
Stove, Heating	W. B. Treadwell	Albany, N. Y	Jan. 7, 1873	134, 573
Stove, Heating	S. S. Utter	Brooklyn, N. Y	Jan. 16, 1872	122, 746
Stove, Heating	S. S. Utter	Brooklyn, N. Y	Sept. 10, 1872	131, 314
Stove, Heating	J. S. Van Buren	South Troy, N. Y	May 7, 1867	64, 599
Stove, Heating	W. Van De Sande	New York, N. Y	Apr. 24, 1866	54, 233
Stove, Heating	A. S. Vedder	Troy, N. Y	June 7, 1870	104, 084
Stove, Heating	S. D. Vose	Milwaukee, Wis	May 7, 1872	126, 596
Stove, Heating	S. D. Vose	Milwaukee, Wis	July 2, 1872	128, 682
Stove, Heating	J. Wager	Troy, N. Y	Dec. 26, 1871	122, 293
Stove, Heating	C. B. Warring	Poughkeepsie, N. Y	June 28, 1870	104, 801
Stove, Heating	J. W. O. Webb	Vinton, Iowa	Nov. 7, 1871	120, 803
Stove, Heating	J. W. O. Webb	Vinton, Iowa	Jan. 2, 1872	122, 418
Stove, Heating	M. L. Webster	Albany, N. Y	July 16, 1872	128, 989
Stove, Heating	T. White	Quincy, Ill	July 24, 1866	56, 649
Stove, Heating	T. White	Quincy, Ill	Nov. 19, 1872	133, 132
Stove, Heating	P. Wilcox	Springfield, Mass	July 31, 1837	335
Stove, Heating	J. L. Willson	Chicago, Ill	Sept. 13, 1864	44, 208
Stove, Heating	T. Yates	Dubuque, Iowa	June 4, 1867	65, 524
Stove, Heating	T. Young	Montreal, Canada	Dec. 13, 1870	110, 104
Stove, Heating	H. Zahn	Philadelphia, Pa	Dec. 12, 1871	121, 741
Stove, Heating	F. S. Zumstein	Evansville, Ind	July 7, 1868	79, 718
Stove, Heating and cooking	J. W. and E. Kirk	Philadelphia, Pa	Aug. 30, 1833	....
Stove, Heating and cooking	R. S. Payne	West Springfield, Mass	July 31, 1837	333
Stove, Heating and cooking	P. Willcox	Springfield, Mass	Sept. 12, 1837	384
Stove-heating apparatus	D. S. Quimby	Brooklyn, N. Y	Mar. 23, 1858	19, 713
Stove heating-attachment, Cooking	J. Beeler	Brownsville, Mo	July 16, 1872	129, 267
Stove heating-attachment, Cooking	R. W. Myers	Glen Gardner Station, N. J	Dec. 7, 1869	97, 678
Stove-hook and hammer, Combined	T. C. Law	Green Island, N. Y	July 17, 1866	56, 423
Stove-hook hanger	J. Sigourney, A. T. Robinson, and J. Shepard.	Bristol, Conn	Dec. 18, 1866	60, 581
Stove, Hot-air	T. Henney	Dubuque, Iowa	Nov. 19, 1867	71, 171
Stove, Hot-air	E. D. Loveland	New York	July 14, 1846	4, 637
Stove, Hot-air	N. W. Northrup	Greene, N. Y	Mar. 25, 1862	34, 768
Stove, Hot-air	M. Pond	Boston, Mass	Sept. 1, 1843	3, 239
Stove, Hot-air	M. Schlegel	Saint Jacob, Ill	Dec. 29, 1868	85, 404
Stove, Hot-air cook	J. M. Babcock	Albany, N. Y	Oct. 12, 1858	21, 731
Stove, Hot-blast	B. Ford	Middlesborough-on-Tees, England.	Mar. 19, 1872	124, 803
Stove, Hot-blast	J. Player	Norton, England	June 11, 1867	65, 599
Stove, Hydrocarbon	A. J. Griffin	Lowell, Mass	Jan. 23, 1866	52, 246
Stove, Hydrocarbon	C. Hitchcock	Chicago, Ill	Aug. 15, 1871	118, 129
Stove, Illuminating	B. Nott	Albany, N. Y	Dec. 21, 1869	98, 096
Stove-illuminator	G. G. Hunt	Bristol, Ill	June 14, 1870	104, 158
Stove, &c., illuminator	B. Nott	Albany, N. Y	Feb. 1, 1870	99, 339
Stove, Kerosene	W. H. Elliott	Plattsburgh, N. Y	May 2, 1865	47, 529
Stove, Kerosene	R. B. Mitchell	Chicago, Ill	Oct. 26, 1869	96, 249
Stove, Kerosene	R. B. Mitchell	Chicago, Ill	Sept. 6, 1870	107, 079
Stove-kindling arrangement	H. L. Byrd	Baltimore, Md	Mar. 19, 1867	62, 935
Stove, Kingsbury's coal	W. E. Lane	Peekskill, N. Y	May 9, 1865	47, 649
Stove, Kitchen	A. Sherwood	New York	Apr. 25, 1811	....
Stove, Kitchen	J. Spencer	Albany, N. Y	Feb. 8, 1813	....
Stove knob or handle	J. L. Mott	New York	July 21, 1835	....
Stove, Lamp	F. Janke	Brünn, Austria	Feb. 18, 1873	136, 063
Stove, Lamp	E. Savoral	New York, N. Y	Dec. 16, 1873	145, 531
Stove, Lamp cooking	O. G. Kennel, E. H. Smith, and G. L. Morrison.	New York, N. Y	Apr. 16, 1867	63, 907
Stove, Laundry	J. H. Mitchell	San Francisco, Cal	Aug. 26, 1873	142, 259
Stove, Laundry	H. Squyer	Rochester, N. Y	Apr. 3, 1866	53, 697
Stove, Laundry	J. Van	Cincinnati, Ohio	Apr. 18, 1871	113, 949
Stove-leg	D. L. Bates	Dayton, Ohio	Aug. 23, 1870	106, 650

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Stove-leg	J. Brickhead, jr	Baltimore, Md	Mar. 7, 1871	112, 314
Stove-leg	G. W. Burling	Trenton, N. J	Aug. 4, 1868	80, 706
Stove-leg	E. Card	Providence, R. I	Apr. 5, 1870	101, 428
Stove-leg	S. E. Chubbuck	Boston, Mass	Oct. 4, 1870	107, 874
Stove-leg	T. J. Close	Philadelphia, Pa	Mar. 28, 1871	113, 142
Stove-leg	J. M. Corbin	Liberty, Mo	July 25, 1871	117, 261
Stove-leg	W. Doyle	Albany, N. Y	Dec. 30, 1873	145, 932
Stove-leg	E. Evans	Sparta, Ohio	May 10, 1870	102, 930
Stove-leg	A. L. Finch	Sing Sing, N. Y	Mar. 7, 1871	112, 437
Stove-leg	J. Gibson, jr	Albany, N. Y	Dec. 28, 1869	98, 243
Stove-leg	J. T. Milligan	Du Quoin, Ill	Dec. 26, 1871	122, 126
Stove-leg	W. R. Oatley	Rochester, N. Y	Nov. 30, 1869	97, 431
Stove-leg	W. R. Oatley	Rochester, N. Y	Feb. 8, 1870	99, 697
Stove-leg	B. F. Roberts	Lacona, Iowa	May 9, 1871	114, 713
Stove-leg	J. Q. C. Searle	Topeka, Kans	Jan. 21, 1873	135, 012
Stove-leg	D. Stewart and L. Bridge	Philadelphia, Pa	May 30, 1871	115, 540
Stove-leg	W. H. Van Cleve	Ypsilanti, Mich	June 20, 1871	116, 240
Stove-leg	F. Whalen	Ballston Spa, N. Y	July 26, 1870	105, 748
Stove-leg fastener	F. Moon	Newberry Court House, S. C	May 24, 1870	103, 354
Stove-legs, Mode of attaching	W. L. Newill	Cincinnati, Ohio	Dec. 22, 1868	85, 237
Stove-lid	R. C. Graves	Barnesville, Ohio	Nov. 7, 1871	120, 738
Stove-lid	W. Teamer	Evansville, Ind	Nov. 14, 1871	121, 019
Stove lid and cover, Combined	T. J. Coulston	Royer's Ford, Pa	June 14, 1870	104, 273
Stove lid and damper	W. Doyle	Albany, N. Y	May 11, 1869	89, 861
Stove-lid holder	L. M. Doudna	Washington, D. C	Apr. 13, 1869	88, 777
Stove-lid lifter	J. H. Deneefe	Saint Louis, Mo	July 9, 1872	128, 792
Stove-lid lifter	G. B. Scribner	Indianapolis, Ind	Aug. 6, 1867	67, 593
Stove-lids, Pattern for molding	S. Smith	Philadelphia, Pa	Jan. 3, 1861	110, 689
Stove-lining	W. Sanford	Brooklyn, N. Y	May 6, 1862	35, 181
Stove-lining	G. B. Snider and J. Gorton	Yorkville, N. Y	Jan. 29, 1861	31, 266
Stove-lining and fire-brick	C. Muir	Lockhaven, Pa	Feb. 15, 1870	99, 933
Stove-lining plate	A. Wisner	Philadelphia, Pa	Feb. 23, 1869	87, 230
Stove linings, Construction of coal	S. T. Savage	Albany, N. Y	Sept. 7, 1858	21, 447
Stove-linings, Mode of securing	A. Packard	Brooklyn, N. Y	Sept. 3, 1867	68, 383
Stove, Magazine	J. Gray	Albany, N. Y	Nov. 17, 1868	84, 109
Stove-magazine	J. R. Painter	Reading, Pa	Aug. 5, 1873	141, 586
Stove magazine, Coal	D. A. Jones	Waterloo, Iowa	July 30, 1872	129, 962
Stove, Magazine cook	J. S. Perry and J. Easterly	Albany, N. Y	Dec. 22, 1868	85, 124
Stove, Magazine cooking	J. S. Perry	Albany, N. Y	June 15, 1869	91, 260
Stove, Magazine fire-place	J. F. Merrill	Cincinnati, Ohio	June 4, 1872	127, 500
Stove, Magazine smoke-consuming	J. Easterly	Albany, N. Y	Feb. 13, 1855	12, 382
Stove, Non-radiating hot-air	B. Blaney	Boston, Mass	Sept. 8, 1837	378
Stove, Novelty cooking	A. D. Fish	New York	Nov. 10, 1841	2, 335
Stove, Nurse	L. A. Plumb	Biddeford, Me	Feb. 5, 1867	61, 863
Stove, Open	J. Howe and W. Lankester	Boston, Mass	Nov. 25, 1812	....
Stove, Open cooking	J. J. Pierce	Greenfield, Mass	Mar. 11, 1822	....
Stove or air-warmer	J. J. Hentzleman	Philadelphia, Pa	June 16, 1836	....
Stove or digestive furnace, Cooking	H. L. Bidwell	Berlin, Conn	Mar. 8, 1833	....
Stove or fire-place	C. Hendricks and W. Elwell	Gardiner, Me	Feb. 25, 1836	....
Stove or fire-place	D. Southerland	Lisbon, Me	Oct. 31, 1835	....
Stove or fire-place, Circular open	R. Berrian and F. Class	New York	Aug. 31, 1820	....
Stove or furnace for burning anthracite coal	D. Olmstead	New Haven, Conn	Oct. 14, 1835	....
Stove or furnace for fire-places, Heat-radiating	J. Liddle	Brooklyn, N. Y	Oct. 29, 1867	70, 233
Stove or furnace for heating iron hoops	G. Post	Auburn, N. Y	May 22, 1826	....
Stove or furnace, Heating	A. Ernst	Milwaukee, Wis	Sept. 20, 1864	44, 295
Stove or gas-heater, Coal-oil	C. A. Harper	Rahway, N. J	Nov. 20, 1866	59, 766
Stove or radiator, Drum	O. B. Buttles	Milwaukee, Wis	Apr. 26, 1864	42, 459
Stove or range, Cooking	R. E. Deane	New York, N. Y	Sept. 16, 1862	36, 455
Stove-oven	D. W. Barker	Clyde, N. Y	July 29, 1837	304
Stove-oven	M. W. Long	Bangor, Me	Aug. 4, 1868	80, 751
Stove-oven	E. Treadwell	Salem, Mass	Aug. 27, 1818	....
Stove-oven	R. C. Whitehouse	Booth Bay, Me	Dec. 22, 1868	85, 194
Stove oven, Portable or cooking	C. Vale	Newark, N. J	June 26, 1835	....
Stove-oven shelf, Cooking	S. S. Utter	New York, N. Y	Apr. 5, 1870	101, 549
Stove, Parlor	J. and E. Backus	New York	Feb. 18, 1841	1, 981
Stove, Parlor	E. Brown	Philadelphia, Pa	July 23, 1872	129, 711
Stove, Parlor	G. Chilson	Boston, Mass	June 18, 1850	7, 436
Stove, Parlor	G. Chilson	Boston, Mass	June 10, 1862	35, 506
Stove, Parlor	B. Douglas	Albany, N. Y	June 30, 1836	....
Stove, Parlor	J. Feinour, jr	Philadelphia, Pa	Oct. 11, 1841	2, 301
Stove, Parlor	J. H. Goodfellow	Troy, N. Y	Sept. 7, 1869	94, 593
Stove, Parlor	S. Hyde	Williamsburgh, Mass	Sept. 27, 1864	44, 430
Stove, Parlor	F. Kenney	Springfield, Mass	July 24, 1855	13, 314
Stove, Parlor	C. W. Leet	Vernon, N. Y	Feb. 10, 1846	4, 375
Stove, Parlor	J. L. Mott	New York, N. Y	Dec. 7, 1837	508
Stove, Parlor	J. Pedder	Philadelphia, Pa	Sept. 30, 1845	4, 214
Stove, Parlor	J. and A. W. Sangster	Buffalo, N. Y	Sept. 13, 1864	44, 223
Stove, Parlor	G. E. Waring	Stamford, Conn	Dec. 12, 1848	5, 962
Stove, Parlor air-heating	L. W. Gosnell	Baltimore, Md	Apr. 2, 1850	7, 229
Stove, Parlor and cooking	D. B. Cox and J. T. Davy	Troy, N. Y	Oct. 25, 1864	44, 831
Stove, Parlor and cooking	W. W. S. Orbeton	Bradford, Mass	Dec. 20, 1870	110, 329
Stove, Parlor and cooking	N. Smith	New Hampton, N. H	Oct. 27, 1836	....
Stove, Parlor cooking	N. A. Boynton	Boston, Mass	July 22, 1851	8, 242
Stove, Parlor cooking	E. R. Brown	Albany, N. Y	June 5, 1849	6, 499
Stove, Parlor cooking	E. Chase	Chicago, Ill	May 17, 1864	42, 749
Stove, Parlor cooking	E. M. Decy	New York, N. Y	July 16, 1872	129, 466
Stove, Parlor cooking	J. Goss	Lewiston, Me	Sept. 27, 1864	44, 419
Stove, Parlor cooking	M. Mead	Lowell, Mass	May 3, 1864	42, 588
Stove, Parlor cooking	J. Simpson	Newark, Ohio	Sept. 20, 1864	44, 348
Stove, Parlor fire-place	W. Lankester	Boston, Mass	Nov. 24, 1812	....
Stove, Parlor hot-air	J. G. Treadwell and W. Hailes	Albany, N. Y	Feb. 4, 1862	34, 323
Stove, Petroleum	W. T. Eddy	West Hoboken, N. J	Feb. 9, 1864	41, 496
Stove, Petroleum	T. G. Hargrave	Boston, Mass	Nov. 7, 1865	50, 821
Stove, Petroleum	I. Holmes	Moscow, N. Y	June 6, 1865	48, 131
Stove, Petroleum	J. Lee	Galesburgh, Ill	Apr. 2, 1867	63, 400
Stove, Petroleum	C. B. Loveless	Syracuse, N. Y	Mar. 22, 1864	42, 007
Stove, Petroleum	O. F. Morrill	Chelsea, Mass	May 22, 1866	55, 032
Stove, Petroleum	H. E. Smith	Cincinnati, Ohio	July 11, 1865	48, 732

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Stove, Petroleum	G. L. Witsil	Philadelphia, Pa	Mar. 22, 1864	42, 059
Stove, Petroleum or gas	D. L. Emerson	Rockford, Ill	Mar. 10, 1868	75, 400
Stove, Petroleum-vapor	J. J. Riddle and W. S. Gray	Pittsburgh, Pa	June 4, 1867	65, 507
Stove-pipe	J. W. Bates	Saint Paul, Minn	Mar. 2, 1869	87, 459
Stove-pipe	L. Bissell	North Bergen, N. Y	Dec. 18, 1860	30, 952
Stove-pipe	M. C. Chamberlin	Johnsonburgh, N. Y	May 24, 1859	24, 100
Stove-pipe	A. D. Cook	New Madrid, Wis	June 22, 1869	91, 608
Stove-pipe	L. Jurgens	Prescott, Wis	Apr. 15, 1873	137, 928
Stove-pipe	W. P. Lewis and S. L. Vera	Pittsburgh, Pa	Aug. 9, 1870	106, 269
Stove-pipe	J. C. Loup	Galveston, Ind	July 14, 1868	79, 902
Stove-pipe	H. A. Mears	Pecatonica, Ill	Oct. 19, 1869	95, 921
Stove-pipe	D. H. Metcalf and H. J. Shoemaker	Battle Creek, Mich	Jan. 3, 1865	45, 732
Stove-pipe	H. L. Palmer	New York, N. Y	Mar. 11, 1873	136, 755
Stove-pipe	J. Parkhurst, jr	Cheshire, N. H	Feb. 13, 1810	....
Stove-pipe	M. L. Powell	Newcastle, Ind	Apr. 2, 1867	63, 422
Stove-pipe	E. Ripley	Albany, N. Y	Jan. 23, 1836	....
Stove-pipe	W. H. Stephenson	Bluffton, Ind	Jan. 21, 1873	135, 170
Stove-pipe	C. D. Woodruff	Toledo, Ohio	Aug. 16, 1870	106, 528
Stove-pipe adjustable shelf	S. V. Beckwith	Hamden, Conn	Oct. 9, 1866	58, 712
Stove pipe and damper	L. R. Comstock	Macon, Mo	Nov. 6, 1866	59, 362
Stove pipe and drum	M. Bradford	Saugerties, N. Y	Mar. 25, 1837	153
Stope pipe and thimble	C. A. Buttles	Milwaukee, Wis	Oct. 3, 1871	119, 571
Stove pipe, Anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	....
Stove-pipe attachment	O. B. and G. E. Bartlett	Lewiston, Me	May 10, 1870	102, 751
Stove-pipe attachment	C. Bellany and J. G. Brothwell	Wolcottville, Conn	June 18, 1872	128, 099
Stove-pipe attachment	E. C. Stoddard and J. R. Hoyt	Woodbury, Conn	Apr. 20, 1869	89, 181
Stove-pipe band and shelf	R. Hoover	Union Centre, Minn	Sept. 13, 1870	107, 260
Stove-pipe blank	E. Norton	Toledo, Ohio	Apr. 27, 1869	89, 426
Stove-pipe boiler	M. A. Shepard	Bridgeport, Ill	Apr. 28, 1868	77, 327
Stove-pipe cap, Marine	G. Warner	Cleaveland, Ohio	June 2, 1868	78, 496
Stove-pipe cleaner	J. F. Kellogg	North Bridgewater, Mass	Aug. 1, 1871	117, 642
Stove-pipe cleaner	J. W. Mortimer	Peoria, Ill	Mar. 10, 1868	75, 291
Stove-pipe cleaner	D. Murphy	Richmond, Va	Apr. 25, 1871	114, 181
Stove-pipe cleaner	D. Sanford	Ashton, Ill	Mar. 7, 1871	112, 500
Stove-pipe-cleaning apparatus	A. W. Smith	Pierrepont, N. Y	Nov. 5, 1867	70, 636
Stove-pipe-cleaning device	W. J. Nace	Tippecanoe City, Ohio	Nov. 26, 1867	71, 500
Stove-pipe collar	R. R. Finch, jr	New York, N. Y	Aug. 30, 1853	9, 968
Stove-pipe collar, Adjustable	G. M. Hay	Johnstown, Pa	Sept. 6, 1864	44, 092
Stove-pipe collar and stopper	W. L. Rydman	Toledo, Ohio	Nov. 5, 1872	132, 738
Stove-pipe connection	J. H. Bell	Chelsea, Mass	Mar. 12, 1861	31, 652
Stove-pipe connection	G. F. Brinkerhoff	Bucyrus, Ohio	Sept. 23, 1873	143, 120
Stove-pipe connection	G. R. Moore	Lyons, Iowa	Sept. 27, 1864	44, 440
Stove-pipe connection	C. R. Penfield	Lockport, N. Y	June 18, 1872	128, 063
Stove-pipe coupling	O. M. Higgins	Lowell, Mass	Jan. 28, 1868	73, 718
Stove-pipe coupling	J. T. McKim	Remington, Ind	June 11, 1872	127, 908
Stove-pipe coupling	H. A. Mears	Pecatonica, Ill	Aug. 26, 1873	142, 254
Stove-pipe cover, Adjustable	T. M. Losie	Elmira, N. Y	Apr. 1, 1873	137, 457
Stove-pipe elbow	N. Bedell	Albion, N. Y	July 19, 1859	24, 840
Stove-pipe elbow	P. J. Biesenbach	Rochester, N. Y	Jan. 11, 1870	98, 659
Stove-pipe elbow	J. P. Brace	Springfield, Ohio	Nov. 28, 1871	121, 229
Stove-pipe elbow	F. Dieckmann	Cincinnati, Ohio	Oct. 31, 1871	120, 503
Stove-pipe elbow	F. Dieckmann	Cincinnati, Ohio	Nov. 28, 1871	121, 341
Stove-pipe elbow	T. Hartley	Bridgeport, Conn	Feb. 27, 1872	123, 992
Stove-pipe elbow	C. Hoeller	Cincinnati, Ohio	Sept. 22, 1868	82, 407
Stove-pipe elbow	G. W. Howell	Covington, Ky	Nov. 21, 1871	121, 104
Stove-pipe elbow	J. F. Murdock	Wareham, Mass	Apr. 26, 1864	42, 499
Stove-pipe elbow	J. G. Perry	South Kingston, R. I	June 14, 1864	43, 130
Stove-pipe elbow	J. G. Perry	South Kingston, R. I	Jan. 3, 1865	45, 745
Stove-pipe elbow	J. G. Perry	South Kingston, R. I	Mar. 21, 1865	46, 934
Stove-pipe elbow	C. Recht	New York, N. Y	Apr. 14, 1868	76, 812
Stove-pipe elbow	O. W. Stow	Plantsville, Conn	Nov. 28, 1865	51, 240
Stove-pipe elbow	A. K. Tupper	Clarkston, Mich	July 19, 1859	24, 834
Stove-pipe elbow	J. Wilson	Wilmington, Del	Dec. 11, 1866	60, 433
Stove-pipe elbow and die for producing the same	F. Boshert	New York, N. Y	Feb. 13, 1866	52, 520
Stove-pipe elbow-joint	H. B. Morrison	Le Roy, N. Y	Oct. 27, 1868	83, 400
Stove-pipe-elbow machine	J. Beckmann and J. Gibson	Cincinnati, Ohio	Feb. 18, 1873	135, 880
Stove-pipe elbows, Die for making blanks for	E. Morton	Chicago, Ill	Dec. 12, 1871	121, 807
Stove-pipe extension-attachment	S. Johnson	James Creek, Pa	Mar. 18, 1873	136, 922
Stove-pipe fastener	I. W. Lamb	Salem, Mich	July 20, 1869	92, 843
Stove-pipe fitter	G. Scott	Montreal, Canada	Dec. 24, 1872	134, 170
Stove-pipe fitter	W. Volk	Buffalo, N. Y	May 21, 1872	127, 001
Stove-pipe flues, Ornamental slide for plate for covering	P. Danis	Fall River, Mass	Aug. 4, 1841	2, 211
Stove-pipe for decks of vessels	J. Hall	Boston, Mass	Apr. 27, 1869	89, 403
Stove-pipe for vessels	J. Hall	Quincy, Mass	Sept. 9, 1873	142, 567
Stove-pipe-grooving machine	C. Bigelow	Hastings, Minn	June 9, 1857	17, 482
Stove-pipe-heat-radiating attachment	N. E. Cornwall	New York, N. Y	Nov. 27, 1866	59, 971
Stove-pipe-heat-radiating attachment	J. Grabner	Warsaw, Ind	Oct. 15, 1867	69, 798
Stove-pipe holder	G. Eckel	Richmond, Ind	Sept. 16, 1873	142, 777
Stove-pipe-hole cover	J. A. Read	Philadelphia, Pa	Sept. 27, 1870	107, 722
Stove-pipe joint	H. M. Clifford	Philadelphia, Pa	Feb. 19, 1867	62, 183
Stove-pipe joint	J. Faint	Columbus, Canada	Dec. 8, 1868	84, 736
Stove-pipe joint	D. L. Milliken and O. M. Pillsbury	Brattleborough, Vt., and Claremont, N. H.	May 7, 1867	64, 552
Stove-pipe joint	H. B. Morrison	Le Roy, N. Y	Feb. 1, 1870	99, 459
Stove-pipe joint	W. Stine	Elmore, Ohio	Oct. 1, 1867	69, 506
Stove-pipe joint	W. Stine	Elmore, Ohio	June 13, 1871	115, 906
Stove-pipe joint	A. C. Sweetland	North Attleborough, Mass	June 17, 1873	139, 932
Stove-pipe joint	J. N. Warner	Buffalo, N. Y	May 14, 1850	7, 372
Stove-pipe joint	J. Weaver	Tipton, Iowa	Sept. 16, 1873	142, 879
Stove-pipe joint	A. Worden	Ypsilanti, Mich	June 19, 1855	13, 113
Stove-pipe-jointing machine	J. N. Adams	Bloomfield, Iowa	Feb. 5, 1867	61, 791
Stove-pipe oven	R. D. Wilcox	Buffalo, N. Y	Aug. 1, 1871	117, 710
Stove-pipe oven and water-heater	H. Herrick	Dixon, Ill	June 30, 1868	79, 348
Stove-pipe, Return-flue	H. Vatter	Lawrence, Mass	May 5, 1868	77, 684
Stove-pipe ring	W. M. Conger	Newark, N. J	July 30, 1872	129, 884
Stove-pipe shelf	S. J. Anderson	Cazenovia, N. Y	Jan. 19, 1869	85, 986

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Invention.	Inventor.	Residence.	Date.	No.
Stove-pipe shelf	S. J. Anderson	Cazenovia, N. Y	Jan. 10, 1871	110, 817
Stove-pipe shelf	F. Arnold	Haddam Neck, Conn	Sept. 10, 1872	131, 241
Stove-pipe shelf	C. H. Bagley and C. E. Mason	Elgin, Ill	Sept. 14, 1869	94, 859
Stove-pipe shelf	J. F. Beckwith	Albion, N. Y	Sept. 30, 1873	143, 320
Stove-pipe shelf	J. H. Betts	New Canaan, Conn	May 28, 1872	127, 217
Stove-pipe shelf	H. P. Chapman	Centre Brook, Conn	Apr. 9, 1872	125, 541
Stove-pipe shelf	J. P. Elliott	Bridgeport, Conn	May 2, 1871	114, 279
Stove-pipe shelf	W. B. Elliott	Corning, N. Y	Apr. 29, 1873	138, 385
Stove-pipe shelf	J. H. Gerhart and J. S. McCord	Middletown, Pa	Jan. 4, 1870	98, 582
Stove-pipe shelf	R. B. Gorton	Niantic, Conn	July 12, 1870	105, 327
Stove-pipe shelf	C. M. Grannis	Morrisville, N. Y	June 29, 1869	92, 039
Stove-pipe shelf	N. H. Howard	Beloit, Wis	May 18, 1869	90, 102
Stove-pipe shelf	H. C. Johnson	Delavan, Wis	June 23, 1868	79, 127
Stove-pipe shelf	J. McCallum	Rochester, N. Y	Jan. 24, 1871	111, 225
Stove-pipe shelf	L. C. Willard	Saint Louis, Mo	June 18, 1872	128, 162
Stove-pipe shelf, &c	D. R. Moore	Owego, N. Y	July 15, 1873	140, 939
Stove-pipe shelf	G. Newcomer	Cleveland, Ohio	Apr. 12, 1870	101, 906
Stove-pipe shelf	L. Olds	Battle Creek, Mich	July 9, 1867	66, 516
Stove-pipe shelf	W. Patterson	Oneonta, N. Y	July 15, 1873	140, 788
Stove-pipe shelf	I. T. Payne	Chester, Conn	Oct. 1, 1872	131, 776
Stove-pipe shelf	J. Perham	Rockton, Ill	July 21, 1868	80, 210
Stove-pipe shelf	O. Ruggles	Franklin, Mass	June 1, 1869	90, 785
Stove-pipe shelf	J. D. Scott	Friendship, N. Y	Feb. 28, 1871	112, 290
Stove-pipe shelf	J. H. Shaut	Andover, N. Y	Sept. 27, 1870	107, 825
Stove-pipe shelf	J. P. Sherwood	Fort Edward, N. Y	Mar. 30, 1869	88, 420
Stove-pipe shelf	M. Smith	Clinton, Mich	June 20, 1871	116, 233
Stove-pipe shelf	J. Smythe and C. Dexter	Willing and Independence, N. Y.	Feb. 1, 1870	99, 489
Stove-pipe shelf	R. H. Springsteed	Vandalia, Mich	June 29, 1869	92, 119
Stove-pipe shelf	W. J. and D. W. Stephenson	Yellow Springs, Ohio	Dec. 2, 1873	145, 251
Stove-pipe shelf	L. C. Stiles and R. P. Jackman	Elgin, Ill	Apr. 14, 1868	76, 608
Stove-pipe shelf	J. Turner	Marshalltown, Iowa	July 23, 1867	67, 084
Stove-pipe shelf	J. J. Watson and W. S. Pugh	Coatesville, Pa	Mar. 16, 1869	87, 808
Stove-pipe shelf	J. W. Wilder	Leominster, Mass	Apr. 12, 1870	101, 799
Stove-pipe shelf and clothes-drier	W. C. Burnham	Blooming Grove, N. Y.	Nov. 16, 1869	96, 773
Stove-pipe shelf and clothes-drier	G. W. Langdon	Greene, N. Y	Mar. 21, 1871	112, 931
Stove-pipe shelf and drier	W. E. Canedy	Wauconda, Ill	June 22, 1869	91, 519
Stove-pipe shelf and drum, Combined	T. Bladon	Oak Harbor, Ohio	July 1, 1873	140, 454
Stove-pipe shelf and oven	J. A. Miner and H. J. Torrey	Wellsville, N. Y	May 25, 1869	90, 459
Stove-pipe shelf and sad-iron holder	H. Schirey and J. M. Furman	Fond du Lac, Wis	June 29, 1869	92, 109
Stove-pipe shelf, Adjustable	O. B. Olmsted	Beloit, Wis	Aug. 20, 1867	67, 900
Stove-pipe shelf, heater, and damper	E. Hall and F. D. Searl	Beloit, Wis., and Rockton, Ill.	Apr. 19, 1870	102, 114
Stove-pipe shelf, Reversible	J. Perham	Beloit, Wis	July 6, 1869	92, 352
Stove-pipe shelves, Bracket for supporting	H. Vansands	Middletown, Conn	May 17, 1870	103, 107
Stove-pipe stretcher, &c	G. Elsey	Sterling, Ill	Nov. 25, 1873	144, 967
Stove-pipe supporter	R. Street	Albany, N. Y	Jan. 23, 1872	122, 922
Stove-pipe suspender	G. W. Bradford	Brooklyn, N. Y	July 21, 1868	80, 126
Stove-pipe thimble	T. K. Anderson	Hornellsville, N. Y	Feb. 16, 1864	41, 592
Stove pipe thimble	S. W. Bartholomew	Burr Oak, Mich	Aug. 22, 1865	49, 494
Stove-pipe thimble	H. N. Bill	Willimantic, Conn	Dec. 14, 1869	97, 861
Stove-pipe thimble	J. S. Brooks	Rochester, N. Y	June 2, 1863	38, 727
Stove-pipe thimble	C. A. Buttles	Milwaukee, Wis	Oct. 12, 1869	95, 649
Stove-pipe thimble	C. A. Buttles	Milwaukee, Wis	Nov. 7, 1871	120, 710
Stove-pipe thimble	C. A. Buttles	Milwaukee, Wis	Nov. 28, 1871	121, 329
Stove-pipe thimble	O. B. Buttles	Milwaukee, Wis	Oct. 1, 1872	131, 846
Stove-pipe thimble	E. C. Chapman	Lacon, Ill	Sept. 7, 1869	94, 474
Stove-pipe thimble	W. W. Davis	Portland, Me	Mar. 25, 1862	34, 743
Stove-pipe thimble	E. J. Durant	Lebanon, N. H	July 2, 1872	128, 474
Stove-pipe thimble	S. Eddy	Brooklyn, N. Y	Nov. 14, 1865	50, 924
Stove-pipe thimble	V. Fath	Saint Louis, Mo	Oct. 28, 1873	143, 973
Stove-pipe thimble	C. H. Fitch	Auburn, N. Y	June 5, 1866	55, 268
Stove-pipe thimble	J. R. Fulton	West Mahoning Township, Pa.	Sept. 16, 1873	142, 784
Stove-pipe thimble	J. P. Gallagher	Saint Louis, Mo	Dec. 3, 1867	71, 602
Stove-pipe thimble	G. E. Hammer	Rochester, Minn	Sept. 8, 1868	81, 899
Stove-pipe thimble	G. W. Helt	Alma, Mich	May 4, 1869	89, 660
Stove-pipe thimble	C. Horel	Lincoln, Wis	Jan. 5, 1869	85, 664
Stove-pipe thimble	A. Hutchinson	Monterey, Ohio	Sept. 10, 1867	68, 628
Stove-pipe thimble	N. Linden	Chicago, Ill	Dec. 16, 1873	145, 579
Stove-pipe thimble	J. L. Little	Atkinson, N. H	Nov. 3, 1868	83, 646
Stove-pipe thimble	T. M. Losie	Elmira, N. Y	Feb. 14, 1865	46, 369
Stove-pipe thimble	H. V. Marchant	Milwaukee, Wis	July 16, 1872	129, 575
Stove-pipe thimble	T. Newell	Oskaloosa, Iowa	Jan. 1, 1867	60, 777
Stove-pipe thimble	T. Newell	Oskaloosa, Iowa	Dec. 21, 1869	98, 003
Stove-pipe thimble	J. D. Pierce	Milwaukee, Wis	Feb. 28, 1871	112, 178
Stove-pipe thimble	J. D. Pierce and J. B. Smith	Milwaukee, Wis	Dec. 6, 1870	109, 838
Stove-pipe thimble	P. H. Rose	Canandaigua, N. Y	Apr. 19, 1870	102, 044
Stove-pipe thimble	J. F. Severance	East Bridgewater, Mass	May 29, 1866	55, 210
Stove-pipe thimble	T. D. Slauson	Havana, N. Y	Oct. 21, 1873	143, 852
Stove-pipe thimble	H. Smith	Southington, Conn	July 1, 1873	140, 553
Stove-pipe thimble	H. G. Smith	Meriden, Conn	May 2, 1871	114, 484
Stove-pipe thimble	F. Tarrant	Saratoga Springs, N. Y	May 20, 1873	139, 210
Stove-pipe thimble	D. Wilson	Milford, N. H	July 25, 1854	11, 402
Stove-pipe thimble, Cement	H. Goss	Union Mills, Pa	Nov. 26, 1867	71, 380
Stove-pipe to promote combustion	E. Hambuger	Detroit, Mich	Sept. 3, 1867	68, 437
Stove-pipe top	W. Chappell	Buffalo, N. Y	July 31, 1866	56, 707
Stove-pipe tube	T. Moore	Fair Haven, Vt	Apr. 3, 1855	12, 639
Stove-pipe ventilator	D. V. Thrift	Monroe, Iowa	June 7, 1870	103, 943
Stove-pipe ventilator and draft-damper	G. G. Wolfe	Troy, N. Y	Feb. 14, 1865	46, 414
Stove-pipe water-heating attachment	N. Rowe	Emmitsburgh, Md	Apr. 12, 1870	101, 923
Stove-pipes and water-conductors, Mode of connecting joints of.	E. Johnson	Hermon, Me	May 8, 1866	54, 555
Stove-pipes, Attaching-collars for	F. H. Merrill	Cape Elizabeth, Me	Jan. 1, 1869	90, 862
Stove-pipes, Attachment for controlling draft in	I. S. Bullard	Geneva, N. Y	Apr. 16, 1867	63, 850
Stove-pipes, Connecting	N. W. Green	Cortland Village, N. Y	Jan. 28, 1868	73, 887
Stove-pipes, Connecting and supporting	S. Crowell	Syracuse, N. Y	Oct. 9, 1866	58, 717
Stove-pipes, Hot-closet for	N. W. Beckwith	McDonough, N. Y	May 25, 1869	90, 486

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Invention.	Inventor.	Residence.	Date.	No.
Stove-pipes, Hot-water reservoir for	C. Lawby	Brodhead, Wis	Feb. 6, 1872	123, 489
Stove-pipes, Machine for forming	J. Rogers	Santa Clara County, Cal	July 31, 1860	29, 405
Stove-pipes, Machine for making	M. C. Root	Toledo, Ohio	May 26, 1857	17, 393
Stove-pipes, Making	J. Colby	Salisbury, Mass	Feb. 16, 1825	....
Stove-pipes, Making	W. W. Weaver	Philadelphia, Pa	Apr. 16, 1822	....
Stove-pipes, Manufacturing sheet-iron into funnels for.	R. Wheatley and J. Beaumont	Boston, Mass	Nov. 4, 1807	....
Stove-pipes, Mode of making	C. Jones	Burlington, Vt	Apr. 5, 1823	....
Stove-pipes, moldings, conductors, &c., Machine for making.	J. Farrar	Cuyahoga, Ohio	Sept. 2, 1840	1, 755
Stove-pipes, &c., Uniting	A. B. Hurd	Watkins, N. Y	Apr. 16, 1867	63, 797
Stove, Plain-plate or box cook	E. Nott	Schenectady, N. Y	Apr. 22, 1835	....
Stove-plate	D. Stuart and A. Wemyss	Philadelphia, Pa	July 21, 1868	80, 235
Stove-plate cover	J. H. Gould	Alliance, Ohio	Sept. 13, 1859	25, 466
Stove-plate, Parlor	J. Cox	Philadelphia, Pa	July 6, 1869	92, 173
Stove-plate-pattern-boiler-hole seats, Machinery for fitting up.	A. P. Rich	Troy, N. Y	July 23, 1867	66, 992
Stove-plates, Attaching mica to	J. H. Keyser	New York, N. Y	Aug. 18, 1868	81, 176
Stove-plates, Casting lugs in	J. M. Fife	Beaver Falls, Pa	May 10, 1870	102, 933
Stove-plates, Construction of	A. Wernet and J. Kershaw	Canton, Ohio	Mar. 8, 1870	100, 699
Stove-plates, Pattern for molding	R. W. Belson	Philadelphia, Pa	June 7, 1870	103, 966
Stove-platform	G. E. Bingham and J. F. Ewing	Chicago, Ill	July 22, 1873	141, 106
Stove-platform	C. Brownell	Troy, N. Y	July 26, 1870	105, 773
Stove-platform	C. Brownell	Troy, N. Y	Oct. 7, 1873	143, 402
Stove-platform	W. M. Conger	Newark, N. J	May 14, 1872	126, 678
Stove-platform	W. M. Conger	Newark, N. J	Mar. 11, 1873	136, 589
Stove-platform	E. Detwiler	Milwaukee, Wis	Feb. 27, 1872	124, 059
Stove-platform	J. Hopke	Hoboken, N. J	Feb. 20, 1872	123, 900
Stove-platform	I. Miller	Cortlandville, N. Y	Jan. 9, 1872	122, 631
Stove-platform	T. Smith and W. M. Kimball	Cleveland, Ohio	July 9, 1872	128, 765
Stove-platform	W. Westlake	Chicago, Ill	Oct. 3, 1871	119, 676
Stove-platform	W. Westlake	Chicago, Ill	Mar. 5, 1872	124, 237
Stove-platform	W. Westlake	Chicago, Ill	June 25, 1872	128, 442
Stove-platform	W. Westlake	Chicago, Ill	July 1, 1873	140, 393
Stove-polish	E. Chamness and J. Vaughn	Greensburgh and Chesterfield, Ind.	July 29, 1873	141, 321
Stove-polish	J. I. Danforth	Newburyport, Mass	May 20, 1873	139, 047
Stove-polish	J. I. Danforth	Newburyport, Mass	June 17, 1873	139, 879
Stove-polish	E. C. Smith	Brandon, Vt	June 30, 1868	79, 504
Stove-polish, Composition for	C. M. Spooner	New Bedford, Mass	Mar. 22, 1864	42, 026
Stove-polish, Compound for	R. E. Cherrington	South Boston, Mass	Jan. 10, 1871	110, 824
Stove-polish, Fluid	J. W. Birch	New York, N. Y	Dec. 17, 1872	133, 917
Stove-polish, Liquid	H. A. Holmes	East Cambridge, Mass	Dec. 3, 1872	133, 534
Stove-polish mixer and scraper	J. C. Reed	Providence, R. I	Apr. 26, 1859	23, 794
Stove polish or blacking	J. Lewis	Albion, N. Y	Apr. 14, 1868	76, 641
Stove-polishing composition	J. Murphy	Brandon, Vt	Jan. 29, 1867	61, 557
Stove, Porcelain or earthenware	J. Smolinski	Philadelphia, Pa	Mar. 28, 1838	659
Stove, Portable	I. C. Bryant	Philadelphia, Pa	Sept. 15, 1863	39, 882
Stove, Portable	N. E. Chase	Boston, Mass	Apr. 8, 1873	137, 594
Stove, Portable	S. J. Dibble	Lockport, N. Y	Dec 16, 1873	145, 491
Stove, Portable	M. S. Hasha and W. M. Van Nortwick.	Batavia, Ill	Aug. 2, 1870	106, 059
Stove, Portable	G. B. Isham	Burlington, Vt	Mar. 4, 1873	136, 521
Stove, Portable	R. Moore	Nashville, Tenn	Nov. 11, 1873	144, 469
Stove, Portable	J. Smallwood	Saint John, British North America.	June 23, 1868	79, 084
Stove, Portable	C. A. Stevens and J. V. Rockwell.	New York, N. Y	Mar. 25, 1862	34, 791
Stove, Portable	C. L. H. Webb	Lockport, N. Y	Dec. 6, 1845	4, 298
Stove, Portable cooking	N. O. Bond	Fairfax Court House, Va	June 10, 1873	139, 760
Stove, Portable cooking	H. Brown	Harlem, N. Y	Apr. 14, 1868	76, 707
Stove, Portable cooking	E. Evans	Philadelphia, Pa	Aug. 2, 1870	106, 040
Stove, Portable cooking	S. J. Gold	Cornwall, Conn	Aug. 29, 1832	....
Stove, Portable cooking	O. B. Hale	Malon, N. Y	Aug. 18, 1868	81, 163
Stove, Portable cooking	J. Iggett	Albany, N. Y	Jan. 16, 1835	....
Stove, Portable cooking	N. Waterman	Boston, Mass	July 18, 1848	5, 675
Stove, Portable cooking	T. Whitson and G. E. Haynes	Roxbury, Mass	Nov. 19, 1834	....
Stove, Portable drying	J. David	Beech Creek Township, Pa	Sept. 13, 1864	44, 166
Stove, Portable gas or petroleum cook	H. E. Smith	Cincinnati, Ohio	Jan. 9, 1866	51, 976
Stove-pot-hole cover, Cooking	L. E. Clow	Albany, N. Y	Mar. 25, 1859	23, 339
Stove-pot hole lid, Cooking	S. Stephen	Womelsdorf, Pa	Aug. 6, 1867	67, 601
Stove, Radiating drum	L. H. Patterson and H. B. Northup.	Glen's Falls and Sandy Hill, N. Y.	Mar. 31, 1868	76, 099
Stove, Railway	J. B. Chollar and H. Parmelee	West Troy, N. Y	July 11, 1844	3, 656
Stove, Railway-car	W. A. Allen	Medina, N. Y	Sept. 22, 1868	82, 373
Stove, Railway-car	A. Brase and L. Salladey	Sciotoville, Ohio	June 7, 1870	103, 839
Stove, Railway-car	R. O. Brien	Dalton, Ohio	June 2, 1868	78, 475
Stove, Railway-car	M. J. Clark	New Richmond, Ohio	July 28, 1868	80, 393
Stove, Railway-car	J. M. Comins	New York, N. Y	Aug. 9, 1870	106, 124
Stove, Railway-car	L. R. Comstock	Keokuk, Iowa	Apr. 20, 1869	89, 027
Stove, Railway-car	S. L. Denney	Christiana, Pa	Aug. 11, 1868	80, 927
Stove, Railway-car	I. Dripps	Fort Wayne, Ind	May 19, 1868	78, 074
Stove, Railway-car	J. T. Evens	Saint Louis, Mo	July 18, 1871	117, 050
Stove, Railway-car	E. M. Grant, J. B. Van Dyne, and T. R. Pugh.	Nashville, Tenn	Nov. 17, 1868	84, 181
Stove, Railway-car	C. L. Holbrook	Boston, Mass	July 2, 1872	128, 624
Stove, Railway-car	W. S. Jones	Damariscotta Mills, Me	July 15, 1873	140, 831
Stove, Railway-car	W. C. McGill and W. Knox	Cincinnati, Ohio	Nov. 24, 1868	84, 295
Stove, Railway-car	J. Megratten	Wilmington, Del	Oct. 1, 1872	131, 769
Stove, Railway-car	S. Meredith	West Philadelphia, Pa	Apr. 12, 1870	101, 753
Stove, Railway-car	M. Mooney, T. D. Van Dorn, and C. C. Winterberg.	Edinburgh, Indiana	Oct. 7, 1873	143, 520
Stove, Railway-car	J. Oliphant	Spring Hill Furnace, Pa	Nov. 8, 1870	109, 143
Stove, Railway-car	A. Reese	Pittsburgh, Pa	Sept. 16, 1873	142, 867
Stove, Railway-car	J. R. Sax and G. W. Kear	Kingston, Pa	July 14, 1868	79, 920
Stove, Railway-car	J. Q. C. Searle	Topeka, Kans	July 12, 1870	105, 260
Stove, Railway-car	J. Spear	Philadelphia, Pa	July 7, 1857	17, 750
Stove, Railway-car	J. Spear	Philadelphia, Pa	Nov. 24, 1868	84, 319

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Stove, Railway-car	J. Stone	Belvidere, N. J	Aug. 18, 1868	81, 118
Stove, Railway-car	E. Z. Webster	Louisville, Ky	May 12, 1868	77, 786
Stove, Railway-car	A. A. Wheelock	Washington, D. C	Feb. 9, 1869	86, 790
Stove, Railway car	A. P. Winslow	Cleveland, Ohio	Feb. 25, 1868	74, 969
Stove, Railway cooking	A. Atwood	Troy, N. Y	Apr. 10, 1839	1, 120
Stove, Railway cooking	I. R. Bucklin	West Troy, N. Y	July 9, 1838	845
Stove, Railway cooking	R. P. Butrick	Lockport, N. Y	Sept. 18, 1841	2, 258
Stove, Railway cooking	P. Williamson	Philadelphia, Pa	Feb. 16, 1829	....
Stove, range, &c	J. M. Read	Boston, Mass	Nov. 8, 1859	26, 054
Stove, Rarefied chimney	G. Rogers	Northampton, Mass	Dec. 18, 1816	....
Stove, Rarefying-oven cooking	S. W. Phelps	Cincinnati, Ohio	July 16, 1834	....
Stove, Reflecting cook	S. W. Phelps	Cincinnati, Ohio	July 16, 1834	....
Stove-register	W. Race	Seneca Falls, N. Y	Apr. 4, 1846	4, 443
Stove-register	W. Race	Seneca Falls, N. Y	Jan. 10, 1860	26, 782
Stove-register, Automatic	J. S. Toan	Rochester, N. Y	Nov. 29, 1870	109, 689
Stove-register plate	H. C. Billings	Trenton, N. J	Jan. 28, 1846	4, 366
Stove-register, Self-acting	W. Race	Seneca Falls, N. Y	Feb. 20, 1849	6, 129
Stove-regulator	W. Race	Seneca Falls, N. Y	July 25, 1854	11, 386
Stove, Reservoir	H. F. T. Hale	Milwaukee, Wis	Sept. 13, 1861	44, 181
Stove, Reservoir	Z. Hunt	Hudson, N. Y	June 14, 1864	43, 155
Stove, Reservoir	J. V. Vrooman and J. H. Clute	Schenectady, N. Y	Dec. 19, 1871	122, 084
Stove, Reservoir cook	S. M. Clark	Beaver Dam, Wis	Nov. 24, 1868	84, 343
Stove, Reservoir cook	M. J. Mosher	Troy, N. Y	Jan. 5, 1869	85, 604
Stove, Reservoir cooking	R. H. Brown	Linneus, Mo	Aug. 26, 1873	142, 080
Stove, Reservoir cooking	M. Curtis and L. E. Clow	Saint Louis, Mo	Nov. 19, 1872	133, 081
Stove, Reservoir cooking	A. R. Fales and H. Seabury	Troy and Albany, N. Y	July 1, 1873	140, 354
Stove, Reservoir cooking	S. W. France	Brooklyn, N. Y	Apr. 1, 1873	137, 355
Stove, Reservoir cooking	L. Hermance	Lansingburgh, N. Y	Jan. 23, 1872	122, 888
Stove, Reservoir cooking	J. R. Hyde	Troy, N. Y	Mar. 11, 1873	136, 730
Stove, Reservoir cooking	W. H. Johnson	Troy, N. Y	June 29, 1869	91, 854
Stove, Reservoir cooking	H. Lappin	Troy, N. Y	Jan. 7, 1873	134, 683
Stove, Reservoir cooking	E. C. Little, L. E. Clow, and D. H. Nation	Saint Louis, Mo	Mar. 9, 1869	87, 688
Stove, Reservoir cooking	D. G. Littlefield	Albany, N. Y	June 10, 1873	139, 720
Stove, Reservoir cooking	D. H. Nation	Saint Louis, Mo	Sept. 9, 1873	142, 717
Stove, Reservoir cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	May 6, 1873	138, 682
Stove, Reservoir cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Sept. 16, 1873	142, 931
Stove, Reservoir cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Sept. 16, 1873	142, 932
Stove, Reservoir cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Sept. 16, 1873	142, 933
Stove, Reservoir cooking	D. H. Nation and E. C. Little	Saint Louis, Mo	Sept. 16, 1873	142, 934
Stove, Reservoir cooking	G. H. Phillips	Troy, N. Y	Nov. 3, 1868	83, 790
Stove, Reservoir cooking	J. F. Quimby	Troy, N. Y	Oct. 27, 1868	83, 407
Stove, Reservoir cooking	H. Stephens	Saint Louis, Mo	Apr. 1, 1873	137, 500
Stove, Revolving cooking	H. Stanley	Poultney, Vt	Dec. 2, 1835	....
Stove, Revolving cooking	H. Stanley	Poultney, Vt	Nov. 28, 1836	....
Stove, Revolving cooking	H. Stanley	Poultney, Vt	Nov. 28, 1836	91
Stove, Rotary	E. Town	Montpelier, Vt	May 16, 1834	....
Stove, Rotary cooking	E. A. Hibbard	Winchester, Va	Nov. 28, 1854	11, 994
Stove, Rotary-top	M. French	Cincinnati, Ohio	June 11, 1842	2, 666
Stove, Rotary-top	H. Stanley	West Poultney, Vt	Oct. 25, 1845	4, 238
Stove, Safety	C. J. Smith	Norfolk, Va	May 31, 1870	103, 672
Stove, Safety ship and car heating	G. F. Foote	Cincinnati, Ohio	Nov. 29, 1864	45, 247
Stove, Salamander cooking	A. D. Spoor	Coxsackie, N. Y	Jan. 7, 1835	....
Stove, Screw and reel grain-drying-machine	D. Ellicott	....	May 1, 1801	....
Stove, Self-extinguishing railway-car	J. Minor	Peoria, Ill	Jan. 12, 1869	85, 750
Stove, Self-feeding cooking	G. Weaver	Lockport, N. Y	July 16, 1872	129, 379
Stove, Self-feeding wood and coal cooking	J. F. Pond	Cleveland, Ohio	Feb. 1, 1870	99, 472
Stove, Self-heat-retaining cooking	Moffatt and Taintor	Buffalo, N. Y	July 17, 1835	....
Stove, Semicircular cooking	T. O. Sayre	Elizabethtown, N. J	Mar. 23, 1842	2, 499
Stove-shelf	F. W. Hudson	Leominster, Mass	Apr. 20, 1869	89, 223
Stove-shelf	J. G. Kritchbaum	Youngstown, Ohio	Feb. 15, 1870	99, 916
Stove-shelf	J. R. Robertson	Syracuse, N. Y	Feb. 22, 1870	100, 073
Stove-shelf	G. L. Swett	Leominster, Mass	Dec. 14, 1869	97, 831
Stove-shelf	D. D. Whitney	Leominster, Mass	June 1, 1869	90, 712
Stove shelf and drier	J. J. Watson	Coatesville, Pa	Mar. 8, 1870	100, 571
Stove-shelf standards, Yoke for	L. Longley	Leominster, Mass	Aug. 3, 1869	93, 211
Stove-shelving	R. Pole	New Providence, Tenn	Nov. 1, 1870	108, 824
Stove-shelving	W. E. Scott	Knoxville, Tenn	June 28, 1870	104, 895
Stove, Shifting cooking	H. Cressman	Philadelphia, Pa	Feb. 7, 1833	....
Stove, Ship's	G. W. Slater	New Haven, Conn	Dec. 20, 1859	26, 538
Stove, Ship's cooking	D. S. Beardsley	New Haven, Conn	Jan. 6, 1857	16, 349
Stove, Smoke-consuming	E. A. Hill	Joliet, Ill	Oct. 17, 1854	11, 807
Stove, Soap-stone	P. Dodge	Perkinsville, Vt	Feb. 21, 1865	46, 455
Stove, Soap-stone	J. H. Flagg	Perkinsville, Vt	May 1, 1866	54, 319
Stove, Soap-stone	A. H. Lowell	Manchester, N. H	July 2, 1867	66, 365
Stove, Soap-stone	W. Payne	....	Dec. 10, 1797	....
Stove, Spiral	R. Roy	Warwick, N. Y	Nov. 13, 1813	....
Stove-stand	D. N. Smith	Boston, Mass	Nov. 30, 1869	97, 391
Stove, Steam	J. L. Sutton	Norristown, Pa	July 20, 1858	20, 963
Stove, Steam and hot water portable	T. G. Fessenden	Charlestown, Mass	Dec. 14, 1830	....
Stove, Steam heating	A. Blood	Norfolk, Va	June 9, 1857	17, 483
Stove, Stone-coal	W. B. A. Lange	Philadelphia, Pa	May 3, 1831	....
Stove, Subaqueous gas	S. H. Scarr	Philadelphia, Pa	Dec. 9, 1873	145, 458
Stove, Summer	W. A. Barlow	Chicago, Ill	July 15, 1873	140, 870
Stove, Summer	F. Morandi	Boston, Mass	Aug. 1, 1865	49, 136
Stove, Summer	J. Schmedinghoff	Cincinnati, Ohio	Nov. 22, 1864	45, 181
Stove, Summer and winter cooking	P. P. Stewart	New York	Sept. 12, 1838	915
Stove, Summer-cooking	A. Atwood	Troy, N. Y	June 30, 1838	815
Stove, Summer-cooking	L. Oakley	Covington, Ky	July 16, 1872	129, 049
Stove, Summer-cooking	A. H. Wellington	Woodstock, Vt	Jan. 18, 1870	99, 040
Stove-support	W. M. Conger	Newark, N. J	Apr. 1, 1873	137, 291
Stove-support	W. M. Conger	Newark, N. J	Apr. 1, 1873	137, 292
Stove, Supply-cylinder coal	W. B. Treadwell	Albany, N. Y	Nov. 1, 1864	44, 900
Stove, Tailor's heating	J. R. Groves	Hightstown, N. J	June 11, 1872	127, 866
Stove tank, Cooking	G. G. Wolfe	Troy, N. Y	Mar. 31, 1868	76, 292
Stove-thimble or deck-iron	L. Wood	New York, N. Y	Jan. 13, 1857	16, 423
Stove, Three-boiler flat cook	S. Parker	Troy, N. Y	Jan. 16, 1835	....
Stove, Tile	E. Y. Robbins	Cincinnati, Ohio	Mar. 21, 1871	112, 964

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Stove to burn anthracite coal	E. Nott	Schenectady, N. Y	Oct. 17, 1835	....
Stove-top and cover	E. W. Bigelow	Worcester, Mass	June 22, 1869	91, 598
Stove-top center-plate	P. Paradis and R. Reilly	Rochester, N. Y	June 4, 1867	65, 421
Stove-top center-plate	J. Thorniley	Fallston, Pa	Sept. 20, 1870	107, 566
Stove top, Cooking	J. Grimes	Portsmouth, Ohio	Aug. 20, 1867	67, 977
Stove, Tubular cooking	J. L. Mott	New York, N. Y	Mar. 23, 1842	2, 503
Stove, Twin wood	A. Worley	Saint Paul, Minn	Mar. 7, 1865	46, 746
Stove-urn	O. F. Mack	Charlestown, Mass	Feb. 28, 1871	112, 160
Stove-urn	J. Spear	Philadelphia, Pa	Aug. 30, 1859	25, 284
Stove-utensil holder	S. Watt	Barnesville, Ohio	Apr. 4, 1871	113, 711
Stove valve, Cooking	H. Root	Deerfield, Mass	Sept. 3, 1839	1, 311
Stove, Vapor	S. Child, jr	Baltimore, Md	July 24, 1866	56, 530
Stove, Vapor	S. Child, jr	Baltimore, Md	Aug. 21, 1866	57, 288
Stove, Vapor	H. W. Dopp	Buffalo, N. Y	Mar. 22, 1864	41, 975
Stove, Vapor	R. R. Lewis	New York, N. Y	June 21, 1864	41, 215
Stove, Vapor	C. B. Loveless	Syracuse, N. Y	Apr. 5, 1864	42, 256
Stove, Vapor	O. F. Morrill	Chelsea, Mass	Mar. 29, 1864	42, 103
Stove, Vapor	O. F. Morrill	Chelsea, Mass	Apr. 5, 1864	42, 214
Stove, Vapor-burning	O. K. Collins and W. B. Grover	Woodbury, N. J	Dec. 18, 1866	60, 480
Stove, Vapor-burning cooking	O. F. Morrill	Chelsea, Mass	Nov. 24, 1863	40, 703
Stove, Ventilating	L. M. Parsons	Waukau, Wis	Feb. 10, 1857	16, 607
Stove, Ventilating	D. Quimby	Calais, Me	Mar. 29, 1834	....
Stove, Ventilating	J. S. White	Prescott, Wis	Feb. 16, 1869	87, 085
Stove, Ventilating	C. Woodward	Washington, D. C	July 2, 1836	....
Stove-ventilating apparatus, Cooking	H. Rasmussen	Racine, Wis	Aug. 20, 1872	130, 744
Stove ventilating attachment	T. S. Bowman	Saint Louis, Mo	Aug. 20, 1867	67, 945
Stove ventilator, Cooking	C. and A. Stoddard	Naples, N. Y	Sept. 15, 1868	82, 173
Stove waiter or shelf	C. D. Wright	Leesville, Conn	June 13, 1871	115, 923
Stove, Warming and cooking	J. Hill	Andover, Mass	Oct. 16, 1838	982
Stove water-back	A. J. Blanchard	Boston, Mass	June 20, 1871	116, 143
Stove water-back and grate, Heating and cooking	G. Dewey	Blooming Valley, Pa	Oct. 22, 1867	70, 077
Stove water-heater	G. Hibberd	Wheeling, W. Va	Oct. 31, 1871	120, 518
Stove-window	C. H. Buck	Saint Louis, Mo	Mar. 17, 1868	75, 664
Stove-window	H. B. Van Benthuysen	Lockhaven, Pa	Jan. 17, 1871	111, 020
Stove-window	F. Warriner	Troy, N. Y	Mar. 18, 1873	136, 884
Stove window, Coal	A. White	Geneseo, Ill	June 28, 1870	104, 911
Stove with central air-passage, Base-burning	E. Smith	Albany, N. Y	May 14, 1872	126, 840
Stove with circular revolving oven, Cooking	G. G. Prentiss	Smithfield, R. I	June 3, 1834	....
Stove with circular shaking-grate	E. B. Finch	Peekskill, N. Y	Aug. 27, 1850	7, 598
Stove with elevated oven	S. B. Spaulding	Brandon, Vt	Mar. 30, 1843	3, 021
Stove with elevated oven, Cooking	M. Bartholomew	Vershire, Vt	July 2, 1842	2, 699
Stove with elevated oven, Cooking	L. Tilden	Barre, Vt	July 18, 1840	1, 698
Stove with portable oven	G. H. Thatcher	Albany, N. Y	July 29, 1851	8, 263
Stove with revolving oven	I. H. and N. P. Haywood	Baltimore, Md	May 8, 1843	3, 076
Stove with stone heater, Foot	A. H. Quincy	Boston, Mass	June 13, 1812	....
Stove, Wood	C. H. Castle	Quincy, Ill	June 18, 1872	128, 016
Stove, Wood base-burning	J. W. Lane	Newton, N. Y	June 20, 1865	48, 289
Stove, Wood-burning	M. G. Fagan	Troy, N. Y	June 1, 1858	20, 415
Stove, Wood-burning	G. G. Wolfe	Troy, N. Y	May 7, 1867	64, 616
Stove zinc board	W. S. Cottrell	Chicago, Ill	May 28, 1872	127, 310
Stove zinc-board	W. Westlake	Chicago, Ill	Mar. 21, 1871	112, 996
Stoves, Adding ovens to rotary	R. D. Granger	Troy, N. Y	July 17, 1837	282
Stoves, Adjustable rolling support for	C. D. Woodruff	Toledo, Ohio	Feb. 13, 1872	123, 756
Stoves, Air-conducting brick for	E. Treadwell	Essex County, Mass	Sept. 12, 1816	....
Stoves, Air-supplying attachment for	W. Wright	Lee's Summit, Mo	Jan. 16, 1872	122, 793
Stoves and air-heating furnaces, Combination of Cooking.	P. J. Ackerman	Paterson, N. J	Jan. 22, 1861	31, 144
Stoves and chimneys, Building	A. Graham	Rumford, Me	Dec. 28, 1832	....
Stoves and fire-places, Construction of	J. Hurd, jr	Stoneham, Mass	June 23, 1838	806
Stoves and fire-places, Fire-back for	A. O'Neill	Portsmouth, Ohio	June 21, 1859	24, 483
Stoves and fire-places, Open front for	J. G. Hunt	Cincinnati, Ohio	May 30, 1871	115, 476
Stoves and furnace doors, Dust-screen for	J. Reynolds	Philadelphia, Pa	Feb. 13, 1866	52, 604
Stoves and furnaces, Automatic draft-regulator for	A. W. Sprague and J. M. Osgood	Quincy and Somerville, Mass.	Apr. 8, 1873	137, 632
Stoves and furnaces, Fire-pot for	B. Franklin	Indianapolis, Ind	June 25, 1872	128, 296
Stoves and furnaces, Fire-pot for	E. Mingay	Boston, Mass	Apr. 4, 1871	113, 549
Stoves and furnaces, Sectional fire-pot for	M. Peckham	Utica, N. Y	Mar. 18, 1856	14, 467
Stoves and furniture, Foot-platform for	J. Easterly	Albany, N. Y	Dec. 10, 1872	133, 766
Stoves and grates, Apron for	W. Hughes	Rochester, N. Y	Apr. 21, 1863	38, 227
Stoves and hollow-ware, Pattern for	J. Owen	Dayton, Ohio	Nov. 24, 1868	84, 438
Stoves and kettles for making varnish, &c., Construction of.	H. Hibbard	Attica, N. Y	June 17, 1840	1, 637
Stoves and ranges, Detachable magazine for cooking.	L. Bridge	Philadelphia, Pa	Feb. 21, 1871	112, 013
Stoves and ranges, Summer attachment for	N. O. Bond	Hyannis, Mass	Dec. 22, 1868	85, 054
Stoves, Apparatus for regulating the heat of	S. D. Tillman	Seneca Falls, N. Y	Apr. 17, 1844	3, 545
Stoves, Applying heat to cooking	J. G. Hathaway	Painesville, Ohio	Dec. 7, 1837	505
Stoves, Ash and sifting pan for cooking	J. H. Shear	Albany, N. Y	Mar. 5, 1867	62, 695
Stoves, Ash-pan for cooking	G. W. Swett	Troy, N. Y	Mar. 3, 1868	75, 073
Stoves, Ash-sifting device in cooking	E. Mingay	Boston, Mass	June 12, 1866	55, 587
Stoves, Auxiliary air-chamber for	J. H. Goodfellow	Troy, N. Y	Dec. 5, 1871	121, 506
Stoves, Auxiliary air-chamber for	E. Hawks	Troy, N. Y	Apr. 23, 1867	64, 102
Stoves, Bed-plate for base-burning wood	C. D. Newton	Troy, N. Y	Jan. 19, 1869	86, 074
Stoves, Boiler-plates for cooking	C. J. Shepard	New York, N. Y	Oct. 30, 1847	5, 351
Stoves by wire-gauze, Leading flame in	S. Morey	Oxford, N. H	Jan. 20, 1819	....
Stoves, Case for inclosing	J. P. Driver	Marengo, Iowa	Oct. 31, 1865	50, 696
Stoves, Casting close	H. Abbott	....	May 4, 1802	....
Stoves, Center-plate for cooking	R. Bailey	Cleveland, Ohio	May 18, 1869	90, 218
Stoves, Collecting, regulating, and retaining heat in	W. Phoebus	New York	Nov. 28, 1817	....
Stoves, Combined tank and closet attachment to cooking.	G. W. Gillett	Chicago, Ill	Dec. 29, 1868	85, 441
Stoves, &c., Composition for blacking	T. C. Scottron and S. Plummer	Springfield, Mass	Aug. 30, 1870	106, 877
Stoves, Constructing cooking	P. Willcox	Springfield, Mass	Sept. 13, 1838	917
Stoves, Constructing flues of	M. Ketchum and W. A. Wheeler	Boston, Mass	Nov. 25, 1839	1, 419
Stoves, Constructing flues of	S. North	Palmyra, N. Y	Oct. 31, 1839	1, 395
Stoves, Constructing flues of cooking	E. Ferren	Haverhill, N. H	Nov. 12, 1839	1, 408
Stoves, Construction of	W. Henderson	....	Feb. 12, 1801	....
Stoves, Construction of cooking	S. H. Ransom	Albany, N. Y	July 2, 1850	7, 483

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Stoves, Construction of top for anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	....
Stoves, Construction of utensils for cooking	S. C. Riley	New York, N. Y	Aug. 31, 1842	2, 767
Stoves, Corner or joint for soapstone	J. H. Flagg	Perkinsville, Vt	July 4, 1865	48, 542
Stoves, Correcting bad smells in cooking	E. Nott	Schenectady, N. Y	Jan. 7, 1835	....
Stoves, Cover for fuel-magazine in base-burning	E. Macy	New York, N. Y	Dec. 15, 1868	84, 890
Stoves, Covering the rod used to bind	J. C. Parry	Pittsburgh, Pa	June 12, 1835	....
Stoves, Detachable shields for the pot-holes of cooking.	A. Britton	Philadelphia, Pa	Feb. 27, 1872	123, 975
Stoves, Device for emptying	B. Connelly	Williamsburgh, N. Y	Mar. 4, 1873	136, 418
Stoves, Device for retaining fire in	E. Y. Robbins	Cincinnati, Ohio	Nov. 4, 1873	144, 357
Stoves, Division-plate for cooking	S. C. Ewing	Hill's Ferry, Cal	May 2, 1871	114, 428
Stoves, Door for cannon	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Feb. 8, 1870	99, 565
Stoves, Door for fire-place	W. E. Wood	Baltimore, Md	Dec. 14, 1869	98, 003
Stoves, Door for heating	G. R. Moore	Lyons, Iowa	Aug. 13, 1867	67, 791
Stoves, Draft-valve in railway-car	J. E. Wootten	Reading, Pa	Sept. 29, 1868	82, 672
Stoves, Elevated-oven attachment for	G. Craine and J. W. Bloss	Fairfield, Iowa	Sept. 9, 1873	142, 558
Stoves, Elevated oven for cooking	J. P. Williston and W. A. Arnold.	Northampton, Mass	Aug. 25, 1840	1, 740
Stoves, Extension-ring for base of heating	D. B. Cox	Troy, N. Y	June 23, 1868	79, 108
Stoves, Fender-ring for heating	N. A. Boynton	New York, N. Y	May 12, 1868	77, 711
Stoves, Fire-lighting attachment for	J. W. Elliot	Leicester, Mass	Dec. 19, 1865	51, 574
Stoves, fire places, chimneys, &c., Coal-burning	O. M. Mitchell	Cincinnati, Ohio	Mar. 8, 1834	....
Stoves, Flue-cleaner for cooking	H. L. Palmer	Stillwater, N. Y	Oct. 25, 1870	108, 726
Stoves, Flue for anthracite-coal	E. Nott	Schenectady, N. Y	June 29, 1833	....
Stoves, Flue for cooking	H. Bleecker	Albany, N. Y	Sept. 18, 1849	6, 718
Stoves, Flue for elevated-oven cooking	J. Easterly	Albany, N. Y	Sept. 7, 1858	21, 467
Stoves, Folding door for	J. Root	Cincinnati, Ohio	Nov. 4, 1851	8, 493
Stoves for burning anthracite, Manufacturing	J. L. Mott	New York, N. Y	July 22, 1837	292
Stoves for generating gas, Attachment to	B. L. Fetherolf	Tamaqua, Pa	May 21, 1867	64, 854
Stoves, Fruit-drying attachment to cooking	D. C. Colby	Newport, N. H	Sept. 18, 1860	30, 105
Stoves, Fuel-reservoir of base-burning	T. J. Coulston	Springville, Pa	Aug. 10, 1869	93, 599
Stoves, furnaces, &c., Dust-arrester in raking of	J. Martino	Philadelphia, Pa	Mar. 12, 1867	62, 763
Stoves, furnaces, &c., Fire-chamber of	M. Stewart, jr	Philadelphia, Pa	Nov. 16, 1841	2, 371
Stoves, furnaces, &c., Valve for	B. W. Dunklee	Boston, Mass	Oct. 25, 1859	25, 893
Stoves, Gasoline-attachment for cooking	F. Hainsworth	Chicago, Ill	Apr. 4, 1871	113, 513
Stoves, grates, &c., Illuminator for	B. Nott	Albany, N. Y	Nov. 11, 1868	83, 877
Stoves, Heat-governor for	A. H. Tingley	Providence, R. I	Apr. 5, 1864	42, 240
Stoves, Heat-radiating attachment for	B. J. Watson	Troy, Wis	Mar. 3, 1868	75, 087
Stoves, Hinging cover to top of cooking	C. J. Ball	Keokuk, Iowa	Aug. 27, 1867	68, 029
Stoves, Hood for cook	F. Raymond and A. Miller	Cleveland, Ohio	July 4, 1865	48, 592
Stoves, Hot-air attachment to cooking	J. Norris	Mount Pleasant, Md	Oct. 20, 1868	83, 199
Stoves, Hot-air flue for heating	R. M. French	Painesville, Ohio	June 25, 1872	128, 297
Stoves, Hot-air flue for	C. K. Marshall	New Orleans, La	July 14, 1868	79, 844
Stoves, Hot-water boiler for	J. S. Brooks	Rochester, N. Y	Aug. 17, 1869	93, 854
Stoves, Hot-water reservoir for	J. B. Crowley	Cincinnati, Ohio	Nov. 20, 1866	59, 894
Stoves, Hot-water reservoir for	H. N. Waters and G. W. Lascell.	Meriden, Conn., and Syracuse, N. Y.	Dec. 17, 1872	133, 958
Stoves, Hot-water tank for	G. Tennie	Pittsburgh, Pa	Apr. 14, 1868	76, 675
Stoves, Hot-water tank on cooking	A. Brown	Troy, N. Y	July 14, 1868	79, 807
Stoves, Hot-water tank on cooking	D. E. Paris	Troy, N. Y	June 9, 1868	78, 688
Stoves, Hot-water tank on cooking	D. E. Paris	Troy, N. Y	June 9, 1868	78, 819
Stoves, Joining and fitting corners of soap-stone	P. Dodge	Perkinsville, Vt	Jan. 24, 1865	45, 982
Stoves, Lid for boiler-hole of cooking	T. G. Clinton and G. H. and E. H. Knight.	Cincinnati, Ohio	Feb. 19, 1850	7, 009
Stoves, Lifting-hook guard for	H. P. Curtis	Washington, D. C	Mar. 17, 1868	75, 630
Stoves, Magazine for base-burning	B. C. Bibb	Baltimore, Md	Nov. 23, 1869	97, 026
Stoves, Magazine for base-burning	J. Van Wormer and M. McGarvey.	Albany, N. Y	Nov. 10, 1868	84, 024
Stoves, Magazine for heating	W. A. Gheene	Brooklyn, N. Y	June 11, 1872	127, 865
Stoves, Making Franklin and cooking	J. Wilson	New York	Mar. 13, 1824	....
Stoves, Management of the draft, &c., in cooking	H. Strickland	Bradford, Vt	June 27, 1840	1, 651
Stoves, Manufacturing	E. W. Newton	Middletown, Conn	Jan. 9, 1835	....
Stoves, Method of securing legs to	J. Gibson, jr	Albany, N. Y	Dec. 28, 1869	98, 219
Stoves, Mica-frame for	G. G. Richmond	Peekskill, N. Y	Jan. 31, 1871	111, 383
Stoves, Mica-frame for	G. S. Stanard	Buffalo, N. Y	May 31, 1870	103, 674
Stoves, Mica window for	S. Foote	Jersey City, N. J	July 16, 1872	129, 020
Stoves, Mode of applying heat in cook	S. J. and J. S. Gold	New York, N. Y	June 20, 1838	792
Stoves, Mode of arranging drafts of cooking	J. L. Lothrop	Provincetown, Mass	Dec. 31, 1839	1, 464
Stoves, Mode of arranging the flues and governing the drafts in cooking.	C. Guild	Cincinnati, Ohio	June 20, 1840	1, 646
Stoves, Mode of changing drafts by an elliptical valve in.	H. Bushnell	Hartford, Conn	June 21, 1839	1, 177
Stoves, Mode of constructing	J. Miller	Baltimore, Md	Oct. 16, 1838	981
Stoves, Mode of constructing and combining portable ovens with.	E. Gosselin	New York	Nov. 7, 1840	1, 848
Stoves, Mode of constructing cooking	J. L. Mott	New York, N. Y	Sept. 19, 1838	930
Stoves, Mode of constructing cooking	D. Tisdale	Canton, Mass	Nov. 12, 1838	1, 006
Stoves, Mode of constructing fire-chambers for	B. F. and J. S. Gold	New York	July 15, 1840	1, 689
Stoves, Mode of constructing legs of	J. Gibson, jr	Albany, N. Y	Jan. 26, 1869	86, 147
Stoves, Mode of feeding fuel to the fire-box of cooking.	M. C. Cronk	Auburn, N. Y	Oct. 25, 1859	25, 930
Stoves, Molding covers of cook	G. W. Gardner	Troy, N. Y	Feb. 22, 1859	23, 022
Stoves, Name-plate for	P. Klotz	Baltimore, Md	Oct. 21, 1873	143, 913
Stoves on vessels, Frame for supporting	A. M. Duburn and J. Keith	Chicago, Ill	Mar. 5, 1867	62, 534
Stoves or furnaces, Heat-radiating attachment for	J. B. Hyzer	Janesville, Wis	June 13, 1865	48, 180
Stoves or ranges, Brazier for cooking	N. O. Bond	Hyannis, Mass	Feb. 13, 1866	52, 519
Stoves, Outside flue and damper for heating	H. G. Giles	Troy, N. Y	Sept. 13, 1864	44, 180
Stoves, Oven-door for cooking	S. S. Utter	Brooklyn, N. Y	June 11, 1872	127, 718
Stoves, Oven for cooking	J. Easterly	Albany, N. Y	Apr. 27, 1858	20, 131
Stoves, Oven for gas cook	L. Erving	Brooklyn, N. Y	Oct. 2, 1866	58, 398
Stoves, Oven in base-burning	A. Spitzmiller	Buffalo, N. Y	July 7, 1868	79, 607
Stoves, Oven of cooking	D. E. Paris	Troy, N. Y	June 9, 1868	78, 687
Stoves, Oven-plate for cooking	W. C. Davis	Cincinnati, Ohio	Nov. 15, 1870	109, 187
Stoves, Oven-rack for ship's	F. L. A. M. Smith	Brooklyn, N. Y	June 16, 1868	79, 018
Stoves, Plate for boiler-holes and tops of	J. B. Chollar	Albany, N. Y	Feb. 6, 1849	6, 087
Stoves, Plate for boiler-holes in cooking	G. E. Waring	Stamford, Conn	Dec. 5, 1848	5, 953
Stoves, Portable heating-attachment for	J. S. Perry	Albany, N. Y	Aug. 24, 1869	94, 026
Stoves, Putting gas-generators into parlor	S. B. Ellithorpe	Elmira, N. Y	Apr. 17, 1855	12, 717
Stoves, ranges, &c., Apparatus for roasting on cooking.	S. Pierce	Troy, N. Y	Sept. 29, 1857	18, 297

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Invention.	Inventor.	Residence.	Date.	No.
Stoves, ranges, &c., Illuminator for	B. Nott	Albany, N. Y	July 6, 1869	92, 346
Stoves, Reservoir for cooking	A. Lyman	Troy, N. Y	Sept. 1, 1868	81, 802
Stoves, Reservoir for cooking	A. Ransom	Albany, N. Y	Apr. 12, 1870	101, 916
Stoves, Safety-bolt for car	C. J. Smith	Norfolk, Va	Mar. 29, 1870	101, 322
Stoves, Ship's caboose and other cooking	L. Wood	New York	Nov. 26, 1840	1, 865
Stoves, Sink or box-hearth for	W. T. James	New York	Apr. 23, 1824	....
Stoves, Steam-apparatus for cooking	P. Getz	Lancaster, Pa	Jan. 11, 1840	1, 469
Stoves, Steaming-attachment for kerosene	R. B. Mitchell	Chicago, Ill	Mar. 21, 1871	112, 948
Stoves, Supplemental attachment for cooking	J. Day	Holley, N. Y	June 24, 1873	140, 252
Stoves, Supplementary oven for cooking	C. O. Line	Indianapolis, Ind	Sept. 2, 1873	142, 483
Stoves, Supplying air to wood and coal	F. A. Fickardt	Easton, Pa	Sept. 25, 1837	407
Stoves, tea-kettles, &c., Attaching and hanging covers to.	D. G. Littlefield	Albany, N. Y	Mar. 13, 1866	53, 251
Stoves, Top for gas-heating parlor	W. S. Walker	Alexandria, Pa	Dec. 18, 1866	60, 598
Stoves, Top for heating	E. Bussey	Troy, N. Y	July 9, 1872	128, 789
Stoves, Top for heating	H. Whittingham	New York, N. Y	June 4, 1872	127, 535
Stoves, Top-plate for cooking	M. Bennet	Dayton, Ohio	Aug. 16, 1870	106, 309
Stoves, Top-plate for cooking	C. Truesdale	Cincinnati, Ohio	Aug. 24, 1869	94, 149
Stoves, Top-plate for cooking	J. Van	Cincinnati, Ohio	Aug. 12, 1873	141, 838
Stoves, Top-plate for cooking	E. R. Wehrle	Pittsburgh, Pa	Feb. 4, 1873	135, 457
Stoves, Top plate for cooking	J. B. Crowley	Cincinnati, Ohio	Oct. 15, 1867	69, 951
Stoves, Ventilating-attachment for	W. M. Eames	Ashtabula, Ohio	June 14, 1870	104, 286
Stoves, Ventilating registers and dampers for	J. Magee	Lawrence, Mass	May 20, 1856	14, 940
Stoves, Warming-closet on cooking	D. E. Paris	Troy, N. Y	June 16, 1868	78, 890
Stoves, Water-reservoir attachment for cooking	D. E. Paris	Troy, N. Y	June 9, 1868	78, 686
Stoves, Water-reservoir for cooking	E. Bussey	Troy, N. Y	Aug. 7, 1866	57, 060
Stoves, Water reservoir for cooking	E. Bussey	Troy, N. Y	Feb. 8, 1870	99, 529
Stoves, Water-reservoir for cooking	C. O. Greene	Troy, N. Y	Mar. 23, 1869	88, 160
Stoves, Water-reservoir for cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Oct. 29, 1867	70, 206
Stoves, Water-reservoir for extension-top	C. H. Buck	Saint Louis, Mo	Dec. 10, 1867	71, 848
Stoves with double fire-places, Construction of cooking.	R. Jackson	Zanesville, Ohio	Mar. 19, 1840	1, 520
Stoves with elevated ovens, Construction of	J. P. Williston and W. A. Arnold.	Northampton, Mass	Nov. 16, 1839	1, 416
Straightening and polishing cylindrical bars or tubes, Apparatus for.	G. W. Dyson	Tinsley, England	Mar. 8, 1864	41, 836
Straightening bars of metal, Machine for	E. R. Cheny	Boston, Mass	May 10, 1870	102, 916
Straightening cylindrical bars of metal, Machine for.	J. Reese	Pittsburgh, Pa	June 18, 1867	65, 832
Straightening-machine	J. C. Warr	Wareham, Mass	Aug. 3, 1869	93, 256
Straightening tubes, bars, and shafting, Machine for.	A. Watkin	Pittsburgh, Pa	Apr. 23, 1872	125, 996
Strainer	F. Morton	Kingston, Mass	Mar. 12, 1867	62, 872
Strainer	W. Westlake	Chicago, Ill	Aug. 4, 1868	80, 790
Strainer and cut-off, Rain-water	S. Ayres	Danville, Ky	Aug. 31, 1869	94, 271
Strainer and funnel, Combined	C. W. and L. H. Heermance	New York, N. Y	Nov. 12, 1872	132, 963
Strainer and spout, Combined	W. Polyblank	Cleveland, Ohio	Aug. 29, 1865	49, 650
Strainer, Bale-hoop	E. A. Field	Sidney, Me	Nov. 14, 1865	50, 925
Strainer, Beer	C. M. Powers	Ridgewood, N. J	June 17, 1873	139, 971
Strainer, Cistern	N. G. Thomas	Ringgold, Tenn	May 6, 1873	138, 594
Strainer, Coffee	D. Sherwood	Lowell, Mass	July 9, 1861	32, 791
Strainer, Cream	R. W. Barnard	Kennett's Square, Pa	Sept. 23, 1873	143, 115
Strainer, Cream	G. J. Bennett	Horner, N. Y	July 9, 1867	66, 552
Strainer, Cream	H. Blake	Panama, N. Y	Nov. 12, 1872	133, 009
Strainer, Cream	H. Blake	Panama, N. Y	Nov. 22, 1870	109, 488
Strainer, Cream	J. Pease	Panama, N. Y	Aug. 27, 1872	130, 862
Strainer, Curd	R. and S. Mason	Burgh Hill, Ohio	July 18, 1871	117, 093
Strainer, Driven-well	C. E. Macomber and C. E. Whelpley.	Minneapolis, Minn	Mar. 1, 1870	100, 426
Strainer, Fluid	W. Dunn	Argosville, N. Y	Mar. 30, 1868	75, 002
Strainer, Fruit	D. O'Flanagan	Charlestown, Mass	Feb. 25, 1862	34, 520
Strainer, Milk	A. A. Bingham	Cooperstown, N. Y	Mar. 16, 1869	87, 904
Strainer, Milk	J. Gleason	Geneva, N. Y	July 4, 1854	11, 221
Strainer, Milk	A. Hassenpflug	Huntingdon, Pa	May 7, 1872	126, 542
Strainer, Milk	W. H. Johnson	Delhi, N. Y	Jan. 30, 1872	123, 261
Strainer, Milk	R. G. Kendall	Fairweather, Ill	July 9, 1872	128, 800
Strainer, Milk	W. F. Rossman	Hudson, N. Y	Sept. 10, 1867	68, 793
Strainer, Milk	P. S. Ryan	Rutland, Vt	Nov. 29, 1870	109, 763
Strainer, Milk	S. Van Auken and J. H. Graham.	Binghamton, N. Y	July 16, 1867	66, 733
Strainer, Milk	N. A. Wright	Prairie du Chien, Wis	Nov. 20, 1866	59, 885
Strainer, Milk-pail	I. Bunnell	Derby, Conn	Aug. 18, 1837	359
Strainer-pipe	A. Harris	Minneapolis, Minn	July 16, 1872	129, 025
Strainer, Press	J. E. Phillips	Philadelphia, Pa	Mar. 19, 1867	63, 090
Strainer, Sirup	W. E. Jacobs	Columbus, Ohio	June 11, 1867	65, 751
Strainer, Tea and coffee	A. B. Searles	Providence, R. I	May 3, 1870	102, 718
Strainer, Water	F. W. Mase	Oshkosh, Wis	Sept. 9, 1873	142, 711
Strainer, Wire-gauze	D. Sherwood	Lowell, Mass	Nov. 18, 1862	36, 982
Strainers, Construction of	R. J. P. Goodwin	Manchester, N. H	Apr. 16, 1867	63, 879
Straining machine, Cream	H. Baker, G. F. Holmes, and R. D. King.	Cortland, N. Y	Aug. 21, 1866	57, 452
Straining-press, Portable	S. Moore and H. Rogers	Sudbury, Mass	June 29, 1869	91, 958
Strap:				

See Back-band strap.
Boot-strap.
Boot and gaiter strap.
Boot-leg strap.
Breast-strap.
Car-strap.
Carriage cross-strap.
Clamp-strap.
Elastic-strap.
Garment-strap.
Garment-strap.
Gutter-strap.
Hame-strap.
Harness safety-strap.
Hitching-strap.
Hold-back strap.
Hose-ladder strap.
Interfering-strap.
Leather strap.
Net-strap.
Pantaloon-strap.
Razor-strap.
Shawl-strap.
Shoulder-strap.
Shovel-strap.
Skate-strap.
Suspender-strap.
Thill-strap.
Tie-strap.
Traveling-bag strap.
Traveling-bag-handle strap.
Tug-strap.

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Invention.	Inventor.	Residence.	Date.	No.
Strap-adjuster	H. E. Gemrig	Philadelphia, Pa	Dec. 19, 1865	51,581
Strap and hone, Combination of	G. Snyder	Philadelphia, Pa	July 28, 1863	39,362
Strap and punching machine	C. Angel	Philadelphia, Pa	July 15, 1829	....
Strap attachment	A. Bedford	Cold Water, Mich	Sept. 3, 1867	68,341
Strap-bolt	W. J. Lewis and H. W. Oliver, jr.	Pittsburgh, Pa	Oct. 6, 1868	82,725
Strap-clamp	J. J. G. Fisher	Foxborough, Mass	Aug. 8, 1865	49,252
Strap clamp, Metal	A. H. Hook	New York, N. Y	Dec. 13, 1859	26,434
Strap-coupling	T. Cogswell	Boston, Mass	Nov. 25, 1873	144,957
Strap-coupling as a substitute for buckles	L. and J. H. Beebe	Penfield, N. Y	Mar. 10, 1843	3,001
Strap-cutter	R. Crocker	Marshalltown, Iowa	Oct. 3, 1871	119,578
Strap-fastener	J. B. Armstrong	Corunna, Mich	May 19, 1868	77,946
Strap-fastener	S. W. Durham	Ipava, Ill	Feb. 25, 1868	74,807
Strap-fastener	A. G. McWhirt	Galesburgh, Ill	May 10, 1864	42,674
Strap-fastener	W. R. Wing	Newark, N. J	May 3, 1870	102,640
Strap-fastening	C. F. Beverly	Salem, Ohio	Jan. 16, 1845	3,884
Strap-fastening	R. Gibbons	San Francisco, Cal	Dec. 17, 1867	72,385
Strap-holder	H. W. Burgess	Ithaca, N. Y	Jan. 14, 1868	73,230
Strap-holder	G. B. Kirkham	New York, N. Y	Feb. 25, 1868	74,916
Strap-holding device	G. W. R. Combs	Alliance, Ohio	Oct. 29, 1867	70,320
Strap-holding device	J. Way	Waterbury, Conn	Aug. 18, 1868	81,311
Strap-machine	A. T. Stowe	Worcester, Mass	Apr. 16, 1872	125,766
Strap ring or clamp	J. Cogan	Boston, Mass	Oct. 31, 1865	50,688
Straw and feed cutter	G. Pedersen	Chicago, Ill	May 18, 1869	90,295
Straw and feed cutter	A. Werner	Buffalo, N. Y	Aug. 30, 1870	106,975
Straw and fodder cutting machine	S. Gilson	Arcadia, N. Y	June 27, 1838	807
Straw and fodder cutting machine	S. Whitlock	Vermont	Mar. 3, 1817	....
Straw and grain, Belt for conveying	J. Blue	Covert, N. Y	Mar. 14, 1846	4,413
Straw and grain separator	A. Bowen	Wadesville, Va	Oct. 24, 1854	11,824
Straw and grain separator	A. B. Davis	Philadelphia, Pa	Dec. 16, 1862	37,154
Straw and grain separator	J. A. Taplin	Fishkill, N. Y	Nov. 1, 1853	10,191
Straw and hay cutter	J. D. Cochran	Milford, N. H	July 30, 1861	32,962
Straw and hay cutter	C. D. Ingraham	South Hadley Falls, Mass	May 6, 1862	35,200
Straw and hay cutter	J. Luckey	New York	Mar. 9, 1833	....
Straw and hay cutter	J. Luckey	New York	Dec. 16, 1833	....
Straw and hay cutter	S. C. Stetson	North Bridgewater, Mass	Jan. 7, 1862	34,076
Straw and hay cutter, Horizontal	P. Moody	Philadelphia, Pa	July 8, 1834	....
Straw and hay cutting machine	M. Coates and E. Evans	....	Apr. 30, 1804	....
Straw and hay cutting machine	W. O. Hickok	Harrisburgh, Pa	Feb. 22, 1859	23,025
Straw and hay cutting machine	M. McDonald	Topsham, Me	June 10, 1824	....
Straw and hay cutting machine	D. T. Robinson	Boston, Mass	Feb. 5, 1867	61,871
Straw and hay cutting machine	H. Silliman	Perry Village, N. Y	Mar. 30, 1837	158
Straw and hay knife	D. Fasig	Rowsburgh, Ohio	Sept. 25, 1866	58,237
Straw and other paper board, Manufacture of	B. F. Field	Beloit, Wis	July 26, 1870	105,790
Straw and stalk cutter	P. S. Clinger and C. Cremer	Conestoga Centre, Pa	Apr. 27, 1858	20,038
Straw and stalk cutter	O. W. Preston, jr., and W. W. Farnham.	Corning, N. Y	July 31, 1860	29,442
Straw and vegetable cutting machine	T. Hopper	New Brunswick, N. J	Mar. 15, 1839	1,103
Straw-board, Apparatus for drying	W. H. Severson	Cohoes, N. Y	Oct. 3, 1865	50,280
Straw-board, Article of	S. T. Merrill	Beloit, Wis	July 20, 1869	92,863
Straw-board for the construction of buildings, Manufacture of.	J. M. Cobb	Beloit, Wis	Feb. 7, 1871	111,611
Straw-board, Machine for attaching thin paper to	M. Fitzgibbons	Brooklyn, N. Y	May 24, 1870	103,319
Straw-board, &c., Machine for lining	B. F. Field	Beloit, Wis	Jan. 17, 1871	111,048
Straw-board, sheets of paper, &c., Apparatus for drying.	R. T. Knight	Philadelphia, Pa	Mar. 26, 1867	63,259
Straw, Boiler for treating	T. A. Nixon	Philadelphia, Pa	Oct. 3, 1865	50,266
Straw-braid trimming machine	H. H. Robbins	Middleborough, Mass	Feb. 18, 1841	1,984
Straw-carrier	C. W. Glover	Farm Ridge, Ill	Nov. 23, 1858	22,117
Straw-carrier	W. Hiler	Branchport, N. Y	Aug. 6, 1867	67,543
Straw-carrier	W. Parker	Washington, Ohio	Apr. 7, 1868	76,513
Straw-carrier	W. Pierpoint	Salem, N. J	May 7, 1850	7,349
Straw-carrier	R. Tomlinson	Jackson, Mich	June 27, 1846	4,594
Straw-carrier and grain-separator	W. K. Osborn	Chester, N. J	May 13, 1863	35,250
Straw-cutter	A. J. Adams	Climax Prairie, Mich	Sept. 13, 1864	44,148
Straw-cutter	T. Allison	Milton, N. Y	Sept. 6, 1853	10,001
Straw-cutter	J. Ambrun	Leavenworth City, Kans	Nov. 3, 1868	83,682
Straw-cutter	J. Ambrun	Leavenworth, Kans	May 3, 1870	102,470
Straw-cutter	T. D. Anderson	Bardstown, Ky	Dec. 16, 1873	145,476
Straw-cutter	J. J. Andrew	Saltilloville, Ind	Mar. 31, 1868	76,137
Straw-cutter	J. J. Andrew	Saltilloville, Ind	Feb. 23, 1869	87,232
Straw-cutter	J. T. Asbury	Taylorsville, N. C	Sept. 6, 1853	9,984
Straw-cutter	E. G. Augustin	New York	July 6, 1835	....
Straw-cutter	D. Babcock	Dryden, N. Y	Aug. 10, 1858	21,110
Straw-cutter	E. Baker	Fredonia, N. Y	May 31, 1859	24,186
Straw-cutter	W. H. Baker, D. Dean, and B. L. Fetherolf.	Tamaqua, Pa	Dec. 27, 1859	26,554
Straw-cutter	H. Baldwin	New Haven, Conn	June 25, 1872	128,273
Straw-cutter	J. Ball	Barnesville, Ohio	Nov. 17, 1857	18,624
Straw-cutter	W. Barrett	Stephentown, N. Y	Dec. 29, 1857	18,946
Straw-cutter	W. S. Bartle and E. Vaughn	Newark, N. Y	July 15, 1856	15,320
Straw-cutter	J. W. Bartlett	Harmer, Ohio	Oct. 23, 1866	58,974
Straw-cutter	A. J. Bell	Bloomingburgh, N. Y	Jan. 7, 1868	73,157
Straw-cutter	J. H. Bennett	Bennington, Vt	Feb. 20, 1855	12,407
Straw-cutter	J. Bean and B. Wright	Hudson, Mich	May 10, 1859	23,890
Straw-cutter	G. M. Beardsley	Fentonville, Mich	Apr. 9, 1867	63,692
Straw-cutter	W. A. Bickle and R. Chesnut	Richmond, Ind	Apr. 9, 1867	63,606
Straw-cutter	E. F. Bishop	Burton, Ohio	Oct. 4, 1864	44,507
Straw-cutter	S. G. Blackman	Norwalk, Conn	Feb. 10, 1846	4,371
Straw-cutter	B. C. Blomsten	Waupaca, Wis	Feb. 28, 1871	112,113
Straw-cutter	A. F. Blunk	Indianapolis, Ind	Sept. 13, 1859	25,378
Straw-cutter	C. T. Botts	Richmond, Va	Mar. 4, 1843	2,983
Straw-cutter	J. H. Bradley	Hillsborough, Ohio	May 9, 1871	114,640
Straw-cutter	J. Brockway	Cambria, N. Y	July 11, 1865	48,649
Straw-cutter	J. W. Brockway	New York, N. Y	Oct. 6, 1868	82,685
Straw-cutter	L. Brooks	Great Falls, N. H	Dec. 14, 1858	22,336
Straw-cutter	A. D. Brown	Columbus, Ga	Oct. 4, 1859	25,700
Straw-cutter	C. H. Brown	Bloomingburgh, N. Y	Jan. 19, 1869	85,993

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Straw-cutter	A. Buch	West Earl Township, Pa	Nov. 5, 1867	70, 404
Straw-cutter	J. D. Burdick	New Haven, Conn	July 30, 1867	67, 261
Straw-cutter	T. and E. Burrel	Seneca, N. Y	Sept. 11, 1849	6, 703
Straw-cutter	W. W. Burson	Rockford, Ill	Apr. 16, 1867	63, 852
Straw-cutter	D. B. Caldwell	Cincinnati, Ohio	Aug. 7, 1860	29, 463
Straw-cutter	R. Carkhuff	Lewisburgh, Pa	Mar. 31, 1863	38, 077
Straw-cutter	G. Catchpole	Geneva, N. Y	Sept. 5, 1846	4, 747
Straw-cutter	D. Chaffee	Rome, Pa	July 13, 1869	92, 583
Straw-cutter	M. Clements	Worcester, Mass	Dec. 15, 1857	18, 887
Straw-cutter	L. Clinton	North Haven, Conn	July 10, 1855	13, 215
Straw-cutter	A. Y. Clough	Clarkston, Mich	June 21, 1864	43, 254
Straw-cutter	A. G. Coes	Worcester, Mass	Sept. 1, 1857	18, 084
Straw-cutter	S. Colahan	Cleveland, Ohio	Aug. 16, 1870	106, 329
Straw-cutter	M. Cole	Colebrook, Conn	Mar. 27, 1866	53, 416
Straw-cutter	R. Conarroe	Camden, Ohio	Oct. 16, 1866	58, 778
Straw-cutter	J. C. Concklin	Peekskill, N. Y	May 2, 1843	3, 066
Straw-cutter	J Conner	Richmond, Ind	Feb. 13, 1866	52, 537
Straw-cutter	J. W. Cope	Franklin County, Tenn	Apr. 22, 1835	......
Straw-cutter	J. A. Cornish	Marshfield, Mo	Sept. 26, 1871	119, 326
Straw-cutter	I. A. Cowdery and G. W. Cowdery.	North Middletown, Ky., and Great Bend, Ohio.	Oct. 30, 1860	30, 529
Straw-cutter	E. A. Crallé, jr	Brickland, Va	Nov. 8, 1870	108, 974
Straw-cutter	D. C. Cumings	Fulton, N. Y	Aug. 7, 1855	13, 385
Straw-cutter	E. G. Cushing	Dryden, N. Y	May 5, 1857	17, 207
Straw-cutter	R. Daniels	Woodstock, Vt	July 2, 1850	7, 472
Straw-cutter	R. Daniels	Woodstock, Vt	Apr. 26, 1853	9, 684
Straw-cutter	R. Daniels	Woodstock, Vt	June 21, 1859	24, 446
Straw-cutter	J. Davis	Marysville, Va	Aug. 19, 1833	......
Straw-cutter	J. Dawson	Barnesville, Ohio	Dec. 14, 1852	9, 470
Straw-cutter	J. Deakyne	Petersburgh, Va	Apr. 2, 1835	......
Straw-cutter	B. Densmore	Kendall, N. Y	June 6, 1848	5, 622
S raw-cutter	J. H. Dickinson	Chicopee Falls, Mass	June 20, 1871	116, 033
Straw-cutter	W. S. Dillebay	Shelby County, Ky	Jan. 3, 1854	10, 362
Straw-cutter	E. Douty	Collomsville, Pa	Apr. 27, 1869	89, 389
Straw-cutter	J. B. Drake	Goshen, Ind	May 17, 1859	24, 014
Straw-cutter	W. J. Duval	Baltimore, Md	Mar. 28, 1838	665
Straw-cutter	A. B. Earle	Oneonta, N. Y	Feb. 24, 1852	8, 753
Straw-cutter	A. B. Earle	Franklin, N. Y	Aug. 22, 1854	11, 548
Straw-cutter	J. S. Eastman	Baltimore, Md	Feb. 15, 1838	600
Straw-cutter	G. A. Edwards	Centralia, Ill	May 5, 1868	77, 599
Straw-cutter	N. Edwards and E. G. Day	Chittenden County, Vt., and New York, N. Y.	May 1, 1860	28, 068
Straw-cutter	J. Eiberweiser and R. Weber	Cincinnati, Ohio	Sept. 18, 1866	58, 080
Straw-cutter	J. Eiberweiser	Cincinnati, Ohio	Oct. 29, 1872	132, 645
Straw-cutter	W. Elder	Mill Hall, Pa	Oct. 19, 1869	95, 887
Straw-cutter	S. Elliott	Richmond, Ind	May 10, 1859	23, 909
Straw-cutter	S. Elliott	Richmond, Ind	Nov. 5, 1867	70, 539
Straw-cutter	S. F. Estell	Richmond, Ind	Mar. 23, 1869	88, 023
Straw-cutter	L. Evans	Fayetteville, N. Y	Apr. 9, 1872	125, 555
Straw-cutter	W. H. Evans	Richmond, Ind	June 18, 1867	65, 893
Straw-cutter	W. H. Evans and W. H. Wainwright.	Indianapolis, Ind	Feb. 4, 1868	73, 961
Straw-cutter	J. Everett	Geneva, N. Y	Feb. 10, 1836	......
Straw-cutter	L. B. Fisher	Cold Water, Mich	Oct. 30, 1855	13, 718
Straw-cutter	F. Fitzpatrick	Cincinnati, Ohio	May 29, 1855	12, 974
Straw-cutter	C. Foss	Painesville, Ohio	July 15, 1856	15, 333
Straw-cutter	A. W. Fox	Athens, Pa	May 17, 1859	24, 020
Straw-cutter	W. B. Frederick	Pontiac, Mich	Mar. 10, 1863	37, 861
Straw-cutter	C. T. Frost	Medfield, Mass	May 8, 1866	54, 525
Straw-cutter	W. Gale	Louisville, Ky	Dec. 21, 1852	9, 482
Straw-cutter	W. Gale	Troy, N. Y	Sept. 12, 1854	11, 667
Straw-cutter	W. Gale	Chicopee Falls, Mass	Jan. 29, 1867	61, 617
Straw-cutter	W. Gale	Chicopee Falls, Mass	Feb. 12, 1867	61, 932
Straw-cutter	W. Gale	Chicopee Falls, Mass	Feb. 12, 1867	61, 933
Straw-cutter	W. Gale	Peekskill, N. Y	May 18, 1869	90, 090
Straw-cutter	G. S. Garth	Mill Hall, Pa	Feb. 1, 1870	99, 308
Straw-cutter	G. S. Garth	Mill Hall, Pa	Nov. 15, 1870	109, 197
Straw-cutter	C. S. Gaylord	Gaylord's Bridge, Conn	Nov. 6, 1843	3, 331
Straw-cutter	J. H. Gooch	Oxford, N. C	Aug. 5, 1856	15, 485
Straw-cutter	W. P. Goolman	Indianapolis, Ind	Aug. 30, 1864	44, 042
Straw-cutter	A. Gordon	Rochester, N. Y	Feb. 17, 1863	37, 687
Straw-cutter	A. Gordon	Rochester, N. Y	July 31, 1866	56, 743
Straw-cutter	H. Gottfried	New York, N. Y	Aug. 14, 1866	57, 121
Straw-cutter	C. G. Grabo	Greenfield, Mich	June 23, 1863	38, 959
Straw-cutter	W. Grantham	Marshall's Ferry, Tenn	June 18, 1839	1, 175
Straw-cutter	O. C. Green	Dublin, Ind	Nov. 2, 1858	21, 954
Straw-cutter	W. Green and M. McFisher	Chattanooga, Tenn	Nov. 16, 1858	22, 072
Straw-cutter	B. R. Greene	Warwick, R. I	Aug. 8, 1833	......
Straw-cutter	B. F. Grimes	Memphis, Tenn	Sept. 12, 1871	118, 926
Straw-cutter	P. P. Gross	Palmyra, Mo	Feb. 28, 1871	112, 241
Straw-cutter	J. F. Hammond	North Sudbury, Mass	Jan. 7, 1868	78, 180
Straw-cutter	L. A. Harper	Russellville, Ky	Aug. 15, 1848	5, 717
Straw-cutter	J. T. Harvey	Murrysville, Pa	Nov. 19, 1867	71, 000
Straw-cutter	H. B. Hawkins	Akron, Ohio	Aug. 27, 1861	33, 147
Straw-cutter	T. Hazard	Wilmington, Ohio	July 2, 1872	128, 621
Straw-cutter	W. G. Hermance	Albany, N. Y	Mar. 4, 1863	34, 573
Straw-cutter	C. R. Hewett	Waupun, Wis	Jan. 24, 1865	45, 997
Straw-cutter	W. O. Hickok	Harrisburgh, Pa	Feb. 23, 1858	19, 4[illegible]5
Straw-cutter	S. B. Hiles and J. B. Danner	Saltilloville, Ind	July 21, 1868	80, 175
Straw-cutter	P. Hill and C. E. Jones	Millport, N. Y	Sept. 8, 1859	18, 146
Straw-cutter	W. Hinds	Little Falls, N. Y	Feb. 22, 1859	23, 062
Straw-cutter	R. Hodgin	Barnesville, Ohio	May 2, 1854	10, 860
Straw-cutter	L. B. Hoit	Cedar Falls, Iowa	May 1, 1866	54, 351
Straw-cutter	L. B. Hoit	Cedar Falls, Iowa	Mar. 10, 1868	75, 969
Straw-cutter	W. W. Hollman	Eddyville, Ky	Mar. 30, 1858	19, 779
Straw-cutter	E. F. Holloway	Knightstown, Ind	June 27, 1865	48, 403
Straw-cutter	N. Holmes	Laona, N. Y	Oct. 15, 1867	69, 915
Straw-cutter	N. Homes	Laona, N. Y	Jan. 3, 1860	26, 676

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Straw-cutter	W. Hovey	Worcester, Mass	Feb. 12, 1844	3,431
Straw-cutter	J. Howlet	Greensborough, N. C	Sept. 7, 1833	....
Straw-cutter	A. A. Hull	Croton, N. Y	Dec. 4, 1843	3,363
Straw-cutter	F. B. Hunt	Cincinnati, Ohio	Dec. 27, 1859	27,637
Straw-cutter	F. B. Hunt	Richmond, Ind	Jan. 5, 1864	41,070
Straw-cutter	F. B. Hunt	Richmond, Ind	Oct. 19, 1869	96,004
Straw-cutter	L. B. Hyatt	Flemington, Pa	June 29, 1869	91,939
Straw-cutter	J. Hyde	Darien, N. Y	Feb. 23, 1836	....
Straw-cutter	A. E. James	Decatur, Ill	Dec. 27, 1859	26,592
Straw-cutter	L. M. Johnson	Hillsborough, Ohio	June 18, 1872	128,046
Straw-cutter	J. S. Jones	Covington, Ind	Apr. 12, 1870	101,741
Straw-cutter	D. S. Kahler	Elkhart, Ind	Oct. 10, 1865	50,366
Straw-cutter	J. K. Keller	Hagerstown, Md	Feb. 11, 1873	135,816
Straw-cutter	J. C. Kenedy	Logansport, Ind	Jan. 17, 1865	45,925
Straw-cutter	W. B. Kern	Middlebourne, Va	Sept. 18, 1860	30,067
Straw-cutter	R. Ketcham	Seneca Castle, N. Y	Oct. 4, 1853	10,072
Straw-cutter	A. Kindermann	Cleveland, Ohio	Sept. 30, 1873	143,356
Straw-cutter	J. B. King	Athens, Tenn	May 15, 1841	2,095
Straw-cutter	W. Lackey	Worcester, Mass	Apr. 10, 1855	12,683
Straw-cutter	E. D. Lady	Nashville, Tenn	Aug. 28, 1860	29,797
Straw-cutter	J. K. Landis	East Hempfield, Pa	Aug. 26, 1843	3,234
Straw-cutter	J. K. Landis	Lancaster, Pa	Apr. 13, 1858	19,935
Straw-cutter	J. S. Lash	Carlisle, Pa	Oct. 11, 1859	25,789
Straw-cutter	J. Lashbrooks	Rockport, Ind	Nov. 2, 1858	21,970
Straw-cutter	J. Laughlin	Gettysburgh, Pa	Mar. 31, 1868	76,209
Straw-cutter	L. Leavenworth	Trumansburgh, N. Y	Oct. 11, 1859	25,744
Straw-cutter	N. Lezat	New Baltimore, N. Y	Dec. 6, 1864	45,376
Straw-cutter	R. Leggett and R. Gittus	Mildenhall, England	Nov. 21, 1865	51,116
Straw-cutter	I. Lewis	Knoxville, Tenn	Sept. 12, 1833	....
Straw-cutter	W. Lewis	Edgefield Court-House, S.C	June 19, 1847	5,169
Straw-cutter	J. H. Lilly	Bardstown, Ky	Oct. 16, 1860	30,414
Straw-cutter	C. A. Lundy	Marshalltown, Iowa	Mar. 10, 1868	75,437
Straw-cutter	A. S. Macomber	Bennington, Vt	Nov. 5, 1850	7,756
Straw-cutter	C. B. Mallory	Fredonia, N. Y	Apr. 3, 1860	27,727
Straw-cutter	T. E. Marable	Petersburgh, Va	Apr. 16, 1872	125,822
Straw-cutter	J. Marchant	Cambridge, Ind	July 17, 1866	56,428
Straw-cutter	M. M. Marshall	Smithfield, Va	July 1, 1836	....
Straw-cutter	A. P. Massey	Cleveland, Ohio	Aug. 23, 1870	106,707
Straw-cutter	J. W. Mauzy and J. Hughes	Richmond and Cambridge, Ind.	Dec. 10, 1867	72,062
Straw-cutter	I. Mayfield	Elkton, Ky	Sept. 19, 1846	4,766
Straw-cutter	T. L. Maynard	Southfield, Mich	Aug. 27, 1872	130,930
Straw-cutter	I. W. McGaffey	Buffalo, N. Y	Jan. 31, 1860	27,003
Straw-cutter	J. McLaughlin	Monongahela City, Pa	July 8, 1862	35,828
Straw-cutter	J. McMahel	Hamilton, Ohio	Aug. 15, 1865	49,478
Straw-cutter	J. McMahel	Hamilton, Ohio	Nov. 6, 1866	59,433
Straw-cutter	J. McMath	Crawford, Pa	June 26, 1835	....
Straw-cutter	C. Merry	Ithaca, N. Y	Jan. 27, 1843	2,930
Straw-cutter	W. Mitchell	Abbeville district, S. C	Nov. 19, 1833	....
Straw-cutter	J. Moore	Roan County, Tenn	Dec. 23, 1834	....
Straw-cutter	O. Moses	Malone, N. Y	July 15, 1856	15,342
Straw-cutter	O. Moses	Malone, N. Y	May 25, 1858	20,361
Straw-cutter	J. Moyle	Martinsburgh, Va	Sept. 6, 1853	9,991
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Jan. 26, 1858	19,200
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Nov. 8, 1859	26,046
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Apr. 28, 1863	38,323
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Aug. 21, 1866	57,363
Straw-cutter	N. Murphree	Nashville, Tenn	Sept. 17, 1834	....
Straw-cutter	N. Murphree	Nashville, Tenn	Jan. 21, 1835	....
Straw-cutter	J. W. Neal	Big Lick, Va	Aug. 29, 1871	118,636
Straw-cutter	W. Newbury	Clarksville, Mo	Jan. 1, 1861	31,029
Straw-cutter	W. Newlin	Ash Ridge, Ohio	Nov. 24, 1863	40,705
Straw-cutter	F. B. Newton	Bouckville, N. Y	July 6, 1869	92,342
Straw-cutter	E. Odell	Winterset, Iowa	Apr. 7, 1863	38,120
Straw-cutter	H. Ogborn	Richmond, Ind	Mar. 5, 1867	62,674
Straw-cutter	H. Ogborn	Richmond, Ind	Nov. 9, 1869	96,609
Straw-cutter	H. Ogborn	Richmond, Ind	July 19, 1870	105,481
Straw-cutter	J. B. Okey	Indianapolis, Ind	Apr. 6, 1858	19,895
Straw-cutter	J. B. Okey	Indianapolis, Ind	Sept. 13, 1859	25,469
Straw-cutter	J. K. O'Neil	Kingston, N. Y	Oct. 24, 1871	120,314
Straw-cutter	N. O'Neil	Purchase Line, Pa	June 14, 1870	104,342
Straw-cutter	D. J. Owen	Springville, Pa	June 30, 1863	39,062
Straw-cutter	A. Park	Germanville, Iowa	Mar. 7, 1871	112,484
Straw-cutter	I. I. Parker	Marietta, Ohio	Oct. 11, 1853	10,112
Straw-cutter	L. Parker	Winterset, Iowa	June 24, 1862	35,702
Straw-cutter	H. Parks	Athens, N. Y	Nov. 12, 1867	70,891
Straw-cutter	G. W. Parsons	Harrisburgh, Pa	Apr. 28, 1868	77,209
Straw-cutter	H. Peckham	King's Ferry, N. Y	June 26, 1855	13,137
Straw-cutter	C. P. Perry	Norristown, Pa	June 15, 1858	20,582
Straw-cutter	J. G. Perry	South Kingston, R. I	Mar. 24, 1863	37,974
Straw-cutter	J. G. Perry	South Kingston, R. I	July 14, 1863	39,241
Straw-cutter	J. G. Perry	South Kingston, R. I	Dec. 18, 1866	60,530
Straw-cutter	S. Pettibone	Corunna, Mich	Sept. 18, 1866	58,129
Straw-cutter	S. Pettibone	Corunna, Mich	July 2, 1867	66,386
Straw-cutter	J. A. Pitts	Buffalo, N. Y	Jan. 16, 1855	12,254
Straw-cutter	C. Polley	Sinking Springs, Ohio	June 19, 1866	55,703
Straw-cutter	D. Porter	Cleveland, Ohio	July 5, 1864	43,459
Straw-cutter	D. J. Powers	Madison, Wis	Feb. 14, 1860	27,154
Straw-cutter	T. Preston	Wallingford, Conn	Oct. 1, 1830	....
Straw-cutter	T. J. Price	Auburn, Ky	Jan. 23, 1866	52,199
Straw-cutter	W. I. Protzman and W. L. McClarnan.	Morgantown, W. Va	July 9, 1872	128,904
Straw-cutter	E. P. Ralph and J. Hannan	Gallipolis, Ohio	Oct. 20, 1868	83,315
Straw-cutter	L. S. Rand	Townshend, Vt	Nov. 18, 1846	4,858
Straw-cutter	R. A. Rash	Petersburgh, Va	Sept. 9, 1873	142,726
Straw-cutter	G. U. and J. Relyea	Veteran and Horseheads, N. Y.	Mar. 19, 1861	31,740
Straw-cutter	I. Reynolds	Bellefontaine, Ohio	Feb. 5, 1861	31,328

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Invention.	Inventor.	Residence.	Date.	No.
Straw-cutter	J. C. Rich	Penfield, N. Y	Jan. 7, 1846	4,351
Straw-cutter	I. J. Richardson	New York	Apr. 10, 1843	3,036
Straw-cutter	I. J. Richardson	New York, N. Y	Feb. 10, 1846	4,384
Straw-cutter	I. J. Richardson	New York, N. Y	Apr. 17, 1849	6,319
Straw-cutter	J. Riley	Detroit, Mich	May 12, 1868	77,762
Straw-cutter	S. Ring	Cleveland, Ohio	July 24, 1860	29,311
Straw-cutter	J. Romans	Romansville, Pa	June 20, 1848	5,642
Straw-cutter	H. S. Root and T. Loyd	Muncy, Pa	Apr. 17, 1860	27,931
Straw-cutter	I. Rose	Akron, Ohio	Apr. 10, 1855	12,694
Straw-cutter	J. P. Ross	Lewisburgh, Pa	Sept. 1, 1843	3,251
Straw-cutter	G. Roushe	Lima, Ohio	May 24, 1859	24,144
Straw-cutter	J. V. Rowlett	Richmond, Ind	Nov. 16, 1869	96,970
Straw-cutter	D. Russell	Drewersburgh, Ind	Apr. 10, 1855	12,696
Straw-cutter	E. P. Russell	Manlius, N. Y	Mar. 11, 1856	14,410
Straw-cutter	E. P. Russell	Manlius, N. Y	Apr. 13, 1858	19,952
Straw-cutter	J. H. Ryland	Baltimore, Md	Sept. 21, 1869	95,047
Straw-cutter	W. J. Rylander	Columbus, Ga	Oct. 3, 1846	4,794
Straw-cutter	F. D. Sampson	East Brookfield, Conn	Feb. 5, 1847	4,956
Straw-cutter	J. Sanford	Redding, Conn	Oct. 12, 1843	3,304
Straw-cutter	J. Shiefferlin, jr	Tioga, Pa	Nov. 20, 1860	30,695
Straw-cutter	W. D. Schooley	Richmond, Ind	Aug. 22, 1865	49,554
Straw-cutter	W. D. Schooley	Richmond, Ind	Nov. 27, 1866	60,069
Straw-cutter	W. D. Schooley	Richmond, Ind	May 28, 1867	65,125
Straw-cutter	W. Schreck	Des Moines, Iowa	Aug. 27, 1867	68,243
Straw-cutter	C. Schultze and J. F. Schroder	Covington, Ky	Sept. 20, 1859	25,530
Straw-cutter	L. Sears	Perrysville, Ohio	Aug. 3, 1869	93,235
Straw-cutter	D. M. Sechler	Wooster, Ohio	Feb. 20, 1845	3,920
Straw-cutter	J. Secor	Bristol, Pa	Dec. 16, 1833	....
Straw-cutter	H. Sells	Vienna, Canada	Nov. 7, 1871	120,781
Straw-cutter	S. T. Sharp	Danville, Mo	Jan. 15, 1856	14,116
Straw-cutter	J. Shaw	Philadelphia, Pa	Nov. 19, 1833	....
Straw-cutter	V. J. Shryock	Folsomville, Ind	Dec. 13, 1870	110,164
Straw-cutter	T. C. Simonton and L. J. Wicks.	Paterson, N. J	Apr. 10, 1855	12,699
Straw-cutter	R. Sinclair, jr	Baltimore, Md	July 20, 1858	20,958
Straw-cutter	C. D. Skinner and D. Read	Haddam, Conn	Feb. 10, 1836	....
Straw-cutter	D. A. Smith	Pomeroy, Ohio	Sept. 24, 1867	69,264
Straw-cutter	H. M. Smith	Richmond, Va	Feb. 20, 1844	3,444
Straw-cutter	I. P. Smith and O. W. Seely	Rochester and Albany, N. Y	July 12, 1853	9,847
Straw-cutter	J. D. Smith	Richmond, Ind	Oct. 8, 1867	69,593
Straw-cutter	S. P. Smith	Crescent, N. Y	May 11, 1858	20,224
Straw-cutter	S. P. Smith	Crescent, N. Y	Aug. 9, 1859	25,054
Straw-cutter	B. Spencer	Lewisburgh, Pa	July 4, 1865	48,597
Straw-cutter	G. L. Squier	Chicopee Falls, Mass	Jan. 30, 1855	12,331
Straw-cutter	W. A. Staples	Lynchburgh, Va	Nov. 16, 1839	1,409
Straw-cutter	E. and J. Strothman	Milwaukee, Wis	Nov. 24, 1868	84,317
Straw-cutter	U. T. Stuart and C. E. Stewart	Fayette County, Tenn	Mar. 5, 1861	31,635
Straw-cutter	D. Sturgis	Byron, Mich	June 30, 1868	79,513
Straw-cutter	J. Sullivan	Lexington, N. C	Oct. 30, 1849	6,838
Straw-cutter	J. Sullivan	Lexington, N. C	May 13, 1851	8,084
Straw-cutter	J. L. Sullivan	Lexington, N. C	July 21, 1857	17,850
Straw-cutter	B. Suverkrup	Louisville, Ky	Dec. 31, 1867	72,936
Straw-cutter	E. Tarbox and C. F. Kneeland	Ogden, N. Y	June 22, 1836	....
Straw-cutter	E. Taylor	Rochester, N. Y	Oct. 12, 1844	3,791
Straw-cutter	E. Taylor	Rochester, N. Y	Nov. 6, 1844	3,811
Straw-cutter	O. C. Taylor	East Burlington, Pa	Feb. 12, 1861	31,417
Straw-cutter	J. M. Thatcher	Milton, Pa	Mar. 4, 1843	2,987
Straw-cutter	E. R. Thompson	Lansing, Mich	Mar. 9, 1869	87,602
Straw-cutter	J. A. Thompson	Cayuga, N. Y	Aug. 28, 1855	13,509
Straw-cutter	S. M. Thompson	Glasgow, Ky	Sept. 2, 1856	15,674
Straw-cutter	J. M. Tilford	Rutherford County, N. C	Dec. 31, 1833	....
Straw-cutter	J. Tittle	Johnstown, Pa	Apr. 27, 1858	20,103
Straw-cutter	H. Trumbull	Central College, Ohio	Nov. 8, 1859	26,062
Straw-cutter	M. Tuell	Penn Yan, N. Y	Oct. 18, 1870	108,411
Straw-cutter	L. Tupper	Auburn, N. Y	Aug. 28, 1849	6,678
Straw-cutter	J. E. Tyler	Roxobel, N. C	Aug. 27, 1872	130,883
Straw-cutter	S. Ustick	Philadelphia, Pa	Oct. 3, 1834	....
Straw-cutter	S. Ustick	Philadelphia, Pa	Feb. 5, 1835	....
Straw-cutter	S. Ustick	Philadelphia, Pa	May 29, 1835	....
Straw-cutter	D. Utley, jr., and P. Teed	Leicester, N. Y	Mar. 13, 1860	27,487
Straw-cutter	G. Utley	Chapel Hill, N. C	Sept. 27, 1845	4,209
Straw-cutter	P. Vandersande	Rochester, N. Y	Nov. 30, 1858	22,207
Straw-cutter	J. T. Wade	Augusta, Ga	Oct. 3, 1846	4,780
Straw-cutter	E. Warren	New York	Oct. 7, 1842	2,803
Straw-cutter	R. Washburn	Ramapo, N. Y	Apr. 28, 1863	38,346
Straw-cutter	J. T. Watson and H. E. Robinson.	Richmond, Ind	July 28, 1868	80,524
Straw-cutter	O. B. Wattles	Mooresborough, N. C	Apr. 16, 1861	32,096
Straw-cutter	C. M. Weathers	Rocheport, Mo	May 3, 1870	102,736
Straw-cutter	J. W. Webb	Mount Morris, N. Y	July 2, 1842	2,697
Straw-cutter	J. W. Webb	Lockport, N. Y	Feb. 10, 1846	4,378
Straw-cutter	T. Webb	Elyria, Ohio	Aug. 5, 1873	141,527
Straw-cutter	J. Weichart	San Francisco, Cal	Dec. 17, 1867	72,249
Straw-cutter	J. White	Antrim, N. H	May 15, 1849	6,454
Straw-cutter	D. H. Whittemore	Worcester, Mass	Apr. 29, 1862	35,121
Straw-cutter	D. H. Whittemore	Worcester, Mass	Aug. 9, 1864	43,811
Straw-cutter	J. R. Whittemore	Chicopee Falls, Mass	Aug. 20, 1861	33,119
Straw-cutter	J. R. Whittemore	Chicopee Falls, Mass	May 24, 1864	42,892
Straw-cutter	J. R. Whittemore	Chicopee Falls, Mass	Mar. 14, 1865	46,839
Straw-cutter	L. J. Wicks	Paterson, N. J	Nov. 13, 1855	13,807
Straw-cutter	T. H. and D. T. Willson	Harrisburgh, Pa	Feb. 23, 1858	19,462
Straw-cutter	S. Wilson	Darlington, S. C	Nov. 11, 1830	....
Straw-cutter	T. F. Wingo	McLemoresville, Tenn	Apr. 22, 1851	8,058
Straw-cutter	T. Wiles	Somerset, Ohio	June 10, 1856	15,108
Straw-cutter	J. M. Wolfolk	Oldham County, Ky	Feb. 21, 1836	....
Straw-cutter	I. Woodward	Mechanicsburgh, Ohio	Oct. 1, 1850	7,693
Straw-cutter	J. Worley	Hawkins County, Tenn	June 20, 1840	1,643
Straw-cutter	G. T. Wright	Cincinnati, Ohio	Aug. 1, 1865	49,190

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Straw-cutter	I. S. Wright	Elbridge, N. Y	Feb. 3, 1836	....
Straw-cutter	S. M. Yeaman	Elizabethtown, Ky	Nov. 7, 1854	11, 918
Straw-cutter	T. N. Young	Richmond, Ind	Oct. 26, 1869	96, 296
Straw-cutter and corn-sheller	W. Denson	Morgan County, Ala	May 2, 1835	....
Straw-cutter and feed-box, Combined	J. Burgess	Richmond, Ind	Oct. 5, 1869	95, 561
Straw-cutter and feed-mixer, Combined	E. F. Bishop	Burton, Ohio	Apr. 25, 1865	47, 386
Straw-cutter and corn-sheller, Convertible	S. J. Taylor	Rome, N. Y	Feb. 25, 1862	34, 533
Straw-cutter and corn-sheller, Combined	C. R. Hewett	Waupun, Wis	Jan. 7, 1868	73, 184
Straw-cutter, corn-sheller, and grinding-mill, Combined.	W. Sprague	Farnham, N. Y	Aug. 24, 1869	94, 145
Straw-cutter feed-apparatus	H. Trumbull	Central College, Ohio	Jan. 24, 1854	10, 451
Straw-cutter feed-roll	A. Gordon	Rochester, N. Y	Sept. 23, 1856	15, 761
Straw-cutter feed-roller	J. H. Sharp	Doylestown, Pa	Mar. 11, 1873	136, 774
Straw-cutter feed-roller	R. Sinclair, jr., and R. F. Maynard.	Baltimore, Md	Nov. 15, 1853	10, 238
Straw-cutter feed-roller	N. Nuckolls	Columbus, Ohio	Jan. 6, 1852	8, 638
Straw-cutter feeder	J. E. Erb	Baltimore, Md	July 2, 1850	7, 473
Straw-cutter feeder	D. Fasig	Rowsburgh, Ohio	Sept. 4, 1860	29, 868
Straw-cutter feeding-apparatus	H. W. Bertholf	Sugar Loaf, N. Y	Oct. 29, 1850	7, 727
Straw-cutter feeding-apparatus	D. Stiles, jr	Middleton, Mass	July 16, 1850	7, 514
Straw-cutter knives, Mounting	J. R. Nelson	Knoxville, Tenn	June 25, 1850	7, 461
Straw-cutter-knife spring	J. B. Stockton	Warren County, Ky	Sept. 26, 1854	11, 734
Straw-cutters, Adjustment of knives in	J. W. Webb	Aurora, N. Y	Oct. 8, 1850	7, 711
Straw-cutters, Affixing knife to	J. Doerksen	Derry Church, Pa	Dec. 13, 1864	45, 396
Straw-cutters, Cutting-gear of	J. Jones and A. Lyle	Rochester, N. Y	Nov. 8, 1853	10, 207
Straw-cutter gage	W. Gale	Louisville, Ky	Mar. 7, 1854	10, 592
Straw-cutter, Horizontal	R. A. B. Beech	Williamson County, Tenn.	Apr. 24, 1838	708
Straw-cutting and corn-shelling machine	C. Chamberlin	America, N. Y	Mar. 15, 1827	....
Straw-cutting knife	G. Utley	Petersburgh, Va	May 1, 1866	54, 446
Straw-cutting machine	W. Ayres and H. Gay	Windsor, Vt	Aug. 13, 1817	....
Straw-cutting machine	T. Benbow	Guilford County, N. C	Feb. 6, 1827	....
Straw-cutting machine	A. Bigelow	Weston, Mass	Feb. 13, 1818	....
Straw-cutting machine	C. T. Botts	Richmond, Va	Mar. 15, 1839	1, 102
Straw-cutting machine	A. Brayton and H. C. Green	Cheshire, Mass	Dec. 5, 1817	....
Straw-cutting machine	H. Camp	Newton, Ga	Aug. 27, 1850	7, 592
Straw-cutting machine	J. Canfield	Morristown, N. Y	June 26, 1809	....
Straw-cutting machine	J. Cleaveland	Franklin County, Pa	July 18, 1807	....
Straw-cutting machine	W. Commins	Livingston County, N. Y	Feb. 11, 1828	....
Straw-cutting machine	B. Connor	Portsmouth, N. H	July 20, 1807	....
Straw-cutting machine	L. Durham and J. S. Pleasants	Halifax County, Va	July 27, 1827	....
Straw-cutting machine	J. S. Eastman	Baltimore, Md	Jan. 29, 1822	....
Straw-cutting machine	W. Gale	Chicopee Falls, Mass	Dec. 18, 1860	31, 001
Straw-cutting machine	E. Gillett	Ellington, Conn	Jan. 9, 1838	553
Straw-cutting machine	L. Greene	Greene County, Ga	Dec. 21, 1819	....
Straw-cutting machine	B. A. and C. Hall	Middletown, Conn	Nov. 7, 1825	....
Straw-cutting machine	R. Haskell	Burlington, N. Y	May 25, 1809	....
Straw-cutting machine	J. Heavin	Montgomery County, Va	Apr. 17, 1806	....
Straw-cutting machine	E. Hotchkiss	Brattleborough, Vt	Aug. 2, 1808	....
Straw-cutting machine	E. Hotchkiss	Brattleborough, Vt	Jan. 18, 1817	....
Straw-cutting machine	J. Osborn	Blandford, Mass	Dec. 6, 1823	....
Straw-cutting machine	S. A. Sherwood	Poughkeepsie, N. Y	Apr. 11, 1818	....
Straw-cutting machine	R. J. Steele	Richmond, N. C	May 24, 1824	....
Straw-cutting machines, Mode of feeding and pressing the straw in.	I. W. Groff	Lampeter, Pa	Apr. 30, 1840	1, 573
Straw, Elevator for raising and stacking	S. Lewin	Poole, England	Nov. 22, 1870	109, 523
Straw goods, Die for manufacture of imitation	H. Lowenberg	New York, N. Y	Feb. 2, 1869	86, 426
Straw goods, Die for manufacture of imitation	H. Lowenberg	New York, N. Y	Mar. 22, 1870	101, 142
Straw goods, Electrotype die for making imitation	J. L. Kendall	New York, N. Y	Jan. 8, 1867	61, 074
Straw, hay, cabbage, paper, &c., Cutting	H. C. Jones	Salem Township, Ohio	Nov. 7, 1835	....
Straw, hay, &c., Cutting	J. S. Bishop	Wayne, Me	Mar. 12, 1834	....
Straw, hay, &c., Cutting	B. Davee	Leeds, Me	June 17, 1834	....
Straw, hay, &c., Machine for cutting	E. Dewey	Butternuts, N. Y	June 4, 1838	766
Straw, hay, &c., Machine for cutting	N. Safford	Springfield, Vt	Aug. 25, 1824	....
Straw, hay, rags, &c., Machine for cutting	J. Boynton	South Coventry, Conn	Nov. 25, 1838	1, 017
Straw, hay, &c., Spinning and twisting	P. G. Sheldon	Winchester, Conn	Apr. 8, 1835	....
Straw, hay, stalks, &c., Machine for cutting	J. Harland	Tompkinsville, Ky	Apr. 19, 1832	....
Straw-machine	A. Hall	Kent, N. Y	Nov. 7, 1835	....
Straw, Machine for separating grain and seeds from	R. Wallis	Baltimore, Md	Nov. 9, 1808	....
Straw or mill board	J. L. Thomson	Syracuse, N. Y	Feb. 4, 1873	135, 452
Straw plait, Trimming and pressing	D. Atherton	Providence, R. I	Apr. 26, 1811	....
Straw-pressing machine	E. T. Ford	Stillwater, N. Y	Feb. 27, 1866	52, 838
Straw-scatterer	M. Blair	Barry, Ill	Sept. 3, 1867	68, 343
Straw, Separating grain, &c., from and cutting	A. Look	Pittsfield, Mass	June 13, 1831	....
Straw-shaker	L. Ellig	Mill Creek Township, Lebanon County, Pa.	July 20, 1858	20, 976
Straw-stacker	S. Fullen	Franklin, Ind	Mar. 12, 1872	124, 564
Straw-stacking machine	W. Boggs	Covington, Ohio	Mar. 15, 1870	100, 716
Straw-stacking machine	D. M. Cochran and A. Gaar	Richmond, Ind	July 4, 1865	48, 519
Straw wove plait, Manufacturing	W. Pond	Wrentham, Mass	Feb. 28, 1811	....
Strawberry-bed, Mode of mulching	J. Brett	Geneva, Ohio	July 21, 1868	80, 053
Strawberry-box	H. C. Freeman	South Pass, Ill	Sept. 10, 1867	67, 620
Strawberry-culture, Device for	H. S. Robbins	Newton Falls, Ohio	July 14, 1868	80, 012
Strawberry-huller	J. W. D. Patten	Washington, D. C	June 28, 1870	104, 919
Strawberry-ripener	C. Jillson	Worcester, Mass	Oct. 1, 1867	69, 346
Strawberry-ripeners, Mold for making	C. Jillson	Worcester, Mass	July 7, 1868	79, 660
Strawberry-vine-trimming machine	H. C. Goodwin	Hamden, Conn	Dec. 31, 1867	72, 838
Strawberry-vines, Machine for removing runners from.	S. H. Warren and W. H. Defrees.	Weston and Newtonville, Mass.	Aug. 1, 1871	117, 705
Strawberry-vines, Method of retarding the growth of.	G. Burson	East Palestine, Ohio	July 13, 1869	92, 578
Street and station indicator	G. A. Jenks and J. J. Fawcett	Chicago, Ill	Nov. 1, 1870	108, 791
Street and station indicator for railway-cars	E. L. Dean	Newburgh, Ohio	June 21, 1870	104, 563
Street cleaning and watering machine	R. Deegan	New York, N. Y	June 6, 1854	11, 014
Street-cleaning machine	W. H. Hope	Washington, D. C	Apr. 30, 1861	30, 234
Street-crossing	J. Schley	Savannah, Ga	Oct. 24, 1871	120, 332
Street-crossing and sewer-inlet	J. A. Miller	New York, N. Y	Mar. 26, 1867	63, 284
Street-crossing, Iron	L. T. D'Epineuil and J. M. Letts.	Paris, France, and Washington, D. C.	May 19, 1863	38, 568

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Invention.	Inventor.	Residence.	Date.	No.
Street-leveling machine	L. Von Froben	Washington, D. C	Feb. 27, 1866	52, 915
Street-light	J. H. Kalb	Charleston, S. C	July 31, 1860	29, 382
Street-moistening compound	M. Marcus	New York, N. Y	May 3, 1870	102, 567
Street-roller, Caloric	M. J. Bendall	New York, N. Y	Nov. 9, 1869	96, 663
Street-sprinkler	J. A. Bancroft	Worcester, Mass	Apr. 12, 1870	101, 700
Street-sprinkler	L. F. Bancroft	Worcester, Mass	Apr. 3, 1866	53, 557
Street-sprinkler	L. F. Bancroft	Worcester, Mass	Mar. 3, 1868	75, 111
Street-sprinkler	L. F. Bancroft	Worcester, Mass	Mar. 19, 1872	124, 657
Street-sprinkler	J. F. Driggs	New York, N. Y	Sept. 2, 1856	15, 647
Street-sprinkler	C. O. Luce	Brandon, Vt	Apr. 28, 1857	17, 158
Street-sprinkler	R. Y. McConnell and G. Pringle	Rochester, N. Y	Nov. 30, 1869	97, 422
Street-sprinkler	W. C. Moores	Washington, D. C	Jan. 3, 1871	110, 775
Street-sprinkler	H. G. Stiebel	Cincinnati, Ohio	Apr. 2, 1872	125, 346
Street-sprinkling apparatus	J. D. Price	Smithsburgh, Md	Apr. 9, 1850	7, 273
Street-sprinkling machine	S. E. Cursons	Buffalo, N. Y	Apr. 4, 1871	113, 404
Street-sweeper	C. Geiger	Philadelphia, Pa	Sept. 16, 1873	142, 847
Street-sweeper	O. W. Kellogg	Fond du Lac, Wis	Mar. 4, 1873	136, 438
Street-sweeper	R. Y. McConnell and G. Pringle	Rochester, N. Y	Dec. 10, 1867	71, 894
Street-sweeper	J. W. McDonald	Chicago, Ill	Mar. 23, 1869	88, 194
Street-sweeper	W. Smith	Barnard Castle, England	July 29, 1873	141, 241
Street-sweeper	M. W. St. John and I. Brown	Leonardsville, N. Y	Oct. 13, 1857	18, 416
Street sweeping and cleaning machine	J. Whitworth	Manchester, England	June 1, 1843	3, 124
Street sweeping and sprinkling machine	D. D. Foley	Washington, D. C	Sept. 13, 1864	44, 174
Street-sweeping machine	T. Alden	New York, N. Y	Mar. 4, 1856	14, 341
Street-sweeping machine	C. S. Bishop	Easton, Pa	Sept. 4, 1849	6, 699
Street-sweeping machine	H. S. Blood	New Orleans, La	Feb. 23, 1864	41, 673
Street-sweeping machine	A. A. Consalvi	New York, N. Y	June 28, 1870	104, 707
Street-sweeping machine	T. Craig	Glasgow, North Britain	Nov. 5, 1872	132, 805
Street-sweeping machine	A. Crane	Newark, N. J	Oct. 12, 1858	21, 743
Street-sweeping machine	J. Critcherson	Boston, Mass	Sept. 15, 1857	18, 195
Street-sweeping machine	J. Critcherson	Boston, Mass	Feb. 10, 1863	37, 611
Street-sweeping machine	W. V. Daboll	Cranston, R. I	May 27, 1862	35, 365
Street-sweeping machine	J. Edson	Boston, Mass	Aug. 14, 1860	29, 577
Street-sweeping machine	S. Emlen	Philadelphia, Pa	Jan. 31, 1865	46, 094
Street-sweeping machine	W. H. Hope	Washington, D. C	Mar. 19, 1861	31, 762
Street-sweeping machine	S. Longley	Cincinnati, Ohio	Nov. 13, 1860	30, 644
Street-sweeping machine	T. Mussey	New London, Conn	Oct. 12, 1843	3, 298
Street-sweeping machine	J. Miller	Boston, Mass	Mar. 25, 1856	14, 512
Street-sweeping machine	J. Miller	Boston, Mass	Feb. 27, 1866	52, 873
Street-sweeping machine	L. J. O'Connor	Chicago, Ill	Oct. 21, 1873	143, 838
Street-sweeping machine	G. M. Ramsay	New York, N. Y	July 10, 1860	29, 101
Street-sweeping machine	D. H. Richards	Georgetown, Mass	July 1, 1856	15, 253
Street-sweeping machine	A. J. Roberts	Boston, Mass	May 18, 1858	20, 303
Street-sweeping machine	A. J. Roberts	Boston, Mass	Oct. 24, 1865	50, 629
Street-sweeping machine	A. J. Roberts	Boston, Mass	Oct. 24, 1865	50, 630
Street-sweeping machine	P. Robinson	Leonardsville, N. Y	July 20, 1843	3, 183
Street-sweeping machine	E. A. G. Roulstone	Boston, Mass	Jan. 31, 1871	111, 477
Street-sweeping machine	D. Sargent	New York, N. Y	Apr. 25, 1865	47, 461
Street-sweeping machine	D. Shattuck	Boston, Mass	Nov. 17, 1857	18, 664
Street-sweeping machine	R. A. Smith	Brooklyn, N. Y	Sept. 9, 1856	15, 710
Street-sweeping machine	R. A. Smith	New York, N. Y	Mar. 13, 1860	27, 481
Street-sweeping machine	R. A. Smith	New York, N. Y	Apr. 10, 1860	27, 839
Street-sweeping machine	R. A. Smith and J. Hartman, jr	Philadelphia, Pa	Feb. 6, 1855	12, 354
Street-sweeping machine	M. W. St. John and I. Brown	Leonardsville, N. Y	Nov. 20, 1855	13, 830
Street-sweeping machine	M. F. Wickersham	Springfield, Ill	Dec. 20, 1864	45, 548
Street-sweeping machine	M. F. Wickersham	Springfield, Ill	Sept. 21, 1869	95, 177
Street-sweeping machine	A. M. Wilson	Rossville, N. Y	Oct. 16, 1844	3, 797
Street-washer	G. C. Bailey	Pittsburgh, Pa	Nov. 28, 1871	121, 313
Street-washer	J. McClelland	Washington, D. C	Feb. 28, 1865	45, 572
Street-washer	J. McClelland	Washington, D. C	Oct. 16, 1866	58, 857
Street-washer	J. Regester	Baltimore, Md	July 23, 1861	32, 893
Streets and roads, Watering	I. Brown	Edinburgh, North Britain	Oct. 28, 1873	144, 055
Streets, Apparatus for irrigating	J. P. Ellicott	Washington, D. C	May 14, 1861	32, 278
Streets of snow, Machine for clearing	W. E. Musgrove	Fair Play, Colo	Sept. 23, 1873	143, 176
Streets of snow, Machine for clearing	R. A. Shinn	Georgetown, D. C	Oct. 7, 1873	143, 470
Streets, roads, &c., Mode of cleaning	J. Tucker	New York	Nov. 10, 1819	....
Streets, Snow-sweeper for	W. W. Smith	Chicago, Ill	Dec. 31, 1867	72, 928
Stretcher	C. H. Tompkins	United States Army	Aug. 7, 1866	57, 013
Stretching-frame	J. Tonner	Canton, Ohio	Nov. 29, 1870	109, 690
Striker, Blacksmith's assistant	W. B. Dobson	Surrey County, N. C	Apr. 25, 1834	....
Striker for hammering iron	J. Woodel	Jackson, Tenn	Aug. 6, 1834	....
Striker for smith-work	L. Stipe	Stokes County, N. C	Sept. 6, 1833	....
Striking-bag	S. D. Kehoe	Brooklyn, N. Y	Mar. 12, 1872	124, 588
Strip-press	P. Hufeland	New York, N. Y	May 24, 1870	103, 466
Structure, Artificial monolithic	F. Coignet	Paris, France	Apr. 6, 1869	88, 546
Structure, Iron	J. M. Duclos	New York, N. Y	Oct. 15, 1872	132, 260
Structure, Tubular	W. F. Holske	New York, N. Y	Apr. 28, 1868	77, 285
Stub-cutting machine	W. Lyon	New York, N. Y	May 28, 1867	65, 248
Stubble-cutter	I. B. Conklin	Baltimore, Md	July 28, 1868	80, 394
Stubble-cutter	M. A. Spink	De Kalb, N. Y	July 18, 1865	48, 849
Stubble shaver and scraper, Combined	H. Von Phul, jr., and J. Mallon	Holly Wood, La	Nov. 25, 1873	144, 933
Stucco-ornament	A. D. Godard	Chicago, Ill	June 10, 1873	139, 781
Stud	J. G. Kenyon	Providence, R. I	June 8, 1869	90, 948
Stud	T. S. Lambert	Peekskill, N. Y	Sept. 15, 1863	39, 935
Stud and button	F. E. Brown	Pawtucket, R. I	Nov. 18, 1873	144, 508
Stud and button	S. S. Ritter	Philadelphia, Pa	May 9, 1865	47, 661
Stud and button fastening	V. G. Arnold	Providence, R. I	July 16, 1861	32, 816
Stud and button fastening	V. Charlet	Hoboken, N. J	July 23, 1867	67, 023
Stud and button fastening	S. H. Hopkins	Providence, R. I	Apr. 17, 1855	12, 725
Stud and button, Shirt	B. P. Coston	Philadelphia, Pa	Aug. 27, 1850	7, 597
Stud and sleeve button, Shirt	J. P. Onderdonk	Philadelphia, Pa	Sept. 3, 1872	131, 023
Stud and sleeve button, Shirt	H. Simon	Providence, R. I	Feb. 24, 1863	37, 777
Stud and sleeve fastener	F. A. Finn	New York, N. Y	Oct. 25, 1859	25, 891
Stud, Bosom	J. P. Derby	Boston, Mass	Jan. 6, 1857	16, 328
Stud-brace for flue of sheet-water-space boiler	A. Lamb and W. A. Summers	Hants County, England	Apr. 27, 1852	8, 910
Stud-fastener	A. Hartman	New York, N. Y	Nov. 21, 1871	121, 100
Stud-fastening	G. A. Lingard	New York, N. Y	Jan. 29, 1867	61, 671
Stud-fastening	B. Moser and D. Yellott	Brooklyn, N. Y	June 18, 1867	65, 932

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Invention.	Inventor.	Residence.	Date.	No.
Stud fastening, &c., Shirt	B. Clayton	Philadelphia, Pa	Mar. 22, 1859	23, 292
Stud fastening, Shirt	B. Clayton	Philadelphia, Pa	Apr. 12, 1859	23, 551
Stud fastening, Shirt	B. Clayton	Philadelphia, Pa	Sept. 13, 1859	25, 386
Stud fastening, Shirt	H. Simon	Providence, R. I	Apr. 12, 1859	23, 617
Stud fastening, Shirt	W. Vogt	Louisville, Ky	June 17, 1862	35, 641
Stud for fastening neck-ties	J. A. Hard	Lawrence, Kans	Feb. 11, 1873	135, 803
Stud for fastening neck-ties to collars	W. E. Simonds	Hartford, Conn	May 17, 1870	103, 093
Stud for shirt-bosom	J. P. Heiss	Philadelphia, Pa	Feb. 12, 1850	7, 096
Stud for wearing-apparel	L. Paige	Cavendish, Vt	Apr. 22, 1856	14, 756
Stud, Initial	A. W. Overbaugh	New York, N. Y	July 31, 1866	56, 791
Stud, Lacing	D. Heaton	Providence, R. I	Apr. 1, 1873	137, 305
Stud-nippers	G. T. Shepley	West Groton, Mass	June 7, 1870	103, 934
Stud or button	L. M. Bronson	New York, N. Y	Aug. 11, 1863	39, 461
Stud or button	W. R. Dutemple	Providence, R. I	Oct. 10, 1871	119, 749
Stud or button	J. W. Ricker	Chelsea, Mass	July 30, 1872	129, 904
Stud or button, Elastic	A. Eliaers	Boston, Mass	Aug. 9, 1864	43, 762
Stud or button fastening	E. M. Deey	New York, N. Y	Mar. 22, 1870	100, 988
Stud or button, Shirt	W. Vogt and J. J. Klink	Louisville, Ky	May 19, 1857	17, 345
Stud, &c., Safety	A. Kent	Baltimore, Md	Feb. 25, 1873	136, 166
Stud, Shirt	E. Bredt	New York, N. Y	Nov. 28, 1871	121, 231
Stud, Shirt	E. Bredt	New York, N. Y	Jan. 23, 1872	122, 988
Stud, Shirt	J. P. Derby	Cavendish, Vt	Mar. 24, 1857	16, 872
Stud, Shirt	J. G. Griswold	Hartford, Conn	July 18, 1871	117, 069
Stud, Shirt	C. E. Haskins	Providence, R. I	Dec. 18, 1860	30, 968
Stud, Shirt	P. Kenny	New York, N. Y	Apr. 2, 1867	63, 531
Stud, Shirt	W. F. Kubler	New York, N. Y	Aug. 7, 1860	29, 496
Stud, Shirt	C. McIntire	Newark, N. J	Dec. 28, 1858	22, 442
Stud, Shirt	D. Morris	Bangor, Me	July 26, 1859	24, 884
Stud, Shirt	C. Padmore	Philadelphia, Pa	Nov. 13, 1866	59, 635
Stud, Shirt	R. B. Ruggles	Hartford, Conn	Aug. 8, 1865	49, 305
Stud, Shirt	H. Simon	Providence, R. I	July 26, 1859	24, 891
Stud, Shirt	H. Simon	Providence, R. I	Apr. 10, 1860	27, 838
Stud, Shirt	O. S. Thayer	Attleborough, Mass	Apr. 29, 1873	138, 299
Stud, Shirt	G. M. White	New Haven, Conn	Aug. 13, 1867	67, 691
Stud, Shirt	D. Wilcox	Providence, R. I	Apr. 14, 1857	17, 060
Stud, Shirt	D. Wilcox	Providence, R. I	Oct. 25, 1859	25, 928
Stud, Shirt-collar	J. Ridge and S. F. Estell	Richmond, Ind	Sept. 5, 1865	49, 789
Stud, Shirt-bosom	J. P. Derby	Cavendish, Vt	Feb. 3, 1857	16, 533
Studs, &c., Lock-joint fastener for	I. A. Ives	New York, N. Y	Aug. 31, 1858	21, 341
Studs or tubular-shanked buttons to fabrics. Machine for attaching.	J. H. Lewis	Providence, R. I	Nov. 15, 1870	109, 227
Stuffing-box	T. W. Allen and C. W. Noyes	Greenbush, N. Y	Nov. 6, 1847	5, 357
Stuffing-box	N. R. Bates	New York, N. Y	May 5, 1857	17, 188
Stuffing-box	W. H. T. Clark	San Francisco, Cal	Aug. 10, 1869	93, 518
Stuffing-box	I. E. Giddings	Springfield, Mass	Jan. 30, 1872	123, 097
Stuffing-box	C. Green	Philadelphia, Pa	Dec. 21, 1869	98, 053
Stuffing-box	W. Harsen	Green Point, N. Y	Nov. 20, 1866	59, 837
Stuffing-box	A. J. Prescott	Catawissa, Pa	Dec. 20, 1870	110, 392
Stuffing-box	H. F. Read	Brooklyn, N. Y	June 22, 1858	20, 683
Stuffing-box	P. W. Richards	Boston Highlands, Mass	Aug. 8, 1871	117, 927
Stuffing-box	P. W. Richards	Boston Highlands, Mass	Dec. 12, 1871	121, 897
Stuffing-box	R. and T. Winans	Baltimore, Md	Mar. 26, 1861	31, 846
Stuffing-box and packing	P. W. Richards	Boston Highlands, Mass	Aug. 8, 1871	117, 928
Stuffing-box, Engine	J. A. H. Ellis	Springfield, Vt	Jan. 31, 1871	111, 330
Stuffing-box for piston-rods, &c	J. S. Reed	Saint Louis, Mo	July 9, 1872	128, 906
Stuffing-box for piston-rods, &c	P. W. Richards	Boston Highlands, Mass	Feb. 4, 1873	135, 589
Stuffing-box for revolving rolls, Steam	H. Campbell	Newtown, Conn	June 12, 1860	28, 648
Stuffing-box for valve-spindles	T. and J. Barber	Brooklyn, N. Y	June 13, 1865	48, 147
Stuffing-box for valve-stems, &c	C. Kline	Brooklyn, N. Y	Jan. 21, 1868	73, 450
Stuffing-box, Metallic	W. H. Holland	Boston, Mass	Jan. 30, 1872	123, 173
Stuffing-box, Metallic	W. H. Holland	Boston, Mass	Mar. 12, 1872	124, 439
Stuffing-box, Metallic	W. H. Holland	Boston, Mass	Apr. 9, 1872	125, 569
Stuffing-boxes, Apparatus for packing	D. L. Smith	Montana, Iowa	Dec. 28, 1869	98, 310
Stump and grub extractor	I. Van Kersen	Kalamazoo, Mich	July 11, 1865	48, 748
Stump and rock extractor	L. Norcross	Dixfield, Me	June 15, 1835	
Stump and rock extractor and elevator	T. and C. C. Newcomb	Kingston, Mass., and Warren, Me.	Feb. 18, 1862	34, 466
Stump-extractor	J. D. Akin	Columbus, Pa	Feb. 26, 1840	1, 500
Stump-extractor	J. R. Ames	Clearfield County, Pa	May 7, 1872	126, 370
Stump-extractor	S. S. Avis	Penn's Grove, N. J	Mar. 17, 1868	75, 512
Stump-extractor	C. Bates	Kingston, Mass	Apr. 17, 1860	27, 879
Stump-extractor	E. Bayliss	Massillon, Ohio	Jan. 7, 1873	134, 507
Stump-extractor	J. Beachler	Anderson, Ind	Aug. 4, 1863	39, 375
Stump-extractor	W. Beckwith	Geneva, Wis	Feb. 13, 1872	123, 609
Stump-extractor	T. Bell and L. Hulon	Bellport and New York, N. Y	Mar. 17, 1863	37, 894
Stump-extractor	I. Bezenah	Saint Martin's, Ohio	June 29, 1869	98, 002
Stump-extractor	C. Bilharz	Pittsylvania Court House, Va.	June 28, 1870	104, 692
Stump-extractor	J. W. Blodgett	Plymouth, Ind	June 26, 1866	55, 809
Stump-extractor	I. J. Bogert	Fayette, Iowa	May 12, 1868	77, 798
Stump-extractor	T. J. Booth	Jefferson Line, Pa	Sept. 29, 1868	82, 484
Stump-extractor	J. G. Boyer	Springfield, Pa	June 16, 1868	78, 920
Stump-extractor	A. Broughton	Malone, N. Y	June 19, 1860	28, 806
Stump-extractor	T. J. Brown	Belvidere, Ill	Jan. 26, 1869	86, 207
Stump-extractor	E. W. Cady	Tomah, Wis	Feb. 14, 1871	111, 725
Stump-extractor	D. Carroll	Union, Pa	May 14, 1867	64, 628
Stump-extractor	S. P. Castle	Urbana, Ohio	Jan. 12, 1858	19, 070
Stump-extractor	L. F. Cavanaugh	Newfield, N. Y	May 15, 1841	2, 094
Stump-extractor	G. Chamberlin	Olean, N. Y	June 11, 1867	65, 724
Stump-extractor	D. S. Chapman	Conneaut, Ohio	Oct. 5, 1869	95, 427
Stump-extractor	E. Colyar	Clayton, Iowa	Apr. 1, 1872	137, 420
Stump-extractor	A. Craig	New Hampshire	Apr. 15, 1807	
Stump-extractor	T. Crane	Fort Atkinson, Wis	Oct. 31, 1865	50, 690
Stump-extractor	J. B. Creighton	Tiffin, Ohio	Apr. 15, 1856	14, 651
Stump-extractor	A. Crowner	Wellsville, N. Y	Dec. 17, 1867	72, 269
Stump-extractor	J. Crowner	Wellsville, N. Y	Jan. 30, 1866	52, 271
Stump-extractor	J. C. Daman	Hartford, Ky	Mar. 6, 1860	27, 373
Stump-extractor	D. A. Donforth	Elkhart, Ind	Feb. 9, 1864	41, 490

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Stump-extractor	D. A. Danforth and D. C. Payne	Elkhart, Ind	Oct. 6, 1863	40,160
Stump-extractor	D. A. Danforth and W. A. Wilkinson.	Elkhart, Ind	July 2, 1861	32,684
Stump-extractor	T. G. Davis and J. Punchus	Elkhart, Ind	Jan. 29, 1861	31,228
Stump-extractor	C. W. Dawson	Paynesville, Mo	Dec. 28, 1869	98,355
Stump-extractor	S. Derr	Lockhaven, Pa	Jan. 31, 1865	46,086
Stump-extractor	W. Dickerson and H. O. Wilbur	Ridgeberry, Pa	Mar. 13, 1866	53,125
Stump-extractor	A. Dickinson	Olean, N. Y	Aug. 29, 1871	118,594
Stump-extractor	W. Duffner	Jasper, Ind	Sept. 23, 1873	143,129
Stump-extractor	G. E. Dyer	New Sharon, Me	Dec. 26, 1871	122,237
Stump-extractor	L. R. Dye	Cranberry, N. J	Aug. 13, 1867	67,738
Stump-extractor	F. M. Eagle	North Manchester, Ind	Dec. 28, 1858	22,415
Stump-extractor	J. M. Eason	Charleston, S. C	May 3, 1870	102,516
Stump-extractor	J. Elliott	New York, N. Y	Dec. 31, 1867	72,826
Stump-extractor	L. C. English	Canton, N. Y	Apr. 17, 1860	27,949
Stump-extractor	L. C. English	Corning, N. Y	Sept. 25, 1866	58,235
Stump-extractor	E. Fales	Lancaster, Mo	Nov. 2, 1869	96,314
Stump-extractor	E. Farnsworth	Sabbath Rest, Pa	June 7, 1870	104,003
Stump-extractor	E. Farnsworth	Sabbath Rest, Pa	Aug. 30, 1870	106,926
Stump-extractor	T. W. Fay	Camden, N. J	Sept. 21, 1869	95,011
Stump-extractor	R. B. Ferris	Holland, Mich	Oct. 13, 1868	82,932
Stump-extractor	I. Flanders	La Fayette, Mich	Nov. 20, 1866	59,904
Stump-extractor	I. Flanders	Paw Paw, Mich	Sept. 28, 1869	95,217
Stump-extractor	I. Flanders	Paw Paw, Mich	July 29, 1873	141,341
Stump-extractor	L. Fowler and D. Smedly	Rushville, Ill	Oct. 15, 1872	132,273
Stump-extractor	D. C. Frazeur and P. Ginter	Sidonsburgh, Pa	Aug. 3, 1869	93,192
Stump-extractor	C. E. Galligan	Paw Paw, Mich	Mar. 24, 1868	75,894
Stump-extractor	C. Gernes and J. H. Gruenhagen.	Winona, Minn	May 17, 1870	103,171
Stump-extractor	H. M. Gibson	Grand Rapids, Mich	June 4, 1867	65,482
Stump-extractor	L. B. Gibson	South Addison, N. Y	Nov. 1, 1870	108,901
Stump-extractor	J. M. Gleichman	Evansville, Ind	Feb. 19, 1867	62,192
Stump-extractor	C. J. Glem, C. Ball, and U. S. Hackett.	Unadilla, Mich	Dec. 10, 1861	33,883
Stump-extractor	F. Godfrey	Grand Rapids, Mich	Oct. 14, 1862	36,648
Stump-extractor	A. Goodrich	Burnt Prairie, Ill	June 2, 1868	78,450
Stump-extractor	H. Gordon	Fountain Dale, Pa	Jan. 16, 1835	....
Stump-extractor	A. Gummer	Omro, Wis	Feb. 1, 1870	99,311
Stump-extractor	E. B. Hall	Woodbury, N. J	Feb. 8, 1859	22,917
Stump-extractor	R. H. Hall	Branchfort, N. Y	Sept. 15, 1838	923
Stump-extractor	W. Hall	Brewer, Me	Mar. 9, 1858	19,562
Stump-extractor	J. Hamlyn	Bellevue, Mich	June 26, 1860	28,856
Stump-extractor	S. Harman	La Porte, Ind	Nov. 15, 1870	109,316
Stump-extractor	G. D. Harris	Fitchburgh, Mass	Apr. 5, 1859	23,464
Stump-extractor	E. C. Haserick	Lake Village, N. H	Oct. 3, 1865	50,244
Stump-extractor	J. Havens	Auburn, N. Y	May 12, 1868	77,879
Stump-extractor	W. L. Hawkins	Lockhaven, Pa	Feb. 11, 1862	34,364
Stump-extractor	I. D. Hazen and J. Hitchcock	Grand Rapids, Mich	Sept. 24, 1867	69,209
Stump-extractor	N. M. Healy	Flushing, Mich	Dec. 11, 1866	60,372
Stump-extractor	J. H. Hendee	Blackman Township, Mich	Mar. 24, 1863	38,011
Stump-extractor	T. Herbig	Jasper, Ind	July 22, 1873	141,140
Stump-extractor	I. Hicks	Hartford, Wis	Sept. 30, 1862	36,585
Stump-extractor	I. Hicks	Hartford, Wis	Nov. 3, 1863	40,478
Stump-extractor	J. Higgins	Friendship, N. Y	Mar. 8, 1870	100,529
Stump-extractor	J. Higgins	Friendship, N. Y	Oct. 4, 1870	107,906
Stump-extractor	E. Hosmer	Bedford, Mass	Dec. 20, 1859	26,498
Stump-extractor	L. and C. Howard	Reading, N. Y	Sept. 14, 1840	1,791
Stump-extractor	F. L. Howe	Woodstock, Vt	Sept. 17, 1861	33,320
Stump-extractor	G. L. and W. M. Howland	Topsham, Me	May 3, 1870	102,544
Stump-extractor	J. D. Huffman	Springfield, Ohio	Apr. 23, 1867	64,106
Stump-extractor	J. A. Jenkins	Clarksville, Mo	Nov. 8, 1870	109,015
Stump-extractor	W. O. Johnson	Alma, Mich	Mar. 15, 1870	100,770
Stump-extractor	W. R. Johnson	Binghamton, N. Y	Mar. 30, 1869	88,303
Stump-extractor	J. A. Kanssler and H. B. Cook	White Pigeon, Mich	Aug. 31, 1869	94,217
Stump-extractor	F. Ketler	Milwaukee, Wis	Apr. 30, 1861	32,103
Stump-extractor	W. and D. Kimmel	Cambridge City, Ind	Aug. 14, 1860	29,603
Stump-extractor	T. B. Kirby	Flowerfield, Mich	Feb. 9, 1869	86,842
Stump-extractor	J. L. Knowlton	Glassborough, N. J	Jan. 11, 1859	22,561
Stump-extractor	W. Langdon	Langdon's Station, Pa	June 5, 1866	55,314
Stump-extractor	H. Lemm	Leonidas, Mich	Dec. 15, 1863	40,940
Stump-extractor	H. Lemm	Leonidas, Mich	Jan. 3, 1865	45,725
Stump-extractor	H. Lemm	Leonidas, Mich	Feb. 26, 1867	62,346
Stump-extractor	L. D. Livermore	Beaver Dam, Wis	Nov. 28, 1865	51,200
Stump-extractor	J. Longanecker	New Pittsburgh, Ohio	May 12, 1868	77,898
Stump-extractor	D. F. and A. P. Luse	Spring Mills, Pa	July 8, 1862	35,827
Stump-extractor	J. B. Lyons	Milton, Conn	Aug. 14, 1860	29,606
Stump-extractor	J. B. Lyons	Baltimore, Md	Mar. 26, 1861	31,812
Stump-extractor	C. C. Manuel	North Troy, Vt	Sept. 8, 1868	81,918
Stump-extractor	E. Marble	Wyalusing, Pa	Dec. 14, 1840	1,900
Stump-extractor	M. J. Martin	Belleville, Ill	Aug. 19, 1862	36,227
Stump-extractor	B. B. Mason and R. and M. Joslyn	Napoli, N. Y	Feb. 20, 1841	1,989
Stump-extractor	A. J. McCrea	Bethlehem, N. J	Feb. 16, 1869	86,990
Stump-extractor	A. McLeod	Black River Falls, Wis	Nov. 23, 1869	97,102
Stump-extractor	H. E. Mead	Centreville, Mich	Nov. 3, 1868	83,651
Stump-extractor	M. Mellen	Richland Station, N. Y	Apr. 16, 1867	63,918
Stump-extractor	C. Metzger, G. R. Roraback, and G. Flint.	De Soto, Mo	Feb. 16, 1869	86,994
Stump-extractor	R. Miller and C. W. Brown	Landis Township and Buena Vista Township, N. J.	Aug. 27, 1872	130,857
Stump-extractor	A. Monroe	Watkins, N. Y	Nov. 13, 1866	59,024
Stump-extractor	W. K. Moody	Hartford, Wis	June 23, 1863	38,975
Stump-extractor	C. Mörchen and P. Doerfer	Eaton, Wis	Feb. 11, 1873	135,658
Stump-extractor	C. Munns	New York, N. Y	June 2, 1868	78,469
Stump-extractor	F. M. Nash	Stockton, Minn	Aug. 29, 1871	118,635
Stump-extractor	G. J. Olendorf	Middlefield, N. Y	Oct. 15, 1867	69,832
Stump-extractor	B. and M. L. Oliver	Brooklyn, N. Y	Mar. 16, 1869	87,871
Stump-extractor	A. Palmer and R. Gilleland	Hudson, Mich	May 29, 1866	55,156

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Stump-extractor	I. H. Palmer	Lodi, Wis	Aug. 27, 1867	68, 228
Stump-extractor	I. Pardee and R. C. Parvin	Vineland and Forest Grove N. J.	May 28, 1867	65, 263
Stump-extractor	N. Parrish	Galesburgh, Mich	June 26, 1860	28, 897
Stump-extractor	N. Parrish	Kalamazoo, Mich	May 1, 1866	54, 398
Stump-extractor	C. B. Pate	Moore's Hill, Ind	Nov. 8, 1859	26, 056
Stump-extractor	L. P. Pease	McCordsville, Ind	Sept. 1, 1863	39, 744
Stump-extractor	F. Plant	Bricksburgh, N. J	Dec. 30, 1873	145, 966
Stump-extractor	G. W. Pressey	Hammonton, N. J	Oct. 8, 1867	69, 701
Stump-extractor	C. W. Rawson	Little Prairie Ronde, Mich	June 3, 1862	35, 470
Stump-extractor	J. R. Remington	Lowndes County, Ala	Sept. 3, 1846	4, 731
Stump-extractor	W. H. Rhodes	Paw Paw, Mich	Aug. 6, 1872	130, 242
Stump-extractor	J. B. Robertson	New Orleans, La	Jan. 7, 1868	73, 046
Stump-extractor	H. H. Rueter	New Hope, Mo	Sept. 10, 1872	131, 228
Stump-extractor	S. W. Ruggles	Fitchburgh, Mass	Oct. 14, 1862	36, 673
Stump-extractor	C. Rundquist	Knoxville, Ill	Mar. 8, 1864	41, 865
Stump-extractor	H. Schwartz	Fayetteville, Ohio	Mar. 8, 1870	100, 674
Stump-extractor	D. C. Smith	Adrian, Mich	Jan. 14, 1862	34, 169
Stump-extractor	H. Smith, 3d	North Chili, N. Y	Mar. 30, 1869	88, 336
Stump-extractor	W. Smith	Pine Hill, Wis	June 8, 1869	91, 049
Stump-extractor	W. Smith	Tomah, Wis	Nov. 22, 1870	109, 466
Stump-extractor	W. Smith	Tomah, Wis	July 16, 1872	129, 181
Stump-extractor	D. Stauffer	Spring Hills, Ohio	Jan. 8, 1867	61, 110
Stump-extractor	F. A. Stuart	Catharine, N. Y	Apr. 30, 1840	1, 579
Stump-extractor	J. S. Swan	Kanawha County, W. Va	Sept. 12, 1871	118, 981
Stump-extractor	D. Tanquary	Carmi, Ill	Mar. 25, 1862	34, 794
Stump-extractor	E. W. Tibbels	Chester, Pa	May 26, 1868	78, 402
Stump-extractor	A. D. Tilyou	Norwich, N. Y	Mar. 21, 1871	112, 864
Stump-extractor	G. W. Townsend	Galesburgh, Mich	Apr. 30, 1867	64, 384
Stump-extractor	G. W. Townsend	Galesburgh, Mich	Nov. 30, 1869	97, 461
Stump-extractor	P. Traxler	Scottsburgh, N. Y	June 9, 1857	17, 528
Stump-extractor	J. D. Troyer	Goshen, Ind	Nov. 28, 1871	121, 436
Stump-extractor	J. Turner	Grand Haven, Mich	Nov. 19, 1867	71, 088
Stump-extractor	B. F. Tuttle	Chelsea, Mich	May 17, 1864	42, 809
Stump-extractor	B. W. Weaver	Transitville, Ind	May 11, 1869	90, 038
Stump-extractor	E. Wills	Augusta, Me	Aug. 9, 1859	25, 070
Stump-extractor	J. S. Wood	Washington Township, N. J	Feb. 3, 1857	16, 563
Stump-extractor	J. A. Woodworth	Hickory Corners, Mich	Apr. 6, 1869	88, 596
Stump-extractor and derrick, Combined	W. Q. Baxter	Maple Township, Pa	July 4, 1871	116, 537
Stump-extractor and press, Combined	G. Kenny	Milford, N. H	Apr. 19, 1859	23, 688
Stump-extractor and press, Combined	N. V. and L. J. Morelle	Newark, Wis	Aug. 10, 1869	93, 548
Stump-extractor and rock-lifter	S. Smith	West Stockholm, N. Y	Jan. 4, 1870	98, 642
Stump-extractors, Wheel-and-axle	J. Rogers	Orleans County, Vt	Jan. 1, 1850	6, 991
Stump-extracting and house-removing machine	J. E. Larkin	Salem, N. Y	Oct. 25, 1832	....
Stump-extracting machine	S. W. Ruggles	Fitchburgh, Mass	May 6, 1856	14, 830
Stump-joint for carriage-bows, Method of forming	A. P. Casey	Plantsville, Conn	July 19, 1870	105, 423
Stump-lifting machine	D. Stone	Claremont, N. H	July 27, 1809	....
Stump-machine	J. Arnold	Elmira, N. Y	Nov. 11, 1862	36, 887
Stump-machine	A. E. Boynton and G. R. Boynton.	Hartford, Wis., and Chicago, Ill.	Jan. 5, 1864	41, 055
Stump-machine	B. Burling	Catharine, N. Y	June 25, 1839	1, 195
Stump-machine	W. Foster	Oswego, N. Y	Apr. 22, 1831	....
Stump-machine	A. Gorham	Turner, Me	Jan. 7, 1831	....
Stump-machine	S. Gorton and F. Morris	Crawford County, Pa	June 19, 1855	13, 088
Stump-machine	D. W. Henderson	Deerfield, Pa	Feb. 12, 1861	31, 386
Stump-machine	J. F. Hostetter	Penn Township, Pa	Feb. 16, 1864	41, 622
Stump-machine	I. Pardee	Buena Vista, N. J	Aug. 11, 1868	80, 873
Stump-machine	E. Vaughn	Alliance, Ohio	Mar. 13, 1855	12, 525
Stump-machine	J. Warner and J. H. Vosburgh	Galesburgh, Mich	Aug. 20, 1861	33, 116
Stump or stone extractor	J. H. Green	North Waterford, Me	Mar. 20, 1866	53, 294
Stump-puller	J. M. Ferguson	Summit, Miss	Oct. 4, 1870	107, 891
Stump-puller	I. Larrance	Cincinnati, Ohio	May 14, 1872	126, 817
Stump-puller	J. B. Lyons	Milton, Conn	Mar. 29, 1864	42, 095
Stump-puller	F. M. Morgan	Huntington, Ind	May 24, 1864	42, 864
Stump-puller	S. H. Richardson	Cleveland, Ohio	Oct. 14, 1862	36, 671
Stump-puller	G. Utley	Charlotte, N. C	Aug. 9, 1870	106, 238
Stump-pulling machine	A. E. and G. R. Boynton	Hartford, Wis., and Chicago, Ill.	Apr. 7, 1863	38, 092
Stump-pulling machine	W. Smith	Tomah, Wis	May 23, 1871	115, 125
Stumps and other heavy and fixed bodies, Removing.	A. Pratt	Jackson, N. Y	Aug. 17, 1827	....
Stumps and raising heavy weights, Mode of applying power for extracting.	H. Rieman, jr	Rogersville, Ind	Apr. 12, 1859	23, 608
Stumps, Device for clearing land of	C. Canfield and H. Willard	Grand Rapids, Mich	Nov. 30, 1869	97, 272
Stumps, Extracting	W. W. Willis	Orange, Mass	Mar. 6, 1855	12, 496
Stumps, Extracting	G. W. Zeigler and M. Grover	Tiffin and Clyde, Ohio	May 20, 1856	14, 937
Stumps, Machine for cutting out	F. Kettler	Milwaukee, Wis	June 8, 1858	20, 494
Stumps, &c., Machinery for removing	M. C. Mix	Tompkins County, N. Y	Mar. 31, 1840	1, 537
Stumps, Mode of extracting	W. O. Thompson and L. Harrington.	Orange and Worcester, Mass.	Aug. 12, 1856	15, 537
Stumps, Mode of removing	H. Willard	Grand Rapids, Mich	Aug. 31, 1869	94, 264
Stumps, Steam-machine for extracting	A. B. Beaumont	Austerlitz, Mich	Aug. 25, 1868	81, 462
Stumps, stones, &c., Machine for raising	A. H. Whitney	Bowdoinham, Me	Mar. 15, 1826	....
Subaqueous foundation	J. B. Eads	Saint Louis, Mo	June 9, 1868	78, 793
Subaqueous structures	G. A. Parker	Lancaster, Mass	Sept. 6, 1864	44, 111
Subaqueous tube	T. F. Rowland	Green Point, N. Y	Jan. 21, 1868	73, 656
Subcutaneous exhauster	G. Dieulafoy	Paris, France	May 17, 1870	103, 027
Submarine and torpedo boat	S. S. Merriam	Springfield, Mass	Oct. 9, 1866	58, 661
Submarine and other walls	W. H. Foye	San Francisco, Cal	Mar. 19, 1872	124, 732
Submarine armament	J. Wood	Brooklyn, N. Y	June 7, 1864	43, 062
Submarine armament for vessels	O. C. Smith	Salem, Mass	July 22, 1862	35, 957
Submarine armor, Apparatus for attaching weights to.	D. Hale	Boston, Mass	Aug. 20, 1867	67, 874
Submarine attack on vessels, Apparatus for	J. McCluskey	Milwaukee, Wis	Jan. 7, 1862	34, 116
Submarine battery	J. Frey and D. B. Burnham	Battle Creek, Mich	July 4, 1854	11, 218
Submarine battery	N. W. Northrup	Greene, N. Y	Sept. 15, 1863	39, 947
Submarine battery	B. F. Smith, jr	Albany, N. Y	Mar. 17, 1863	37, 942
Submarine battery, Apparatus for operating	I. A. Ketcham	Brooklyn, N. Y	Oct. 14, 1862	36, 654

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Submarine battery connected with a boat or other vessel, Operating.	W. H. Elliot	Plattsburgh, N. Y	May 13, 1862	35, 285
Submarine bed, Apparatus for obtaining profile of.	C. Van Horn	Springfield, Mass	Feb. 10, 1863	37, 650
Submarine blasting, Charging and tamping platform for.	J. Burson	Yates City, Ill	June 3, 1873	139, 452
Submarine boat	J. Carver	Bellevue, Ohio	Jan. 26, 1864	41, 365
Submarine bodies, Method of blasting or removing.	S. Eakins	Philadelphia, Pa	Dec. 28, 1858	22, 472
Submarine carriage	A. O. Crane	Hoboken, N. J	Sept. 2, 1862	36, 340
Submarine deposit, Method of removing	E. Brazelton	Saint Louis, Mo	Aug. 3, 1858	21, 060
Submarine-drilling apparatus	T. F. Rowland	Green Point, N. Y	May 4, 1869	89, 794
Submarine-drilling platform	J. Cody	New York, N. Y	June 29, 1869	91, 911
Submarine excavator	J. C. Osgood	Troy, N. Y	Sept. 2, 1862	36, 360
Submarine explorer	V. Ryerson	New York, N. Y	Oct. 19, 1858	21, 852
Submarine explorer	S. Short and N. Bradford	Barnstable, Mass	Feb. 18, 1830	......
Submarine explorer	W. M. Storm	New York, N. Y	May 1, 1866	54, 438
Submarine exploring	H. S. Thayer	Boston, Mass	July 28, 1868	80, 517
Submarine-exploring armor	L. D. Phillips	Chicago, Ill	Oct. 14, 1856	15, 898
Submarine foundation	W. H. Foye	San Francisco, Cal	June 29, 1869	92, 033
Submarine foundation	E. Manico	London, England	July 29, 1873	141, 283
Submarine grapple	T. Sheehan	Dunkirk, N. Y	Mar. 2, 1858	19, 516
Submarine gun	J. N. Smith	New York, N. Y	Jan. 26, 1864	41, 402
Submarine gun-boat	D. Fitzgerald	New York, N. Y	Oct. 11, 1841	2, 294
Submarine guns, Apparatus for using	R. Montgomery	New York, N. Y	May 13, 1862	35, 247
Submarine-helmet window	C. M. Gould	Worcester, Mass	July 26, 1859	24, 864
Submarine lantern	M. Vander Weide	Saint Petersburgh, Russia	Aug. 18, 1868	81, 231
Submarine or floating batteries, Mode of operating.	I. A. Ketcham	Brooklyn, N. Y	Oct. 28, 1862	36, 845
Submarine ordnance	J. Duffy	Paterson, N. J	Sept. 8, 1863	39, 801
Submarine operator	G. W. Martin	West Morrisania, N. Y	July 24, 1860	29, 296
Submarine passage or hollow inverted arch	J. Staples, jr		Mar. 18, 1803	......
Submarine port-hole	J. F. Clen	New York, N. Y	Dec. 20, 1864	45, 475
Submarine port-hole	T. F. Gilliland	Chicago, Ill	May 31, 1864	42, 938
Submarine-port-hole closer	J. H. Kavanagh	Joliet, Ill	June 6, 1865	48, 074
Submarine revolving battery for war-vessels	F. A. De Mey	Brooklyn, N. Y	June 9, 1863	38, 814
Submarine-rock-drilling machine	J. G. Foster and G. W. Townsend.	Boston, Mass	Aug. 10, 1869	93, 610
Submarine-rock-drilling machine	S. F. Schoonmaker	New York, N. Y	Nov. 9, 1869	96, 735
Submarine safety mouth-piece	J. Hawkins	Braddock's Field, Pa	Mar. 21, 1865	46, 902
Submarine scoop	A. Balding	Olney, Ill	Mar. 28, 1854	10, 699
Submarine shell or torpedoes, Apparatus for operating.	W. W. W. Wood and J. L. Lay.	Philadelphia, Pa., and Buffalo, N. Y.	Mar. 14, 1865	46, 853
Submarine shot-conductor	E. H. Hull	Millersburgh, Ohio	Oct. 11, 1864	44, 631
Submarine torpedoes, &c., Apparatus for carrying and exploding.	W. W. W. Wood and J. L. Lay.	Buffalo, N. Y	Mar. 14, 1865	46, 852
Submarine vessel	L. Alexandre	France	Sept. 3, 1850	7, 609
Submarine vessel	E. C. B. Rick	Hermann, Mo	Oct. 15, 1867	69, 940
Submarine vessel and life-boat	J. Bachman	Hoboken, N. J	Sept. 27, 1864	44, 380
Subsoil-breaking machine	L. J. Chateau	Paris, France	Dec. 10, 1861	33, 877
Subsoiling-implement	W. D. Strowger	Oswego, N. Y	Mar. 31, 1863	38, 066
Sucker-rod	D. Jones	Boston, Mass	Sept. 26, 1871	119, 232
Sucker-rod connection	G. M. Backus	Oil City, Pa	July 19, 1870	105, 410
Sucker-rod coupling	J. H. Beatty	Franklin, Pa	Nov. 8, 1870	108, 959
Sucker-rod coupling	J. Odell	Petroleum Centre, Pa	July 12, 1870	105, 235
Sucker-rod coupling for oil-wells	A. Good, jr	Titusville, Pa	Feb. 15, 1870	99, 997
Sucker-rod elevator	L. K. Stitts and S. R. Dresser	Parker's Landing, Pa	Nov. 26, 1872	133, 390
Sucker-rod joint	A. Crosby	Westfield, N. Y	June 4, 1872	127, 464
Sucker-rod joint	A. Good, jr	Titusville, Pa	June 21, 1870	104, 576
Sucker-rod joint or coupling	J. H. Beatty	Franklin, Pa	July 25, 1871	117, 371
Sucker-rods to walking-beams, Adjustable connection of.	A. Good, jr	Titusville, Pa	May 24, 1870	103, 447
Suction-drill	O. G. Warren	New York, N. Y	Jan. 9, 1866	51, 984
Sugar and alcohol from lichens, Manufacture of	S. Stenberg	Stockholm, Sweden	Apr. 12, 1870	101, 783
Sugar and cider mill	H. J. Cox	Warren County, Ohio	Mar. 9, 1858	19, 545
Sugar and cooling charcoal, &c., Apparatus for drying.	G. A. Jasper	Charlestown, Mass	May 25, 1869	90, 549
Sugar and dextrine, Manufacture of	T. A. Hoffman	Beardstown, Ill	May 25, 1858	20, 347
Sugar and forming it into blocks, Machine for crushing.	G. A. Jasper	Charlestown, Mass	Sept. 22, 1863	40, 043
Sugar and liquid evaporator	T. and J. M. Scantlin	Evansville, Ind	Aug. 31, 1869	94, 343
Sugar and sirup, Apparatus for refining	S. H. Gilman	New Orleans, La	Oct. 21, 1873	143, 754
Sugar and sirup, Apparatus for the manufacture of.	E. Porter	Clinton, Ill	Feb. 26, 1867	62, 440
Sugar and sirup from sorghum, &c., Manufacture of.	J. F. Riggs	Fremont, Nebr	Jan. 26, 1864	41, 398
Sugar and sirup, Maple-flavored	C. McLean	Boston, Mass	July 24, 1866	56, 673
Sugar and sirup, Process of treating Indian corn and beet-roots to produce.	F. W. Gossling	Buffalo, N. Y	May 10, 1864	42, 728
Sugar and sirup, Refining	H. A. Williams	Saint Louis, Mo	Aug. 27, 1867	68, 328
Sugar and sorghum mill	D. J. Powers and H. B. Stevens	Madison, Wis	Oct. 26, 1869	96, 264
Sugar, Apparatus for cutting or dividing loaf	C. Rinzler and W. Rosebrook	New York, N. Y	May 8, 1860	28, 183
Sugar, Apparatus for defecating	R. A. Stewart	Saint Bernard Parish, La	Aug. 2, 1859	24, 961
Sugar, Apparatus for dissolving crude	W. Moller	New York, N. Y	Sept. 10, 1861	33, 261
Sugar, Apparatus for filtering and washing animal-black used in clarifying.	T. Oxnard	Cumberland, Me	Aug. 6, 1831	......
Sugar, Apparatus for granulating	F. Michael	Gratis, Ohio	Feb. 19, 1867	62, 146
Sugar, Apparatus for manufacturing cube	G. Finken	Brooklyn, N. Y	Aug. 20, 1861	33, 078
Sugar, Apparatus for sifting and separating	G. A. Jasper	Charlestown, Mass	Apr. 2, 1867	63, 390
Sugar, Apparatus for the manufacture of cube	G. A. Jasper	Boston, Mass	May 12, 1863	38, 487
Sugar, Apparatus for the manufacture of cube	J. King	Hoboken, N. J	July 16, 1872	128, 964
Sugar, Apparatus for the manufacture of cube	A. F. W. Partz	Oakland, Cal	Oct. 1, 1872	131, 898
Sugar, Apparatus for the manufacture of cube	W. H. Whitmore	Boston, Mass	June 9, 1863	38, 854
Sugar-bin	M. L. Rick	Sand Bank, N. Y	Sept. 8, 1868	82, 035
Sugar, Bleaching granulated	T. T. Taylor	Philadelphia, Pa	Aug. 31, 1869	94, 359
Sugar-boiler	F. Duplessis	Plaquemines, La	Dec. 16, 1845	4, 310
Sugar-boiler	W. Graham	Saint Charles, La	Mar. 10, 1843	3, 000
Sugar-boiler	A. Hager	Donaldsonville, La	Mar. 9, 1844	3, 473
Sugar-boiler	P. Holbrook	Whitingham, Vt	Aug. 4, 1857	17, 933
Sugar-boiler, Circulating	F. Hoard	United States	May 30, 1838	761
Sugar, Boiler for making maple	G. L. Parker	Coventryville, N. Y	May 26, 1868	78, 391
Sugar-boiler, Vacuum-pan	C. Harriman	New York, N. Y	June 25, 1867	66, 080

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Invention.	Inventor.	Residence.	Date.	No.
Sugar-boilers, Construction of	E. J. Woolsey	Astoria, N. Y	Oct. 10, 1854	11, 801
Sugar-boiling	E. Beanes and C. W. Finzel	London and Bristol, England.	Feb. 14, 1865	46, 419
Sugar, Boiling	K. Reed	New Haven, Conn	Apr. 24, 1849	6, 395
Sugar-boiling apparatus	M. Bonnin and C. Escudier	New Iberia, La	July 27, 1869	92, 932
Sugar-boiling apparatus	W. H. Clement	Philadelphia, Pa	Oct. 12, 1852	9, 315
Sugar-boiling apparatus	M. D. Mudget	Eden, Vt	Aug. 2, 1864	43, 701
Sugar-boiling apparatus	J. Ramos	Island of Porto Rico	June 29, 1852	9, 086
Sugar-boiling apparatus	I. Vest	New Iberia, La	May 30, 1871	115, 395
Sugar-boiling, Steam-pipe for	A. Stillman	New York, N. Y	June 12, 1849	6, 519
Sugar, &c., boiling under a vacuum	J. Steel, jr	New York	Oct. 27, 1835	....
Sugar-boiling, &c., under a vacuum	J. Steel, jr	New York	Oct. 27, 1835	....
Sugar, Box for dropping	A. T. Ballantine	New York, N. Y	Oct. 23, 1860	30, 516
Sugar-boxes by machinery, Making	P. Pearson and J. Howe	Alna, Me	Apr. 15, 1828	....
Sugar-breaking machine	J. Forrest	New York, N. Y	May 14, 1861	32, 282
Sugar-breaking machine	J. Mitchell	Northern Liberties, Pa	Sept. 11, 1822	....
Sugar-breaking machine	W. G. Sterling	Bridgeport, Conn	Jan. 28, 1829	....
Sugar by steam, Refining	F. Schleifer	San Francisco, Cal	Oct. 25, 1870	108, 732
Sugar, Caking	U. Smith	Sandisfield, Mass	Jan. 21, 1833	....
Sugar called "table-manna," Preparation of	M. Butterfield	Indianapolis, Ind	Apr. 14, 1857	17, 021
Sugar-cane and bagasse carrier, &c., Fastening slats on.	C. Neames	New Orleans, La	Apr. 26, 1859	23, 777
Sugar-cane and other materials, Apparatus for obtaining extractive matters from.	L. A. De Lime	Saint Louis, Mo	Nov. 23, 1869	97, 059
Sugar-cane, Apparatus for extracting saccharine matter from.	M. S. Bringier	Ascension Parish, La	Feb. 27, 1872	124, 030
Sugar-cane coverer	F. Roy	Saint Bernard Parish, La	Aug. 5, 1873	141, 464
Sugar-cane, Crushing and stripping	L. Maney and C. Branger	Saint Morgan, Ill	Apr. 7, 1863	38, 114
Sugar-cane for grinding, Machine for stripping and cutting.	L. E. Porter	Lake Mills, Wis	May 24, 1859	24, 149
Sugar-cane from decay, Process of preserving the stubble of.	W. Green	New Orleans, La	Oct. 14, 1873	143, 622
Sugar-cane juice, Machine for expressing	H. Bessemer	Baxter House, England	Mar. 15, 1853	9, 617
Sugar-cane-leaf stripper	P. P. Mills	Washington, Ohio	Dec. 11, 1860	30, 927
Sugar-cane leaves, &c., for obtaining fibrous material, Process of treating.	T. Harang	Banana Grove Plantation, La.	Apr. 30, 1872	126, 293
Sugar-cane, Machine for covering	J. Allison	Saint Martin Parish, La	Nov. 24, 1857	18, 666
Sugar-cane, Machine for crushing	T. Grundman	Freeport, Ill	Apr. 17, 1860	27, 900
Sugar-cane, Machine for crushing	D. C. Turner	Madison, Wis	Mar. 14, 1865	46, 835
Sugar-cane, Machine for cutting	A. Philipp	Mayville, Wis	June 21, 1859	24, 487
Sugar-cane, Machine for grinding	J. G. Breithler	New Orleans, La	June 13, 1818	....
Sugar-cane, Machine for stripping leaves from	D. E. Butler	Chesterfield, Ohio	June 21, 1864	43, 178
Sugar-cane, Machine for windrowing	B. A. Jenkins	Whitewater, Wis	July 3, 1860	28, 987
Sugar-cane, Machinery for crushing	A. Stillman	New York	Aug. 8, 1846	4, 682
Sugar-cane mill	W. Aiken and J. R. Gates	Louisville, Ky	Jan. 19, 1869	85, 984
Sugar-cane mill	N. B. Carr	Madison, Wis	May 1, 1866	54, 293
Sugar-cane mill	W. H. Clark and W. E. Edgerton.	Cincinnati, Ohio, and Spiceland, Ind.	Feb. 23, 1864	41, 680
Sugar-cane mill	W. H. Clark and R. R. James	Cincinnati, Ohio, and Rising Sun, Ind.	Feb. 23, 1864	41, 681
Sugar-cane mill	O. Clarke	Rockford, Ill	Jan. 29, 1867	61, 516
Sugar-cane mill	A. Demarce	Fairfield, Iowa	Oct. 26, 1869	96, 088
Sugar-cane mill	W. T. Dennis	Richmond, Ind	Jan. 25, 1859	22, 711
Sugar-cane mill	H. T. Douglas	Zanesville, Ohio	Aug. 28, 1860	29, 773
Sugar-cane mill	A. Eaton	Madison, Wis	Sept. 11, 1866	57, 883
Sugar-cane mill	J. Harris	Janesville, Wis	Sept. 19, 1865	49, 998
Sugar-cane mill	J. Howard	New York, N. Y	Aug. 31, 1858	21, 340
Sugar-cane mill	D. J. Powers	Madison, Wis	Feb. 26, 1867	62, 499
Sugar-cane mill	D. J. Powers and H. B. Stevens	Madison, Wis., and Buffalo, N. Y.	Sept. 24, 1867	69, 244
Sugar-cane mill	F. M. Robinson	Conneautville, Pa	Oct. 25, 1859	25, 916
Sugar-cane mill	E. W. Skinner	Madison, Wis	June 5, 1866	55, 379
Sugar-cane mill	E. A. Williams	Columbus, Ohio	Mar. 7, 1865	46, 743
Sugar-cane mill	A. Van Trump	Lancaster, Ohio	Mar. 1, 1859	23, 128
Sugar-cane, Mill for crushing	D. Bassett	Whitewater, Wis	Aug. 2, 1859	24, 922
Sugar-cane, Mill for crushing	A. Ingalls	Independence, Iowa	Aug. 12, 1862	36, 156
Sugar-cane, Mill for crushing	G. H. Laub	Macomb, Ill	Dec. 15, 1863	40, 938
Sugar-cane, &c., Mill for crushing	H. B. Stevens	Buffalo, N. Y	Apr. 30, 1872	126, 341
Sugar-cane, Mill for crushing	I. Straub	Cincinnati, Ohio	July 7, 1863	39, 182
Sugar-cane, Mill for cutting, crushing, and expressing the juice from.	J. J. Fearington	Pittsborough, N. C	July 6, 1858	20, 784
Sugar-cane, Mill for grinding	T. L. Roberts	Indianapolis, Ind	Jan. 23, 1866	52, 207
Sugar-cane, Mill for treating Chinese	H. Meyer	Bridgeton, N. J	May 18, 1858	20, 288
Sugar-cane mills, Gearing for	E. Phelps	Pittsburgh, Pa	Jan. 29, 1850	7, 059
Sugar-cane preparatory to grinding, Machine for cutting the leaves from.	C. Dickey	Mercersburgh, Pa	Mar. 23, 1858	19, 688
Sugar-cane press	W. Bull	New Calfornia, Wis	July 19, 1859	24, 789
Sugar-cane press	T. Crane	Fort Atkinson, Wis	June 14, 1859	24, 376
Sugar-cane press	J. C. Crismar	Omaha City, Nebr	Mar. 14, 1865	46, 781
Sugar-cane, &c., Process and apparatus for extracting the juice of.	G. Wilkinson, A. L. Possos, J. P. Lafarque, and A. E. Dutreish.	Paris, France	Apr. 8, 1873	137, 746
Sugar-cane, Process for extracting saccharine matter from.	M. S. Bringier	Ascension Parish, La	Nov. 12, 1867	70, 691
Sugar-cane, sorghum, &c., Cutter for	W. H. White	Dubuque, Iowa	Aug. 5, 1862	36, 120
Sugar-cane stripper	B. and E. Haworth	Ridge Farm, Ill	June 24, 1862	35, 680
Sugar-cane stripper	S. T. Hudson	Success, N. Y	May 21, 1867	64, 875
Sugar-cane-stripping instrument	L. R. Witherell	Galesburgh, Ill	Aug. 22, 1865	49, 577
Sugar-cane, Treating	J. C. Bell	Pawnee City, Nebr	Aug. 28, 1866	57, 465
Sugar, Clarifying	H. G. C. Paulsen	New York, N. Y	June 19, 1860	28, 769
Sugar, Cleaning	J. Hurd	Stoneham, Mass	Oct. 3, 1844	3, 772
Sugar, Composition for the manufacture of	L. H. F. Melsens	Louvain, Belgium	Jan. 29, 1850	7, 057
Sugar-cracking machine	S. H. Murrill	Baltimore, Md	July 26, 1859	24, 910
Sugar, cream, salt, &c., Rack for	M. A. S. Mullin	Osgood, Ind	Aug. 31, 1869	93, 233
Sugar-crusher	A. and F. Brown	New York, N. Y	Apr. 27, 1860	27, 613
Sugar-crystallizing tank or wagon	F. O. Mathiessen	Jersey City, N. J	July 2, 1867	66, 369
Sugar-cutter	C. Kinzler and W. Rosebrock	New York, N. Y	Feb. 14, 1860	27, 135
Sugar cutter, Loaf	A. and F. Brown	New York, N. Y	Nov. 15, 1870	109, 293

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Sugar cutter, Loaf	F. Brown	New York, N. Y	Nov. 15, 1870	109, 295
Sugar cutter, Loaf	F. Brown	New York, N. Y	Nov. 15, 1870	109, 296
Sugar-cutting machine	C. Kinzler	New York, N. Y	Sept. 25, 1860	30, 145
Sugar-cutting machine	W. Moller	New York, N. Y	Sept. 10, 1861	33, 260
Sugar-cutting machine	J. H. Murrill	Baltimore, Md	Mar. 8, 1864	41, 855
Sugar-cutting machine	T. H. Quick	New York, N. Y	June 26, 1860	28, 903
Sugar-cutting machine	C. Teckelnburg	Philadelphia, Pa	Aug. 20, 1861	33, 111
Sugar, Decolorizing raw	L. H. G. Ehrhardt	New York, N. Y	July 18, 1871	117, 161
Sugar, Defecating	R. De Massy	Near St. Quentin, France	May 7, 1850	7, 342
Sugar, Defecating	R. and J. Oxland	Plymouth, England	July 6, 1852	9, 099
Sugar-dissolving apparatus	W. Hocking	New York, N. Y	Apr. 9, 1872	125, 654
Sugar-drainer	H. Bessemer	Baxter House, England	Apr. 26, 1853	9, 681
Sugar drainer and cooler	B. Tanner	Cheneyville, La	June 4, 1872	127, 528
Sugar, Draining	C. W. Finzel	Bristol, England	Sept. 3, 1850	7, 616
Sugar, Draining and blanching	J. Spangenberg	Jefferson Parish, La	Mar. 20, 1849	6, 199
Sugar-draining apparatus	J. Aspinall	London, England	July 10, 1855	13, 203
Sugar-draining apparatus	G. Fincken	Brooklyn, N. Y	Nov. 11, 1856	16, 051
Sugar-draining apparatus	S. Gardner	New York, N. Y	Sept. 16, 1851	8, 362
Sugar-draining apparatus	J. B. Hill	Allegheny City, Pa	Dec. 10, 1867	71, 876
Sugar-draining apparatus	J. J. Unbehagen	Baton Rouge, La	July 10, 1860	29, 115
Sugar-draining machine	J. W. Archibald	Porto Rico, West Indies	Jan. 25, 1853	9, 560
Sugar-draining machine	H. A. Coppess	Greenville, Ohio	June 11, 1867	65, 546
Sugar-draining machine	C. Macumber	Aurora, Ill	July 2, 1867	66, 241
Sugar, Drip-pot for refining	A. Mackey and J. W. Jarboe	New York, N. Y	Dec. 2, 1862	37, 046
Sugar-dryer	A. Herbst	Moscow, Russia	Oct. 12, 1869	95, 798
Sugar-dryer	A. Mackey	New York, N. Y	Apr. 1, 1873	137, 459
Sugar, Drying loaf	W. M. Davis	Philadelphia, Pa	June 4, 1867	65, 352
Sugar-drying machine	A. W. J. Mason	New Orleans, La	May 8, 1860	28, 189
Sugar during evaporation, Apparatus for preventing the loss of.	G. A. Jasper	Charlestown, Mass	Mar. 22, 1864	41, 999
Sugar evaporating and refining apparatus	J. E. Youngman	Rockford, Ill	Jan. 12, 1864	41, 253
Sugar-evaporating apparatus	E. Tucker	Poplar Grove, Ind	Dec. 8, 1863	40, 870
Sugar, Evaporating-apparatus for manufacture of	F. G. Butler	Bellows Falls, Vt	July 11, 1871	116, 803
Sugar-evaporator	T. C. Bartle	Independence, Iowa	Oct. 13, 1863	40, 232
Sugar-evaporator	T. C. Bartle	Independence, Iowa	Aug. 15, 1865	49, 363
Sugar-evaporator	V. R. Beach and J. Day	Independence, Iowa	Oct. 21, 1862	36, 749
Sugar-evaporator	D. Beasley	Boone County, Ind	Oct. 20, 1863	40, 378
Sugar-evaporator	J. A. Bowlus	Fremont, Ohio	Apr. 28, 1863	38, 278
Sugar-evaporator	A. L. Brink	Warren, Ill	Jan. 16, 1866	52, 022
Sugar-evaporator	H. Butler	Chesterfield, Ohio	Nov. 1, 1864	44, 850
Sugar-evaporator	R. S. Cole	Mount Pleasant, Iowa	Jan. 12, 1864	41, 195
Sugar-evaporator	J. S. Corbin	New Richmond, Ohio	Sept. 27, 1864	44, 401
Sugar-evaporator	J. L. Crowley and L. J. Johnson	Marion, Iowa	Aug. 5, 1862	36, 076
Sugar-evaporator	J. C. Douglas	Cincinnati, Ohio	Feb. 19, 1833	....
Sugar-evaporator	S. H. Gilman	New Orleans, La	Apr. 22, 1856	14, 717
Sugar-evaporator	S. H. Gilman	New Orleans, La	July 29, 1856	15, 421
Sugar-evaporator	R. Hamilton	Franklin, Ind	Feb. 24, 1863	37, 751
Sugar-evaporator	J. High	Walnut Fork, Iowa	Dec. 15, 1863	40, 934
Sugar-evaporator	S. Hoyt	New York, N. Y	Nov. 10, 1863	40, 562
Sugar-evaporator	W. E. Jacobs	Columbus, Ohio	Sept. 12, 1871	118, 943
Sugar-evaporator	J. K. Leedy	Bloomington, Ill	Sept. 16, 1862	36, 469
Sugar-evaporator	J. K. Leedy	Bloomington, Ill	Mar. 17, 1863	37, 916
Sugar-evaporator	L. Lefebvre	New Orleans, La	Oct. 8, 1867	69, 684
Sugar-evaporator	A. H. Miller	La Porte, Ind	Oct. 29, 1861	33, 593
Sugar-evaporator	O. B. Olmsted	Rockton, Ill	Jan. 6, 1863	37, 303
Sugar-evaporator	N. Z. Potter	Uniontown, Ill	Sept. 23, 1862	36, 527
Sugar-evaporator	P. Robinson	Harrisburgh, Ill	Dec. 26, 1871	122, 194
Sugar-evaporator	S. M. Shattuck	Cambridge, Ill	Feb. 19, 1867	62, 292
Sugar-evaporator	W. C. Smith	Warrensburgh, Mo	June 11, 1867	65, 702
Sugar-evaporator	W. C. Smith	Warrensburgh, Mo	May 5, 1868	77, 6[illegible]8
Sugar-evaporator	W. C. Smith	Warrensburgh, Mo	June 9, 1868	78, 695
Sugar-evaporator	H. C. and T. W. Stevens	Enosburgh, Vt	Apr. 8, 1873	137, 576
Sugar-evaporator	F. L. Stewart	Murrysville, Pa	Jan. 5, 1864	41, 106
Sugar-evaporator	R. Wakefield	Hardwick, Vt	Oct. 19, 1869	95, 958
Sugar-evaporator	C. O. and E. West and J. Carey	Martinsville, Ohio	Apr. 21, 1863	38, 254
Sugar-evaporator	A. Whitenack	North Salem, Ind	Sept. 8, 1863	39, 855
Sugar-evaporator	J. H. Withey	Winchester, Ill	May 26, 1863	38, 710
Sugar-evaporator furnace	A. H. Perry	Tipton, Iowa	June 2, 1863	38, 739
Sugar-evaporator furnace	S. B. Spaulding	Brandon, Vt	Oct. 6, 1863	40, 196
Sugar-evaporator, Portable	R. Hamilton	Franklin, Ind	Aug. 26, 1862	36, 294
Sugar-evaporator with automatic feeder	J. Smead	Pawlet, Vt	Sept. 29, 1863	40, 126
Sugar-evaporator with automatic feeder	G. Stevenson	Zionsville, Ind	Nov. 10, 1863	40, 579
Sugar-evaporators, Sap-feeder to	G. D. Chandler	West Concord, Vt	Sept. 20, 1870	107, 448
Sugar-evaporators, Skimmer for	T. J. Price	Industry, Ill	Oct. 11, 1864	44, 657
Sugar-evaporators, Skimming-attachment for	J. F. Riggs	Fremont, Nebr	Aug. 2, 1864	43, 743
Sugar-evaporators, Smoke-pipe and base-plate for	C. C. Post	Hinesburgh, Vt	May 9, 1871	114, 597
Sugar-evaporators, Working and using	L. W. Bodwell	Ann Arbor, Mich	Feb. 23, 1864	41, 674
Sugar, Extracting, manufacturing, and refining	J. E. Boivin and D. Loiseau	Paris, France	Jan. 25, 1870	99, 141
Sugar, Extracting, refining, and crystallizing	L. J. F. Marqueritte	Paris, France	June 1, 1869	90, 762
Sugar from beets, Process of manufacturing	J. Hurd, jr	Boston, Mass	July 26, 1838	855
Sugar from cane-juice, Manufacturing	W. A. Archbald	New York	Apr. 19, 1830	....
Sugar from cane-juice, Manufacturing	E. A. Lester	Boston, Mass	Sept. 10, 1829	....
Sugar from cane-juice, Raw or brown	W. A. Archbald	New York	Apr. 19, 1830	....
Sugar from cane-juice, Raw or brown	W. A. Archbald	New York	Apr. 19, 1830	....
Sugar from corn, Manufacture of	A. H. Hirsh	New York, N. Y	Oct. 16, 1866	58, 824
Sugar from Indian corn or other grain, Method of making.	F. W. Goessling	Jersey City, N. J	Sept. 5, 1865	49, 750
Sugar from molasses, &c., Cleansing	A. H. Tait	Jersey City, N. J	Dec. 9, 1873	145, 460
Sugar from molasses, Obtaining	J. Schroeder	Petschek, Austria	Oct. 10, 1871	119, 886
Sugar from molasses, Process of extracting	J. B. Thomas	Baltimore, Md	Nov. 4, 1873	144, 369
Sugar from sorghum-juice, Manufacture of	A. L. and A. S. Folger and H. Henshaw.	Sumner and Quakertown, Ind.	Aug. 11, 1868	80, 819
Sugar from sorghum, Manufacture of	J. C. Garretson	Pilot Grove, Iowa	June 23, 1863	38, 958
Sugar from sorghum, Process of manufacturing	J. F. Shelden	Viola, Ill	Dec. 15, 1863	40, 954
Sugar from sweet-potatoes, &c., Extracting	W. Adamson and C. F. A. Simonin.	Philadelphia, Pa	Apr. 2, 1872	125, 249
Sugar from wheat, rye, &c., Making	J. Wiseheart	Wayne County, Ind	May 25, 1819	....
Sugar for brewing, &c., Manufacture of inverse	W. Garton	Southampton, England	Aug. 29, 1871	118, 524

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Sugar for table use, &c., Machine for molding	L. M. Boynton	Hartford, Conn	Dec. 27, 1864	45, 579
Sugar, Granulating	J. A. Morrell	New York, N. Y	Sept. 2, 1873	142, 498
Sugar, Granulating	W. Young and W. Bosson	Shelbyville and Murfreesborough, Tenn.	Oct. 22, 1872	132, 511
Sugar, Granulating and drying	J. Hanford	Lexington, Mass	Sept. 18, 1866	58, 096
Sugar-grinding mill	G. I. Rice	Frederick City, Md	Aug. 14, 1860	29, 618
Sugar grinding mill	N. Sargent	Cambridgeport, Mass	Sept. 10, 1840	1, 783
Sugar-holder and distributer	T. Lewis	Malden, Mass	Apr. 3, 1860	27, 726
Sugar-house, Drip-pot for	J. Turl	New York, N. Y	Sept. 15, 1857	18, 215
Sugar in blocks, Apparatus for dividing	W. H. Whitmore	Boston, Mass	Apr. 4, 1865	47, 147
Sugar in blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	Hoboken, N. J	Oct. 29, 1872	132, 626
Sugar in blocks or cubes, Manufacture of	A. F. W. Parts	Oakland, Cal	Nov. 12, 1872	132, 921
Sugar in sugar-refineries, Machine for stirring and dissolving.	T. H. Quick	New York, N. Y	May 8, 1866	54, 597
Sugar, &c., in waste liquid, Apparatus for detecting.	G. A. Jasper	Charlestown, Mass	Dec. 22, 1863	41, 008
Sugar, &c., into barrels, Machine for compacting	G. A. Jasper	Charlestown, Mass	June 2, 1863	38, 787
Sugar into blocks, Apparatus for compacting granular.	A. F. W. Parts	Oakland, Cal	Dec. 10, 1872	133, 884
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	Hoboken, N. J	Jan. 7, 1873	134, 588
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	Hoboken, N. J	July 1, 1873	140, 464
Sugar into blocks, Machine for cutting	P. O. Brunjés and A. Benneckendorf.	Hoboken, N. J	July 29, 1873	141, 201
Sugar into blocks, Machine for cutting	G. D. Jones	Brooklyn, N. Y	Nov. 10, 1868	83, 972
Sugar into cubes, Apparatus for cutting disks of	J. King	Hoboken, N. J	Nov. 12, 1872	132, 911
Sugar-juice, &c., Clarifying and refining	H. G. C. Paulsen	Flatlands, N. Y	Nov. 8, 1859	26, 050
Sugar-juice-clarifying apparatus	W. Dill	Houma, La	July 28, 1868	80, 340
Sugar-juice, Defecating	M. A. Nicolas and L. J. Champagne.	Thibodeaux, La	June 28, 1859	24, 572
Sugar-juice, Defecating	A. H. Tait	New York, N. Y	June 28, 1859	24, 592
Sugar-juice-evaporating apparatus	J. Smart	Mansfield, Ohio	Mar. 15, 1859	23, 270
Sugar-juice-evaporating furnace	E. Duchamp	Saint Martinsville, La	Jan. 31, 1860	26, 974
Sugar-juice evaporator	E. Duchamp	Saint Martinsville, La	Dec. 27, 1859	26, 574
Sugar-juice evaporator	S. W. Ells	Mansfield, Ohio	Apr. 10, 1860	27, 783
Sugar-juice evaporator	C. Harvey	Richmond, Ind	May 8, 1860	28, 171
Sugar-juice evaporator	A. Jonan	San Francisco, Cal	Jan. 25, 1859	22, 732
Sugar-juice evaporator	S. B. Maulsby	Muncie, Ind	Apr. 2, 1867	63, 545
Sugar-juice evaporator	J. Taylor	Canton, N. Y	Oct. 13, 1868	83, 106
Sugar-juice evaporator	G. W. Thompson and A. H. Rogers.	Marion, Iowa	Aug. 12, 1862	36, 179
Sugar-juice evaporator	M. and S. G. Tufts	Mainville, Ohio	Mar. 11, 1862	34, 655
Sugar-juice skimmer	J. M. Jones	New Orleans, La	Feb. 21, 1860	27, 257
Sugar-kettle trains, Arrangement of	J. P. Henderson	Franklin, La	July 10, 1860	29, 076
Sugar-kettles, Apparatus for emptying	C. H. Collins and W. B. McClure	Alexandria, Va	Sept. 7, 1869	94, 475
Sugar-kisses, Wrapping	T. Laramie and J. A. Scott	Wheeling, W. Va	Apr. 27, 1869	89, 319
Sugar-loaf mill	S. and P. Moore	Mount Tirzah, N. C	June 15, 1827	....
Sugar, Machine for cutting and reducing loaf	A. E. Letorey	Rouen, France	Aug. 17, 1869	93, 894
Sugar, Machine for cutting beet-roots for the manufacture of.	J. Hurd, jr	Boston, Mass	July 26, 1838	856
Sugar, Machine for cutting loaf	A. and F. Brown	New York, N. Y	Mar. 25, 1856	14, 490
Sugar, Machine for cutting loaf	P. O. Brunjes	New York, N. Y	Apr. 9, 1872	125, 536
Sugar, Machine for filtering and refining	A. L. G. Dehne	Halle on Saale, Prussia	July 7, 1868	79, 558
Sugar, Machine for making cube	L. W. Boynton	Hartford, Conn	Mar. 6, 1866	52, 956
Sugar, Machine for mixing and bleaching	M. Hanford	Lexington, Mass	Jan. 17, 1871	110, 972
Sugar, Machine for molding, pressing, and cutting	P. Spreckels and J. Peterson	San Francisco, Cal	June 20, 1871	116, 235
Sugar, Machine for pulverizing	O. R. Chase	Boston, Mass	Oct. 15, 1850	7, 718
Sugar, Machine for separating iron from	J. Meyer	Portland, Me	July 14, 1868	79, 849
Sugar machines, Mold for making loaf	C. Duncan	Williamsburgh, N. Y	Oct. 27, 1835	....
Sugar, Machinery for crushing and mixing	F. Ebeling	New York, N. Y	May 31, 1859	24, 204
Sugar-making	E. Campbell	New York, N. Y	Oct. 25, 1845	4, 240
Sugar-making	J. De Bretton, sr	New Orleans, La	May 24, 1845	4, 059
Sugar-making	C. De Manoël and E. Brafin	Saint Pierre, Martinique	Feb. 22, 1848	5, 454
Sugar-making	C. L. Derosue	Paris, France	July 10, 1845	4, 108
Sugar-making	N. Rillieux	New Orleans, La	Dec. 10, 1846	4, 879
Sugar, Making	D. Bruce	Rossville, N. Y	Jan. 22, 1867	61, 314
Sugar, Making	A. M. F. Chevet	Saint James Parish, La	Sept. 4, 1847	5, 276
Sugar, Making	G. Michiels	Guadaloupe, Island of Guadaloupe.	Oct. 3, 1846	4, 790
Sugar, Making	F. Moore	Bloomington, Ill	July 4, 1865	48, 580
Sugar, Making and refining	A. Boucherie	Philadelphia, Pa	Jan. 8, 1808	....
Sugar-making apparatus	J. Guardiola	Chocolá, Central America	July 2, 1872	128, 541
Sugar-making apparatus, Construction of	L. A. Gossin	Thibodeaux, La	Oct. 10, 1854	11, 782
Sugar-making machine	I. A. Heald	Washington, D. C	June 3, 1862	35, 442
Sugar-manufacture	H. M. Aschenbrenner	Havana, Cuba	Dec. 30, 1873	145, 040
Sugar-manufacture	H. Butler	Chesterfield, Ohio	July 19, 1864	43, 566
Sugar-manufacture	H. P. Gale	Washington, Vt	June 30, 1868	79, 464
Sugar-manufacture	W. Knaggs	Clarendon Parish, Jamaica, West Indies.	Nov. 10, 1868	83, 974
Sugar-manufacture	F. O. Matthiessen	Jersey City, N. J	Jan. 15, 1867	61, 294
Sugar-manufacture	A. F. W. Parts	Oakland, Cal	May 20, 1873	139, 078
Sugar-manufacture	J. Poey	Havana, Cuba	May 10, 1870	102, 969
Sugar-manufacture	I. W. Reid	New York, N. Y	Sept. 24, 1867	69, 249
Sugar, Manufacture and refining of	E. Beanes	Havana, Cuba	Aug. 5, 1862	36, 067
Sugar, Manufacture and refining of	L. J. F. Margueritte	Paris, France	Oct. 5, 1869	95, 496
Sugar-manufacture, Apparatus for	S. Dod	Havana, Cuba	Feb. 4, 1873	135, 529
Sugar, Manufacture of	A. M. F. Chevet	New Orleans, La	Feb. 27, 1847	4, 985
Sugar, Manufacture of	G. A. Drummond and T. S. Hunt.	Montreal, Canada	Jan. 2, 1872	122, 371
Sugar, Manufacture of	F. W. Goessling	Buffalo, N. Y	Dec. 20, 1864	45, 561
Sugar, Manufacture of	F. W. Goessling	Buffalo, N. Y	May 10, 1864	42, 727
Sugar, Manufacture of	T. Lespés	Cold Spring, N. Y	Feb. 6, 1866	52, 424
Sugar, Manufacture of	J. A. Morrell	New York, N. Y	July 22, 1873	141, 067
Sugar, Manufacture of	E. Pesier	Valenciennes, France	Jan. 11, 1859	22, 578
Sugar, Manufacture of	J. Poey	Havana, Cuba	Oct. 18, 1870	108, 514
Sugar, Manufacture of	T. J. Price	South Union, Ky	Mar. 29, 1864	42, 169

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Invention.	Inventor.	Residence.	Date.	No.
Sugar, Manufacture of	J. Ramos	Island of Porto Rico	June 29, 1852	9,087
Sugar, Manufacture of	J. Scoffern	Upper Holloway, England	Nov. 27, 1849	6,900
Sugar, Manufacture of	S. Schüzenbach	New York, N. Y	May 17, 1870	103,090
Sugar, Manufacture of	J. C. Tucker and L. Lanzweert	San Francisco, Cal	Oct. 12, 1858	21,786
Sugar, Manufacture of	A. Weichert	New York, N. Y	Nov. 1, 1870	108,861
Sugar, Manufacture of	H. Weller and J. E. Hatcher	Fultonham, Ohio	Dec. 12, 1865	51,502
Sugar, Manufacture of beet	T. Gennert	New York, N. Y	Sept. 15, 1868	82,106
Sugar, Manufacture of crushed	C. Spreckels	San Francisco, Cal	Mar. 17, 1868	75,656
Sugar, Manufacture of cube	G. Finken	Brooklyn, N. Y	Oct. 22, 1861	33,524
Sugar, Manufacture of cube	A. F. W. Partz	Oakland, Cal	Oct. 1, 1872	131,899
Sugar, Manufacture of glucose sirup and	J. J. Grosheins	Logelbach, France	May 22, 1871	115,051
Sugar, Manufacture of granulated	C. Wandel	Waldau, Germany	July 6, 1869	92,406
Sugar, Manufacture of hard	J. O. Donner and S. S. Hepworth.	Williamsburgh and Yonkers, N. Y.	Mar. 5, 1872	124,197
Sugar, Manufacture of hard	A. F. W. Partz	Oakland, Cal	Oct. 1, 1872	131,900
Sugar, Manufacture of loaf	E. Langen	Cologne, Prussia	Jan. 7, 1873	134,682
Sugar, Manufacture of refined	E. P. Eastwick	Baltimore, Md	June 11, 1867	65,658
Sugar, Manufacture of sorghum	F. M. Chalfant	Morgantown, W. Va	Oct. 30, 1866	59,183
Sugar, Manufacture of sorghum	R. Watson and T. Spencer	Central College, Ohio	June 18, 1867	65,848
Sugar, Manufacture of starch	N. Pigeon	Montreal, Canada	Apr. 23, 1867	64,139
Sugar, Manufacturing	W. A. Archbald	New York	Aug. 16, 1831	....
Sugar, Manufacturing	G. Duplantier	East Baton Rouge, La	Jan. 21, 1833	....
Sugar, Manufacturing	J. Penny	Ascension Parish, La	Sept. 25, 1837	405
Sugar, Manufacturing	L. W. Wright	London, England	Aug. 25, 1831	....
Sugar-manufacturing apparatus	J. W. Hahn	San Francisco, Cal	Nov. 15, 1870	109,314
Sugar, Method of sprinkling liquids in refining	H. Merrill	Brooklyn, N. Y	Apr. 23, 1867	64,181
Sugar-mill	J. B. Aveilhé	New York	Aug. 28, 1817	....
Sugar-mill	G. Bevitt	Madison, Wis	Jan. 23, 1866	52,127
Sugar-mill	J. L. Brown and A. C. Greenleaf.	Indianapolis, Ind	Apr. 26, 1859	23,753
Sugar-mill	J. Burge	Terre Haute, Ind	June 21, 1859	24,440
Sugar-mill	J. W. Chapman	Trinity Springs, Ind	June 21, 1859	24,444
Sugar-mill	T. S. Cox	La Fayette, Ind	Sept. 23, 1862	36,508
Sugar-mill	F. E. Dake	Indianapolis, Ind	Apr. 27, 1858	20,124
Sugar-mill	S. L. Denney	Lancaster County, Pa	Sept. 28, 1858	21,601
Sugar-mill	R. Emerson, jr	Rockford, Ill	Mar. 15, 1859	23,237
Sugar-mill	P. Fitzgerol	Newport, Ky	Oct. 24, 1865	50,570
Sugar-mill	J. R. Gates	Indianapolis, Ind	July 5, 1859	24,697
Sugar-mill	G. W. L. Hazen	Indianapolis, Ind	Apr. 17, 1860	27,903
Sugar-mill	T. E. Hunt	Indianapolis, Ind	Mar. 15, 1859	23,287
Sugar-mill	J. Paynter	Shelbyville, Ind	July 12, 1859	24,781
Sugar-mill	L. E. Porter	Lake Mills, Wis	Jan. 12, 1864	41,265
Sugar-mill	M. Roe	Townsend, Ohio	Mar. 26, 1861	31,828
Sugar-mill for breaking and crumbling lumps of sugar.	W. Bent	Philadelphia, Pa	Feb. 3, 1838	591
Sugar-mills, Crushing-roller for	P. W. Gates	Chicago, Ill	Apr. 10, 1860	27,863
Sugar-mills, Governor for	R. Stott	Baton Rouge, La	Apr. 19, 1859	23,724
Sugar-mills, Oiling-boxes of vertical	J. Cooper	Mount Vernon, Ohio	Dec. 6, 1859	26,340
Sugar mixer and packer, Combined	M. C. Cogswell and M. L. Senderling.	Brooklyn, N. Y., and Jersey City, N. J.	Apr. 9, 1872	125,379
Sugar-mixing apparatus	M. L. Senderling	Jersey City, N. J	Jan. 1, 1867	60,797
Sugar, molasses, and saccharine juices, Purifying	J. M. O. Tamin	New York, N. Y	Aug. 12, 1873	141,831
Sugar-mold	J. S. Inskeep	West Middlebury, Ohio	Jan. 28, 1868	73,810
Sugar-mold	C. Kronig	Vienna, Austria	June 28, 1864	43,376
Sugar-mold	A. Mayer	New York, N. Y	Jan. 27, 1863	37,514
Sugar-mold	F. Nishwitz	Williamsburgh, N. Y	June 26, 1866	55,887
Sugar-mold carriage	T. Beach	New York, N. Y	Nov. 3, 1863	40,454
Sugar-mold carriage	C. E. Bertrand	Williamsburgh, N. Y	Mar. 30, 1858	19,743
Sugar-mold carriage	T. A. Havemeyer and H. Schmitzspan.	New York, N. Y	Mar. 18, 1862	34,686
Sugar-mold carriage	A. Mackey	New York, N. Y	Nov. 29, 1864	45,255
Sugar-mold carriage	W. Mitchell	New York, N. Y	Sept. 13, 1864	44,211
Sugar, Mold for claying	J. Williams, jr		Mar. 13, 1793	....
Sugar, Mold for refining	M. Merrill	New York	Oct. 25, 1816	....
Sugar-mold tip	F. Nishwitz	Williamsburgh, N. Y	June 26, 1866	55,888
Sugar-molds, Drip-pot for	J. W. Jarboe and A. Mackey	New York, N. Y	July 23, 1861	32,873
Sugar-molds, Making	A. Carbonel	Philadelphia, Pa	Apr. 29, 1842	2,591
Sugar-molds, Making	J. Myers, jr	New York, N. Y	Dec. 19, 1854	12,101
Sugar-molds, Tip for	J. Turl	New York, N. Y	May 26, 1857	17,409
Sugar or other boilers, Preventing incrustation of	A. T. Hay	Burlington, Iowa	Nov. 20, 1866	59,910
Sugar-packer	E. J. Biederman	Brooklyn, N. Y	Aug. 18, 1868	81,062
Sugar-packing machine	C. E. Haynes	Boston, Mass	Dec. 5, 1871	121,518
Sugar-pan	J. Benson and J. Day	Brooklyn, N. Y	Aug. 1, 1848	5,691
Sugar-pan	A. Stillman	New York, N. Y	May 16, 1846	4,519
Sugar-pan	A. Stillman	New York, N. Y	Aug. 28, 1849	6,671
Sugar-pan	A. T. Wilder	La Porte, Ind	June 23, 1863	38,998
Sugar-pan derrick	J. D. Ayers	East Greensborough, Vt	Oct. 27, 1868	83,356
Sugar-pan derrick	A. J. Weed	Hardwick, Vt	Oct. 6, 1868	82,774
Sugar-pan derrick	D. Young	East Topsham, Vt	Apr. 28, 1868	77,342
Sugar-pan evaporator	J. Larkin	Thibodeaux, La	Jan. 17, 1860	26,851
Sugar-pan valve	L. Colwell	New York, N. Y	Apr. 28, 1868	77,259
Sugar-pans, Apparatus for shifting	M. Tibbets	Lancaster, Ind	May 2, 1865	47,583
Sugar-pans, Scumming-apparatus for	W. H. Clement	Philadelphia, Pa	Oct. 12, 1852	9,316
Sugar-pans, Skimming-apparatus for	T. J. Price	Industry, Ind	Mar. 15, 1864	41,941
Sugar-plums, Machine for manufacturing	E. Dujour and F. Couppè	Chartres, France	Feb. 20, 1872	123,773
Sugar-press	W. C. Bruson	Chicago, Ill	Feb. 23, 1869	87,090
Sugar-press	P. M. Gilbert	Kewanee, Ill	July 10, 1866	56,205
Sugar-press	D. C. and L. S. Riggs	Omaha City, Nebr	May 30, 1865	47,984
Sugar, Process for melting	C. W. Finzel	Bristol, England	Apr. 17, 1855	12,719
Sugar, Process of collecting spirit during the refining of.	F. Reid	Liverpool, England	Sept. 19, 1865	50,081
Sugar, Process of purging and draining	W. H. Guild	Brooklyn, N. Y	Mar. 2, 1869	87,487
Sugar, Purifying	H. Gerken	Middlesex County, England	Feb. 27, 1872	123,988
Sugar, Purifying and cleansing	G. A. Jasper	Charlestown, Mass	Jan. 27, 1863	37,548
Sugar, Purifying and preparing blood for clarifying	T. Hewitt	Philadelphia, Pa	Nov. 19, 1833	....
Sugar, Purifying and refining	B. E. Verjon	Washington, D. C	Apr. 26, 1816	....
Sugar, Raising the grade of raw	A. Mackey and E. Müller	New York and Brooklyn, N. Y.	Aug. 13, 1867	67,662

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Invention.	Inventor.	Residence.	Date.	No.
Sugar-refiner kiln, Cover for	W. R. Bradford	Charlestown, Mass	Mar. 19, 1867	62, 927
Sugar-refineries, Method of utilizing waste products from.	V. G. Bloede	Brooklyn, N. Y	Apr. 27, 1869	89, 279
Sugar, Refining	J. Aspinwall	London, England	Nov. 8, 1859	26, 007
Sugar, Refining	J. A. Morrell	New York, N. Y	Sept. 12, 1871	118, 875
Sugar, Refining	H. G. C. Paulsen	New York, N. Y	Mar. 3, 1863	37, 824
Sugar, Refining	C. F. L. Wandel	Bernburg, Germany	May 25, 1869	90, 616
Sugar-refining	A. F. W. Partz	Oakland, Cal	Apr. 25, 1871	114, 192
Sugar-refining	H. G. C. Paulsen	New York, N. Y	Sept. 18, 1860	30, 108
Sugar-refining	J. Rogers and L. Reid	Brooklyn, N. Y	July 12, 1870	105, 254
Sugar, Refining and crystallizing	H. N. Fryatt	Belleville, N. J	Dec. 24, 1861	33, 987
Sugar refining and manufacture	E. Beanes	Havana, Cuba	Nov. 25, 1862	36, 988
Sugar, Refining and purifying	J. Wright, jr	New York, N. Y	Nov. 5, 1861	33, 674
Sugar-refining bath	W. A. Archibald	New York	May 29, 1828	....
Sugar-refining, Double boiler for	W. A. Archibald	New York	May 29, 1828	....
Sugar-refining filtering-apparatus	W. A. Archibald	New York	May 29, 1828	....
Sugar, Refining maple	O. P. Beardsley	McDonough, N. Y	Sept. 17, 1861	33, 289
Sugar, Refining maple	O. P. Beardsley	McDonough, N. Y	Apr. 20, 1869	89, 195
Sugar, Refining raw	R. W. Bender	Boston, Mass	May 30, 1871	115, 417
Sugar, Removing foreign substances from	J. Hoover	Oscaloosa, Iowa	Apr. 25, 1865	47, 420
Sugar, salt, &c., Dryer for	D. Lee	Boston, Mass	May 27, 1873	139, 400
Sugar, salt, &c., Dryer for	D. Lee	Boston, Mass	May 27, 1873	139, 401
Sugar-sirup from sweet potatoes, Manufacture of	C. Delemarre	New Orleans, La	Dec. 6, 1870	109, 991
Sugar-sirup heater	H. Bessemer	Baxter House, England	Mar. 15, 1853	9, 618
Sugar, sirup, &c., Method of refining and bleaching.	W. Van Wyck	Belleville, N. J	Feb. 5, 1867	61, 898
Sugar-solutions, Apparatus for evaporating	W. B. Goodrich	Ashley, Ohio	Mar. 12, 1861	31, 662
Sugar, Steam-pans for clarifying	G. M. Longacre	New Orleans, La	Sept. 6, 1859	25, 341
Sugar stirrer, Maple	F. B. Graves	Cortlandville, N. Y	July 1, 1873	140, 361
Sugar, Tank for crystallizing	C. E. Bertrand	New York, N. Y	Dec. 18, 1860	30, 951
Sugar, Treating	F. C. Durant	New York, N. Y	July 16, 1872	129, 114
Sugar with sulphurous acid in the vacuum-pan, Treating.	A. H. Seyferth	Brunswick, Germany	Jan. 21, 1873	135, 014
Sugar-works	N. Pillieux	New Orleans, La	Aug. 26, 1843	3, 237
Sulky	J. A. Bilz	Pleasanton, Cal	Nov. 26, 1872	133, 401
Sulky	M. C. Boyer	Norristown, Pa	Mar. 19, 1872	124, 785
Sulky	J. Jenkins	Sligo, Md	Nov. 1, 1870	108, 911
Sulky	L. H. Jennison	Monroeville, Ohio	Nov. 25, 1873	144, 983
Sulky	A. Miller	Angola, Ind	Aug. 30, 1864	44, 012
Sulky	J. G. Reiff	Farmersville, Pa	Nov. 6, 1866	59, 452
Sulky	T. S. Seabury	Saint James, N. Y	Dec. 12, 1871	121, 817
Sulky	J. Winecoff	Berlin, Pa	Oct. 17, 1871	119, 956
Sulky, One-wheeled	J. A. Sinclair	Woodsfield, Ohio	Jan. 25, 1870	99, 114
Sulky-seat	O. H. Capron and G. Barton, jr	Shaftsbury, Vt	Jan. 23, 1846	....
Sulky, Spring	E. Milner	Marquette, Mich	June 21, 1870	104, 626
Sulphur and chlorine, Manufacture of	H. M. Baker	Washington, D. C	Jan. 26, 1869	86, 201
Sulphur, Apparatus for sublimating	G. B. Dexter	Boston, Mass	Oct. 9, 1806	....
Sulphur-duster	J. W. Clarke	Kingston, Wis	July 31, 1866	56, 711
Sulphur, Manufacture of	L. A. C. S. P. De Sincay	La Vieille Montagne, Belgium.	Oct. 30, 1866	59, 328
Sulphur, Manufacture of precipitated	D. E. Paynter	Philadelphia, Pa	Mar. 1, 1859	23, 141
Sulphur, Mode of subliming	G. Robertson	Elizabethtown, N. J	Nov. 16, 1812	....
Sulphurets and manufacturing carbonates and sulphur compounds, Treatment of hydro-.	C. Lennig	Philadelphia, Pa	Mar. 16, 1852	8, 804
Sulphurets, Machine for separating and concentrating.	A. Hunter	San Francisco, Cal	Aug. 4, 1868	80, 629
Sulphurets, Mode of treating metalliferous	H. Holland	Westfield, Mass	Dec. 27, 1859	26, 590
Sulphurets, Process for treating auriferous and argentiferous.	H. Holland	Westfield, Mass	May 29, 1855	12, 948
Sulphurets, Process of roasting auriferous	W. Brücknerr	Central, Colo	June 29, 1869	92, 009
Sulphurets, Treatment of metallic	A. Monnier	Camden, N. J	June 22, 1858	20, 655
Sumac, Machine for manufacturing	C. Hoyt, jr	....	Apr. 7, 1800	....
Sumac, Manufacturing	J. Hillard	....	May 12, 1796	....
Sumac, Mill for grinding	P., W. S., and J. J. Hench	Port Royal, Pa	Jan. 24, 1854	10, 432
Sumac, Mill for grinding and bolting	S. W. Powell	Tuscarora Valley, Pa	Mar. 6, 1855	12, 487
Summer-furnace	E. C. Little and J. W. Bell	Saint Louis, Mo	Dec. 17, 1867	72, 207
Summer-furnace	W. P. Springer	Oswego, N. Y	Mar. 11, 1873	136, 783
Summer-furnace	J. S. Van Buren	Green Island, N. Y	Oct. 26, 1869	96, 289
Summer-furnace, Portable	J. H. Lyon, W. Ager, D. Breed, and W. H. Seaman.	Washington, D. C	Aug. 3, 1869	93, 321
Sun-dial	J. Johnson	Saco, Me	May 4, 1869	89, 585
Sun-dial	H. C. Pearsons	Ferrysburg, Mich	May 26, 1868	78, 392
Sun-dial	L. I. Trueg	Saint Vincent's, Pa	Dec. 28, 1869	98, 320
Sun-dial	L. I. Trueg	Saint Vincent's, Pa	Mar. 8, 1870	100, 691
Sun-dial, Cast-iron	H. McCluer	Hamburgh, N. Y	Sept. 17, 1834	....
Sun-dial, Pocket	H. H. Hempler	Washington, D. C	July 18, 1865	48, 812
Sun-dial, Pocket	D. L. Smith	Waterbury, Conn	Aug. 23, 1870	106, 735
Sun-shade	S. N. Campbell	Elgin, Ill	July 10, 1855	13, 212
Sun-shade	A. G. Davis	Watertown, Conn	Aug. 31, 1858	21, 324
Sun-shade, Pocket	J. W. Browne	New York, N. Y	June 18, 1867	65, 871
Sun-stroke, Head-cushion to prevent	W. H. Richards	Newton, Mass	June 24, 1862	35, 707
Sun-stroke preventer	W. M. Pegram	Baltimore, Md	July 23, 1872	129, 749
Sun-stroke protector for head-covering	H. Prévôt	New York, N. Y	June 13, 1871	115, 894
Superheater	N. Brown and H. B. Gregg	Gratis, Ohio	Jan. 2, 1866	51, 796
Superheater	D. Renshaw	Philadelphia, Pa	Oct. 21, 1873	143, 846
Superheater for steam and other generators	W. Smith	Saint Louis, Mo	Oct. 19, 1869	96, 046
Superheater, Steam	S. N. Carvalho	Baltimore, Md	Jan. 3, 1860	26, 731
Superheater, Steam	L. R. Cornell	Flatbush, N. Y	Oct. 1, 1867	69, 411
Superheater, Steam	L. V. Fichet	New York, N. Y	Oct. 10, 1865	50, 346
Superheater, Steam	L. V. Fichet	New York, N. Y	Mar. 6, 1866	52, 982
Superheater, Steam	J. E. Neill	Brooklyn, N. Y	Sept. 13, 1864	44, 213
Superheater, Steam	G. A. Stone	Roxbury, Mass	May 10, 1859	23, 958
Superheater, Steam	G. A. Stone	Roxbury, Mass	Jan. 31, 1860	27, 013
Superheater, Steam	H. Yost	Columbia, Pa	Feb. 6, 1872	123, 542
Superheating-apparatus	I. Newton	New York, N. Y	May 15, 1866	54, 757
Superphosphates, Manufacture of	G. Liebig	Baltimore, Md	Sept. 5, 1865	49, 831
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See Bell-rope supporter. Book-supporter. Camera-box supporter. Canopy and curtain supporter. Carriage-spring supporter. Chair and stool supporter. Chair-seat supporter. Clothes-line supporter. Coat-supporter. Combined supporter. Corset skirt-supporter. Counter-supporter. Cuff-supporter. Curtain-supporter. Drawer-supporter. Drawers-supporter. Ear-ring supporter. Eave-trough supporter. Elastic supporter. Female-supporter. File-supporter. Filter-supporter. Floor-timber supporter. Flower-pot supporter. Folding-table supporter. Friction-roller supporter. Garment-supporter. Gas-tube supporter. Grape-vine supporter. Grate-bar supporter. Hammock-supporter. Hand-supporter. Hat-supporter. Hoop-skirt supporter. Hop-vine supporter. Hose-supporter. Invalid-supporter. Knapsack-supporter. Lady's elastic supporter. Lamp-extension supporter. Lamp-shade supporter. Lathe-tool supporter. Looking-glass supporter. Luggage-supporter. Mill-spindle-step supporter. Mirror and picture frame supporter. Mosquito-net supporter. Neck-scarf and collar supporter. Neck-tie supporter. Net-supporter. Obstetrical supporter. Picture-frame supporter. Piles-supporter. Pillow-supporter. Plasterer's head-supporter. Platform-supporter. Rein-supporter. Sail-supporter. Sash-supporter. Scaffold-supporter. Scarf-supporter. Sewing-machine-table-leaf supporter. Shirt-bosom supporter. Shoulder-supporter. Skater's supporter. Skirt-supporter. Spinal supporter. Spinning-supporter. Spinning-ring supporter. Steam-pipe supporter. Stocking-supporter. Stove-supporter. Stove-pipe supporter. Table-leaf supporter. Tent-supporter. Thumb-supporter. Tongue-supporter. Tool-supporter. Trace-supporter. Trunk-lid supporter. Truss-supporter. Umbilical supporter. Umbrella-supporter. Uterine supporter. Utero-vaginal supporter. Vest-supporter. Wagon-seat supporter. Wagon-standard supporter. Wash-tub supporter. Water-pipe supporter. Womb-supporter. Wrist-supporter.

Invention.	Inventor.	Residence.	Date.	No.
Supporter	P. S. Greenamyer	Smithville, Ohio	Apr. 30, 1867	64,311
Supporter and pessary	H. Spillmann	New Orleans, La	June 27, 1871	116,368
Supporting-jack	J. Fouser	Philadelphia, Pa	Nov. 13, 1855	13,783
Supporting-spring, Adjustable	J. Christy	Philadelphia, Pa	June 4, 1872	127,509
Suppository-machine	A. M. Knowlson	Troy, N. Y	July 14, 1868	79,840
Suppository-mold	J. A. Robbins	Medford, Mass	Mar. 14, 1871	112,634
Suppository-mold	P. I. Spenzer	Cleveland, Ohio	Sept. 2, 1873	142,524
Suppository, Surgical	H. H. Seys	Oil City, Pa	Mar. 17, 1868	75,586
Suppositories, Mold for making	L. R. Blackman	Newport, R. I	June 17, 1873	139,858
Surcingle	S. Hyde	New York, N. Y	May 26, 1868	78,289
Surcingle	D. P. Rood	Warsaw, N. Y	Sept. 18, 1866	58,139
Surcingle	M. Wesson	Springfield, Mass	Dec. 7, 1869	97,574
Surcingle	S. V. R. York	Antwerp, N. Y	Apr. 28, 1868	77,234
Surf and life boat	R. C. Holmes	Cape May, N. J	Sept. 1, 1857	18,095
Surf and life boat, Self-bailing	N. Penrose	Philadelphia, Pa	July 9, 1867	66,624
Surface and depth gage	R. Hathaway	Chicopee, Mass	Dec. 4, 1866	60,186
Surface-gage	W. F. Cornell	Adrian, Mich	Aug. 18, 1868	81,144
Surface-gage	W. F. Cornell	Adrian, Mich	May 30, 1871	115,438
Surface-springs, Method of treating	A. Wolcott	East Bloomfield, N. Y	Apr. 8, 1856	14,623
Surfaces, Cooling frictional	A. Doig	Brooklyn, N. Y	July 16, 1861	32,823
Surge-reliever	C. D. Cutting	Boston, Mass	Oct. 26, 1869	96,087
Surge-reliever	J. E. Jones	Wiretown, N. J	Oct. 4, 1870	107,947
Surgeon's operating-table	T. McIlroy	New York, N. Y	Aug. 1, 1865	49,132
Surgical apparatus for exsections	E. D. Hudson	New York, N. Y	Sept. 26, 1865	50,128
Surgical bandage	J. G. Groocock	New York, N. Y	Nov. 14, 1871	120,814
Surgical bandage	J. Smitley	White Cottage, Ohio	May 9, 1871	114,615
Surgical cup	J. G. Hadfield	Cincinnati, Ohio	Mar. 10, 1868	75,412
Surgical cup	G. Hadfield	Cincinnati, Ohio	Oct. 22, 1867	70,087
Surgical cup	G. Hadfield	Cincinnati, Ohio	Oct. 22, 1867	70,088
Surgical instrument called speculum ani	J. T. Pitney	Auburn, N. Y	July 23, 1841	2,191
Surgical instrument for the relief of piles	E. Dithridge	Pittsburgh, Pa	May 30, 1871	115,285
Surgical instruments, Fastening for	G. Tiemann	Brooklyn, N. Y	Jan. 12, 1864	41,243
Surgical operations	C. T. Jackson and W. T. G. Morton.	Boston, Mass	Nov. 12, 1846	4,848
Surgical or dental operating-chair	M. W. Hanchett	Syracuse, N. Y	Aug. 15, 1848	5,711

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Invention.	Inventor.	Residence.	Date.	No.
Surgical splint	T. H. Currie	Webster, N. H	Mar. 31, 1863	38, 034
Surgical splint	R. J. P. Goodwin	Manchester, N. H	Oct. 2, 1866	58, 403
Surgical splint	C. Wittemann	Brooklyn, N. Y	Sept. 22, 1863	40, 071
Surveying and calculating areas, Instrument for	J. M. Lilley	Greenville, Va	Nov. 10, 1857	18, 608
Surveying, Hydrographic	H. A. Norris	New York	June 27, 1840	1, 662
Surveying-instrument	B. H. Benton	Middleburgh, Va	Dec. 12, 1842	2, 880
Surveying-instrument	R. F. George	Palmyra, Va	June 20, 1871	116, 047
Surveying-instrument	R. Root	Galesburgh, Ill	Dec. 27, 1859	26, 621
Surveying-instrument	K. Schow	La Fayette, Ind	May 23, 1865	47, 906
Surveying-instrument	S. R. Seibert	Munising, Mich	Oct. 4, 1859	25, 678
Surveying-instrument	G. D. Varney	Newbury, Mass	June 24, 1843	3, 147
Surveying-instrument	G. Windle	Edenburgh, Va	Jan. 11, 1859	22, 598
Surveying-instrument for determining inaccessible heights and distances.	M. Ingersoll	Grafton, Ohio	Feb. 8, 1859	22, 876
Surveying-instruments, Method of adjusting the plummet without moving the tripod in.	C. A. Saxe	Philadelphia, Pa	Nov. 2, 1858	21, 982
Surveying-instruments, Tripod for	J. W. Barlow	United States Army	Dec. 17, 1867	72, 358
Surveying-machine, Self-recording	H. Manger	Philadelphia, Pa	May 24, 1870	103, 479
Surveyor's instrument	A. Ware	Athens, Me	Aug. 28, 1860	29, 835
Surveyor's mark	C. C. P. Meyer	Yankton, Dak	Dec. 21, 1869	98, 084
Surveyor's protractor	J. A. Finn	Simpson County, Ky	Feb. 16, 1858	19, 356
Surveyor's tackle-case	W. H. Paine	Sheboygan, Wis	July 10, 1860	29, 096
Suspenders	J. Barnett	Philadelphia, Pa	Sept. 14, 1816	....
Suspenders	T. W. Bartholomew	New York, N. Y	Mar. 30, 1870	101, 211
Suspenders	E. Burgess	Racine, Wis	Nov. 28, 1865	51, 137
Suspenders	H. Burke	Bucks County, Pa	May 25, 1811	....
Suspenders	E. Chesterman	New York	June 19, 1827	....
Suspenders	C. H. Cleveland	Selma, Ala	Oct. 8, 1867	69, 629
Suspenders	C. H. Cleveland	Selma, Ala	July 21, 1868	80, 142
Suspenders	C. H. Cleveland	Selma, Ala	Sept. 8, 1868	81, 984
Suspenders	J. Davis	Philadelphia, Pa	May 18, 1810	....
Suspenders	J. Dawson	Philadelphia, Pa	Nov. 6, 1806	....
Suspenders	J. W. Dayton	Waterbury, Conn	Feb. 7, 1871	111, 617
Suspenders	R. H. Eddy	Boston, Mass	June 6, 1871	115, 722
Suspenders	R. H. Eddy	Boston, Mass	Dec. 5, 1871	121, 600
Suspenders	T. J. Flagg	New York, N. Y	Nov. 25, 1873	144, 970
Suspenders	B. J. Greely	New York, N. Y	Jan. 19, 1864	41, 295
Suspenders	B. J. Greely	New York, N. Y	Oct. 10, 1865	50, 351
Suspenders	B. J. Greely	Boston, Mass	Mar. 15, 1870	100, 886
Suspenders	B. J. Greely	Boston, Mass	Aug. 19, 1873	141, 926
Suspenders	H. C. Griggs	Waterbury, Conn	Dec. 5, 1871	121, 509
Suspenders	S. Hamm	Philadelphia, Pa	Oct. 28, 1873	144, 091
Suspenders	A. W. Harris	New York, N. Y	June 16, 1868	78, 872
Suspenders	S. W. Hanlon	Selma, Ala	Dec. 1, 1868	84, 669
Suspenders	J. Hotchkiss	Waterbury, Conn	Dec. 23, 1851	8, 606
Suspenders	R. Howell	....	Mar. 5, 1806	....
Suspenders	T. J. Irving	Baltimore, Md	June 17, 1873	140, 045
Suspenders	E. Jennings, jr	New York, N. Y	May 4, 1869	89, 772
Suspenders	M. Nelson	Philadelphia, Pa	Oct. 17, 1814	....
Suspenders	E. Oldfield	Norwich, Conn	Apr. 26, 1870	102, 424
Suspenders	G. H. Palmer	Lewisham Parish, England	Apr. 6, 1869	88, 731
Suspenders	T. O. Potter	Boston, Mass	Nov. 23, 1869	97, 116
Suspenders	T. Rich	South Seekonk, Mass	Aug. 15, 1871	118, 055
Suspenders	A. Salmon	New York, N. Y	Jan. 23, 1872	122, 915
Suspenders	J. B. Sharp and R. M. Seymour	New York, N. Y	Nov. 6, 1866	59, 465
Suspenders	A. Shenfield	New York, N. Y	Dec. 7, 1869	97, 557
Suspenders	A. Shenfield	New York, N. Y	July 8, 1873	140, 652
Suspenders	J. W. Smith	Boston, Mass	Nov. 1, 1870	108, 841
Suspenders	S. E. Smith	Washington, D. C	Mar. 14, 1871	112, 746
Suspenders	W. P. Towles	Baltimore, Md	June 2, 1868	78, 494
Suspenders	A. W. Upton	Lowell, Mass	Apr. 18, 1865	47, 348
Suspenders	C. Van Hoesen	Catskill, N. Y	Dec. 14, 1869	97, 995
Suspenders	J. W. Wattles	Canton, Mass	Dec. 6, 1870	109, 853
Suspenders	J. W. Wattles	Canton, Mass	Oct. 28, 1873	144, 042
Suspenders	O. Webb	....	Sept. 18, 1804	....
Suspenders	A. B. Wilcox	Lowell, Mass	Aug. 10, 1869	93, 655
Suspenders	B. Wilse	Utica, N. Y	Aug. 19, 1826	....
Suspenders	A. Woodard	Bangor, Me	Aug. 21, 1866	57, 426
Suspenders and safety-pocket combined	M. Harris	New York, N. Y	Nov. 7, 1871	120, 584
Suspenders and shoulder-brace	H. H. Day and F. D. Hayward	New Brunswick, N. J	Nov. 7, 1848	5, 904
Suspenders and shoulder-brace, Combined	E. Jennings, jr	New York, N. Y	Oct. 6, 1868	82, 720
Suspenders and shoulder-brace, Combined	H. B. Leach	Philadelphia, Pa	May 11, 1869	89, 872
Suspenders and shoulder-brace, Combined	T. O. Potter and J. W. Smith	Boston, Mass	June 20, 1871	116, 093
Suspenders and shoulder-brace, Combined	T. O. Potter and J. W. Smith	Boston, Mass	Oct. 17, 1871	119, 903
Suspenders, Chest-expanding	G. W. Walker	Lowell, Mass	Jan. 31, 1865	46, 161
Suspenders, Clasp for	J. W. Smith	Boston, Mass	July 22, 1873	141, 087
Suspenders, Double spring for	B. Wolcot	Danbury, Ohio	May 29, 1811	....
Suspenders, Elastic cord for	N. Goodyear	New York, N. Y	Oct. 16, 1849	6, 786
Suspenders, End for	T. J. Flagg	New York, N. Y	Sept. 14, 1869	94, 881
Suspenders, End for	G. H. Leonard	East Hampton, Mass	June 4, 1872	127, 615
Suspenders, Fastening for	G. A. Meacham	New York, N. Y	Aug. 5, 1862	36, 100
Suspenders, Fastening for	W. Wright	Bloomfield, N. J	Nov. 10, 1868	84, 042
Suspenders, Felt end for	T. J. Flagg	New York, N. Y	Apr. 27, 1869	89, 302
Suspenders for breeches, pantaloons, &c	S. Smith	....	Oct. 23, 1804	....
Suspenders for garments	E. N. Snow	Chicopee, Mass	Dec. 7, 1869	97, 562
Suspenders for garments, Encircling	H. H. Tinker	New London, Conn	Mar. 2, 1852	8, 783
Suspenders, Gilding and ornamenting leather for ends, &c., of.	G. W. Walker	Lowell, Mass	Aug. 27, 1872	130, 958
Suspenders, Manufacture of	A. S. Van Horn	Philadelphia	Feb. 22, 1827	....
Suspenders, Manufacturing ends for	J. Hotchkiss	Waterbury, Conn	June 27, 1854	11, 160
Suspenders, Shoulder-brace	B. J. Greeley	Springfield, Mass	June 1, 1858	20, 424
Suspenders, Slide for	J. E. Smith	Waterbury, Conn	Aug. 1, 1871	117, 694
Suspenders, Spring and cord for	A. Bacon	Philadelphia, Pa	Dec. 17, 1830	....
Suspenders, Strap-fastening for	J. Hotchkiss	Waterbury, Conn	May 15, 1847	5, 120
Suspenders to pantaloons, Method of attaching straps of.	D. B. Cook	New York	Sept. 4, 1841	2, 237
Suspending and detaching articles, Device for	W. C. Lane	Green Point, N. Y	Nov. 19, 1867	71, 186
Suspending-clamp	D. P. Foster	Waltham, Mass	Dec. 29, 1868	85, 298

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Suspending clamp, Pasteboard and other fabric	E. H. Sampson	Boston, Mass	Dec. 15, 1868	84,009
Suspension-clip	H. S. Griffiths and J. C. Cary	New York, N. Y	Dec. 21, 1869	98,054
Suspension-clip	T. H. Lee	Cincinnati, Ohio	Apr. 9, 1872	125,580
Suspension, Gate	E. Chadderdon	Howard, Mich	July 12, 1870	105,170
Suspension-hook and insect-insulator	J. C. Moulton	Fitchburgh, Mass	Oct. 28, 1856	15,962
Suspension-hook for eye-glasses	W. S. Tappan	Washington, D. C	Apr. 8, 1873	137,735
Suspension-hook for horse hay-forks	E. Hicks	North Hempstead, N. Y	Oct. 1, 1867	69,434
Suspension-ring	S. Cary	Brooklyn, N. Y	Feb. 13, 1872	123,553
Suspension-ring	G. Doolittle	Bridgeport, Conn	Mar. 18, 1873	136,977
Suspension-ring	H. S. Griffiths	Brooklyn, N. Y	May 5, 1868	77,482
Suspension-ring	D. M. Somers	Brooklyn, N. Y	Aug. 23, 1870	106,738
Suture-instrument	H. M. Cooper	Xenia, Ohio	June 14, 1864	43,098
Swage	J. Williams and I. Short	Amelia, Ohio	Mar. 5, 1867	62,584
Swage, Blacksmith's	G. W. Brown	Providence, R. I	Mar. 23, 1869	88,125
Swage or cable spring	W. Wilcox	East Hartford, Conn	Apr. 21, 1857	17,122
Swaging and punching die, Wrench-jaw	J. S. Farnsworth	Windsor, Vt	June 25, 1867	66,009
Swaging-machine	H. M. Crippen	Bartlett, Ohio	May 6, 1873	138,617
Swaging-machine	F. S. De Witt	Rochester, N. Y	July 7, 1868	79,735
Swaging-machine	G. M. Hinkley	Milwaukee, Wis	Oct. 11, 1870	108,140
Swaging-machine	J. H. Tobey	Cranston, R. I	June 19, 1866	55,790
Swaging-machine, Rotary	P. G. Gardiner	New York, N. Y	Dec. 23, 1851	8,605
Sweat and collar pad, Metallic	J. M. C. Bennett	Ovid, Mich	May 20, 1873	138,990
Sweeper, Street	R. Y. McConnell and G. Pringle	Rochester, N. Y	Dec. 29, 1868	85,319
Sweeping-machine	R. D. Cary	Philadelphia, Pa	Mar. 18, 1862	34,668
Sweeping-machine	A. S. Jimmerson	Green Point, N. Y	Jan. 15, 1867	61,205
Sweeping-machine	I. W. McGaffery	Chicago, Ill	June 8, 1869	91,145
Sweeping-machine	G. S. Norris	Baltimore, Md	Mar. 21, 1871	112,837
Sweeping-machine	S. W. Smith	Brooklyn, N. Y	Jan. 18, 1859	22,678
Sweeping machine, Street	L. Conroy	New York, N. Y	Apr. 16, 1861	32,051
Sweeping machine, Street	L. Conroy	New York, N. Y	Oct. 29, 1861	33,572
Sweeping machine, Street	E. Hambujer	New York, N. Y	Apr. 12, 1864	42,287
Sweeping or cleaning machine	A. Jones	New York	July 28, 1843	3,203
Sweetmeat	F. Arond	Lyons, France	Sept. 14, 1860	94,695
Swift	N. Benedict	Aurelius, N. Y	Dec. 11, 1860	30,867
Swift	E. M. Coffin	Woburn, Mass	Dec. 31, 1867	72,800
Swift	M. R. Griswold and O. B. Bailey	Watertown, Conn	July 16, 1861	32,832
Swift	A. Haskell	Harrison, Me	Sept. 3, 1867	68,438
Swift	M. Heminway	Watertown, Conn	Sept. 18, 1860	30,064
Swift	C. W. Pearson	Charlestown, Mass	Nov. 13, 1860	30,642
Swift	C. P. S. Wardwell	Lake Village, N. H	May 15, 1860	28,319
Swift and reel	G. W. Horton	Belvidere, Ill	Apr. 2, 1867	63,519
Swift and reel	L. F. Molthrop	Rome, Wis	Feb. 27, 1872	124,147
Swift and reel	C. Parks	Milan, Ohio	Apr. 26, 1870	108,309
Swift and reel, Combined	C. H. Clark	Pittsfield, Me	Aug. 2, 1870	105,905
Swift or reel	E. N. Porter and P. P. Roberts	Morrisville, Vt	Aug. 4, 1868	80,664
Swimming-apparatus	F. Barnett	Paris, France	June 15, 1869	91,300
Swimming, Apparatus for teaching the art of	S. Scholfield	Norwich, Conn	May 12, 1863	38,505
Swimming-bath	P. Bralley	Oakland, Cal	Feb. 25, 1873	136,128
Swimming-propeller	J. Kleiber	Memphis, Tenn	Mar. 5, 1861	31,608
Swimming, Teaching the art of	S. Scholfield	Norwich, Conn	July 21, 1863	39,311
Swine from rooting, Device for preventing	J. Brown	Lawn Ridge, Ill	Sept. 16, 1862	36,450
Swine, Implement for catching	L. Goldsmith and N. Gregory, jr.	Goshen, N. Y	Nov. 3, 1863	40,476
Swine, Nose-jewel for	M. G. Tousley and F. E. Marcellus.	Fulton, Ill	May 7, 1867	64,461
Swine, Snout-ring for	M. G. Tousley	Fulton, Ill	Aug. 27, 1867	68,131
Swine to prevent them from rooting, Device for cutting the noses of.	R. Hurd	Spring Hill, Ill	Feb. 11, 1862	34,368
Swing	G. W. Cole	Canton, Ill	July 4, 1871	116,560
Swing	J. A. Crandall	Brooklyn, N. Y	June 13, 1871	115,825
Swing	H. Davies	Portsmouth, Ohio	Oct. 29, 1861	33,576
Swing	C. M. Dillon	Philadelphia, Pa	Apr. 27, 1869	89,297
Swing	A. B. Fuller	New York, N. Y	July 30, 1872	129,940
Swing	J. F. Hartman	Fond du Lac, Wis	Apr. 10, 1867	53,938
Swing	F. Hovey	Ipswich, Mass	Mar. 14, 1871	113,708
Swing	W. J. Huckett	Marshall, Mich	Aug. 19, 1862	36,216
Swing	G. H. Lupton	Cleveland, Ohio	Apr. 16, 1867	63,911
Swing	C. Luxton	New York, N. Y	Oct. 16, 1847	5,330
Swing	E. Maynard	New York, N. Y	May 18, 1852	8,957
Swing	J. A. McClain	Philadelphia, Pa	Mar. 26, 1867	63,278
Swing	H. F. Metzler	New York, N. Y	Sept. 8, 1868	82,018
Swing	L. F. Noe	New York, N. Y	Oct. 24, 1865	50,618
Swing	A. B. Nott	Fairhaven, Mass	Aug. 6, 1867	67,571
Swing	W. H. Odenatt	Philadelphia, Pa	Dec. 22, 1868	85,238
Swing	J. F. Quigg	Chicago, Ill	Feb. 25, 1873	136,181
Swing	G. A. Seaver	New York, N. Y	Oct. 13, 1868	82,998
Swing	B. F. Shaffer	Dayton, Ohio	Jan. 7, 1868	73,128
Swing	B. F. Shaffer	Dayton, Ohio	Oct. 20, 1868	83,216
Swing	J. W. Sheaffer	Lockport, Ill	Sept. 24, 1867	69,132
Swing	E. A. Tuttle	Williamsburgh, N. Y	Feb. 11, 1873	135,738
Swing	L. Winston	Pontiac, Ill	Nov. 8, 1870	109,165
Swing	F. R. Wolfinger	Vermont, Ill	Aug. 15, 1865	49,465
Swing, Automatic	J. J. Rymal	Rochester, Minn	June 23, 1868	79,147
Swing, Child's	W. H. Alcorn	West Hoboken, N. J	Mar. 25, 1873	137,121
Swing, Child's	W. H. Scriven and W. K. Taylor.	Flatbush, N. Y	Dec. 19, 1871	122,066
Swing for exercising	J. H. Ross	New York, N. Y	Aug. 26, 1845	4,166
Swing, Gymnastic	A. P. Payson	San Francisco, Cal	June 25, 1867	66,038
Swing, Hobby-horse	J. A. Crandall	Brooklyn, N. Y	May 27, 1873	139,371
Swing, Oscillating	J. N. Fowler	New York, N. Y	Mar. 5, 1872	124,262
Swing, Parlor	B. Strässle	Chicago, Ill	Jan. 21, 1873	135,018
Swing, Portable	M. D. Brine	Chicago, Ill	Apr. 5, 1870	101,576
Swing, Portable	E. S. Farson	Philadelphia, Pa	May 27, 1851	8,117
Swing, Portable	D. M. Reynolds	Chicago, Ill	Feb. 7, 1871	111,570
Swing, Portable	L. K. Selden	Haddam, Conn	Apr. 24, 1860	28,015
Swing-power	W. Valentine and T. C. Longton.	Trenton, N. J	Nov. 20, 1866	59,878
Swing, Revolving	A. Graves	Roscoe, Ill	Apr. 5, 1870	101,609

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Invention.	Inventor.	Residence.	Date.	No.
Swing, Rocking	T. H. B. Sanders	Philadelphia, Pa	June 30, 1868	79, 401
Swing, Rotary	I. N. Forrester	Bridgeport, Conn	Nov. 19, 1867	70, 965
Swinging-chair	E. Marx	New York, N. Y	Aug. 14, 1866	57, 255
Swinging-chair	M. H. Prescott, jr	La Crosse, Wis	Oct. 8, 1872	132, 021
Swinging gate	J. J. Gentry and J. F. Collett	Corinth, Miss	Sept. 30, 1873	143, 349
Swinging gate	L. Hatchitt, jr	Louisiana, Mo	Oct. 29, 1872	132, 530
Swingle-tree	C. Howard	Madison County, Ill	Mar. 23, 1852	8, 824
Swingle-tree	M. Ryerson	Huntsville, Ala	Aug. 27, 1867	68, 237
Switch: *See* Automatic switch. Fly-switch. Galvanic-battery switch. Hair-switch. Platform-switch. Portable switch. Railway switch. Railway safety-switch. Rain-water switch. Self-acting switch. Self-adjusting switch. Self-operating switch. Sliding switch. Telegraph-switch. Transfer-switch.				
Switch	J. T. Clark and J. D. Bealer	Galesburgh, Ill	Aug. 4, 1868	80, 601
Switch	J. F. Jones	Washington, D. C	Mar. 5, 1867	62, 544
Switch	W. P. Patton	Harrisburgh, Pa	Oct. 22, 1867	70, 109
Switch	G. W. Spaulding	Norton, Mass	Apr. 9, 1867	63, 663
Switch	J. P. White	Savannah, Ga	Aug. 13, 1867	67, 827
Switch-alarm connection	T. S. Hall	Stamford, Conn	June 1, 1869	90, 744
Switch and draw-bridge signal, Electro-magnetic	T. S. Hall	West Meriden, Conn	Sept. 19, 1871	119, 137
Switch and signal	J. Saxby and J. S. Farmer	Kilburn, England	Aug. 11, 1868	80, 878
Switch-chair	S. T. Emerson	Amboy, Ill	Apr. 9, 1867	63, 624
Switch-holder	A. C. Penny and M. Spicer	Unadilla Forks, N. Y	Aug. 3, 1869	93, 341
Switch-lock	A. W. Crane and W. B. Dunbar	Saint Louis, Mo., and Chicago, Ill	June 27, 1871	116, 416
Switch-lock	W. B. Sloan and E. H. Sweetser	Hamburgh, Iowa	Sept. 10, 1872	131, 310
Switch lock, Railway	J. V. Chamberlin	Cincinnati, Ohio	July 28, 1868	80, 333
Switch lock, Railway	A. W. Cram	Saint Louis, Mo	Nov. 15, 1870	109, 182
Switch lock, Safety	H. C. Cotter and G. G. Green	Fort Wayne, Ind	Nov. 10, 1868	83, 834
Switch-locking device	R. S. Patton	Hamburgh, Iowa	Oct. 29, 1872	132, 597
Switch-operating	J. F. Wilson and J. C. Bartlett	Boston and Charlestown, Mass	Jan. 10, 1865	45, 889
Switch operating mechanism	W. Wharton, jr	Philadelphia, Pa	Aug. 17, 1869	93, 932
Switch, Safety	C. A. S. Temple	Greenwood, Mass	Apr. 20, 1869	89, 092
Switch-signal	H. A. Efner and C. Boynton	Marshall, Mich	Feb. 22, 1870	100, 018
Switch-stand	P. Corrigan	Sturgeon, Mo	June 25, 1872	128, 282
Switch-stand	C. C. Dodge	Marshall, Mich	Aug. 9, 1870	106, 259
Switch-stand	W. L. Meeker and T. Kearney	Newark, N. J	June 11, 1872	127, 700
Switch-stand	E. F. Reynolds	Saint Joseph, Mich	Nov. 28, 1871	121, 419
Switch-stand and signal-target	D. J. Whittemore	Milwaukee, Wis	July 5, 1864	43, 446
Switch stand, Railway	C. E. Byers	Mahanoy Plane, Pa	May 22, 1866	54, 855
Switch stand, Railway	A. W. Cram	Litchfield, Ill	Aug. 13, 1872	130, 487
Switch stand, Railway	N. N. Dale	Plymouth, Ind	Jan. 4, 1870	98, 472
Switch stand, Railway	R. L. McGowan and W. Fletcher	Alliance, Ohio	Oct. 27, 1868	83, 396
Switch stand, Railway	A. McLeod	Covington, Ky	Feb. 25, 1868	74, 926
Switch stand, Railway	R. A. Rash	Petersburgh, Va	Sept. 9, 1873	142, 725
Switch stand, Railway	R. A. Wilder	Cressona, Pa	Mar. 13, 1860	27, 493
Switch-tender's house	W. Mansfield	New Haven, Conn	Aug. 1, 1854	11, 431
Swivel cock-eye	R. A. McKanna	Young America, Ill	June 8, 1869	91, 146
Swivel-hook	A. and M. Falkenan and M. Pollak	New York, N. Y	May 25, 1852	8, 968
Swivel-hook	C. E. Richards	North Attleborough, Mass	July 11, 1871	116, 870
Swivel-hook and ring	J. Lees	Birmingham, England	Nov. 5, 1861	33, 653
Swivel-hook for watch-chains, &c	L. Bornemann	Hudson City, N. J	Dec. 1, 1863	40, 790
Swivel-nibbed key	J. Hanley	New York, N. Y	Jan. 28, 1851	7, 917
Swivel, Safety	R. Richards	Albany, N. Y	Nov. 29, 1870	109, 666
Swivel-shackle	T. B. Roche	Folsom, Cal	May 29, 1866	55, 162
Swivel-shackle	W. Williams	Vallejo, Cal	Feb. 1, 1870	99, 508
Swiveled chair	D. E. Teal	New Lisbon, N. Y	Apr. 2, 1872	125, 350
Sword and pistol, Combined	R. J. Colvin	Lancaster, Pa	Mar. 25, 1862	34, 740
Sword and pistol, Combined	L. Gabel	Richmond, Ind	Apr. 29, 1862	35, 093
Sword and pistol, Combined	A. Rauh	Solinger, Prussia	Feb. 6, 1866	52, 504
Sword-blades, Machine for rolling	J. C. Richardson	Philadelphia, Pa	Sept. 23, 1873	143, 094
Sword, Dress	J. M. Mason	Washington, D. C	Mar. 14, 1871	112, 7[illegible]9
Sword-handle and revolving fire-arm, Combined	S. Guilbert	New York, N. Y	Sept. 20, 1864	44, 303
Sword-handle, India-rubber	M. C. Bogia	Philadelphia, Pa	May 20, 1862	35, 292
Sword-hanger	S. McKeever	United States Army	June 24, 1873	140, 151
Sword-hanger, Baldric	D. B. Howell	Brooklyn, N. Y	Aug. 20, 1872	130, 718
Sword-scabbards, Casting ornaments for	V. Price	Woodside, N. Y	May 20, 1873	139, 023
Sword-scabbards, Method of coating and finishing	V. Price	New York, N. Y	Feb. 28, 1871	112, 181
Swords, Hanging	J. Ball	Utica, N. Y	Nov. 2, 1858	21, 933
Swords, Hanging	D. B. Howell	New York, N. Y	July 7, 1868	79, 761
Swords, Hanging	V. Price	New York, N. Y	Aug. 13, 1867	67, 800
Syllable-pronunciator	J. A. Cummings	Boston, Mass	Nov. 3, 1819	......
Syphilis, &c., Compound for treatment of	S. T. Thurman	Lincoln, Ky	July 23, 1841	2, 186
Syphon	J. M. Naglee	Philadelphia, Pa	Apr. 12, 1864	42, 304
Syringe	C. W. Buffon	Vinton, Iowa	Jan. 19, 1869	85, 935
Syringe	P. F. Cederholm	Stillwater, Minn	Nov. 23, 1869	97, 165
Syringe	G. Conover	Mott Haven, N. Y	Oct. 11, 1870	108, 111
Syringe	W. J. Davidson	Staunton, Va	Apr. 6, 1869	88, 695
Syringe	J. J. Essex	Newport, R. I	Nov. 5, 1867	70, 540
Syringe	J. J. Essex	Newport, R. I	Apr. 27, 1869	89, 393
Syringe	M. Faloon	Bloomington, Ill	July 7, 1868	79, 742
Syringe	B. Irving	New York, N. Y	July 10, 1860	29, 083
Syringe	T. Lewis	Malden, Mass	Sept. 10, 1867	68, 629
Syringe	H. D. Lockwood	Charlestown, Mass	Sept. 12, 1865	49, 900
Syringe	H. D. Lockwood	Charlestown, Mass	Sept. 7, 1869	94, 620
Syringe	H. N. Mattison	New York, N. Y	Oct. 31, 1871	120, 525
Syringe	M. Mattson	New York, N. Y	Sept. 24, 1867	69, 110
Syringe	P. J. McElroy	East Cambridge, Mass	Sept. 24, 1872	131, 697
Syringe	J. F. McMillen	Mansfield, Ohio	Aug. 31, 1869	94, 328
Syringe	W. B. Snyder	Bridgeport, Conn	Feb. 13, 1872	123, 587

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Syringe	E. G. Stevens	Biddeford, Me	July 10, 1860	29, 112
Syringe	F. A. Stohlmann	Brooklyn, N. Y	Mar. 10, 1868	75, 485
Syringe	L. Wheelock	New Haven, Conn	Apr. 11, 1865	47, 248
Syringe and pump	J. Speak	Philadelphia, Pa	Nov. 18, 1873	144, 802
Syringe, Barrel	S. P. Hart	Boston, Mass	Sept. 13, 1859	25, 409
Syringe-bottle for medicinal agents	J. Stull	Philadelphia, Pa	Mar. 25, 1856	14, 524
Syringe, Catarrhal	J. W. Culbertson	Richmond, Ind	Apr. 20, 1869	89, 030
Syringe, Catarrhal	A. L. Lighthill	Boston, Mass	Oct. 31, 1865	50, 722
Syringe, Cauterizing	E. T. Bussell	Shelbyville, Ind	Feb. 24, 1857	16, 680
Syringe, Elastic	H. E. Davidson	Gloucester, Mass	Dec. 26, 1865	51, 778
Syringe, Elastic	H. D. Lockwood	Charlestown, Mass	Aug. 25, 1863	39, 662
Syringe, Elastic-bulb	J. J. Essex	Newport, R. I	Aug. 23, 1859	25, 186
Syringe, Elastic-bulb	H. D. Lockwood	Charlestown, Mass	Sept. 11, 1866	57, 933
Syringe, Elastic-bulb enema	F. B. Richardson	Boston, Mass	Jan. 27, 1863	37, 522
Syringe, Elastic enema	F. B. Richardson	Boston, Mass	Nov. 22, 1859	26, 204
Syringe, Enema	C. H. and H. E. Davidson	Charlestown and Gloucester, Mass.	Mar. 31, 1857	16, 956
Syringe, Enema	G. W. Hubbard	New York, N. Y	Feb. 5, 1861	31, 318
Syringe, Enema	M. Mattson	Boston, Mass	Apr. 4, 1854	10, 742
Syringe, Enema	M. Mattson	Boston, Mass	Nov. 19, 1861	33, 747
Syringe, Enema	D. Minthorn	Beverly, Mass	Mar. 20, 1860	27, 596
Syringe, Enema	J. Parshall and D. Gilbert	Gettysburgh, Pa	May 22, 1833	....
Syringe, Enema	F. B. Richardson	Boston, Mass	Mar. 5, 1861	31, 626
Syringe Enema	F. B. and B. L. Richardson	Boston, Mass	May 8, 1860	28, 196
Syringe, Enema	E. G. Stevens	Biddeford, Me	Mar. 5, 1861	31, 634
Syringe Eye-bath	S. Towle	Pembroke, N. Y	Apr. 25, 1854	10, 888
Syringe, Female	S. M. Landis	Philadelphia, Pa	Dec. 18, 1866	60, 526
Syringe, Flexible	M. Mattson	New York, N. Y	Feb. 5, 1867	61, 730
Syringe for destroying cotton-plant worms	A. Robira	Galveston, Tex	June 15, 1869	91, 272
Syringe for gardens, Sprinkling	A. L. Jewell	Waltham, Mass	July 31, 1866	56, 757
Syringe, Fountain	H. D. Lockwood	Charlestown, Mass	Apr. 29, 1873	138, 417
Syringe, Hypodermic	E. Cutter	Woburn, Mass	Nov. 18, 1873	144, 661
Syringe, Hypodermic	J. Leiter	Vienna, Austria	Dec. 2, 1873	145, 217
Syringe, India-rubber	F. M. Shepard	New York, N. Y	June 14, 1864	43, 158
Syringe, Injecting	J. Ralph	New York, N. Y	Feb. 25, 1836	....
Syringe, Pitch	D. Flint	Nobleborough, Me	Aug. 31, 1827	....
Syringe, Shower	I. Warren	Boston, Mass	Dec. 6, 1853	10, 303
Syringe, Uterine	J. J. Essex	Newport, R. I	Oct. 26, 1869	96, 095
Syringe, Vaginal	H. K. W. Boardman	Chicago, Ill	Sept. 10, 1861	33, 234
Syringe, Vaginal	A. M. Dye	Elkhart City, Ill	May 14, 1872	126, 791
Syringe, Vaginal	J. A. Morrell	Chicago, Ill	Mar. 17, 1868	75, 693
Syringe, Vaginal	S. E. Parsons	Albany, N. Y	June 5, 1866	55, 355
Syringe, Vaginal	W. B. Snyder	Bridgeport, Conn	May 10, 1870	102, 985
Syringe, Vaginal	A. W. Washburn	Yazoo City, Miss	Aug. 27, 1867	68, 333
Syringe, Veterinary	W. Somerville	Buffalo, N. Y	Apr. 7, 1857	17, 000
Syringes, Cannula-point for	E. B. Nimmo	Brooklyn, N. Y	Nov. 4, 1873	144, 352
Syringes, Case for holding	M. Mattson	New York, N. Y	Mar. 17, 1868	75, 689
Syringes, Combination of injecting	J. Buhler	New York, N. Y	Dec. 25, 1855	13, 975
Syringes, Mold for enema	F. B. Richardson	Boston, Mass	Nov. 14, 1865	50, 957
Syringes, tubes, &c., of gutta-percha, Making flexible.	H. Bewley	Dublin, Ireland	May 23, 1848	5, 589
Syringes, Vaginal-injection pipe for	T. Lewis	Malden, Mass	Jan. 12, 1869	85, 744
Syringing-apparatus	F. Bagnicki	New York, N. Y	Jan. 18, 1859	22, 615

T.

Table:

See Auxiliary table.
Bagatelle-table.
Baker's table.
Base-ball table.
Billiard-table.
Book-binder's supplemental table.
Buffet-table.
Cabin-table.
Carving-table.
Center-table.
Compass-table.
Compress-table.
Cooking-table.
Copying-press table.
Dining-table.
Drawing-table.
Education-table.
Emery-grinder's table
Extension-table.
Fall-leaf table.
Folding-table.
Folding ironing-table.
Fork-table.
Game-table.
Geometrical interest-table.
Gluing-table.
Harvester binder's table.
Heating-table.
Hospital-table.
Ice-crushing table.
Interest-table.
Invalid-table.
Ironing-table.
Kitchen-table.
Kitchen and ironing table.
Molder's table.
Money-table.
Nursing-table.
Office-table.
Ore-concentrating table.
Panel-table.
Playing-table.
Post-office distributing-table.
Protracting-table.
Reading-table.
Revolving-table.
Saloon-table.
Saw-table.
Sawing-machine table.
Screening-table.
Sea-table.
Secretary-table.
Self-waiting table.
Sewing-table.
Sewing-machine table.
Shaking-table.
Sheep-table.
Sheep-shearing table.
Ship's table.
Shoe-making table.
Side-table.
Steam-generator table.
Surgeon's operating-table.
Tanner's table.
Teaching-table.
Time-table.
Tivoli-table.
Turn-table.
Wool-packing table.
Work-table.

Invention.	Inventor.	Residence.	Date.	No.
Table	E. Bucker	Old Tappan, N. Y	Aug. 16, 1870	106, 318
Table	G. J. Cougle	Chippewa Falls, Wis	Dec. 13, 1870	110, 013
T..ble	R. R. Crowe	Chicago, Ill	Sept. 5, 1865	49, 729

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Table	C. Cuttica	New York, N. Y	Aug. 29, 1865	49, 677
Table	E. Dinter	Boston, Mass	Oct. 23, 1866	58, 965
Table	J. C. Droughard and A. L. Roye	New York, N. Y	Dec. 1, 1868	84, 618
Table	J. E. Dust	Hyattsville, Ohio	Jan. 1, 1867	60, 841
Table	L. Freeman	New York, N. Y	Jan. 18, 1870	98, 948
Table	H. C. Hardy	Muncie, Ind	June 25, 1867	66, 148
Table	G. H. Henkel	Hartford City, Ind	Sept. 13, 1870	107, 258
Table	W. Hoese	Providence, R. I	Jan. 30, 1872	123, 172
Table	W. Jefts	Battle Creek, Mich	Mar. 18, 1873	136, 837
Table	W. Kaiser	Chicago, Ill	Jan. 26, 1869	86, 309
Table	G. Kuhlmann	New York, N. Y	Dec. 24, 1867	72, 646
Table	H. F. Learnard	Mazo Manie, Wis	Dec. 28, 1869	98, 276
Table	L. Menzer	Goodrich, Mich	Nov. 7, 1871	120, 759
Table	J. C. Miller and E. S. Armstrong	Sunbury, Ohio	Feb. 11, 1873	135, 655
Table	J. H. Osborne	Auburn, N. Y	June 25, 1872	128, 242
Table	H. W. Pearsall	Emporia, Kans	Apr. 29, 1873	138, 431
Table	J. C. Putnam	Worcester, Mass	Sept. 15, 1868	82, 247
Table	D. M. Reynolds	Chicago, Ill	Nov. 8, 1870	109, 051
Table	C. Rowland	Belleville, Ill	Sept. 5, 1854	11, 652
Table	T. J. Shannon	Lawrenceburgh, Ind	Jan. 25, 1870	99, 246
Table	S. Snow	Saco, Me	Mar. 2, 1815	......
Table	E. L. Staples	Nashville, Tenn	Aug. 14, 1866	57, 209
Table	N. Stockwell	Windsor, N. Y	Apr. 20, 1869	89, 252
Table	T. B. Stout	Keyport, N. J	July 24, 1866	56, 632
Table	C. T. Sutton	Brooklyn, N. Y	May 24, 1870	103, 387
Table	J. Taft	Rockville, Conn	Oct. 18, 1870	108, 406
Table	T. H. Taylor	Fayetteville, N. Y	May 11, 1852	8, 944
Table	P. P. Warriner	Holland Patent, N. Y	Mar. 12, 1861	31, 685
Table	J. H. Wattles	Battle Creek, Mich	May 6, 1873	138, 718
Table	R. Weber	Etna Borough, Pa	Apr. 23, 1872	125, 997
Table	G. E. Young	Providence, R. I	Aug. 23, 1870	106, 646
Table advertising-attachment	L. Limerick and A. H. E. Stein	Louisville, Ky	June 22, 1869	91, 645
Table and bedstead	J. L. Brander	Boston, Mass	Sept. 21, 1869	95, 076
Table and bedstead, Combined	C. Baum	Philadelphia, Pa	Oct. 21, 1856	15, 943
Table and bedstead, Combined	J. R. Bennett and P. W. Birck	Brooklyn, N. Y	Sept. 5, 1865	49, 701
Table and bedstead, Combined	S. S. Burr	Dedham, Mass	Dec. 11, 1866	60, 339
Table and bedstead, Combined	F. Leslie	Upper Rahway, N. J	Nov. 20, 1849	6, 884
Table and camp-chest	H. W. Ball	New York, N. Y	Jan. 7, 1862	34, 047
Table and chair, Child's	P. G. Beckley	Newark, N. J	Jan. 4, 1870	98, 463
Table and chair, Combined	S. Hedges	New York, N. Y	Apr. 4, 1854	10, 740
Table and clothes-dryer	E. Culver	Shelburne Falls, Mass	July 5, 1859	24, 694
Table and clothes-dryer, Combined	L. Pagin	Elmore, Ohio	Oct. 4, 1859	25, 669
Table and counter	S. Simonson	Bridgeport, Conn	May 10, 1870	102, 977
Table and cradle, Combined	E. A. Goodes	Philadelphia, Pa	Oct. 12, 1869	95, 791
Table and desk	C. Baldwin	Manchester, N. H	Apr. 25, 1865	47, 378
Table and drawing-board, Combined	C. W. Clift	Mystic Bridge, Conn	May 28, 1872	127, 149
Table and floor cover	A. Herzog	New York, N. Y	Apr. 19, 1870	102, 123
Table and bend-rest for invalids	M. Fitch	Washington, D. C	Mar. 5, 1872	124, 260
Table and quilting-frame	M. E. Phillips	Lena, Ill	June 2, 1868	78, 478
Table and secret writing-desk, Combined	C. Kade	Lexington, Mo	Nov. 18, 1873	144, 709
Table and sink, Combined	J. G. Cain	Smith's Mills, Pa	May 6, 1862	35, 136
Table and stand	J. S. Welch and A. A. Wheeler	Boston, Mass	Sept. 12, 1871	118, 991
Table and stand leg	G. H. Bell	New York, N. Y	July 9, 1872	128, 782
Table and step-ladder, Combined	R. W. Myers	New York, N. Y	July 16, 1872	129, 579
Table and stool	H. Loth	Philadelphia, Pa	July 31, 1866	56, 769
Table and writing-desk, Combined	L. Paige	Cavendish, Vt	Apr. 24, 1855	12, 765
Table-attachment, Auxiliary	J. Blake	Scranton, Pa	Oct. 4, 1870	108, 000
Table, bench, &c	D. S. Leavitt	Grand Rapids, Mich	July 28, 1868	80, 289
Table, bureau, cupboard, and sink, Combined	M. J. Miller	Bloomington, Ill	Oct. 10, 1871	119, 873
Table-cloth protector	J. H. Mott	Washington, D. C	Oct. 13, 1868	83, 120
Table-cover	A. L. Munson	New Haven, Conn	May 1, 1866	54, 390
Table-cupboard and clothes-rack	W. M. Baker	Fortville, Ind	Feb. 19, 1867	62, 176
Table, desk, &c	E. Becker	Pittsburgh, Pa	Aug. 11, 1868	80, 898
Table-fastening	W. K. Sawyer	Three Oaks, Mich	Sept. 10, 1872	131, 304
Table for the sick	A. Millhauser	New York, N. Y	Sept. 12, 1865	49, 907
Table-fork	C. A. Durgin	New York, N. Y	May 8, 1866	54, 514
Table-fork	J. D. Edmond and W. W. Wirt	Washington, D. C	June 19, 1866	55, 632
Table-fork	E. G. Lamson	Shelburne Falls, Mass	Mar. 5, 1867	62, 640
Table-fork	W. Mannheimer	New York, N. Y	May 1, 1860	28, 063
Table-fork	J. Patterson	San Francisco, Cal	Feb. 1, 1870	99, 341
Table-fork	L. A. Powers	Meriden, Conn	July 14, 1868	80, 009
Table-forks, Manufacture of	J. D. Frary	New Britain, Conn	Apr. 21, 1868	77, 026
Table-heater and stand, Combined	E. A. Beardsley	Binghamton, N. Y	Oct. 24, 1871	120, 233
Table-knife	W. H. Andrew	Sheffield, England	Dec. 2, 1873	145, 080
Table-knife	M. Chapman	Greenfield, Mass	Aug. 16, 1870	106, 323
Table-knife	J. O. Ely	Philadelphia, Pa	Aug. 8, 1865	49, 246
Table-knife	P. Neff	Cincinnati, Ohio	Aug. 27, 1867	68, 307
Table knife and fork	M. Chapman	Greenfield, Mass	June 27, 1871	116, 412
Table-knife blades, Attaching handles to	D. N. Ropes	Meriden, Conn	Nov. 29, 1853	10, 275
Table-knife handle	J. A. White	Philadelphia, Pa	Oct. 25, 1870	108, 740
Table knives and forks, Making	G. Ropes	Portland, Me	May 10, 1838	737
Table-knives, Bolster for plated	O. Cleveland	New York, N. Y	Jan. 5, 1858	19, 017
Table-knives, Making	C. Poppenhusen and C. F. E. Simon.	College Point, N. Y	Mar. 31, 1857	16, 953
Table-leaf connection	J. Murphy	Roslindale, Mass	Sept. 17, 1872	131, 456
Table-leaf joints, Machine for making	J. Richards	Cincinnati, Ohio	Mar. 30, 1869	88, 331
Table-leaf support	E. L. Abbott and S. T. Gibson	South Bend, Ind	Apr. 29, 1873	138, 369
Table-leaf support	A. Anderson	South Bend, Ind	Mar. 22, 1870	100, 965
Table-leaf support	A. Belchambers	Ripley, Ohio	Sept. 7, 1869	94, 548
Table-leaf support	E. E. Berry	Farmington, N. H	May 26, 1868	78, 177
Table-leaf support	W. R. Briggs	Boston, Mass	Feb. 15, 1870	99, 839
Table-leaf support	D. Bull	Amboy, Ill	Dec. 19, 1865	51, 647
Table-leaf support	D. Bull	Amboy, Ill	Feb. 19, 1867	62, 245
Table-leaf support	D. Bull	Amboy, Ill	Jan. 7, 1868	72, 970
Table-leaf support	D. Bull	Amboy, Ill	June 18, 1872	128, 108
Table-leaf support	L. R. Cavender	Eureka, Ill	July 3, 1866	56, 005
Table-leaf support	A. Cutler	Pittston, Pa	Nov. 27, 1866	59, 974
Table-leaf support	G. E. Eberhart	Cedar Falls, Iowa	Sept. 3, 1872	131, 054

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Table-leaf support	S. Ehrman	Chicago, Ill	Apr. 14, 1868	76, 725
Table-leaf support	A. Forrest	Moingona, Iowa	May 3, 1870	102, 528
Table-leaf support	G. Fyfe	Ottawa, Ill	June 26, 1866	55, 846
Table-leaf support	G. L. Gerard	New Haven, Conn	Aug. 16, 1870	106, 353
Table-leaf support	J. Hilts	Detroit, Mich	Apr. 20, 1869	89, 045
Table-leaf support	H. Imhof	Lockport, N. Y	Apr. 15, 1873	137, 925
Table-leaf support	W. Jefts	Battle Creek, Mich	Mar. 18, 1873	136, 836
Table-leaf support	A. C. Johnson	Rockford, Ill	Mar. 25, 1873	137, 210
Table-leaf support	N. Long	Eaton, Ind	Dec. 31, 1867	72, 871
Table-leaf support	J. A. MacKinnon	Reading, Pa	Mar. 26, 1867	63, 274
Table-leaf support	A. Marchand	Lyons, Mich	Mar. 25, 1873	137, 087
Table-leaf support	J. K. Moffett	Watertown, N. Y	Aug. 26, 1873	142, 260
Table-leaf support	G. Payzant	Chicago, Ill	Apr. 22, 1873	138, 182
Table-leaf support	E. W. Perrin	Portland, Oreg	Aug. 19, 1873	141, 887
Table-leaf support	D. Saylor and L. Anderson	Chicago, Ill	Apr. 4, 1871	113, 452
Table-leaf support	G. C. Thomas	Chicago, Ill	May 13, 1873	138, 769
Table-leaf support	S. Walker	Boston, Mass	Jan. 31, 1860	27, 026
Table-leaf support	C. H. Wheeler	Saint Louis, Mo	June 17, 1873	140, 102
Table-leaf support	W. Whitworth	Cleveland, Ohio	July 30, 1867	67, 390
Table-leaf support	C. P. Wing	Lyonsville, Ill	June 15, 1869	91, 397
Table-leaves, Fastening down	L. J. Mason	Franklinville, N. Y	Apr. 8, 1851	8, 023
Table-leaves, Supporting	H. A. Frost	Worcester, Mass	Mar. 27, 1855	12, 588
Table-leaves, Supporting falling	C. Phelps	Salem, Mass	Nov. 29, 1853	10, 285
Table-legs, Floor-catch for	J. M. Lemon	Polk City, Iowa	Aug. 24, 1869	94, 011
Table-mat	I. Leonard	Lowell, Mass	Jan. 24, 1860	26, 913
Table-mat	C. Weber	West Meriden, Conn	June 5, 1866	55, 402
Table or desk	W. Hemmer	Newark, N. J	July 25, 1865	48, 939
Table or stand	J. Thornton	Oswego, N. Y	Oct. 31, 1871	120, 550
Table-rack for steamers, ships, &c	J. Franz	Boston, Mass	Jan. 19, 1858	19, 139
Table-rim	E. Mets	Rochester, N. Y	Jan. 12, 1864	41, 230
Table-service, Covered article for	H. C. Wilcox	West Meriden, Conn	July 11, 1871	117, 026
Table-sink	J. Wylie	Bethel, Conn	May 30, 1871	115, 408
Table-slide	W. J. Boda	Dayton, Ohio	May 28, 1872	127, 302
Table-slide	A. Brower	Rochester, N. Y	Oct. 5, 1869	95, 421
Table-slide	M. Griffin	New York, N. Y	Aug. 15, 1871	118, 123
Table-slide	S. May and J. Hooper	Waterloo, N. Y	Nov. 23, 1869	97, 209
Table-slide	C. W. Thomas and W. W. Warren.	Hubbardstown, Mich	Sept. 17, 1872	131, 476
Table-slide, Extension	J. F. Birchard	Milwaukee, Wis	Oct. 20, 1863	40, 320
Table-slide, Extension	C. Kean	Hollidaysburgh, Pa	July 16, 1867	66, 851
Table, sofa, and bed, Combined	D. Katzenstein	New York, N. Y	Feb. 20, 1872	123, 829
Table, stand, &c	D. K. Barnhart	Gaines, Pa	July 11, 1871	116, 797
Table-stand for articles of food	B. F. Porter and H. M. Glines	Manchester, N. H	Jan. 2, 1866	51, 863
Table-stand for food	B. F. Porter	Manchester, N. H	Sept. 11, 1866	57, 964
Table-stand for pitchers, &c	J. Gibson, jr	Albany, N. Y	July 18, 1871	117, 066
Table, stool, and stand, Combined	J. A. Markle	Philadelphia, Pa	June 24, 1873	140, 288
Table-support	J. Blake	Scranton, Pa	Aug. 9, 1870	106, 109
Table-support	J. Blake	Scranton, Pa	Aug. 9, 1870	106, 110
Table-top	N. Sargent	Charlestown, Mass	Sept. 20, 1859	25, 529
Table-tops and leaves, Machine for jointing	F. B. Markle	Columbus, Ohio	Mar. 6, 1866	53, 018
Table-tops, Machine for jointing	W. I. Hatfield	Dayton, Ohio	Dec. 20, 1853	10, 338
Table-ware, Manufacture of	H. W. Wright	Taunton, Mass	June 2, 1868	78, 562
Table, Extension for	D. Cole	Marshall, Ill	May 12, 1868	77, 801
Tables, Joint for frame and leg of	S. Oppenheimer	Peru, Ind	Aug. 7, 1866	56, 986
Tablet	J. Wenisch and R. B. Berky	Tompkinsville and New York, N. Y.	Apr. 16, 1861	32, 097
Tablet, Computing	H. Kummer	New York, N. Y	May 18, 1869	90, 275
Tablet, India-rubber	F. M. Shepard	New York, N. Y	May 24, 1864	42, 883
Tablet, platform, or mat, Non-conducting	H. L. Palmer	New York, N. Y	Aug. 12, 1873	141, 812
Tablet, Pocket	J. A. Minor	Middletown, Conn	July 31, 1866	56, 776
Tablet, token, or check to be used in life-insurance	H. A. Jones	Brooklyn, N. Y	Mar. 8, 1870	100, 638
Tablet, Writing	G. Asmus	Houghton, Mich	Mar. 28, 1865	46, 982
Tablet, Writing	C. N. Brown	Providence, R. I	Nov. 25, 1873	144, 950
Tablet, Writing	G. Munger	New Haven, Conn	Sept. 27, 1859	25, 576
Tablet, Writing	L. Pettigrew	Gardiner, Me	Jan. 23, 1872	123, 045
Tablet, Writing	A. Schindler	Lancaster, Pa	May 27, 1873	139, 266
Tablet, Writing	P. Shaw	Boston, Mass	Mar. 11, 1862	34, 664
Tablet, Writing	T. Weaver	Harrisburgh, Pa	Apr. 4, 1865	47, 175
Tablets, Coating for writing	A. Schindler	Lancaster, Pa	Jan. 7, 1873	134, 566
Tablets, Composition for writing or drawing	A. D. Allen		May 10, 1804	......
Tablets, Transparent composition for	H. J. Griswold	Norwich, Conn	Oct. 24, 1865	50, 658
Tabulating-device	C. W. Seaton	Washington, D. C	June 4, 1872	127, 435
Tack	L. R. Blake	Brooklyn, N. Y	Sept. 3, 1872	131, 080
Tack	A. A. Porter	New Haven, Conn	Mar. 7, 1871	112, 378
Tack and nail machine	N. and N. N. Leonard	North Dighton, Mass	Mar. 13, 1866	53, 154
Tack-capping machine	J. C. Rhodes	East Bridgewater, Mass	July 10, 1866	56, 268
Tack, Double-pointed	P. Miles	New York, N. Y	June 14, 1870	104, 183
Tack-driver	B. C. Davis	Herkimer, N. Y	May 30, 1865	47, 935
Tack driver, Carpet	H. S. Walcott	East Boston, Mass	Feb. 5, 1861	31, 360
Tack-driving machine	A. Smith	Perrysburgh, Ohio	July 30, 1872	129, 992
Tack-extractor	F. M. Osborn	Dover Plains, N. Y	Oct. 23, 1866	59, 039
Tack-holder and carpet-stretcher	J. E. Sturdy	Augusta, Me	Dec. 8, 1868	84, 717
Tack, Lasting	L. F. Thayer	Randolph, Mass	Feb. 9, 1864	41, 584
Tack-leathering apparatus	L. G. Bradford	Plymouth, Mass	Oct. 14, 1862	36, 640
Tack-leathering machine	L. G. Bradford and C. O. Churchill.	Plymouth, Mass	Mar. 10, 1863	37, 850
Tack-leathering machine	W. H. Field	Taunton, Mass	Oct. 30, 1866	59, 203
Tack-leathering machine	S. Loring	Duxbury, Mass	Feb. 25, 1862	34, 510
Tack-leathering machine	J. Reed	Marshfield, Mass	July 6, 1858	20, 819
Tack-leathering machine	M. M. and J. C. Rhodes	Taunton, Mass	May 8, 1855	12, 832
Tack-leathering machine	C. L. Russell	Derby, Conn	July 6, 1858	20, 821
Tack-making machine	J. Reed	Hanover, Mass	Aug. 1, 1816	......
Tack-protector, Carpet	R. K. Lee	Brooklyn, N. Y	Jan. 5, 1864	41, 160
Tack-puller	C. W. Blakeslee	Plantsville, Conn	Dec. 23, 1873	145, 837
Tack, Shoe	J. H. Knight	Newburyport, Mass	Dec. 18, 1860	30, 974
Tacks and brads, Machine for manufacturing	S. Rogers and T. Blanchard	Boston, Mass	Oct. 3, 1817	......
Tacks and nails with copper, Coating	H. Wright	Taunton, Mass	Aug. 30, 1870	106, 977

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Invention.	Inventor.	Residence.	Date.	No.
Tacks, Machine for finishing galvanized	R. Hathaway, jr., and J. D. Stetson.	Fairhaven, Mass	May 25, 1869	90, 536
Tacks, Machine for making double-pointed	P. Miles	New York, N. Y	June 14, 1870	104, 184
Tacks, Machine for separating and delivering	C. W. Glidden	Lynn, Mass	Jan. 28, 1873	135, 329
Tacks, nails, and screws to prevent corrosion and to color them, Coating.	G. Starks	Taunton, Mass	Nov. 18, 1873	144, 712
Tacks, nails, &c., Metal-coating	C. D. Hunt	Fairhaven, Mass	Jan. 28, 1873	135, 339
Tackle-block	W. B. Barnard	Waterbury, Conn	Nov. 30, 1858	22, 154
Tackle-block	J. Briggs	Louisville, Ky	Dec. 18, 1866	60, 614
Tackle-block	T. Brown	Wellfleet, Mass	July 9, 1872	128, 700
Tackle-block	E. Doty	Janesville, Wis	May 30, 1871	115, 450
Tackle-block	J. Ferrier	Charlestown, Mass	Nov. 2, 1858	21, 950
Tackle-block	J. F. Harcourt	Cincinnati, Ohio	June 9, 1868	78, 663
Tackle-block	J. F. Harcourt	Cincinnati, Ohio	Aug. 30, 1870	106, 933
Tackle-block	G. Milsom	Buffalo, N. Y	Feb. 27, 1866	52, 871
Tackle-block	J. W. Norcross	Middletown, Conn	Oct. 10, 1865	50, 379
Tackle-block	I. E. Palmer	Saint Louis, Mo	Nov. 1, 1859	25, 978
Tackle-block	I. E. Palmer	Hackensack, N. J	May 2, 1871	114, 333
Tackle block, Chain	S. D. Backus	New York, N. Y	Nov. 18, 1873	144, 727
Tackle-block-cheek-forming machine	T. Blanchard	United States	Aug. 31, 1836	19
Tackle-block, Elastic	J. E. Jones	Wiretown, N. J	July 13, 1869	92, 585
Tackle-block, Elastic	J. E. Jones	Wiretown, N. J	May 9, 1871	114, 567
Tackle-block hook	W. H. Birdsell	Elizabethport, N. J	Oct. 1, 1861	33, 413
Tackle-block hook	W. Carter	Philadelphia, Pa	Feb. 16, 1869	86, 902
Tackle-block sheave	J. W. Norcross	Middletown, Conn	July 3, 1866	56, 087
Tackle-block sheave and pin-cutting machine	T. Blanchard	United States	Aug. 31, 1836	17
Tackle-block-sheave-bushing machine	T. Blanchard	United States	Aug. 31, 1836	18
Tackle-block, Spring	O. Hussey	Baltimore, Md	Dec. 28, 1858	22, 432
Tackle-blocks and dead-eyes, Machine for cutting	T. Blanchard	United States	Aug. 10, 1836	8
Tackle-blocks, Attachment for	G. Focht	Reading, Pa	Sept. 28, 1858	21, 602
Tackle-blocks, Bush for sheaves of	C. H. Platt	New York, N. Y	June 17, 1862	35, 622
Tackle-blocks, Casting	J. W. Norcross	Middletown, Conn	May 9, 1865	47, 656
Tackle-blocks, Hook and eye for	J. Holroyd	Washington, D. C	Mar. 18, 1873	136, 833
Tackle-blocks, Machine for forming ends of plank	T. Blanchard	United States	Aug. 10, 1836	6
Tackle-blocks, Machine for making sheave and pins for.	T. Blanchard	United States	Aug. 1, 1836	3
Tackle-blocks, Machine for mortising and boring	T. Blanchard	United States	Aug. 10, 1836	5
Tackle-blocks, Machine for riveting plank	T. Blanchard	United States	Aug. 10, 1836	9
Tackle-blocks, Machine for stock-shaving	T. Blanchard	United States	Aug. 10, 1836	....
Tackle-blocks, Strapping	J. B. Fayette and D. Wheeler	Oswego, N. Y	June 17, 1856	15, 125
Tackle for raising and lowering boats	H. A. Devon	Port Richmond, N. Y	Sept. 11, 1866	57, 877
Tackle for raising sunken whales and other bodies.	T. W. Roys	New York, N. Y	Apr. 3, 1866	53, 684
Tackle for the sheets of fore-and-aft rigged vessels, Spring.	W. Woodbury	Gloucester, Mass	Mar. 19, 1861	31, 759
Tackle-hook	R. Frisbie	Middletown, Conn	June 20, 1865	48, 336
Tackle-hook	W. Newcomb	Baltimore, Md	June 20, 1871	116, 212
Tackle-hook	J. W. Norcross	Middletown, Conn	Apr. 18, 1865	47, 322
Tackle-hook	J. W. Norcross	Boston, Mass	Apr. 4, 1871	113, 689
Tackle-hook	H. Thompson	Rockland, Me.	May 31, 1870	103, 687
Tackle or purchase block	J. J. Doyle	New York, N. Y	July 7, 1863	39, 130
Tackle, Safety	B. Bellair	Paris, France	Oct. 19, 1869	95, 971
Tackle, Safety	P. J. Jamet	Paris, France	May 30, 1865	48, 034
Tag	S. B. Fay	New York, N. Y	Nov. 2, 1869	96, 410
Tag	T. P. Marston	New York, N. Y	Jan. 14, 1873	134, 757
Tag	C. A. Moore	West Brook, Conn	Dec. 11, 1866	60, 406
Tag	R. Parks	Philadelphia, Pa	Nov. 5, 1867	70, 464
Tag	J. P. Pultz	Plantsville, Conn	Aug. 6, 1872	130, 152
Tag	F. G. Sargent and N. H. Bruce	Graniteville, Mass	Dec. 3, 1867	71, 795
Tag	T. J. Southworth	Rochester, N. Y	July 20, 1869	92, 895
Tag	T. J. Southworth and W. H. Lawton.	Rochester and Elmira, N. Y.	Nov. 15, 1870	109, 263
Tag	T. Van Kannel	Cincinnati, Ohio	Nov. 21, 1871	121, 221
Tag	G. F. Wright and W. Orr, jr.	Clinton, Mass	June 23, 1868	79, 287
Tag and label making machine	T. Percival	Augusta, Me	Nov. 26, 1867	71, 323
Tag-attachment	T. P. Marston	New York, N. Y	Feb. 1, 1870	99, 334
Tag-fastener	H. Fisher	Canton, Ohio	May 10, 1870	102, 800
Tag-fastener	J. M. Goodridge	Norfolk, Va	Oct. 14, 1873	143, 621
Tag-fastener	T. P. Marston	New York, N. Y	Jan. 14, 1873	134, 756
Tag-fastening	J. S. Loughery	New York, N. Y	Jan. 14, 1873	134, 755
Tag-fastening	T. P. Marston	New York, N. Y	Sept. 10, 1872	131, 174
Tag-fastening	N. M. Phillips	New York, N. Y	July 28, 1868	80, 498
Tag-fastening	W. N. Weeden	Boston, Mass	Apr. 28, 1868	77, 424
Tag-folding machine	J. B. Clark	Plantsville, Conn	Sept. 22, 1863	40, 019
Tag for filing papers, Adhesive	L. Heyl	Columbus, Ohio	Oct. 13, 1863	40, 260
Tag for straps, Metallic	E. Wadhams	Yorkville, N. Y	May 19, 1868	78, 032
Tag-holder	A. Grushus	Saint Paul, Minn	Nov. 12, 1867	70, 834
Tag-holder	E. C. Stillman and E. F. Burrows.	Hopkinton, R. I., and Mystic River, Conn.	Mar. 25, 1873	137, 257
Tag-holder	E. C. Ten Eyck	West Meriden, Conn	Apr. 5, 1870	101, 680
Tag-holder for bales, &c	R. Shepard	Brooklyn, N. Y	Oct. 11, 1864	44, 666
Tag-hook	J. Hawks	Brooklyn, N. Y	May 10, 1864	42, 729
Tag-hook	T. P. Marston and N. M. Phillips.	New York, N. Y	Sept. 30, 1873	143, 364
Tag, Key	C. L. Carter	Washington, D. C	Apr. 25, 1871	114, 108
Tag-machine	C. H. Chapman	Shirley, Mass	Mar. 1, 1870	100, 258
Tag-machine	C. M. O'Brien	Hightstown, N. J	May 27, 1873	139, 259
Tag-machine	J. H. Silvers	Hightstown, N. J	May 27, 1873	139, 270
Tag-making apparatus	J. B. Clark	Plantsville, Conn	Feb. 28, 1865	46, 543
Tag-making machine	T. B. De Forest	Birmingham, Conn	Nov. 24, 1863	40, 684
Tag-making machine	T. B. De Forest	Birmingham, Conn	Dec. 8, 1863	40, 827
Tag-making machine	C. S. Hutchinson	Burlington, N. J	Feb. 23, 1869	87, 261
Tag-making machine	W. Liddell	Boston, Mass	Oct. 26, 1869	96, 125
Tag-making machine, Folded	T. B. De Forest	Birmingham, Conn	Sept. 27, 1864	44, 496
Tag or label	N. H. Bruce	Westford, Mass	Jan. 1, 1867	60, 856
Tag or label	C. H. Chapman	Shirley, Mass	Oct. 1, 1867	69, 405
Tag or label	E. A. Locke	Boston, Mass	Aug. 13, 1867	67, 661
Tag or label	G. W. Storer	Portland, Conn	Nov. 13, 1866	59, 678
Tag or label for express-companies, &c	E. A. Locke and L. Heuser	Boston, Mass	June 26, 1866	55, 879

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Tag-printing machine, Mail	G. H. Fayman	Washington, D. C	Dec. 5, 1871	121, 602
Tag, Spring	S. B. Fay	Franklin, Pa	Apr. 30, 1867	64, 298
Tag spring-attachment	B. L. Dennison	Boston, Mass	Oct. 27, 1868	83, 368
Tags and shoe-laces, Machine for cutting	F. J. Seymour	Wolcottville, Conn	Jan. 12, 1864	41, 239
Tags, Machine for twisting wires for marking	M. Dimock	Newark, N. J	Nov. 10, 1863	40, 586
Tags. Metal loop for	S. B. Fay	Franklin, Pa	Dec. 18, 1866	60, 624
Tail-block, Self-setting	H. Mellish	Drewsville, N. H	Sept. 19, 1846	4, 769
Tail-board, Self-locking	S. Walker	New York, N. Y	Jan. 23, 1866	52, 230
Tailor's bench	W. Burtis	New Brunswick, N. J	Oct. 3, 1808	....
Tailor's crayon-sharpener	B. W. Minor and A. Colburn	Boston, Mass	July 9, 1867	66, 513
Tailor's cutting-instrument	H. Mengel	Philadelphia, Pa	Jan. 22, 1867	61, 349
Tailor's furnace	A. W. Roberts	Hartford, Conn	May 28, 1830	....
Tailor's press-board holder	D. C. Wilson	Painesville, Ohio	Oct. 14, 1862	36, 684
Tailor's pressing-machine	A. C. Sawyer	Canton, N. Y	Mar. 25, 1873	137, 100
Tailor's pressing-machine	L. B. Storrs	Canton, N. Y	June 8, 1858	20, 519
Tailor's pressing-machine	I. Summersfield	Manchester, England	July 30, 1872	130, 084
Tailor's pressing-machine	J. W. Thorp	Hillsborough, N. H	May 31, 1859	24, 250
Tailor's pressing-machine	C. W. Williams	Boston, Mass	Nov. 18, 1856	16, 106
Tailor's seat	F. Neuhaus	Belleville, Ill	June 2, 1868	78, 472
Tailor's seat	F. Neuhaus	Belleville, Ill	Aug. 11, 1868	80, 991
Tailor's shears	R. Fitzgerald	Elizabethtown, N. J	Apr. 28, 1836	....
Tailor's shears	T. Hawkins	New York, N. Y	Mar. 23, 1842	2, 500
Tailor's shears	R. Heinisch	New York, N. Y	Mar. 11, 1835	....
Tailor's shears	R. Heinisch	Newark, N. J	Feb. 27, 1839	1, 092
Tailor's shears	R. Heinisch	Newark, N. J	July 13, 1858	20, 879
Tailor's shears	R. Heinisch	Newark, N. J	Sept. 20, 1859	25, 508
Tailor's shears	I. Jaques	Elizabethtown, N. J	Aug. 28, 1846	4, 723
Tailor's shears	J. Phares	Cincinnati, Ohio	Sept. 12, 1854	11, 679
Tailor's shears	B. W. Warner	New York, N. Y	Jan. 9, 1849	6, 008
Tailor's shears	H. Wendt	New York, N. Y	Mar. 23, 1842	2, 501
Tailor's shears	H. Wendt	Elizabeth, N. J	Aug. 25, 1863	39, 693
Tailor's square for delineating garments	A. Wiswell	Exeter, N. H	June 7, 1832	....
Tailoring, Art of	G. Ross	Carlisle, Ky	Apr. 5, 1826	....
Tailoring, Art of	J. Zwisler, jr	Hagerstown, Md	July 1, 1836	....
Tailoring, System of	A. Sherman	Newark, N. J	July 17, 1837	283
Talc for machinery, Lubricating	A. Bridges	Jersey City, N. J	Mar. 26, 1872	125, 016
Talc, steatite, &c., Process of hardening	J. F. Sell	Cambridge, Mass	Apr. 27, 1869	89, 438
Tallow and lard, Process for purifying and bleaching	J. R. Brown	New Haven, Conn	Dec. 23, 1873	145, 840
Tallow-hardening process	C. Schinz	Camden, N. J	June 13, 1854	11, 087
Tallow, lard, &c., Process of rendering and bleaching.	J. S. Shapter	New York, N. Y	Dec. 18, 1866	60, 575
Tallow, &c., Machine for cutting	Z. Ellis	Kensington, Pa	Oct. 12, 1844	3, 789
Tallow obtained from offal, Refining and deodorizing.	B. F. Shaw	Cambridge, Mass	Jan. 28, 1873	135, 373
Tallow or stearine composition	C. G. Ritter	Cincinnati, Ohio	Feb. 18, 1834	....
Tallow, Process for refining	G. Sanger	Beloit, Wis	July 13, 1869	92, 656
Tally-board	F. N. Clark	Chicago, Ill	Aug. 3, 1852	9, 165
Tally-keeping	W. A. Turner	Plymouth, N. C	July 12, 1823	....
Tallying-instrument	G. Farmer	Flint, Mich	Oct. 8, 1867	69, 647
Tallying register, Freight	F. Nicholson	Warsaw, N. Y	July 5, 1870	105, 118
Tallying-register, Portable	H. C. Buhoup	Pittsburgh, Pa	July 4, 1871	116, 550
Tampico and bristles, Apparatus for combing and mixing.	G. Willett	Burlington, Vt	Sept. 2, 1873	142, 427
Tamping-apparatus	D. Corgan	Sugar Notch, Pa	July 4, 1871	116, 565
Tamping-bar	A. Doble	San Francisco, Cal	Apr. 12, 1864	42, 278
Tamping-plug	H. Ball	New York, N. Y	Jan. 12, 1869	85, 888
Tan, Apparatus for drying	N. Porter	Peabody, Mass	Nov. 25, 1873	145, 010
Tan-bark and obtaining extracts, Apparatus for leaching.	W. H. Allen	Fryeburgh, Me	July 29, 1862	36, 048
Tan-bark, Apparatus for concentrating extract of	B. Irving	New York, N. Y	Dec. 22, 1868	85, 175
Tan-bark, Apparatus for expressing liquid from spent.	L. Breval	Paris, France	Jan. 28, 1873	135, 317
Tan-bark, Apparatus for making extracts from	T. W. Johnson	New York, N. Y	Oct. 27, 1868	83, 389
Tan-bark, Apparatus for making extracts from	T. W. Johnson	New York, N. Y	June 1, 1869	90, 848
Tan-bark, Extracting	T. W. Johnson	New York, N. Y	Sept. 15, 1868	82, 121
Tan-bark, Extracting	S. W. Pingree	Lawrence, Mass	Mar. 1, 1864	41, 782
Tan-bark for use, Mode of preparing	A. Appleby	Brownfield, Me	Sept. 3, 1867	68, 335
Tan-bark leach	L. C. England	Philadelphia, Pa	Oct. 26, 1869	96, 212
Tan-bark leaches by steam, Method of heating	L. C. England	Philadelphia, Pa	Sept. 21, 1869	95, 009
Tan-bark, Leaching	A. Steers	New York, N. Y	Aug. 20, 1867	68, 010
Tan-bark, Machine for cutting	J. Kilborn	....	Aug. 23, 1800	....
Tan-bark, Machine for shaving	W. and J. Goodwin, jr	Lebanon and Mansfield, Conn.	Oct. 16, 1814	....
Tan-bark, Method of treating	J. M. Caller	Salem, Mass	June 27, 1865	48, 365
Tan-bark, Preparing	N. S. Thomas	Painted Post, N. Y	Apr. 6, 1869	88, 678
Tan-bark, softening hides, &c., Machine for cutting	C. Griswold and H. E. Potter	Otsego, N. Y	Nov. 20, 1810	....
Tan-bark, Wheel-mill for grinding	D. Pelton	Lyme, N. H	Sept. 30, 1814	....
Tan, Machine for desiccating	C. H. Moseley	Winchester, Mass	Feb. 18, 1873	135, 909
Tan, &c., Machine for desiccating leached	C. H Moseley	Winchester, Mass	Oct. 6, 1868	82, 739
Tan-vat	T. W. Brown	Howardsville, Va	Apr. 17, 1849	6, 340
Tan-vat	C. H. Manning	Washington, D. C	Jan. 28, 1873	135, 231
Tan-vat	C. H. Manning	Washington, D. C	Jan. 28, 1873	135, 232
Tan-vat	C. H. Manning	Washington, D. C	May 13, 1873	138, 906
Tan-vat	J. W. Moon	Roxbury, Mass	Apr. 18, 1833	....
Tan-vat	N. Smith	McAllistersville, Pa	July 4, 1871	116, 766
Tan-vat and conveying-trough	W. Brown	Herkimer, N. Y	June 28, 1832	....
Tan-vats, Apparatus for stirring	W. P. Martin	Salem, Mass	Sept. 3, 1861	33, 203
Tan-vats, Arrangement of	D. H. Kennedy	Reading, Pa	Jan. 22, 1856	14, 135
Tan-vats, &c., Constructing	A. Higgins	Florence, Ohio	Apr. 24, 1826	....
Tan-vats, Construction of	J. Hub r	Buffalo, N. Y	Feb. 18, 1868	74, 540
Tan-vats, Construction of hide-frames in	E. A. Eliason	Georgetown, D. C	Oct. 7, 1856	15, 844
Tan-vats, reservoirs, &c., with American cement, Constructing.	J. C. Johnson	Catskill, N. Y	Feb. 20, 1835	....
Tan-yard	A. Cornwell	Fayette County, Ind	Nov. 4, 1831	....
Tan-yards and in tanning leather, Constructing	L. B. Johnston	Tompkinsville, Ky	Mar. 3, 1829	....

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Tank: *See* Hog-scalding tank. Oil-tank. Railway-tank. Railway water-tank. Steam-condensing tank. Vacuum-tank. Water-tank.				
Tank and bed, Propagating	N. H. Lindley	Bridgeport, Conn	Nov. 5, 1867	70, 584
Tank and cistern for supplying locomotives	A. W. McDonald	Hampshire County, Va	Nov. 28, 1854	11, 998
Tank and liquid-measure, Combined	J. H. Corliss	Reno, Nev	Dec. 23, 1873	145, 725
Tank and refrigerator, Water	W. Rosenkranz and M. Esch	Saint Paul, Minn	July 30, 1867	67, 354
Tank, Cooling and preserving	D. E. Somes	Washington, D. C	Mar. 8, 1870	100, 682
Tank for containing and transporting petroleum	W. C. Allison	Philadelphia, Pa	Oct. 16, 1866	58, 746
Tank for fermenting ale, beer, &c	E. K. Warren	Rochester, N. Y	Oct. 6, 1868	82, 905
Tank for holding compressed air	F. Roberts	New Orleans, La	July 5, 1870	105, 128
Tank for hot-houses	H. E. Hooker	Rochester, N. Y	Apr. 19, 1864	42, 374
Tank for locomotives	J. Kimball	Concord, N. H	Sept. 29, 1857	18, 315
Tank for transporting oil, &c	G. W. Howard	Pontiac, Mich	Sept. 26, 1865	50, 126
Tank-regulator	J. M. Crose	Lebanon, Ind	Aug. 31, 1869	94, 288
Tanks, Construction of sheet-metal	A. Edwards	Chicago, Ill	Aug. 11, 1863	39, 470
Tanks, Construction of stone	L. B. Darling	Providence, R. I	Aug. 21, 1860	29, 674
Tanks, Electrical apparatus for indicating depth of liquids in.	E. P. Warner	Galesburgh, Ill	Aug. 20, 1872	130, 611
Tanks for fatty acids, Lining	M. Werk	Cincinnati, Ohio	Nov. 22, 1859	26, 221
Tanks, mail-bags, &c., water-tight, Method of rendering the mouths of.	C. H. Hinckley	Stonington, Conn	Aug. 25, 1857	18, 046
Tanks, Method of elevating water into railway	C. L. Stevens	Galesburgh, Ill	Aug. 14, 1866	57, 211
Tanners' and curriers' knives, Machine for sharpening.	W. Eggleston	Troy, N. Y	Jan. 8, 1839	1, 064
Tanner's flesh-blacking	P. Havill and D. Curran	Roscoe, Ohio	June 24, 1843	3, 144
Tanner's hook	J. Hoffman	Belvidere, N. J	July 28, 1868	80, 350
Tanner's rinsing-wheel	P. Lull	Norwich, N. Y	Oct. 10, 1871	119, 778
Tanner's steeper	L. K. Parsons, C. E. Getchell, and S. W. Fairfield.	Salem, Mass	July 4, 1871	116, 626
Tanner's table	F. C. Sexton	Shelbyville, Ind	Mar. 2, 1869	87, 437
Tannery	L. C. England	Philadelphia, Pa	Sept. 17, 1867	68, 861
Tannery stuffing-wheels, Man-hole plate for	H. Smith, jr	Milwaukee, Wis	Mar. 15, 1870	100, 939
Tannery, Working liming-vat in	L. W. Fisko	Louisville, Ky	Feb. 6, 1855	12, 369
Tannin and coloring-matter in quercitron-bark, Separating.	G. C. Close and E. Field	Port Chester, N. Y	Apr. 22, 1845	4, 007
Tannin, Applying steam in extracting	W. Coburn	Gardiner, Me	Nov. 1, 1828	....
Tannin-extract, &c., Apparatus for making	T. W. Johnson and A. W. Goodell.	New York, N. Y	Jan. 7, 1873	134, 675
Tannin from bark, Extracting	A. A. Hayes	Roxbury, Mass	July 12, 1838	836
Tannin from bark, Extracting	W. Knapp	Milford, N. Y	Apr. 5, 1823	....
Tannin from bark, Extracting	G. Warren	Roxbury, Mass	Mar. 17, 1868	75, 608
Tannin from bark, Water-press for extracting	W. Lowber	Philadelphia, Pa	Mar. 15, 1825	....
Tannin from leather, Process for extracting	O. Rich	Cambridge, Mass	Jan. 2, 1855	12, 139
Tannin from solutions, Process of separating	N. C. Platt	Salisbury, N. Y	July 25, 1871	117, 455
Tannin-liquid, Decolorizing	G. Bossiere	Paris, France	Sept. 1, 1868	81, 587
Tannin, Mode of procuring	D. Roe, C. F. Kellogg, and J. W. Gazlay.	Cincinnati, Ohio	Oct. 3, 1823	....
Tanning	H. W. Adams	Irvington, N. J	Nov. 21, 1865	50, 998
Tanning	H. W. Adams	Milton, Pa	Mar. 31, 1868	76, 134
Tanning	A. H. Avery	Bennington, Vt	Sept. 30, 1811	....
Tanning	Z. Baker	Erie, Ill	Oct. 14, 1862	36, 636
Tanning	J. Barker	Deerfield, N. Y	Jan. 10, 1812	....
Tanning	M. A. Bell	Rushford, N. Y	Apr. 24, 1860	27, 961
Tanning	I. M. Belote	Fayette County, Tenn	Apr. 14, 1835	....
Tanning	J. Brainerd	Cleveland, Ohio	Sept. 3, 1861	33, 182
Tanning	J. Brainerd	Cleveland, Ohio	Mar. 4, 1862	34, [illegible]
Tanning	J. Brainerd and W. H. Burbridge.	Cleveland, Ohio	June 7, 1859	24, 278
Tanning	J. Brainerd and W. H. Burbridge.	Cleveland, Ohio	Aug. 30, 1859	25, 241
Tanning	J. Brainerd and W. H. Burbridge.	Cleveland, Ohio	Sept. 6, 1859	25, 315
Tanning	H. Bretney	Lebanon, Ohio	Mar. 24, 1825	....
Tanning	W. Brown	Manchester, Md	Aug. 1, 1844	3, 688
Tanning	W. Buchanan	Milford, Pa	Dec. 17, 1840	1, 906
Tanning	C. Burton	Union, Me	Feb. 21, 1865	46, 446
Tanning	J. W. Calef	Salisbury, N. H	Dec. 18, 1866	60, 472
Tanning	J. Carter and A. C. Keith	Jersey City, N. J	Mar. 4, 1873	136, 488
Tanning	J. Cox	Edinburgh, Scotland	June 5, 1844	3, 614
Tanning	R. Crane and W. Baldwin	Anamosa, Iowa	Oct. 16, 1860	30, 390
Tanning	S. Currie	Philadelphia, Pa	Mar. 28, 1812	....
Tanning	C. J. Cushing, B. F. Walls, and W. A. Wood.	Hancock County, Ky	Oct. 8, 1867	69, 636
Tanning	P. Daniels	Le Roy, N. Y	Feb. 7, 1860	27, 088
Tanning	J. Davis and J. McKelvey	Pawtucket, R. I	Jan. 1, 1867	60, 701
Tanning	A. Dietz	New York, N. Y	Oct. 16, 1860	30, 392
Tanning	A. K. Eaton	Rochester, N. Y	Aug. 10, 1852	9, 181
Tanning	W. Edwards	Northampton, Mass	Oct. 19, 1812	....
Tanning	W. Edwards	Northampton, Mass	Apr. 3, 1816	....
Tanning	L. Emery	New York, N. Y	Mar. 19, 1836	....
Tanning	E. England	Mossy Creek, Tenn	Mar. 29, 1870	101, 943
Tanning	L. C. England	Owego, N. Y	Jan. 25, 1859	22, 717
Tanning	R. Enos	Woodstock, Ill	July 18, 1854	11, 325
Tanning	R. Enos and B. T. Hunt	Saint Charles, Ill	Mar. 22, 1853	9, 634
Tanning	O. B. Evans	Buffalo, N. Y	May 28, 1867	65, 190
Tanning	C. Frank	Cincinnati, Ohio	Nov. 26, 1867	71, 293
Tanning	A. D. Fullmer	Buffalo, N. Y	Mar. 8, 1870	100, 520
Tanning	J. J. Fulton	Monongahela City, Pa	July 12, 1853	9, 840
Tanning	J. Galbraith	Trenton, N. Y	Oct. 15, 1823	....
Tanning	W. Germar	Easton, Pa	July 2, 1846	4, 615
Tanning	R. Gould	Whitewater, Wis	Mar. 11, 1856	14, 399
Tanning	J. Gove	Milford, N. H	June 21, 1859	24, 457
Tanning	R. Harper	Trumbull, Ohio	Oct. 2, 1860	30, 220
Tanning	B. Harrington and N. Russell	China, Me	Oct. 12, 1858	21, 755

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Tanning	G. W. Hatch	Princeton, Ill	Oct. 1, 1861	33,388
Tanning	S. Heath	Pike, N. Y	May 23, 1836	....
Tanning	S. A. Hickel	Roane County, W. Va	Nov. 7, 1865	50,872
Tanning	A. Hill	Dubuque, Iowa	Nov. 27, 1866	60,006
Tanning	W. Hollingsworth	Elkton, Md	July 30, 1811	....
Tanning	L. Jacobs	Missouri	Feb. 10, 1823	....
Tanning	L. Jacobs	Richmond, Va	Mar. 1, 1826	....
Tanning	M. W. Jenkins	Baltimore, Md	Mar. 10, 1834	....
Tanning	H. Johnson	Farmersville, N. Y	Apr. 5, 1859	23,471
Tanning	J. J. Johnston	Allegheny City, Pa	Dec. 18, 1866	60,524
Tanning	D. Kennedy	Reading, Pa	Nov. 16, 1852	9,4 6
Tanning	A. Kettering and A. Vogle	Hempfield, Pa	June 24, 1844	3,639
Tanning	J. Kidder	Urbana, Ohio	June 28, 1870	104,741
Tanning	H. Lockier	Lancaster, Pa	Mar. 18, 1836	....
Tanning	G. L. Loversidge	Bury Bank Cottages, Great Britain.	Sept. 10, 1867	68,631
Tanning	C. Luther and J. Smith	Georgetown	May 5, 1812	....
Tanning	J. Meehan	Newark, N. J	Aug. 6, 1867	67,563
Tanning	J. Morgan	Sumpterville, S. C	June 8, 1858	20,502
Tanning	J. M. Muller	North Becket, Mass	Nov. 14, 1865	50,945
Tanning	D. Needham	Oskaloosa, Iowa	Apr. 10, 1860	27,823
Tanning	C. F. Panknin	Charleston, S. C	Sept. 27, 1870	107,713
Tanning	J. E. Park	Sequin, Tex	Dec. 5, 1865	51,407
Tanning	S. Parker	Billerica, Mass	July 9, 1808	....
Tanning	F. D. Parmelee	Akron, Ohio	Nov. 1, 1845	4,253
Tanning	J. A. Pease	New York, N. Y	Dec. 18, 1866	60,548
Tanning	G. Pile	Blountville, Tenn	May 9, 1871	114,596
Tanning	B. A. Potter	Manlius, N. Y	Sept. 26, 1816	....
Tanning	J. Price	Edgefield District, S. C	Oct. 24, 1865	50,662
Tanning	C. L. Robinson	Waukesha, Wis	Feb. 21, 1860	27,259
Tanning	J. Schultz	Ellenville, N. Y	Apr. 3, 1866	53,688
Tanning	J. H. Slocum and G. F. Turner	Fayette, Me	Aug. 2, 1870	106,085
Tanning	S. Snyder	Dayton, Ohio	Apr. 10, 1845	3,993
Tanning	S. Snyder	Cincinnati, Ohio	Aug. 4, 1868	80,779
Tanning	W. C. Stone	Derby Line, Vt	Feb. 7, 1871	111,583
Tanning	H. Stratton, jr	Leavenworth, Kans	June 28, 1864	43,346
Tanning	R. B. Thompson	Galesburgh, Ill	Jan. 10, 1860	26,800
Tanning	N. C. Towle	Washington, D. C	Oct. 7, 1851	8,406
Tanning	A. Turnbull	England	Aug. 28, 1844	5,261
Tanning	J. Wampler and G. Matthews	Steubenville, Ohio	Aug. 27, 1824	....
Tanning	W. R. Webster	Gowanda, N. Y	Feb. 14, 1860	27,177
Tanning	G. D. Wheelock	Freedom, Ohio	Oct. 23, 1866	59,109
Tanning	S. and A. Williams	Orange, N. J	Nov. 12, 1825	....
Tanning	W. Windoes	Fond du Lac, Wis	Aug. 4, 1868	80,693
Tanning	J. Wonder	Trucksville, Pa	Feb. 16, 1864	41,666
Tanning	I. Wood	Woodstock, Vt	Nov. 12, 1866	60,108
Tanning	D. Woodbury	Peabody, Mass	Aug. 15, 1871	118,089
Tanning	F. H. Wright	Richmond, Ind	May 28, 1867	65,323
Tanning	A. R. Wyeth	West Middletown, Pa	Mar. 5, 1861	31,640
Tanning and coloring sheep-skins	J. Diehl	East Freedom, Pa	Mar. 17, 1868	75,535
Tanning, and construction of vats for	J. R. Deniston	Connersville, Ind	Aug. 1, 1834	....
Tanning and dyeing extracts, Making	B. C. Tilghman	Philadelphia, Pa	Nov. 2, 1869	96,365
Tanning and manufacturing hides into leather	E. Shove and T. Hunt	Locke, N. Y	May 13, 1828	....
Tanning and stuffing leather	W. Brittingham	La Fayette, Ind	Jan. 18, 1870	98,916
Tanning and stuffing leather	J. Peters	Saint James, Mo	June 25, 1872	128,246
Tanning-apparatus	A. Appleby	Brownfield, Me	Oct. 30, 1866	59,157
Tanning-apparatus	O. H. Brewer and W. Wimer	Shannon and Freeport, Ill.	June 27, 1865	48,361
Tanning-apparatus	J. Campion	Woburn Centre, Mass	July 12, 1870	105,169
Tanning-apparatus	J. W. Coburn and E. F. Winslow.	East Walpole and South Dedham, Mass.	Oct. 10, 1871	119,822
Tanning-apparatus	J. Q. Cowell	Vernon, Ind	Mar. 20, 1860	27,529
Tanning-apparatus	C. R. Dean	Randolph, N. Y	Oct. 3, 1865	50,228
Tanning-apparatus	C. J. Dumery	Paris, France	Apr. 16, 1867	63,869
Tanning-apparatus	L. C. England	Owego, N. Y	July 12, 1859	24,727
Tanning-apparatus	W. H. Heald	Baltimore, Md	Sept. 18, 1860	30,062
Tanning-apparatus	C. Herveux	Islington, England	June 17, 1873	139,892
Tanning-apparatus	S. Hosmer	Concord, Mass	Nov. 17, 1868	84,190
Tanning-apparatus	D. L. Hubbard	Glastenbury, Conn	June 28, 1859	24,560
Tanning-apparatus	H. Lieberman	Paducah, Ky	Dec. 19, 1865	51,655
Tanning-apparatus	J. Mouren	Marseilles, France	Aug. 9, 1864	43,787
Tanning-apparatus	S. J. Patterson	Bridgeport, Conn	Oct. 8, 1861	33,448
Tanning-apparatus	J. B. Read	Cold Spring, N. Y	Aug. 9, 1859	25,045
Tanning-apparatus	J. and S. F. Robinson and C. C. Putman.	Skowhegan, Me	Aug. 9, 1870	106,209
Tanning-apparatus	W. H. Rosensteel	New Oxford, Pa	Feb. 12, 1850	7,089
Tanning-apparatus	T. Sharp	Nashville, Tenn	Jan. 2, 1866	51,870
Tanning-apparatus	G. W. Smith	Nanticoke, N. Y	Aug. 7, 1855	13,403
Tanning-apparatus	A. Steers	Medina, Ohio	Mar. 4, 1856	14,375
Tanning-apparatus	A. Steers	New York, N. Y	May 28, 1867	65,292
Tanning-apparatus	A. C. Taggart and A. Gray	Allegheny, Pa	Oct. 5, 1858	21,705
Tanning-apparatus	O. B. Wattles	Waddington, N. Y	May 26, 1857	17,399
Tanning-apparatus	J. S. Wheat	Wheeling, Va	Nov. 6, 1860	30,598
Tanning-apparatus	J. S. Wheat	Berkeley Springs, Va	Apr. 1, 1862	34,853
Tanning, Apparatus and process of	W. Morris	Philadelphia, Pa	Sept. 26, 1871	119,238
Tanning apparatus, Atmospheric	J. E. Kauffelt	Shrewsbury, Pa	July 13, 1869	92,615
Tanning-apparatus, Construction of	D. Aldrich	Saint Louis, Mo.	Aug. 21, 1860	29,656
Tanning-apparatus, Construction of	N. Dodge	Orford, N. H	June 13, 1854	11,061
Tanning, Apparatus for concentrating bark-extract for.	B. Irving	New York, N. Y	Apr. 30, 1867	64,324
Tanning, Apparatus for concentrating bark-extract for.	B. Irving	New York, N. Y	Apr. 30, 1867	64,325
Tanning, Apparatus for making extracts for	R. P. Wilson	New York, N. Y	Jan. 3, 1871	110,710
Tanning, Apparatus for obtaining extracts from bark for.	B. Irving	New York, N. Y	Dec. 22, 1868	85,173
Tanning apparatus, Hide	H. W. Adams	Philadelphia, Pa	June 15, 1869	91,402
Tanning apparatus, Leather	O. W. Bean and W. B. Rowland	Tecumseh, Mich	Mar. 29, 1870	101,213
Tanning-apparatus, Removing the refuse bark by means of water from leach of.	W. Browne	Mooresville, N. Y	Nov. 2, 1831	....

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Invention.	Inventor.	Residence.	Date.	No.
Tanning-bark	D. Williams	Boston, Mass	Feb. 5, 1836	....
Tanning by electricity	E. Irving	New York, N. Y	Apr. 24, 1849	6, 373
Tanning by infiltration	L. T. Robertson	New York, N. Y	Apr. 5, 1870	101, 661
Tanning by infiltration, Apparatus for	J. G. Baker	Wilmington, Del	Apr. 12, 1870	101, 812
Tanning by machinery	D. H. Mason	Dahlonega, Ga	Dec. 5, 1842	2, 868
Tanning by machinery	J. Southwick	Boston, Mass	Apr. 11, 1842	2, 552
Tanning, Chestnut tree used for	W. Sheldon	Springfield, Mass	Feb. 26, 1819	....
Tanning-composition	W. Beach	Hamden, Conn	Oct. 29, 1861	33, 564
Tanning-composition	M. Benas	New York, N. Y	Jan. 21, 1862	34, 192
Tanning-composition	W. B. Brittingham	La Fayette, Ind	Nov. 29, 1870	109, 714
Tanning-composition	I. Carle	Kingston Township, Pa	July 28, 1857	17, 867
Tanning-composition	N. Cox	Salem, Ill	Dec. 8, 1868	84, 734
Tanning-composition	G. W. Crabtree and J. G. Stoakes	Chocoville, Ark	June 14, 1870	104, 276
Tanning-composition	S. Dunseith	Philadelphia, Pa	June 21, 1864	43, 188
Tanning-composition	A. Hill	Dubuque, Iowa	Aug. 7, 1860	29, 488
Tanning-composition	W. Johnson	Shirleysburgh, Pa	Sept. 3, 1867	68, 511
Tanning-composition	E. Keith and A. A. Eylar	Wabash, Ind., and Pontiac, Ill.	June 9, 1868	78, 672
Tanning-composition	E. Keith and B. Thorn	La Fontaine, Ind	Sept. 12, 1865	49, 886
Tanning-composition	T. S. Page	Milan, Ohio	Sept. 20, 1859	25, 522
Tanning-composition	S. Pierce and F. F. Beardsley	Castle Grove, Iowa	Oct. 4, 1859	25, 671
Tanning-composition	G. Reynolds	Bangor, Me	Dec. 19, 1854	12, 102
Tanning-composition	P. W. Thomas	Levee, Ky	Sept. 17, 1861	33, 314
Tanning-composition	N. A. Thornton	Conikee, Ala	Aug. 10, 1869	93, 498
Tanning-composition	J. L. Wells	Saint Louis, Mo	Oct. 9, 1860	30, 367
Tanning-composition	A. Westbrook and J. Campbell	Leona, Pa	July 2, 1867	66, 432
Tanning-composition	I. Wood	Woodstock, Vt	Aug. 18, 1868	81, 237
Tanning, Composition of liquids for	I. Wood	Woodstock, Vt	Sept. 14, 1869	94, 805
Tanning-composition, Pre-	I. P. Williams	Salem, Mass	June 17, 1856	15, 157
Tanning-compound	A. T. Atherton	Lowell, Mass	July 25, 1871	117, 241
Tanning-compound	D. J. Cochran	Centreville, Ind	July 17, 1860	29, 140
Tanning-compound	W. Farris	Yarmouth, Me	Oct. 15, 1872	132, 269
Tanning-compound	B. F. Gross	Trenton, Tenn	Sept. 29, 1868	82, 517
Tanning-compound	A. Hisey	Tama City, Iowa	May 16, 1871	114, 941
Tanning-compound	J. B. Hite	Guyandotte, W. Va	June 17, 1873	140, 049
Tanning-compound	S. Lusten	Linesville, Pa	Oct. 13, 1868	83, 073
Tanning-compound	W. H. Newby	Seymour, Ind	June 18, 1867	65, 934
Tanning-compound	J. W. Taylor	North Collins, N. Y	Sept. 13, 1864	44, 234
Tanning-compound	W. Thilmany	Cl veland, Ohio	Sept. 23, 1873	143, 105
Tanning-compound	O. B. Wattles	Waddington, N. Y	Aug. 14, 1855	13, 443
Tanning, Construction of rollers for pressing hides in process of.	L. Palmer	Maryland, N. Y	Dec. 31, 1839	1, 455
Tanning, dyeing, and other purposes, Material for	F. P. Porcher	Charleston, S. C	Jan. 18, 1870	98, 884
Tanning, Extract of hemlock for	T. Rundlet	Bedford, N. H	Dec. 30, 1833	....
Tanning extracts, Apparatus for obtaining	S. W. Kennedy	New York, N. Y	May 10, 1870	102, 832
Tanning extracts, Preparation of	J. Connell	Port Huron, Mich	July 17, 1860	29, 143
Tanning, Extracting the essence of sumac, fern, &c., for.	N. Ladd	....	Feb. 12, 1800	....
Tanning for morocco and other grain-finished leather.	W. Bush	Wilmington, Del	Apr. 1, 1862	34, 815
Tanning, fulling, and cleaning machine	C. Schmitz	Philadelphia, Pa	Feb. 23, 1869	87, 298
Tanning hides	J. Carter and A. C. Keith	Jersey City, N. J	Mar. 26, 1872	125, 020
Tanning hides	E. Daniels	La Fayette, Wis	Jan. 6, 1857	16, 355
Tanning hides	A. Fleischhauer	Brooklyn, N. Y	Jan. 28, 1873	135, 214
Tanning hides	T. Klemm	Stuttgart, Würtemberg	Aug. 10, 1858	21, 168
Tanning hides	J. Lippincot and J. Hillyear	Philadelphia, Pa	Apr. 14, 1835	....
Tanning hides	S. W. Pingree	Methuen, Mass	July 8, 1856	15, 303
Tanning hides	E. Siter	Spread Eagle Post-Office, Pa.	Aug. 14, 1810	....
Tanning hides	A. Van Pelt	Bedminster, N. J	July 8, 1842	2, 706
Tanning hides	R. P. Wilson	New York, N. Y	Nov. 7, 1871	120, 606
Tanning hides and skins	J. Batchelder	Grafton, N. H	Dec. 22, 1818	....
Tanning hides and skins	H. Bretney	Springfield, Ohio	Jan. 25, 1853	9, 555
Tanning hides and skins	W. Fields and I. Townsend	Wilmington, Del	June 7, 1864	43, 013
Tanning hides and skins	T. T. Furgusson	New York, N. Y	Mar. 29, 1859	23, 360
Tanning hides and skins	C. Osmani	Tolentino, Italy	Dec. 29, 1868	85, 327
Tanning hides and skins	T. G. Peachy	Williamsburgh, Va	Dec. 28, 1831	....
Tanning hides and skins, Apparatus for	W. Y. Warner and J. Crooks	Wilmington, Del	Jan. 4, 1870	98, 651
Tanning hides and skins by compression-rollers, &c	E. S. and D. Bell	Smithfield, Va	July 28, 1834	....
Tanning hides and skins, Process of	F. J. Burcham	Racine, Wis	May 26, 1868	78, 256
Tanning hides and skins, Process of	B. Picard	Paris, France	Feb. 13, 1866	52, 655
Tanning hides, Apparatus for	A. G. Eaton	Gouverneur, N. Y	Oct. 6, 1868	82, 815
Tanning hides, Apparatus for	L. C. England	Owego, N. Y	Aug. 10, 1858	21, 126
Tanning hides, Apparatus for	Z. S. White	Winchester, Mass	Mar. 29, 1870	101, 331
Tanning hides by machinery	W. Wallace and J. Fleming	Lehman Township, Pa., and Sandiston Township, N. J.	July 20, 1842	2, 729
Tanning hides, Composition for	D. H. Kennedy	New Alexandria, Pa	Apr. 14, 1857	17, 043
Tanning hides, Composition for	J. M. Müller	Cobleskill, N. Y	Jan. 30, 1872	123, 118
Tanning hides, Mode of	J. R. Enos	Peabody, Mass	Nov. 12, 1872	133, 021
Tanning hides, Process of	S. Guilford	Lebanon, Pa	Nov. 10, 1841	2, 332
Tanning hides, Process of	G. A. Starkweather	Waymart, Pa	Oct. 6, 1868	82, 763
Tanning hides, Revolving cylinder for	J. W. Lull	Glen Hope, Pa	Apr. 14, 1868	76, 784
Tanning hides, Vat for	L. C. England	Williamsburgh, N. Y	Dec. 24, 1850	7, 854
Tanning in vacuo, &c., Apparatus for	C. Doty	Saint Louis, Mo	Mar. 10, 1868	75, 391
Tanning in vacuo, Apparatus for	W. Masek	Nashville, Tenn	Aug. 15 1871	118, 034
Tanning in vacuum and other tanks	K. M. Jarvis	Peabody, Mass	Jan. 30, 1872	123, 105
Tanning, Lay-away vat for	I. C. Williams	Philadelphia, Pa	Oct. 29, 1867	70, 306
Tanning-leach	W. T. H. Wharton	Fayetteville, Tenn	Dec. 20, 1870	110, 317
Tanning leather	J. Barker	Deerfield, N. Y	Apr. 10, 1811	....
Tanning leather	J. Blunt	New York	Nov. 30, 1832	....
Tanning leather	J. S. Boothby	Portland, Me	July 19, 1864	43, 563
Tanning leather	W. Browne	New York	Nov. 11, 1830	....
Tanning leather	G. Burr	Watertown, N. Y	Feb. 6, 1834	....
Tanning leather	O. Cogswell	Cincinnati, Ohio	Sept. 18, 1827	....
Tanning leather	O. Cogswell	Cincinnati, Ohio	Jan. 29, 1831	....
Tanning leather	P. Daniels	Le Roy, N. Y	Feb. 5, 1861	31, 345

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Tanning leather	J. Davis		Apr. 14, 1796	
Tanning leather	I. Dawes	Goshen Farm, Ind	Apr. 21, 1831	
Tanning leather	L. C. Dudley and S. Brooks	Portland, Me	Oct. 23, 1834	
Tanning leather	J. Gove	Milford, N. H	May 31, 1859	24, 208
Tanning leather	C. L. Jenkins	Omaha, Nebr	Sept. 6, 1870	107, 177
Tanning leather	H. G. Johnson	Cleveland, Ohio	June 15, 1858	20, 565
Tanning leather	H. McKenzie	Talladega, Ala	June 11, 1861	32, 526
Tanning leather	B. G. Noble	Whitewater, Wis	Jan. 26, 1858	19, 201
Tanning leather	W. Russell	Ashburnham, Mass	Jan. 23, 1834	
Tanning leather and coloring cloth, Vat for	N. Burley	Strafford, N. H	Jan. 24, 1811	
Tanning leather, Apparatus for	H. Lucas	Rowsburgh, Ohio	Aug. 11, 1868	80, 981
Tanning leather, Apparatus for handling hides, &c., in the process of.	W. Brown	Thompson, N. Y	Feb. 9, 1839	1, 079
Tanning leather by tannin and acids	H. Hibbard	Henrietta, N. Y	Oct. 16, 1849	6, 790
Tanning leather, Composition for	C. Daniels	Elk Horn, Wis	Mar. 30, 1858	19, 756
Tanning leather, Composition for	W. W. Gaige	Rochester, N. Y	Dec. 14, 1858	22, 285
Tanning leather, Composition for	J. Nuessley	Gowanda, N. Y	Mar. 27, 1860	27, 648
Tanning leather, Heating water in vats for	A. Henderson	Great Barrington, Mass	Nov. 24, 1810	
Tanning leather, Process and composition for	G. Zippe	New York, N. Y	Oct. 27, 1868	83, 433
Tanning leather, Process of	R. Blake	Pontiac, Ill	Nov. 11, 1873	144, 500
Tanning leather, Vacuum-tank for	D. F. Noyes	Lewiston, Me	Jan. 30, 1872	123, 192
Tanning, Liming and handling hides in	C. Hank	Monroe County, Va	May 3, 1832	
Tanning-liquid	L. De La Peyrouse	Paris, France	Aug. 18, 1857	18, 030
Tanning, Machine	L. L. Kelley	Delaware Station, Ind	Apr. 14, 1868	76, 777
Tanning-machine	V. E. Rusco	Chicago, Ill	Nov. 10, 1863	40, 575
Tanning, Machine for grinding bark for	P. Pilsbury	Newbury, Mass	Sept. 22, 1808	
Tanning, Machine for obtaining bark-extract for	B. Irving	New York, N. Y	Apr. 30, 1867	64, 322
Tanning-machinery	C. N. Farnam	Norwich, Conn	Dec. 17, 1867	72, 381
Tanning, Machinery for preparing hides for	L. Newson	Gallipolis, Ohio	Mar. 8, 1832	
Tanning, Method of concentrating the extract of bark for.	B. Irving	New York, N. Y	Dec. 22, 1868	85, 174
Tanning morocco	L. C. England	New York, N. Y	June 19, 1847	5, 165
Tanning, Preparation of hides for	G. W. Hatch	Princeton, Ill	Sept. 16, 1856	15, 736
Tanning, Preparation of materials for	F. P. Porcher	Charleston, S. C	May 23, 1871	115, 100
Tanning, Preparing extract of bark for	O. Batchelder	Bedford, N. H	Nov. 7, 1835	
Tanning, Preparing skins for	J. C. F. Salomon	Reading, Pa	Oct. 17, 1835	
Tanning-principle of bark, Desmond's mode of obtaining the.	J. Niles	Guilford, Vt	Apr. 11, 1825	
Tanning-process	J. F. Bechmann	Abbott's Corners, N. Y	Mar. 2, 1869	87, 325
Tanning-process	C. J. Bugh	Eau Claire, Wis	Nov. 17, 1868	84, 169
Tanning-process	A. H. Buzzell	North Bridgewater, Me	Aug. 25, 1840	1, 741
Tanning-process	T. Chase	New York, N. Y	Nov. 25, 1838	1, 018
Tanning-process	O. A. Coe	Charlestown, Ohio	Oct. 3, 1865	50, 222
Tanning-process	J. Davis and J. Armstrong	Pittston, Pa	Apr. 22, 1873	138, 138
Tanning-process	R. T. Downing and G. D. Smith	Monroe County and Philadelphia, Pa.	Apr. 30, 1840	1, 576
Tanning-process	W. Herapath	Bristol, England	May 30, 1839	1, 160
Tanning-process	G. W. Hersey	Greenbush, Wis	Oct. 9, 1866	58, 643
Tanning-process	A. W. Irish	Rochester, Minn	Oct. 29, 1867	70, 337
Tanning-process	J. J. Johnson	Kalamazoo County, Mich	Mar. 18, 1862	34, 688
Tanning-process	J. J. Johnson and E. J. Murray	Kalamazoo, Mich., and Wyoming, N. Y.	Nov. 14, 1865	50, 936
Tanning-process	R. Keeler	Rochester, N. Y	Jan. 2, 1855	12, 148
Tanning-process	B. H. McNulty and W. Kern	Mansfield, Ohio	May 23, 1865	47, 844
Tanning-process	J. M. Muller	Richmondville, N. Y	Nov. 26, 1861	33, 790
Tanning-process	M. W. Page	Franklin, N. H	May 8, 1866	54, 588
Tanning-process	J. A. Pease	New York, N. Y	Dec. 18, 1866	60, 549
Tanning-process	J. N. Sturtevant and H. E. Jones.	McGregor, Iowa	Sept. 4, 1866	57, 795
Tanning-process	D. Symonds	Marlow, N. H	Apr. 21, 1868	76, 957
Tanning-process	W. E. Terry	Wyoming, N. Y	July 11, 1865	48, 740
Tanning-process	W. H. Towers	New York, N. Y	Dec. 26, 1865	51, 762
Tanning, Process and apparatus for	E. Lynch	Georgetown, D. C	Apr. 6, 1869	88, 764
Tanning, Process for obtaining bark-extract for	B. Irving	New York, N. Y	Apr. 30, 1867	64, 323
Tanning process, Hide	H. L. Wilcox	Percival, Iowa	June 15, 1869	91, 504
Tanning, Process of concentrating bark-extract for	B. Irving	New York, N. Y	Apr. 30, 1867	64, 321
Tanning-properties from bark, Mode of extracting	J. McGeary	Salem, Mass	Dec. 13, 1864	45, 421
Tanning-purposes, Concentrated extracts for	J. Connell	Port Huron, Mich	Apr. 10, 1860	27, 859
Tanning, Pyroligneous oil and acid used in	H. H. Hayden	Baltimore, Md	Nov. 26, 1823	
Tanning, Raising or lifting hides in	J. Cox		Feb. 20, 1800	
Tanning, Removing the refuse bark from leach in	H. W. Babcock	Cooperstown, N. Y	Dec. 24, 1833	
Tanning skins and hides	G. H. Richards	New York	Dec. 16, 1833	
Tanning skins and hides, Composition for	W. D. Bunting	Cleveland, Ohio	Jan. 31, 1860	26, 966
Tanning skins, Apparatus for	C. A. Shaw and J. Clark	Biddeford, Me	Jan. 26, 1858	19, 211
Tanning skins, Process of	C. Smith	Bellaire, Ohio	July 13, 1869	92, 484
Tanning sole-leather	W. Edwards	Northampton, Mass	Dec. 30, 1812	
Tanning, &c., Solid or dry extract of bark for	J. Pickles	Wigan, England	Nov. 2, 1869	96, 345
Tanning, Treating hides and skins for	I. C. Colton and A. M. Hastings	Buffalo and Rochester, N. Y	Mar. 5, 1867	62, 611
Tanning, Use of hemlock in	J. Lansing, jr	Albany, N. Y	Apr. 30, 1819	
Tanning-vat	J. W. Coburn	East Walpole, Mass	Dec. 26, 1871	122, 157
Tanning-vat	J. E. and C. L. Smith	South Dedham, Mass	Oct. 4, 1870	107, 060
Tanning-vat	J. S. Wheat	Wheeling, Va	July 1, 1862	35, 797
Tanning-vats, Arranging	W. La Dew	Norway, N. Y	May 8, 1866	54, 647
Tanning-vats for leather, Mode of constructing and managing.	W. L. J. C. Rouse and S. Taylor	Bedford County, Va	June 20, 1838	795
Tanning without the use of lime or sweating the hides.	E. Evans	Salem Township, Pa	Dec. 28, 1832	
Tap, Air-pressure	C. T. Bonsall and T. Bergner	Philadelphia, Pa	Aug. 8, 1871	117, 857
Tap and cutter, Combined	J. Gunn	Webster, Mass	Mar. 12, 1872	124, 570
Tap and die	A. E. Barthel	Detroit, Mich	June 10, 1873	139, 651
Tap and die	F. S. Gregg	Cincinnati, Ohio	Aug. 14, 1866	57, 124
Tap and die	G. Gübel	New Orleans, La	Aug. 18, 1868	81, 162
Tap and faucet, Barrel	G. B. Taylor	Oakland, Cal	Dec. 16, 1873	145, 695
Tap and nozzle for oil-cans	J. A. Boswick	New York, N. Y	Mar. 21, 1871	112, 771
Tap and reamer, Expanding	B. T. Loomis	New York, N. Y	Apr. 17, 1866	53, 996
Tap, auger, and drill handle	W. Baxter	Newark, N. J	Feb. 9, 1869	86, 802
Tap-borer	S. S. Crocker	Maquoketa, Iowa	Dec. 11, 1866	60, 342

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Invention.	Inventor.	Residence.	Date.	No.
Tap, Expanding	F. Murgatroyd	Cleveland, Ohio	Oct. 4, 1870	107, 946
Tap, Expanding	G. H. Ohl	Newark, N. J	Jan. 16, 1866	52, 068
Tap, Expanding	H. Stone and M. D. Cole	Uxbridge and Blackstone, Mass.	Dec. 2, 1856	16, 151
Tap for and mode of cutting dies	W. Newsham	Philadelphia, Pa	July 5, 1870	104, 984
Tap for cement-lined pipes	N. Stephens	Brooklyn, N. Y	July 23, 1867	67, 020
Tap for liquid-packages	A. Warth	New York, N. Y	Apr. 19, 1870	102, 188
Tap for liquid-packages	A. Warth	Stapleton, N. Y	July 5, 1870	105, 150
Tap for liquid-packages	A. Warth	Stapleton, N. Y	June 20, 1871	116, 244
Tap for liquid-packages	A. Warth	Stapleton, N. Y	June 20, 1871	116, 245
Tap for liquid-packages	A. Warth	Stapleton, N. Y	June 4, 1872	127, 664
Tap for oil-cans	M. Andrew	Melbourn, Victoria	Aug. 8, 1871	117, 854
Tap for oil-cans	J. A. Bostwick	New York, N. Y	Feb. 21, 1871	111, 902
Tap for oil-cans	J. A. Bostwick	New York, N. Y	Dec. 5, 1871	121, 579
Tap for oil-packages	A. Warth	Stapleton, N. Y	Dec. 27, 1870	110, 611
Tap for oil-packages	A. Warth	Stapleton, N. Y	Dec. 27, 1870	110, 612
Tap for oil-vessels	M. Andrew	Melbourne, Australia	Aug. 24, 1869	94, 059
Tap for tapping pipes	H. Kerr	Brooklyn, N. Y	Nov. 11, 1862	36, 907
Tap or faucet, Bottle	D. H. Chamberlain	West Roxbury, Mass	June 20, 1871	116, 155
Tap, plug, and faucet connection	J. F. Kane	San Francisco, Cal	Nov. 18, 1873	144, 680
Tap, Screw	S. J. M. Clark and J. L. Tarrell	Brookline and Boston, Mass.	Nov. 24, 1868	84, 411
Tap, Water-main	J. F. Brien	Washington, D. C	May 21, 1872	126, 869
Tap-wrench	J. J. Grant	Greenfield, Mass	July 16, 1872	129, 472
Tap-wrench	G. W. Huntoon and E. Simonds	Lowell, Mass	Feb. 7, 1871	111, 647
Taps, Machine for cutting eccentric	B. F. Bee	Harwick, Mass	May 19, 1868	77, 951
Taps, reamers, &c., Guide-attachment for	W. S. Hadley	Norwalk, Ohio	Nov. 11, 1862	36, 903
Tap, Well for water-main	P. E. Ober	Beverly, Mass	July 16, 1872	129, 246
Tape-box	A. J. Fellows	Meriden, Conn	May 26, 1868	78, 272
Tape-box	M. B. Westhead	Manchester, Great Britain	Aug. 11, 1868	81, 040
Tape-cutting machine	J. S. Jewett	Gloucester, Mass	June 24, 1873	140, 274
Tape-line, Box	C. E. Donnellan	Indianapolis, Ind	Apr. 5, 1870	101, 442
Tape, ribbon, and thread for use, Device for arranging.	M. B. Westhead	Manchester, Great Britain	Oct. 3, 1865	50, 318
Tape trimming, Machine for making	J. E. Earle	Brooklyn, N. Y	June 25, 1861	32, 663
Tape trimming, Manufacture of	C. O. Crosby and H. Kellogg	New Haven, Conn	Sept. 16, 1862	36, 454
Tape-worm operation	A. Myers	Logansport, Ind	Nov. 14, 1854	11, 943
Tape-worm trap	A. Myers	Logansport, Ind	Nov. 14, 1854	11, 942
Taper-cutting machine	C. Jillson	Worcester, Mass	Oct. 5, 1869	95, 480
Taper-gage, Carpenter's	J. Marvin	Bellport, N. Y	Jan. 11, 1859	22, 564
Taper-holder	H. B. Adams	New York, N. Y	Sept. 13, 1870	107, 209
Taper-holder	T. W. Houchin	Morrisania, N. Y	Mar. 7, 1871	112, 343
Taper-holder for lighting lamps	E. P. Gleason	New York, N. Y	May 26, 1863	38, 672
Taper tubes, Machine for making	T. J. and J. T. Jones	Sharon, Pa	Aug. 19, 1873	141, 932
Taper-turning machine	C. Jillson	Worcester, Mass	Sept. 21, 1869	95, 117
Tapers, Feeder for wax	S. G. Dare	New York, N. Y	May 16, 1871	114, 772
Tapered tube, Apparatus for drawing	G. P. Harding	Chiswick, England	Jan. 28, 1868	73, 715
Tapering boards, Method of tonguing and grooving	B. J. Barber	Ballston Spa, N. Y	Feb. 12, 1856	14, 220
Tapering drill	J. A. Bidwell	East Boston, Mass	Nov. 12, 1867	70, 686
Tapering tubes, Machine for rolling	W. Ostrander	New York, N. Y	Jan. 13, 1857	16, 395
Tapering tubes, Method of making	W. A. Shaw	New York, N. Y	Feb. 18, 1868	74, 614
Tapping and drilling machine	G. Cahill	New York, N. Y	May 5, 1868	77, 453
Tapping boilers, Machine for	P. I. Perrin and J. L. Hewes	Taunton, Mass., and Newark, N. J.	Mar. 14, 1871	112, 626
Tapping-branch for water and other pipes	H. Knight	Brooklyn, N. Y	Feb. 7, 1865	46, 246
Tapping cement-lined pipes, Device for	G. H. Bailey	Jersey City, N. J	June 18, 1867	65, 863
Tapping fluids under pressure, Method of	J. P. S. Otterson	Nashua, N. H	July 22, 1856	15, 385
Tapping gas and water fittings, Machine for	C. B. Long	Worcester, Mass	Apr. 4, 1871	113, 314
Tapping gas and water fittings, Machine for	C. C. Walworth	Boston, Mass	Nov. 4, 1873	144, 374
Tapping gas and water mains, Machine for	G. Shelly	Easton, Pa	Jan. 9, 1872	122, 668
Tapping gas and water pipes	L. Spaulding and E. E. Guy	Norfolk, Va	Oct. 10, 1871	119, 895
Tapping gas and water pipes	J. J. Watson	Buffalo, N. Y	Dec. 11, 1860	30, 901
Tapping gas-fittings, Machine for	R. T. Crane	Chicago, Ill	Nov. 12, 1872	133, 016
Tapping pipe-fittings, Machine for	J. Gunn	Webster, Mass	Aug. 20, 1872	130, 577
Tapping pipe-fittings, Machine for	E. Rogers	Cleveland, Ohio	Mar. 11, 1873	136, 621
Tapping pipes, Device for	L. Spaulding	Norfolk, Va	July 23, 1872	129, 869
Tapping water and gas mains, Machine for	H. Mueller	Decatur, Ill.	July 23, 1872	129, 853
Tapping water-mains	J. B. Quigley	Trenton, N. J	Aug. 16, 1859	25, 216
Tapping water-pipes	P. Ball	Worcester, Mass	Jan. 23, 1865	45, 964
Tapping water-pipes	J. Drake	New York, N. Y	Sept. 18, 1860	30, 051
Tapping water or gas mains, Apparatus for	E. T. D. Myers and C. F. Thomas.	Washington, D. C	Aug. 2, 1859	24, 949
Tar and petroleum burner	J. Burns	London, Canada	July 1, 1873	140, 465
Tar, Apparatus for burning	R. Yielding	Ypsilanti, Mich	Apr. 24, 1866	54, 243
Tar, &c., from pine wood, Apparatus for extracting	J. D. Stanley	Baltimore, Md	May 30, 1871	115, 378
Target	W. Stein	Camden, N. J	Nov. 17, 1868	84, 228
Target-alarm	A. Anderhub	New York, N. Y	Feb. 28, 1871	112, 204
Tarpaulin-manufacture	N. C. Szerelmey	Pimlico, England	July 6, 1869	92, 225
Tart-cutter	J. H. Treadwell	Swampscott, Mass	June 11, 1867	65, 618
Tassel	G. E. Jenkins	Philadelphia, Pa	July 1, 1873	140, 372
Tassel	H. C. Lees	Philadelphia, Pa	Mar. 26, 1872	125, 059
Tassel	C. J. McAlister	Chicago, Ill	June 14, 1870	104, 175
Tassel	J. Norman	Brooklyn, N. Y	May 30, 1871	115, 347
Tassel	J. Norman	Brooklyn, N. Y	July 11, 1871	116, 860
Tassel and cord for boots	A. Janes	Hartford, Conn	Mar. 1, 1813	....
Tassel-clamp for window-curtains	J. Gottlieb	Boston, Mass	Dec. 24, 1867	72, 630
Tassel-clip for curtains	F. Müller	Boston, Mass	June 24, 1873	140, 295
Tassel clip, Window-shade	F. Müller	Boston, Mass	Jan. 19, 1869	85, 953
Tassel, Curtain	W. I. Laighton	Portsmouth, N. H	Apr. 30, 1867	64, 230
Tassel-fastening	S. B. Hill	Chicopee, Mass	Aug. 4, 1868	80, 545
Tassel-fastening	C. B. Lang	Chicopee, Mass	Nov. 19, 1867	71, 024
Tassel for canes and umbrellas	W. Harnach	New York, N. Y	July 15, 1873	140, 825
Tassel for window-curtains	E. Maynard	Brooklyn, N. Y	Mar. 20, 1860	27, 554
Tassel-head	G. A. Cooper and C. Southworth	Stoughton, Mass	May 9, 1871	114, 647
Tassel-hook	A. D. Judd	New Haven, Conn	Feb. 27, 1866	52, 857
Tassel-hook	H. L. Judd	Brooklyn, N. Y	June 14, 1870	104, 164
Tassel-hook	E. Turner	Wolcottville, Conn	June 28, 1870	104, 903
Tassel-mold-covering machine	C. Feickert	New York, N. Y	Aug. 18, 1865	51, 154

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Tassel, Muff	S. Brady	New York, N. Y	Oct. 31, 1871	120, 487
Tassel, Muff	S. Brady	New York, N. Y	Jan. 16, 1872	122, 808
Tassel-top	H. C. Lees	Camden, N. J	Oct. 28, 1873	144, 115
Tatting	C. O. Crosby	New Haven, Conn	Nov. 3, 1868	83, 765
Tatting-frame	D. F. Randall	Hartford, Conn	Mar. 5, 1861	31, 6?4
Tatting, Machine for making	C. O. Crosby	New Haven, Conn	May 25, 1869	90, 508
Tatting-shuttle	A. Dobronsky	Shasta, Cal.	June 5, 1866	55, 254
Tatting-shuttle	B. L. Fetherolf	Tamaqua, Pa	May 24, 1870	103, 436
Tatting-shuttle	B. L. Fetherolf	Tamaqua, Pa	June 21, 1870	104, 565
Tatting-shuttle	A. B. Greenwalt	Baltimore, Md	Jan. 1, 1867	60, 882
Tatting-shuttle	E. N. Parker	Essex, Centre Brook Post-Office, Conn.	Apr. 7, 1868	76, 512
Tatting-shuttle	S. Schofield	Plainville, Mass.	Oct. 15, 1867	69, 845
Tatting-shuttle	I. H. Stockwell and L. C. Goodwin.	Worcester, Mass.	Aug. 4, 1868	80, 781
Tatting-shuttle	J. S. Warner	Ogdensburgh, N. Y	Nov. 14, 1865	50, 970
Tatting-shuttle and crochet-needle, Combined	E. P. Kellogg	New York, N. Y	Dec. 30, 1873	146, 077
Tatting-shuttle winder	E. S. Burns	La Crosse, Wis	Nov. 10, 1868	83, 921
Tatting-shuttle winder	J. D. Moore	Grinnell, Iowa	Dec. 11, 1866	60, 407
Tatting-shuttles, Thread-guiding plate for filling	A. Clow	Port Byron, N. Y	June 23, 1868	79, 207
Tatting-shuttles, Winding	H. P. Jones	Davenport, Iowa	June 11, 1867	65, 576
Tawing skins of animals	L. Clozel	Grenoble, France	Feb. 2, 1869	86, 506
T-bolts, Method of forming	J. Deeble	Plantsville, Conn	Jan. 18, 1870	98, 931
Tea and coffee, Apparatus for making	H. W. Persing and J. F. Peese.	Chicago, Ill	May 25, 1869	90, 387
Tea and coffee canister	A. B. Day	Mansfield, Mass	Sept. 10, 1872	131, 255
Tea and coffee cup cover	J. Leach	New Harmony, Ind	Dec. 13, 1870	110, 148
Tea and coffee, Decocting-apparatus for	E. Thayer	New York, N. Y	Jan. 8, 1867	61, 0?0
Tea and coffee, Package for	H. Odenkirchen	New Haven, Conn	Aug. 30, 1870	106, 952
Tea and coffee pot	A. Arnold	Tenafly, N. J	Dec. 10, 1867	71, 837
Tea and coffee pot	J. Bamber	Rochester, N. Y	May 19, 1863	38, 545
Tea and coffee pot	A. Bayley	Newark, N. J	July 23, 1867	66, 936
Tea and coffee pot	T. Bishop	Plainville, Conn	Nov. 1, 1859	25, 994
Tea and coffee pot	E. M. Burchard	Washington, D. C	Nov. 28, 1871	121, 326
Tea and coffee pot	S. Culver	Newark, N. J	Dec. 14, 1858	22, 278
Tea and coffee pot	J. E. Earle	New Haven, Conn	June 8, 1869	91, 104
Tea and coffee pot	J. H. Finch	Rochester, N. Y	June 15, 1869	91, 320
Tea and coffee pot	T. F. Frank	Buffalo, N. Y	Feb. 2, 1869	86, 522
Tea and coffee pot	T. F. Frank	Buffalo, N. Y	June 1, 1869	90, 835
Tea and coffee pot	H. J. Hammond	Newburgh, Ohio	Sept. 26, 1871	119, 352
Tea and coffee pot	A. C. Kasson	Milwaukee, Wis	Apr. 28, 1868	77, 291
Tea and coffee pot	E. B. Manning	Cromwell, Conn	June 3, 1862	35, 457
Tea and coffee pot	E. B. Manning	Middletown, Conn	Aug. 18, 1868	81, 186
Tea and coffee pot	L. A. Plumb	Biddeford, Me	Aug. 21, 1866	57, 372
Tea and coffee pot	P. G. H. Schaffer	West Meriden, Conn	June 19, 1866	55, 720
Tea and coffee pot	I. W. Sener	Fredericksburgh, Va	Apr. 19, 1859	23, 715
Tea and coffee pot	M. Simons	Middletown, Conn	Mar. 17, 1868	75, 651
Tea and coffee pot	S. Simpson	Wallingford, Conn	June 1, 1869	90, 720
Tea and coffee pot, Britannia	R. W. Andrews	Staffordville, Conn	Mar. 7, 1854	10, 616
Tea and coffee pot, Britannia	W. W. Crossman	Taunton, Mass	Mar. 12, 1834	......
Tea and coffee pot handle	H. Bullard	Middletown, Conn	July 7, 1868	79, 726
Tea and coffee pot handle	G. B. Halsted	New York, N. Y	June 6, 1865	48, 061
Tea and coffee pot handle	E. E. Stow	Plantsville, Conn	Dec. 10, 1867	71, 920
Tea and coffee pot handles, Construction of metal	W. Bellamy	Newark, N. J	Jan. 21, 1868	73, 567
Tea and coffee pot stand	J. H. Bigelow	Worcester, Mass	Apr. 12, 1870	101, 813
Tea and coffee pot stand	T. D. Currier	Waldoborough, Me	Nov. 14, 1871	120, 945
Tea and coffee pot stand	J. W. Routh	Decatur, Ill	Feb. 23, 1869	87, 114
Tea and coffee pots, Blank for body of sheet-metal	W. A. Munn	Milwaukee, Wis	May 5, 1868	77, 643
Tea and coffee pots, Construction of	L. H. Williams	Cromwell, Conn	July 18, 1871	117, 228
Tea and coffee pots, Construction of	D. B. Woodworth	Cincinnati, Ohio	Apr. 14, 1868	76, 684
Tea and coffee pots, Construction of sheet-metal	J. H. Stone	Philadelphia, Pa	Mar. 17, 1868	75, 700
Tea and coffee pots, Hard-metal bottoms for	H. Bullard and R. Holmes	Middletown, Conn	May 18, 1869	90, 234
Tea and coffee pots, Manufacture of	W. W. Lyman	West Meriden, Conn	Oct. 15, 1867	69, 923
Tea and coffee service	I. Yeamans	Brooklyn, N. Y	June 7, 1870	104, 010
Tea-canister	W. Welbourne	Preston, Great Britain	June 18, 1867	65, 849
Tea-canister, Revolving	W. M. Hoyt	Chicago, Ill	June 18, 1872	127, 976
Tea, coffee, &c., packing machine	J. Garsed and C. Denn	Frankford, Pa	Nov. 10, 1868	83, 951
Tea-kettle	C. Anthony	Schenectady, N. Y	Feb. 25, 1868	74, 787
Tea-kettle	A. C. Barstow	Providence, R. I	Jan. 27, 1863	37, 483
Tea-kettle	E. Card	Providence, R. I	Mar. 14, 1871	112, 543
Tea-kettle	W. Caven	Cincinnati, Ohio	May 8, 1866	54, 503
Tea-kettle	W. C. Davis	Cincinnati, Ohio	Aug. 18, 1863	39, 554
Tea-kettle	W. C. Davis	Cincinnati, Ohio	Feb. 9, 1864	41, 492
Tea-kettle	J. H. Downing	Healdsburgh, Cal	Jan. 19, 1869	86, 008
Tea-kettle	P. B. V. Gantz	Albany, N. Y	Mar. 14, 1871	112, 581
Tea-kettle	J. A. Goewey	Albany, N. Y	July 8, 1862	35, 818
Tea-kettle, &c	J. Greenhalgh, sr	Waterford, Mass	Apr. 21, 1857	17, 087
Tea-kettle	A. C. Ketchum	New York, N. Y	Oct. 11, 1859	25, 742
Tea-kettle	A. Kipp	Brooklyn, N. Y	June 27, 1865	48, 411
Tea-kettle	W. H. Lazelle	Brooklyn, N. Y	July 28, 1863	39, 368
Tea-kettle	C. W. McClure and W. A. Shepherd.	Wooster, Ohio	Feb. 28, 1871	112, 266
Tea-kettle	E. McGrann	Louisville, Ky	July 9, 1867	66, 607
Tea-kettle	B. H. Menke	Cincinnati, Ohio	Jan. 13, 1863	37, 423
Tea-kettle	B. H. Menke	Cincinnati, Ohio	June 23, 1863	38, 972
Tea-kettle	N. Plympton	Boston, Mass	Nov. 18, 1873	144, 698
Tea-kettle	A. Ransom and R. D. Granger	Albany, N. Y	Mar. 19, 1861	31, 767
Tea-kettle	E. Ripley	Troy, N. Y	July 9, 1867	66, 521
Tea-kettle	E. Ripley	Troy, N. Y	July 14, 1868	79, 860
Tea-kettle	E. Ripley	Troy, N. Y	Mar. 14, 1846	4, 417
Tea-kettle	J. W. Ward	Wheeling, W. Va	Mar. 12, 1872	124, 461
Tea-kettle	W. Westlake	Milwaukee, Wis	Aug. 11, 1857	17, 989
Tea-kettle	A. F. Wolf	Beaver Falls, Pa	Nov. 21, 1871	121, 071
Tea-kettle	C. D. Woodruff	Toledo, Ohio	Mar. 4, 1873	136, 576
Tea-kettle and other vessels	S. B. Everitt	Ansonia, Conn	Aug. 6, 1867	67, 425
Tea-kettle and other vessels	J. Gibson, jr	Albany, N. Y	Aug. 1, 1871	117, 617
Tea-kettle boiler	A. Berney	Jersey City, N. J	Oct. 27, 1868	83, 419
Tea-kettle breast	Z. Dixon	Bristol, Ill	Apr. 6, 1869	88, 614
Tea-kettle, coffee-pot, &c	W. Wagstaff	Millbury, Ohio	Aug. 4, 1868	80, 576

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Invention.	Inventor.	Residence.	Date.	No.
Tea-kettle cover	Z. Dixon	Bristol, Ill	June 20, 1871	116, 035
Tea-kettle cover	W. C. Lovering	Taunton, Mass	Jan. 4, 1870	98, 509
Tea-kettle, &c., cover	W. W. Page	Troy, N. Y	Nov. 5, 1867	70, 461
Tea-kettle covers, Fastening for	C. Fownes	Pittsburgh, Pa	Mar. 20, 1866	53, 290
Tea-kettle covers, Hinging	E. S. Atwood	Boston Highlands, Mass	June [illegible], 1869	90, 808
Tea-kettle covers, Hinging	C. Fownes	Pittsburgh, Pa	Dec. 17, 1867	72, 279
Tea-kettle covers, Hinging	E. Ripley	Troy, N. Y	July 9, 1867	66, 631
Tea-kettle bails, Die for shaping	J. Britton	New York, N. Y	Apr. 23, 1872	125, 932
Tea-kettle lid	I. De Haven	Allegheny City, Pa	Feb. 4, 1868	74, 057
Tea-kettle lids, Hinging	C. C. and S. J. Hare	Louisville, Ky	Dec. 3, 1867	71, 748
Tea-kettle lids, Hinging	W. L. McDowell	Philadelphia, Pa	May 28, 1867	65, 104
Tea-kettle spout	J. Ash	Sterling, Ill	Jan. 30, 1872	123, 215
Tea-kettles, Cast-iron bottom for	L. J. Worden	Utica, N. Y	June 2, 1863	38, 780
Tea-kettles, Flask and pattern for molding iron	D. Stewart	Danville, Pa	June 26, 1835	....
Tea-leaves, Machine for rolling	K. Goddard	Philadelphia, Pa	Apr. 11, 1865	47, 201
Tea-mixing machine	W. Thompson	Dublin, Ireland	Apr. 13, 1869	88, 828
Tea-pot	W. Austin	Philadelphia, Pa	Sept. 21, 1858	21, 589
Tea-pot	A. M. Bristol	Detroit, Mich	July 7, 1863	39, 115
Tea-pot	A. Carmichel	Westerly, R. I	Feb. 12, 1861	62, 002
Tea-pot	R. Carter	San Francisco, Cal	July 17, 1866	56, 367
Tea-pot	N. Plympton	Boston, Mass	June 28, 1870	104, 764
Tea-pot	C. H. Reynolds and G. Z. Clark	Croton Falls, N. Y	Mar. 23, 1869	88, 076
Tea-pot	T. Smith, jr	Boston, Mass	Apr. 5, 1870	101, 672
Tea-pot	W. W. Stevens	Portland, Me	June 16, 1868	78, 901
Tea-pot and water-heater	E. Hunter	Norwich, Conn	Sept. 6, 1870	107, 054
Tea-pot, Earthen	T. Smith, jr	Boston, Mass	Oct. 4, 1870	108, 061
Tea-pot handle	L. C. Clark	Plantsville, Conn	June 8, 1869	90, 995
Tea-pot handle	L. C. Clark	Plantsville, Conn	Nov. 2, 1869	96, 309
Tea-pot handle	L. C. Clark	Plantsville, Conn	June 28, 1870	104, 829
Tea-pot handle	E. W. Porter	Taunton, Mass	Feb. 2, 1869	86, 444
Tea-pot jacket or case	A. Arnold	Tenafly, N. J	Apr. 20, 1869	89, 114
Tea-pot spouts and handles, Casting	T. Ackerman	Cincinnati, Ohio	Oct. 16, 1855	13, 695
Tea-pot spouts, Casting	H. Tiebe and W. Muhle	Cincinnati, Ohio	Dec. 12, 1854	12, 086
Tea-pot spouts, Manufacture of	W. Westlake	Brooklyn, N. Y	Apr. 7, 1868	76, 367
Tea-pots, Construction of	E. B. Manning	Middletown, Conn	Feb. 9, 1869	86, 849
Tea-pots, Manufacture of	D. B. Woodworth	Cincinnati, Ohio	Nov. 26, 1867	71, 565
Tea-pots, Sheet-metal knob for	J. Britton	Williamsburgh, N. Y	Oct. 10, 1871	119, 739
Tea, sugar, &c., can	D. H. Meloy	Waterbury, Conn	Dec. 19, 1865	51, 605
Teacher's register	W. S. and W. N. Poulson	Cadiz, Ohio	Dec. 14, 1869	97, 960
Teaching arithmetic	B. M. Van Der Veer	Clyde, N. Y	July 14, 1846	4, 632
Teaching children, Device for	J. J. Johnston	Allegheny, Pa	Sept. 4, 1860	29, 888
Teaching commercial transactions, Device for	C. A. Walworth	Utica, N. Y	Feb. 18, 1868	74, 740
Teaching geography and astrography, Apparatus for	R. Piggot	Elk Ridge Landing, Md	Jan. 17, 1842	2, 426
Teaching geography, Apparatus for	J. Schedler	Jersey City Heights, N. J	Oct. 21, 1873	143, 934
Teaching, &c., Magnetic indicator for	J. Unna	San Francisco, Cal	May 14, 1872	126, 761
Teaching orthography, Apparatus for	H. W. Brown	Huntington, N. Y	Feb. 21, 1860	27, 201
Teaching penmanship, Diagram for	I. Bates	Poughkeepsie, N. Y	Oct. 25, 1864	44, 778
Teaching spelling, Apparatus for	H. Skinner	Yonkers, N. Y	Feb. 20, 1866	52, 758
Teaching-table, Automatic	W. C. Munson	Rockford, Ill	Dec. 10, 1867	72, 070
Teaching to read, Mode of	H. Chard	Cortlandtown, N. Y	Feb. 16, 1809	....
Teaching to write, Mode of	S. Randall	Warren, R. I	Jan. 11, 1812	....
Teaching writing	S. Randall	Warren, R. I	Oct. 1, 1810	....
Teaching writing, Plummets of lead used in	T. Weston	Peacham, Vt	June 26, 1812	....
Team-shovel	E. Case	Canton, Conn	Apr. 23, 1822	....
Team to farming-implements, Machine for attaching.	H. A. Cook	Hillsdale, N. Y	Nov. 14, 1865	50, 908
Teasel-grading machine	G. A. Burrough	Providence, R. I	Feb. 15, 1870	99, 840
Teasel-trimmer	C. G. Nye	Onondaga, N. Y	Apr. 6, 1869	88, 580
Teasel-trimming machine	E. Leffingwell	Sempronius, N. Y	Apr. 28, 1868	77, 296
Teasel-trimming machine	G. M. Rhoades	Hamilton, N. Y	Jan. 25, 1861	32, 649
Teaseling-machine	E. Birkenshaw	Ashuelot, N. H	Sept. 1, 1868	81, 739
Teaseling-machine	J. Jewett	Dudley, Mass	Dec. 30, 1830	....
Tedder, Animal	G. F. Jerome	North Hempstead, N. Y	Nov. 17, 1863	40, 625
Tedder, Animal	D. Newton	Southington, Conn	Sept. 7, 1869	94, 502
Teeth	S. Clayton	West Chester, Pa	Jan. 2, 1855	12, 156
Teeth, Adjustable punch for setting artificial	S. Mallett and A. B. Smith	New Haven, Conn	June 17, 1856	15, 139
Teeth, Adjusting metallic plates to artificial	T. R. Vanderslice	Philadelphia, Pa	Jan. 5, 1831	....
Teeth and gums, Cast of	D. T. Evens	Philadelphia, Pa	Aug. 28, 1840	1, 743
Teeth and gums, Compound for cleansing and preserving.	W. M. Tandy	Carrollton, Ky	Nov. 1, 1870	108, 845
Teeth, Apparatus for applying freezing-mixtures to the.	I. B. Branch	Galena, Ill	Oct. 28, 1856	15, 966
Teeth, Apparatus for extracting	C. C. Thomas	Natchez, Miss	July 13, 1858	20, 905
Teeth, Artificial	W. Ballard	Brooklyn, N. Y	Nov. 21, 1865	51, 001
Teeth, Artificial	J. A. Bidwell	Chicago, Ill	May 31, 1870	103, 707
Teeth, Artificial	A. A. Blandy	Baltimore, Md	Jan. 20, 1857	16, 433
Teeth, Artificial	J. W. Clark	Philadelphia, Pa	Aug. 18, 1868	81, 068
Teeth, Artificial	S. D. Engle	Hazleton, Pa	May 31, 1864	42, 933
Teeth, Artificial	T. A. D. Forster	Philadelphia, Pa	Oct. 31, 1871	120, 509
Teeth, Artificial	N. C. Fowler	Yarmouth Port, Mass	Feb. 14, 1865	46, 345
Teeth, Artificial	N. C. Fowler	Yarmouth Port, Mass	Feb. 14, 1865	46, 346
Teeth, Artificial	C. M. Graham	New York	Mar. 9, 1822	....
Teeth, Artificial	J. J. Griffith	Philadelphia, Pa	Aug. 11, 1868	80, 822
Teeth, Artificial	J. Guttman	Somersworth, N. H	Mar. 6, 1866	52, 903
Teeth, Artificial	J. W. Hollingsworth	Mount Vernon, Ind	May 17, 1870	103, 189
Teeth, Artificial	E. P. Hoyt	New York, N. Y	Jan. 30, 1866	52, 290
Teeth, Artificial	A. A. Knowlton	Saint Albans, Vt	Mar. 10, 1868	75, 431
Teeth, Artificial	H. Laurence	Philadelphia, Pa	May 1, 1849	6, 406
Teeth, Artificial	C. H. Mack	Portland, Oreg	Jan. 30, 1872	123, 271
Teeth, Artificial	J. W. Moffitt	Harrisburgh, Pa	Nov. 20, 1860	30, 864
Teeth, Artificial	D. and J. Pollock	Cleveland, Ohio	Aug. 19, 1862	36, 234
Teeth, Artificial	S. R. Screven	Philadelphia, Pa	Jan. 30, 1866	52, 326
Teeth, Artificial	S. T. Sheppard	Alhambra, Ill	Feb. 15, 1853	9, 587
Teeth, Artificial	F. W. Smith	Philadelphia, Pa	Dec. 18, 1866	60, 583
Teeth, Artificial	S. W. Stockton	Philadelphia, Pa	Feb. 19, 1867	62, 296
Teeth, Artificial	J. Terrell	Philadelphia, Pa	June 28, 1864	43, 347
Teeth, Artificial	W. C. Tracy	Brooklyn, N. Y	Oct. 7, 1873	143, 476
Teeth, Artificial	S. S. White	Philadelphia, Pa	Mar. 31, 1863	38, 072

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Invention.	Inventor.	Residence.	Date.	No.
Teeth, Artificial	S. S. White	Philadelphia, Pa	Mar. 31, 1863	38,073
Teeth, Artificial	J. H. Wood	Lebanon, Ohio	Apr. 19, 1870	102,193
Teeth, Artificial crown for	J. B. Beers	San Francisco, Cal	Nov. 4, 1873	144,182
Teeth, Artificial plate for	L. R. Streeter	Chelsea, Mass	Dec. 17, 1867	72,428
Teeth, Attachment for artificial	J. C. K. Crooks	Birmingham, Mich	Apr. 30, 1867	64,287
Teeth, Base for artificial	J. A. Bidwell	Sturgis, Mich	Apr. 7, 1863	38,091
Teeth, Base for artificial	G. F. J. Colburn	Newark, N. J	July 23, 1867	67,026
Teeth, Base for artificial	G. Dieffenbach	New York, N. Y	Apr. 13, 1858	19,916
Teeth, Base for artificial	G. Dieffenbach	New York, N. Y	June 28, 1859	24,544
Teeth, Base for artificial	F. Hickman	Reading, Pa	May 14, 1872	126,809
Teeth, Base for artificial	D. Steinberg	San Francisco, Cal	May 26, 1863	38,703
Teeth, Base-plate for artificial	J. A. Bidwell	Toledo, Ohio	Apr. 30, 1872	126,174
Teeth by atmospheric pressure, Setting artificial	J. A. Cleveland	Charleston, S. C	June 25, 1850	7,451
Teeth by the electric process, Casting plates for artificial.	J. L. Newell	Binghamton, N. Y	Sept. 9, 1856	15,706
Teeth, Card for artificial	A. M. Asay	Philadelphia, Pa	Mar. 3, 1868	74,971
Teeth, Casting aluminium plate on artificial	W. Allender	New London, Conn	Mar. 3, 1868	75,106
Teeth, Casting plate for artificial	A. A. Blandy	Baltimore, Md	Mar. 3, 1857	16,708
Teeth, Coloring artificial	G. Dieffenbach	New York, N. Y	June 28, 1859	24,545
Teeth, Coloring the plates for artificial	M. Levett and H. Davis	New York, N. Y	Sept. 18, 1847	5,294
Teeth, Composition amalgam for filling	L. A. Plumb	Boston, Mass	June 28, 1870	104,879
Teeth, Composition for cleansing the	F. Field	Waltham, Mass	Sept. 26, 1865	50,110
Teeth, Composition for cleansing and preserving	L. S. Parmly	New York	June 17, 1820	....
Teeth, Composition for filling	A. Hill and S. G. Blackman	Norwalk, Conn	Feb. 13, 1849	6,110
Teeth, Casting plates of alloys for artificial	A. A. Blandy	Baltimore, Md	Mar. 10, 1857	16,784
Teeth, Composition or soap for cleansing	J. O. Draper	Pawtucket, R. I	June 6, 1871	115,719
Teeth, Construction of pin for securing artificial	J. Hassell, jr	Newark, N. J	May 31, 1859	24,209
Teeth-cooling apparatus	E. Oudry	Pittsburgh, Pa	Aug. 25, 1863	39,673
Teeth cutting and punching machine	A. T. Mirvin	Muncy, Pa	Oct. 28, 1835	....
Teeth, Device for retaining fillings in	E. Osmond	Cincinnati, Ohio	Oct. 7, 1873	143,418
Teeth, Device for setting artificial	W. G. Oliver and T. Harrison	Buffalo, N. Y	May 20, 1856	14,924
Teeth, Engrafting	E. A. Bigelow	Brandon, Vt	Mar. 8, 1827	....
Teeth, Extracting	T. Bruff	....	July 1, 1797	....
Teeth, Filling for	C. E. Blake	San Francisco, Cal	Dec. 30, 1873	145,982
Teeth, Flasks for vulcanizing rubber plates for setting.	C. G. French	Springfield, Ill	Aug. 10, 1869	93,429
Teeth, Fusible metal for filling	B. Wood	Albany, N. Y	Sept. 20, 1864	44,362
Teeth, Inserting artificial	V. R. David	Sandwich, Ill	May 19, 1868	78,070
Teeth, Inserting artificial	E. B. Goodall	Portsmouth, N. H	Jan. 5, 1869	85,653
Teeth, Inserting porcelain	W. W. Riley	Columbus, Ohio	Nov. 8, 1851	8,533
Teeth, Instrument for adjusting the grinding surfaces of artificial.	J. Cameron	Philadelphia, Pa	Apr. 30, 1840	1,574
Teeth, Instrument for cutting	E. Bourquard	Paris, France	Sept. 18, 1866	58,186
Teeth, Instrument for extracting	J. W. Baker and W. W. Riley	Columbus, Ohio	Nov. 8, 1845	4,261
Teeth, Instrument for plugging	C. S. Longstreet	New York, N. Y	July 16, 1872	129,483
Teeth, Key for extracting	J. McConnel	Philadelphia, Pa	Sept. 20, 1839	1,327
Teeth, Looped pin for securing artificial	C. H. Eccleston	Oxford, N. Y	May 19, 1868	77,964
Teeth, Making artificial	G. E. Murray	Philadelphia, Pa	Dec. 4, 1849	6,924
Teeth, Manufacture of artificial	W. E. Dunn	Delaware, Ohio	May 7, 1867	64,411
Teeth, Manufacture of artificial	D. Harrington	Philadelphia, Pa	Dec. 10, 1840	1,884
Teeth, Manufacture of artificial	W. Reynolds	Columbia, S. C	Dec. 24, 1867	72,541
Teeth, Manufacture of artificial	S. S. White	Philadelphia, Pa	Jan. 21, 1862	34,223
Teeth, Manufacturing artificial	W. S. McIlhenny	Philadelphia, Pa	Mar. 23, 1852	8,829
Teeth, Method of applying electricity during extraction of.	J. S. Simmerman	Glassborough, N. J	Oct. 19, 1858	21,853
Teeth, Method of extracting	J. B. Francis	Philadelphia, Pa	May 25, 1858	20,390
Teeth, Method of fastening artificial	A. M. and J. L. Asay	Philadelphia, Pa	Apr. 3, 1860	27,678
Teeth, Method of fastening artificial	G. F. C. Reese	Brooklyn, N. Y	Nov. 18, 1873	144,609
Teeth, Method of preparing gold for filling	E. Lamm	New Orleans, La	June 4, 1867	65,399
Teeth, Method of separating hard rubber from porcelain.	A. G. Nye	Weymouth, Mass	Jan. 8, 1867	61,017
Teeth, Mode of attaching artificial	A. Riggs	New York	July 3, 1840	1,674
Teeth, Mode of attaching pyroxyline base to artificial.	M. Newton	Boston, Mass	Apr. 23, 1872	125,979
Teeth, Mode of constructing mold for casting aluminium for artificial.	J. B. Bean	Baltimore, Md	Oct. 8, 1867	69,614
Teeth, Mode of fastening	J. A. Mason	Keokuk, Iowa	Feb. 11, 1868	74,237
Teeth, Mode of fastening artificial	T. Y. Brown	Reading, Pa	Jan. 7, 1868	72,968
Teeth, Mode of fastening artificial	E. C. Stone	Galesburgh, Ill	Sept. 7, 1869	94,664
Teeth, Mode of polishing artificial	S. B. Sill	Three Rivers, Mich	Feb. 23, 1869	87,303
Teeth, Mold for artificial	A. M. Asay	Philadelphia, Pa	Oct. 29, 1867	70,148
Teeth, Mold for artificial	A. A. Knowlton	Saint Albans, Vt	Mar. 3, 1868	75,047
Teeth, Mold for artificial	J. A. McClelland	Louisville, Ky	Mar. 31, 1868	76,221
Teeth, Mold for artificial	E. Sweet	Whitney's Point, N. Y	May 3, 1870	102,615
Teeth, Mold for forming artificial	A. Lewenberg	New York, N. Y	Apr. 5, 1859	23,473
Teeth, Mold for forming artificial	J. Terrell	Philadelphia, Pa	Nov. 10, 1863	40,581
Teeth, Mold for making artificial	A. M. and J. L. Asay	Philadelphia, Pa	Mar. 26, 1861	31,770
Teeth, Molding artificial	H. D. Justi	Philadelphia, Pa	Apr. 26, 1864	42,491
Teeth, Molding artificial	J. A. Pelton	Middletown, Conn	Oct. 20, 1863	40,357
Teeth, Mounting artificial	J. C. Fuller	Chicago, Ill	Aug. 11, 1863	39,476
Teeth, Mounting artificial	R. Haering	Melrose, N. Y	Jan. 19, 1869	85,927
Teeth, Mounting artificial	G. E. Hayes	Buffalo, N. Y	Jan. 27, 1857	16,482
Teeth, Mounting for artificial	W. C. Michaelis	New York, N. Y	Jan. 5, 1869	85,600
Teeth on rollers, Method of forming	A. Johnson	Brooklyn, N. Y	Feb. 8, 1870	99,683
Teeth on rubber base to metallic plate, Method of uniting artificial.	E. K. Jenner	Healdsburgh, Cal	Nov. 2, 1869	96,438
Teeth, Palate for artificial	L. Simonds	Boston, Mass	Sept. 12, 1854	11,682
Teeth, Pin for artificial	H. M. Raynor	New York, N. Y	Feb. 8, 1870	99,593
Teeth, Pin for artificial	S. S White	Philadelphia, Pa	Sept. 17, 1872	131,381
Teeth, Pivoting	D. H. Porter	Bridgeport, Conn	Mar. 3, 1868	75,192
Teeth, Plate for artificial	L. Gilbert	New Haven, Conn	Feb. 15, 1848	5,447
Teeth, Plate for artificial	I. A. Horn	Cincinnati, Ohio	May 19, 1868	78,094
Teeth, Plate for artificial	G. H. Hurd	Saint Louis, Mo	Sept. 4, 1866	57,725
Teeth, Plate for artificial	D. S. Hutchison	San Francisco, Cal	June 9, 1868	78,669
Teeth, Plate for artificial	M. Loomis	Cambridgeport, Mass	May 2, 1854	10,847
Teeth, Plate for artificial	G. Morrison	Lockport, Ill	Mar. 16, 1869	88,798
Teeth, Plate for artificial	G. Morrison	Palmyra, Wis	Dec. 12, 1871	121,802
Teeth, Plate for artificial	J. A. Straight	Albion, N. Y	Nov. 23, 1869	97,244

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Teeth, Plate for artificial	L. R. Streeter	Chelsea, Mass	Dec. 15, 1868	85, 038
Teeth, Plugging-instrument for	B. Wood	Albany, N. Y	Feb. 28, 1865	46, 602
Teeth, Preparation of platinum for filling	E. G. and L. Kearsing	Spring Valley, N. Y	Feb. 7, 1871	111, 551
Teeth, Preparing artificial	B. A. Satterthwait	Lima, Ohio	Nov. 13, 1855	13, 801
Teeth, Preventive for the decay of human	H. H. Hayden	Baltimore, Md	Feb. 11, 1824	....
Teeth, Securing artificial	N. B. Slayton	Madison, Ind	Aug. 9, 1859	25, 053
Teeth, Securing porcelain	S. G. Chamberlain	Philadelphia, Pa	Feb. 11, 1831	....
Teeth, Setting	A. F. Ahrens	Philadelphia, Pa	May 13, 1851	8, 091
Teeth, Setting	A. F. Ahrens	Philadelphia, Pa	May 13, 1851	8, 092
Teeth, Setting	J. Allen	Cincinnati, Ohio	Dec. 16, 1845	4, 313
Teeth, Setting	F. H. Clark	New York, N. Y	Feb. 13, 1849	6, 114
Teeth, Setting	M. S. Foster	Trenton, N. J	Nov. 12, 1842	2, 849
Teeth, Setting artificial	J. W. and W. Z. W. Chapman	New York, N. Y	Mar. 3, 1863	37, 869
Teeth, Setting artificial	G. L. Derr	Mifflintown, Pa	Feb. 18, 1868	74, 516
Teeth, Setting artificial	J. Dodge	New York	Mar. 4, 1843	2, 985
Teeth, Setting artificial	J. S. Dodge	New York, N. Y	Mar. 13, 1844	3, 485
Teeth, Setting artificial	J. Mittlehaus	Berlin, Prussia	Mar. 4, 1862	34, 586
Teeth, Setting artificial	D. Steinberg	San Francisco, Cal	Nov. 12, 1861	33, 716
Teeth, Setting mineral	J. Allen	Cincinnati, Ohio	Dec. 23, 1851	8, 621
Teeth, Setting natural and artificial	W. R. Eagleson	Baltimore, Md	Oct. 4, 1817	....
Teeth, Setting porcelain	M. L. Wright	Cleveland, Ohio	Aug. 11, 1857	18, 005
Teeth, Spring for artificial	G. Stuart	Philadelphia, Pa	July 3, 1847	5, 181
Teeth, Staples for artificial	J. L. Asay	Philadelphia, Pa	Mar. 19, 1867	62, 918
Teeth, Terro-metallic	A. Planton	Philadelphia, Pa	Apr. 5, 1828	....
Teeth to artificial base, Securing	B. W. Franklin	New York, N. Y	Sept. 23, 1862	36, 513
Teeth to base, Attaching artificial	S. W. Stockton	Philadelphia, Pa	Sept. 4, 1866	57, 793
Teeth to base, Securing artificial	O. Lund	Philadelphia, Pa	Mar. 31, 1863	38, 081
Teeth to cast plates, Mode of securing artificial	J. B. Bean	Baltimore, Md	Oct. 8, 1867	69, 615
Teeth to dental plates, Method of attaching	A. Clark	Galesburgh, Ill	Jan. 26, 1869	86, 135
Teeth to metallic plates, Attaching artificial	H. S. Crider and D. Williams	Lancaster, Ohio	Oct. 18, 1853	10, 127
Teeth to metallic plates, Fastening artificial	T. H. and J. P. Bradish	Utica, N. Y	July 14, 1857	17, 775
Teeth to metallic plates, Fastening artificial	H. B. Hale	Rockford, Ill	Oct. 25, 1870	108, 588
Teeth to pyroxyline base, Apparatus for attaching artificial.	A. E. Pursell	Indianapolis, Ind	May 7, 1872	126, 575
Teeth to pyroxyline dental plates, Process of attaching.	J. A. Troutman	Seneca Falls, N. Y	Oct. 17, 1871	120, 130
Teeth to their base-plates, Means of attaching artificial.	E. Hale, jr	Saint Louis, Mo	July 13, 1869	92, 605
Telegraph	A. Bain	New York, N. Y	July 23, 1861	32, 854
Telegraph	J. M. Elford	Charleston, S. C	June 18, 1823	....
Telegraph	S. Frew	Elizabeth, Pa	July 2, 1842	2, 701
Telegraph	J. Grout, jr	....	Oct. 24, 1800	....
Telegraph	W. B. Guernsey	Jersey City, N. J	Apr. 30, 1872	126, 290
Telegraph	D. E. Hughes	Louisville, Ky	May 20, 1856	14, 917
Telegraph	W. A. Peaslee	Indianapolis, Ind	Oct. 9, 1855	13, 655
Telegraph	W. Shultz	Baltimore, Md	June 14, 1809	....
Telegraph, Acoustic	S. H. Everitt	New Orleans, La	Nov. 17, 1863	40, 616
Telegraph-alarm, Railway	G. Natcher	Sidney, Ohio	July 14, 1868	79, 915
Telegraph, Alphabetical	C. T. Chester	New York, N. Y	Feb. 25, 1862	34, 480
Telegraph and circuit, Printing and dial	H. D. Rogers	Cincinnati, Ohio	June 10, 1873	139, 690
Telegraph and circuit wire, Insulating covering for	S. C. Bishop	New York, N. Y	Dec. 3, 1867	71, 688
Telegraph and electric wire, Compound for insulating.	S. C. Bishop	New York, N. Y	Oct. 13, 1868	83, 031
Telegraph and railway, Atmospheric	I. S. Richardson	Boston, Mass	Aug. 2, 1853	9, 903
Telegraph-apparatus	J. M. Brown	Auburn, N. Y	Sept. 17, 1867	68, 838
Telegraph-apparatus	H. S. L Bryan	Liberty, Mo	July 11, 1871	116, 928
Telegraph-apparatus	I. Hall	New York, N. Y	Aug. 8, 1871	117, 771
Telegraph-apparatus	C. Durant	Jersey City, N. J	Oct. 26, 1869	96, 090
Telegraph-apparatus	T. A. Edison	Newark, N. J	Jan. 23, 1872	123, 005
Telegraph-apparatus	T. A. Edison	Newark, N. J	Feb. 27, 1872	123, 984
Telegraph-apparatus	D. Flanery	New Orleans, La	Sept. 21, 1869	95, 013
Telegraph-apparatus	T. M. Foote and C. A. Randall	New York, N. Y	July 16, 1872	129, 219
Telegraph-apparatus	W. Gillett	Allegheny City, Pa	Oct. 24, 1871	120, 262
Telegraph-apparatus	E Gray	Oberlin, Ohio	Oct. 1, 1867	69, 424
Telegraph-apparatus	E. Gray	Cleveland, Ohio	Apr. 14, 1868	76, 748
Telegraph-apparatus	L. T. Lindsey	Jackson, Tenn	Mar. 7, 1871	112, 360
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Oct. 24, 1871	120, 290
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Jan. 2, 1872	122, 474
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Feb. 6, 1872	123, 490
Telegraph-apparatus	G. Little	Rutherford Park, N. J	July 9, 1872	128, 894
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Aug. 27, 1872	130, 811
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Sept. 2, 1873	142, 486
Telegraph-apparatus	B. Meyer	Paris, France	Apr. 12, 1870	101, 900
Telegraph-apparatus	H. C. Nicholson	Mount Washington, Ohio	Mar. 21, 1871	112, 836
Telegraph-apparatus	C. H. Pond	Oberlin, Ohio	Oct. 8, 1867	69, 585
Telegraph-apparatus	J. Rowe	Paterson, N. J	Oct. 17, 1871	120, 060
Telegraph-apparatus	J. E. Selden	Albany, N. Y	Mar. 23, 1869	88, 085
Telegraph-apparatus	J. B. Stearns	Boston, Mass	June 2, 1868	78, 547
Telegraph-apparatus	J. B. Stearns	Boston, Mass	June 2, 1868	78, 548
Telegraph apparatus, Automatic	G. Little	Rutherford Park, N. J	Nov. 2, 1869	96, 333
Telegraph-apparatus, Automatic circuit-closer for	G. Little	Rutherford Park, N. J	Oct. 24, 1871	120, 291
Telegraph apparatus, Automatic signaling	W. Unger and H. E. Towle	Newark, N. J., and New York, N. Y.	Nov. 18, 1873	144, 643
Telegraph apparatus, Automatic transmitting	C. Westbrook	Harrisburgh, Pa	Mar. 23, 1869	88, 248
Telegraph apparatus, Dial	E. T. Gilliland	Cincinnati, Ohio	Nov. 23, 1869	97, 076
Telegraph apparatus, Dial	E. T. Gilliland	Cincinnati, Ohio	June 27, 1871	116, 439
Telegraph apparatus, Duplex	J. B. Stearns	Boston, Mass	May 14, 1872	126, 847
Telegraph apparatus, Duplex	J. B. Stearns	Boston, Mass	Nov. 12, 1872	132, 933
Telegraph apparatus, Electric	G. Little	Rutherford Park, N. J	Apr. 9, 1872	125, 582
Telegraph apparatus, Electric	F. L. Pope	Elizabeth, N. J	May 7, 1872	126, 486
Telegraph apparatus, Fire-alarm	E. Rogers	Boston, Mass	June 14, 1870	104, 357
Telegraph apparatus, Fire-alarm	J. N. Gamewell	Hackensack, N. J	Apr. 4, 1871	113, 649
Telegraph apparatus, Printing	G. L. Anders	Boston, Mass	July 25, 1871	117, 239
Telegraph apparatus, Printing	G. L. Anders	Boston, Mass	July 23, 1872	129, 641
Telegraph apparatus, Printing	T. A. Edison	New York, N. Y	Nov. 9, 1869	96, 567
Telegraph apparatus, Printing	T. A. Edison	Newark, N. J	Mar. 28, 1871	113, 033
Telegraph apparatus, Printing	T. A. Edison	Newark, N. J	Mar. 28, 1871	113, 034
Telegraph apparatus, Printing	T. M. Foote and C. A. Randall	Brooklyn, E. D., N. Y	May 16, 1871	114, 790

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Invention.	Inventor.	Residence.	Date.	No.
Telegraph apparatus, Printing	T. M. Foote and C. A. Randall	Brooklyn, E. D., N. Y	May 16, 1871	114,791
Telegraph apparatus, Printing	T. M. Foote and C. A. Randall	Brooklyn, E. D., N. Y	May 16, 1871	114,792
Telegraph apparatus, Printing	F. L. Pope and T. A. Edison	Elizabeth, N. J., and New York, N. Y.	Apr. 26, 1870	102,320
Telegraph apparatus, Printing	F. L. Pope and T. A. Edison	Elizabeth, N. J., and New York, N. Y.	June 7, 1870	103,924
Telegraph, Attaching wires to bell	H. Hockstrasser	Philadelphia, Pa	Sept. 8, 1859	18,147
Telegraph, Automatic signal-box for fire-alarm	M. G. Crane and E. Rogers	Newton and Boston, Mass	July 6, 1869	92,275
Telegraph, Automatic signal-box for fire-alarm	G. Wright, M. Y. Holley, and H. R. Miles.	Washington, D. C	Feb. 20, 1872	123,970
Telegraph-battery switch-board	W. G. Brownson	Wellsville, Ohio	July 23, 1867	66,944
Telegraph, Bell	J. G. Day	Brooklyn, N. Y	Dec. 19, 1848	5,969
Telegraph, Bell	H. Houghton	Truxton, N. Y	Mar. 20, 1849	6,202
Telegraph, Bell	E. J. Mallett	New York, N. Y	Oct. 3, 1848	5,823
Telegraph, Burglar-alarm and police	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111,409
Telegraph-cable	L. Andrews	De Kalb, Ill	Oct. 7, 1862	36,639
Telegraph-cable	J. S. Davison	Cranberry, N. J	Sept. 27, 1859	25,562
Telegraph-cable	A. J. B. De Morat	Philadelphia, Pa	Jan. 22, 1867	61,325
Telegraph-cable	T. W. Evans	Philadelphia, Pa	Apr. 30, 1861	32,186
Telegraph-cable	S. T. Field	Saint Louis, Mo	Mar. 27, 1866	53,430
Telegraph-cable	W. H. Johnson	Springfield, Mass	Oct. 11, 1859	25,739
Telegraph-cable	J. Morgan, A. T. Jay, E. Edwards, and J. Tilston.	London, England	Apr. 1, 1862	34,862
Telegraph-cable	J. N. Phelps	Brooklyn, N. Y	Oct. 30, 1866	59,318
Telegraph-cable	W. P. Piggott	London, England	Oct. 3, 1865	50,314
Telegraph-cable	P. A. Salvotti	New York, N. Y	Mar. 6, 1866	53,047
Telegraph-cable	D. H. Southworth	New York, N. Y	Feb. 28, 1865	46,613
Telegraph-cable	J. Story	Paris, Ky	Apr. 3, 1866	53,700
Telegraph, Cable and testing-post for subterranean	S. F. Van Choate	Boston, Mass	Nov. 9, 1869	96,641
Telegraph-cable, Apparatus for paying out	L. Brauer	Washington, D. C	Feb. 2, 1858	19,278
Telegraph-cable, Apparatus for paying out	G. Scott	Wicasset, Me	Aug. 31, 1858	21,371
Telegraph-cable, Construction of	J. Absterdam	Boston, Mass	Jan. 19, 1858	19,116
Telegraph cable, Hydraulic and electric	F. Tommasi	Paris, France	Oct. 14, 1873	143,597
Telegraph-cable, Laying	W. H. Horstmann	Brooklyn, N. Y	Jan. 3, 1860	26,677
Telegraph cable, Laying submarine	A. Turney, jr	Fairfield, Conn	Aug. 16, 1859	25,151
Telegraph-cable, Machine for manufacturing	A. F. Jaloureau	Paris, France	June 23, 1868	79,126
Telegraph cable, Method of laying submarine	S. Samuels	Brooklyn, N. Y	Sept. 28, 1858	21,629
Telegraph cable, Method of laying submarine	O. G. Warren	New York, N. Y	Sept. 28, 1858	21,634
Telegraph-cable, Mode of laying	T. Shaw	Philadelphia, Pa	Apr. 29, 1862	35,128
Telegraph-cable, Mode of manufacturing	W. H. Horstmann	Brooklyn, N. Y	Sept. 13, 1859	25,414
Telegraph-cable, &c., Shackle for	G. Gilmour	Chelsea, Mass	Feb. 15, 1859	22,948
Telegraph cable, Submarine	F. J. Bridges	New York, N. Y	Mar. 22, 1859	23,290
Telegraph cable, Submarine	J. M. Connel	Newark, Ohio	Mar. 29, 1859	23,351
Telegraph cable, Submarine	M. G. Farmer	Salem, Mass	Nov. 30, 1869	97,374
Telegraph cable, Submarine	A. Foucaut	Orleans, France	May 18, 1869	90,089
Telegraph cable, Submarine	S. E. and G. L. Morse	Harrison, N. J	July 9, 1867	66,613
Telegraph cable, Submarine	E. N. Newton	Franklin Grove, Ill	Sept. 19, 1871	119,093
Telegraph, Calls for	A. Bain	New York, N. Y	May 12, 1863	38,529
Telegraph, Chemical	T. A. Edison	Newark, N. J	Aug. 12, 1873	141,774
Telegraph, Chemical	G. Little	Rutherford Park, N. J	Oct. 18, 1870	108,496
Telegraph, Chemical electric	M. Lefferts	New York, N. Y	May 9, 1871	114,698
Telegraph circuit, Automatic	T. A. Edison	Newark, N. J	Aug. 12, 1873	141,773
Telegraph circuit, Automatic	T. A. Edison	Newark, N. J	Aug. 12, 1873	141,776
Telegraph circuit, Automatic or chemical	T. A. Edison	Newark, N. J	Aug. 12, 1873	141,772
Telegraph, Circuit-changer for electro-magnetic	C. S. Bulkley	Macon, N. Y	Sept. 2, 1851	8,340
Telegraph-circuit closer	E. B. and J. S. Lake	Absecom, N. J	June 24, 1862	35,694
Telegraph, Circuit-closer and circuit for multiplex or interval.	M. Gally	Rochester, N. Y	Sept. 30, 1873	143,340
Telegraph, Circuit for chemical	T. A. Edison	Newark, N. J	Feb. 4, 1873	135,531
Telegraph circuit indicator	G. Little	Rutherford Park, N. J	Aug. 27, 1872	130,813
Telegraph-circuit, Mechanism for opening and closing.	J. M. Fairchild	New Haven, Conn	Nov. 5, 1867	70,673
Telegraph circuit, Printing	T. A. Edison	Newark, N. J	July 1, 1873	140,489
Telegraph circuit, Printing	L. T. Lindsey	Jackson, Tenn	Oct. 14, 1873	143,700
Telegraph-conductor	J. Montgomery	New York, N. Y	May 17, 1870	103,072
Telegraph-conductor, Material for insulating	W. Perkins and G. G. Tandy	London and Penge, England.	May 19, 1868	78,125
Telegraph-connectors, Method of jointing	J. N. Power	New York, N. Y	Mar. 5, 1861	31,622
Telegraph, Copying	J. J. E. Lenoir	Paris, France	Feb. 19, 1867	62,141
Telegraph cut-out	W. G. Linn	Bloomfield, Iowa	Dec. 2, 1873	145,064
Telegraph cut-out and switch	R. Henning	Ottawa, Ill	May 13, 1873	138,889
Telegraph, Delineating	C. G. Bonelli	Milan, Sardinia	Jan. 6, 1863	37,331
Telegraph, Dial	C. T. Chester	New York, N. Y	Oct. 20, 1863	40,324
Telegraph, District and fire-alarm	E. A. Calahan	Brooklyn, N. Y	June 11, 1872	127,844
Telegraph, District and fire-alarm	J. H. Guest	Brooklyn, N. Y	Sept. 30, 1873	143,344
Telegraph, District and fire-alarm	J. H. Guest	Brooklyn, N. Y	Nov. 11, 1873	144,535
Telegraph, Domestic	D. Pierson	Boston, Mass	Mar. 2, 1822	....
Telegraph, Domestic	J. Russell	New York, N. Y	Oct. 17, 1848	5,862
Telegraph, Double-transmitting printing	G. L. Anders	Boston, Mass	Oct. 17, 1871	120,019
Telegraph, Duplex	J. B. Stearns	Boston, Mass	Mar. 18, 1873	136,673
Telegraph, Duplex	J. B. Stearns	Boston, Mass	Mar. 18, 1873	136,674
Telegraph, Duplex	J. C. Wilson	Buffalo, N. Y	Mar. 4, 1873	136,400
Telegraph, Electric	A. Bain	New York, N. Y	Mar. 24, 1863	37,997
Telegraph, Electric	A. Bain	London, England	Apr. 17, 1849	6,328
Telegraph, Electric	J. Blackie	New York, N. Y	Aug. 7, 1866	56,886
Telegraph, Electric	A. Chace	Syracuse, N. Y	Sept. 4, 1866	57,673
Telegraph, Electric	L. C. A. J. G. D'Arlincourt	Paris, France	May 16, 1871	114,771
Telegraph, Electric	G. Doyle	Ottawa, Ill	Jan. 31, 1860	26,973
Telegraph, Electric	H. G. Dyar	New York, N. Y	June 30, 1857	17,673
Telegraph, Electric	M. G. Farmer	Salem, Mass	Mar. 29, 1853	9,634
Telegraph, Electric	H. Highton	Putney, England	Dec. 24, 1873	134,140
Telegraph, Electric	G. H. Horn	Boston, Mass	June 25, 1850	7,455
Telegraph, Electric	C. F. Johnson	Owego, N. Y	May 16, 1848	5,568
Telegraph, Electric	C. Kirchhof	New York, N. Y	Apr. 15, 1856	14,664
Telegraph, Electric	S. F. B. Morse	Poughkeepsie, N. Y	May 1, 1849	6,420
Telegraph, Electric	W. S. Thomas	Norwich, N. Y	Feb. 12, 1850	7,092
Telegraph, Electric	C. F. Varley	New York, N. Y	Apr. 7, 1868	76,358
Telegraph, Electric	W. D. Wesson	Chillicothe, Ohio	Feb. 17, 1857	16,665

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Telegraph, Electric phonetic	R. E. House	Binghamton, N. Y	May 12, 1868	77,882
Telegraph, Electrical circuit for the chemical	G. Little	Rutherford Park, N. J	Feb. 13, 1872	123,711
Telegraph, Electro-chemical	A. F. Park	Troy, N. Y	Aug. 7, 1866	56,988
Telegraph, Electro-chemical	R. Smith and A. Bain	Blackford, Scotland, and Hammersmith, England.	Oct. 30, 1849	6,837
Telegraph, Electro-chemical	C. Westbrook and H. J. Rogers	Washington, D. C., and Baltimore, Md.	May 28, 1850	7,406
Telegraph, Electro-magnetic	R. Boyle	New York, N. Y	Aug. 22, 1865	49,585
Telegraph, Electro-magnetic	S. F. Day	Ballston Spa, N. Y	May 24, 1864	42,842
Telegraph, Electro-magnetic	G. D. Infreville	New York, N. Y	May 27, 1873	139,302
Telegraph, Electro-magnetic	S. F. B. Morse	New York, N. Y	Apr. 11, 1846	4,453
Telegraph, Electro-magnetic	J. E. Smith	Poughkeepsie, N. Y	Sept. 10, 1861	33,269
Telegraph, Electro-magnetic	J. E. Smith	New York, N. Y	Apr. 15, 1862	34,969
Telegraph, Electro-magnetic	J. E. Smith	New York, N. Y	June 10, 1862	35,571
Telegraph, Electro-magnetic	C. Wheatstone and W. F. Cooke	Great Britain	June 10, 1840	1,622
Telegraph, Electro-magnetic fire-alarm	J. W. Martin	Saint Joseph, Mo	Aug. 15, 1871	118,033
Telegraph, &c., Electro-magnetic motor for printing.	L. T. Lindsey	Jackson, Tenn	Feb. 25, 1873	136,329
Telegraph, Electro-magnetic printing	H. N. Baker	Union, N. Y	Apr. 29, 1856	14,759
Telegraph, Electro-magnetic printing	P. A. J. Dujardin	Lille, France	Sept. 29, 1868	82,502
Telegraph, Electro-magnetic printing	A. J. Partridge	Southbridge, Mass	Apr. 22, 1856	14,731
Telegraph, Electro-phonetic	R. E. House	Binghamton, N. Y	June 27, 1865	48,408
Telegraph, Fire-alarm	R. Carter	New York, N. Y	June 17, 1873	140,011
Telegraph, Fire-alarm	J. M. Fairchild	New Haven, Conn	Nov. 5, 1867	70,672
Telegraph, Fire-alarm	C. Kirchof	Newark, N. J	Nov. 29, 1864	45,251
Telegraph, Fire-alarm	W. R. Smiley	New Lisbon, Ohio	Mar. 2, 1869	87,439
Telegraph, Fire-alarm	J. B. Stearns	Boston, Mass	Sept. 17, 1867	69,039
Telegraph, Fire-alarm	J. H. Stevens	Boston, Mass	Oct. 1, 1867	69,503
Telegraph, Fire-alarm	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111,410
Telegraph, Fire-alarm	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111,411
Telegraph, Fire-alarm	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111,412
Telegraph, Fire-alarm	W. B. Watkins	Jersey City, N. J	Jan. 31, 1871	111,413
Telegraph-fire-alarm apparatus	E. C. Clay	Boston, Mass	Nov. 17, 1857	18,626
Telegraph for city, Electro-magnetic fire-alarm	W. F. Channing and M. G. Farmer.	Boston and Salem, Mass	May 19, 1857	17,355
Telegraph for hotel-annunciator, Hydro-pneumatic	G. G. Percival	Brooklyn, N. Y	Jan. 2, 1866	51,858
Telegraph, Galvanic-battery for	L. B. Swan	Rochester, N. Y	Dec. 18, 1847	5,400
Telegraph, Indicating	L. G. Curtiss	Cincinnati, Ohio	Jan. 16, 1849	6,040
Telegraph, Indicating electro-magnetic	J. Davis	New Bedford, Mass	Dec. 6, 1853	10,292
Telegraph-instrument	E. F. Barnes	New York, N. Y	Oct. 1, 1861	33,373
Telegraph-instrument	S. Brown, jr	Morristown, Pa	Aug. 13, 1861	33,027
Telegraph-instrument	S. G. Cabell	Quincy, Ill	Aug. 6, 1867	67,410
Telegraph-instrument	P. A. M. Chauvassaignes and J. P. Lambrigot.	Paris, France	July 28, 1868	80,452
Telegraph-instrument	S. F. Day	Ballston Spa, N. Y	May 20, 1862	35,304
Telegraph-instrument	S. F. Day	Ballston Spa, N. Y	Nov. 1, 1864	44,855
Telegraph-instrument	S. F. Day	Ballston Spa, N. Y	Oct. 6, 1868	82,695
Telegraph-instrument	D. Flanery	Jackson, Mich	Aug. 21, 1860	29,686
Telegraph-instrument	G. B. Hicks	Cleveland, Ohio	Aug. 10, 1858	21,132
Telegraph-instrument	A. G. Holcomb	New York, N. Y	May 15, 1860	28,274
Telegraph-instrument	R. Kendrick and A. W. Arkerson.	Cambridgeport, Mass	Nov. 16, 1858	22,082
Telegraph-instrument	G. W. King	Georgetown, D. C	Nov. 17, 1868	84,197
Telegraph-instrument	G. Little	Hudson City, N. J	July 28, 1868	80,293
Telegraph-instrument	E. F. Reynolds	West Farms, N. Y	Aug. 21, 1860	29,747
Telegraph instrument and circuit therefor, Duplex	J. B. Stearns	Boston, Mass	Nov. 12, 1872	132,932
Telegraph instrument, Automatic	T. A. Edison	Newark, N. J	Jan. 14, 1873	134,867
Telegraph instrument, Automatic	G. Little	Rutherford Park, N. J	Jan. 2, 1872	122,473
Telegraph instrument, Dial	S. Chester	Elizabeth, N. J	July 9, 1872	128,708
Telegraph instrument, Dial	E. T. Gilliland	Cincinnati, Ohio	June 27, 1871	116,430
Telegraph instrument, Duplex	J. B. Stearns	Boston, Mass	Feb. 25, 1873	136,274
Telegraph instrument, Mechanical	J. Gamble	San Francisco, Cal	Mar. 28, 1871	113,041
Telegraph instrument, Printing	R. K. Boyle	New York, N. Y	Sept. 8, 1868	81,871
Telegraph instrument, Printing	T. A. Edison	Newark, N. J	July 2, 1872	128,608
Telegraph instrument, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131,341
Telegraph instrument, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131,342
Telegraph instrument, Printing	T. A. Edison	Newark, N. J	Jan. 14, 1873	134,866
Telegraph instrument, Printing	R. H. Gallaher	New York, N. Y	Aug. 15, 1871	118,122
Telegraph instrument, Printing	E. Gray	Chicago, Ill	Nov. 12, 1872	132,907
Telegraph instrument, Printing	L. T. Lindsey	Jackson, Tenn	May 3, 1870	102,561
Telegraph instrument, Printing	W. P. Phelps and W. J. Philips	Brooklyn, N. Y., and Philadelphia, Pa.	June 14, 1870	104,345
Telegraph instrument, Printing	W. P. Phelps and W. J. Philips	Brooklyn, N. Y., and Philadelphia, Pa.	May 24, 1870	103,496
Telegraph instrument, Printing	M. F. Wessman	Brooklyn, N. Y	Aug. 6, 1872	130,261
Telegraph-instrument, Relay	G. Little	Rutherford Park, N. J	June 13, 1871	115,967
Telegraph-instruments against atmospheric electricity, Method of protecting.	E. F. Barnes	Brooklyn, N. Y	Nov. 1, 1859	25,939
Telegraph-instruments, Electro-magnet for	T. A. Edison	Newark, N. J	May 9, 1871	114,658
Telegraph instruments, Escapement for dial	B. F. Edmands and J. Hamblet, jr.	Boston and Charlestown, Mass.	July 7, 1868	79,741
Telegraph-instruments, Key-board for	W. B. Allyn	Boston, Mass	July 21, 1868	80,049
Telegraph-instruments, Relay for	E. S. Hidden	Millburn, N. J	Feb. 15, 1870	99,892
Telegraph-instruments, Relay-magnet for	T. A. Edison	Newark, N. J	May 9, 1871	114,657
Telegraph, &c., Insulating compound for	C. H. Pond	Cleveland, Ohio	Jan. 23, 1872	122,962
Telegraph-key	C. H. Billings and G. W. Stockley.	Cleveland, Ohio	Nov. 18, 1873	144,730
Telegraph-key	A. G. Davis	Baltimore, Md	Aug. 27, 1872	130,793
Telegraph-key	J. Davis	New Bedford, Mass	Sept. 19, 1854	11,690
Telegraph-key	W. E. Davis	Jersey City, N. J	July 6, 1869	92,285
Telegraph key	A. W. Decker	Cleveland, Ohio	Nov. 5, 1872	132,815
Telegraph key and sounder, Mechanical	D. L. Parkhurst	San Francisco, Cal	Sept. 30, 1873	143,298
Telegraph-key-apparatus	L. S. White and L. White	Chicopee, Mass., and Hartford, Conn.	May 22, 1855	12,929
Telegraph key, Duplex	J. B. Stearns	Boston, Mass	Mar. 18, 1873	136,875
Telegraph, Key for electric	A. Bain	New York, N. Y	May 12, 1863	38,530
Telegraph-key, Self-closing	W. C. Bowers	Wheatland, Iowa	Sept. 7, 1869	94,556
Telegraph-key, Self-closing	J. J. B. Frey	New York, N. Y	Sept. 21, 1869	95,014

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Telegraph-key, Self-closing	W. Hochhausen	New York, N. Y	Nov. 4, 1873	144,274
Telegraph-key, Self-closing	J. H. McElroy	Warwick, N. Y	June 29, 1869	91,955
Telegraph-key, Self-closing	J. H. McElroy	Warwick, N. Y	Aug. 17, 1869	93,728
Telegraph-key, Self-closing	J. F. and P. H. O'Sullivan	Jackson, Miss	Nov. 7, 1871	120,662
Telegraph-key, Vertical	A. B. Shearer	Davisville, Cal	Sept. 10, 1872	131,306
Telegraph-keys, Operating	W. M. Franz	Bucyrus, Ohio	Oct. 22, 1867	69,984
Telegraph-keys, Operating	J. I. Hayden	Rising Sun, Ind	Jan. 5, 1858	19,027
Telegraph lightning-arrester	W. H. Hall	Chicago, Ill	Oct. 29, 1867	70,203
Telegraph lightning-arrester	G. A. Stearns	Rochester, N. Y	June 21, 1864	43,265
Telegraph lightning-arrester	D. F. S. Ways	Baltimore, Md	Aug. 7, 1860	29,533
Telegraph-line, Subterranean	E. H. Austin	New York, N. Y	Apr. 22, 1873	138,115
Telegraph-line wire	M. G. Farmer and G. F. Milliken.	Salem and Boston, Mass	May 30, 1865	47,940
Telegraph-line wire	M. G. Farmer and G. F. Milliken.	Salem and Boston, Mass	Nov. 20, 1866	59,763
Telegraph-lines, Insulation of	H. J. Rogers	New York, N. Y	Dec. 3, 1872	133,595
Telegraph-machine	L. Bradley	Tolsom, Cal	Oct. 11, 1859	25,718
Telegraph-magnet	T. P. Shaffner	Louisville, Ky	Dec. 11, 1866	60,452
Telegraph, Magnetic	M. G. Farmer	Salem, Mass	Aug. 25, 1868	81,485
Telegraph, Magnetic	C. Kirchhof	Newark, N. J	Nov. 28, 1865	51,193
Telegraph, Magnetic	C. Kirchhof	Newark, N. J	Nov. 28, 1865	51,261
Telegraph, Magnetic	C. Winegar	Springport, N. Y	Mar. 20, 1849	6,243
Telegraph, Magnetic printing	R. E. House	New York, N. Y	Apr. 18, 1846	4,464
Telegraph, Magnetic printing	R. E. House	New York, N. Y	Dec. 28, 1852	9,505
Telegraph, Magnetic printing	S. F. Van Choate	Yreka, Cal	Mar. 27, 1860	27,655
Telegraph, Magneto-electric	G. W. Beardslee	College Point, N. Y	Aug. 4, 1863	39,376
Telegraph, Magneto-electric dial	G. L. Anders	Boston, Mass	Apr. 4, 1871	113,240
Telegraph, Magneto-electric dial	J. B. Johnson and H. Whittemore.	Boston, Mass	Aug. 27, 1872	130,855
Telegraph-manipulator	E. R. Roe	Shawneetown, Ill	May 30, 1848	5,612
Telegraph manipulator, Electric	A. F. Park	Troy, N. Y	Aug. 27, 1850	7,606
Telegraph, Marine	A. Foucaut	New York, N. Y	Nov. 26, 1867	71,476
Telegraph, Means for obviating difficulties arising from defective insulation of.	C. S. Bulkley	Macon, Ga	Aug. 26, 1851	8,321
Telegraph, Mechanical	J. Dearborn	Seabrook, N. H	Apr. 30, 1867	64,204
Telegraph-message for automatic transmission, Embossed.	J. H. and J. W. Rogers	Peekskill, N. Y	Aug. 20, 1872	130,662
Telegraph, Mode of operating electro-magnetic	E. Cornell	Ithaca, N. Y	Dec. 20, 1845	4,318
Telegraph, Multiplex or interval	M. Gally	Rochester, N. Y	Sept. 30, 1873	143,341
Telegraph, Ocean	G. W. Bowlsby	Monroe, Mich	Feb. 13, 1866	52,522
Telegraph, Optical	W. C. Bridges	Philadelphia, Pa	Jan. 14, 1862	34,127
Telegraph, Pantographic	G. Caselli	Florence, Italy	June 29, 1858	20,698
Telegraph-paper, Machine for punching	E. A. Calahan	Brooklyn, N. Y	May 29, 1866	55,056
Telegraph-paper, Machine for punching	M. Lefferts	New York, N. Y	Dec. 12, 1865	51,464
Telegraph-paper, Machinery for perforating	T. A. Edison	Newark, N. J	Dec. 5, 1871	121,601
Telegraph-paper reel	H. McGaun	Cleveland, Ohio	Jan. 19, 1864	41,312
Telegraph perforator, Automatic	T. A. Edison	Newark, N. J	Aug. 12, 1873	141,775
Telegraph perforator, Automatic	G. Little	Rutherford Park, N. J	Sept. 2, 1873	142,485
Telegraph, Pneumatic	E. A. Calahan and C. B. Field	Brooklyn and New York, N. Y.	Mar. 21, 1871	112,779
Telegraph, Pneumatic	H. K. Gardner	York, Pa	May 27, 1862	35,416
Telegraph, Pneumatic	A. Jaynor	London, England	July 15, 1873	140,923
Telegraph, Pneumatic	A. M. and M. A. Wier	Bayswater, Great Britain	June 22, 1869	91,694
Telegraph, Pneumatic	A. M. and M. A. Wier	Elm Lodge, Newton Road, Bayswater, Great Britain.	July 11, 1871	117,025
Telegraph-pole	J. L. Chapman	Philadelphia, Pa	Aug. 26, 1873	142,082
Telegraph-pole	H. Dodge	Beaver Dam, Wis	June 24, 1873	140,255
Telegraph-pole	I. Hersey	New York, N. Y	Apr. 25, 1871	114,138
Telegraph-pole	C. F. Howes	Philadelphia, Pa	Feb. 4, 1873	135,429
Telegraph-pole	T. J. McCarver and J. A. and B. Jennings.	Oregon City, Oreg	June 3, 1873	139,593
Telegraph-pole	E. F. Prentiss	Philadelphia, Pa	Mar. 8, 1870	100,666
Telegraph-pole	T. Rogers	Fredericktown, Ohio	Jan. 9, 1872	122,656
Telegraph-pole	A. H. Trego	Philadelphia, Pa	Apr. 16, 1872	125,771
Telegraph-pole	C. F. Varley	New York, N. Y	Mar. 10, 1868	75,492
Telegraph-pole, Iron	R. D. McDonald and E. M. Crandal.	Jersey City, N. J., and Marshalltown, Iowa.	Jan. 23, 1872	122,952
Telegraph-pole, Iron	J. Weis	Jersey City, N. J	Aug. 27, 1872	130,884
Telegraph-pole, Metallic	F. Boyd	Newburgh, N. Y	Apr. 16, 1872	125,716
Telegraph-poles, &c., Device for climbing	J. A. and G. C. Hanger	Churchville, Va	July 25, 1871	117,413
Telegraph-poles, Means for climbing	J. H. McNeely	Indianapolis, Ind	Nov. 29, 1859	26,280
Telegraph-poles, Mode of preserving	L. S. Robbins	New York, N. Y	Apr. 27, 1869	89,345
Telegraph-post	W. J. Fryer, jr	New York, N. Y	May 15, 1866	54,712
Telegraph-post	H. G. Hall	Kirksville, Ohio	Sept. 19, 1848	5,781
Telegraph-post	F. W. Shields	Westminster, England	May 23, 1865	47,910
Telegraph-post	A. B. Sprout	Picture Rocks, Pa	Sept. 3, 1872	131,037
Telegraph, Printing	M. F. Adams	Boston, Mass	Jan. 25, 1870	99,047
Telegraph, Printing	G. L. Anders	Boston, Mass	Nov. 1, 1870	108,867
Telegraph, Printing	G. L. Anders	Boston, Mass	Oct. 20, 1873	144,045
Telegraph, Printing	J. Blackie	New York, N. Y	Aug. 31, 1869	94,178
Telegraph, Printing	J. S. Brown	Washington, D. C	July 16, 1872	129,391
Telegraph, Printing	E. A. Calahan	Brooklyn, N. Y	Apr. 21, 1868	76,993
Telegraph, Printing	E. A. Calahan	Brooklyn, N. Y	Feb. 1, 1870	99,401
Telegraph, Printing	T. A. Edison	Boston, Mass	June 22, 1869	91,527
Telegraph, Printing	T. A. Edison	Newark, N. J	Jan. 23, 1872	123,006
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,530
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,531
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,532
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,533
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,534
Telegraph, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126,535
Telegraph, Printing	T. A. Edison	Newark, N. J	June 18, 1872	128,131
Telegraph, Printing	T. A. Edison	Newark, N. J	July 2, 1872	128,604
Telegraph, Printing	T. A. Edison	Newark, N. J	July 2, 1872	128,605
Telegraph, Printing	T. A. Edison	Newark, N. J	July 2, 1872	128,606
Telegraph, Printing	T. A. Edison	Newark, N. J	July 2, 1872	128,607
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131,335

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Invention.	Inventor.	Residence.	Date.	No.
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 336
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 337
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 338
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 339
Telegraph, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 340
Telegraph, Printing	T. A. Edison	Newark, N. J	May 13, 1873	138, 869
Telegraph, Printing	T. A. Edison	Newark, N. J	May 13, 1873	138, 870
Telegraph, Printing	T. A. Edison	Newark, N. J	May 20, 1873	139, 128
Telegraph, Printing	T. A. Edison	Newark, N. J	May 20, 1873	139, 129
Telegraph, Printing	T. A. Edison	Newark, N. J	July 1, 1873	140, 487
Telegraph, Printing	T. A. Edison	Newark, N. J	July 1, 1873	140, 488
Telegraph, Printing	D. Flanery	New Orleans, La	July 11, 1871	116, 826
Telegraph, Printing	T. M. Foote and C. A. Randall	Brooklyn, E. D., N. Y	May 16, 1871	114, 793
Telegraph, Printing	R. H. Gallaher	New York, N. Y	Apr. 23, 1872	126, 048
Telegraph, Printing	M. Gally	Rochester, N. Y	Mar. 4, 1873	136, 369
Telegraph, Printing	R. Herring	Canonbury, England	Nov. 21, 1871	121, 102
Telegraph, Printing	J. P. Humaston	New York, N. Y	July 2, 1872	128, 627
Telegraph, Printing	A. A. Knudson	Brooklyn, N. Y	June 24, 1873	140, 143
Telegraph, Printing	S. S. Laws	New York, N. Y	Jan. 25, 1870	99, 273
Telegraph, Printing	L. T. Lindsey	Jackson, Tenn	Oct. 14, 1873	143, 702
Telegraph, Printing	L. T. Lindsey and H. H. Curtiss	Jackson, Tenn	Oct. 3, 1871	119, 623
Telegraph, Printing	G. Little	Rutherford Park, N. J	Apr. 9, 1872	125, 583
Telegraph, Printing	G. Little	Rutherford Park, N. J	Apr. 9, 1872	125, 584
Telegraph, Printing	C. T. Moore	White Sulphur Springs, W. Va.	Aug. 31, 1869	94, 329
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	May 11, 1869	89, 887
Telegraph, Printing	G. M. Rhelps	Brooklyn, N. Y	June 22, 1869	91, 662
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	Jan. 3, 1871	110, 675
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	Apr. 30, 1872	126, 329
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	July 22, 1873	141, 076
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	Nov. 4, 1873	144, 285
Telegraph, Printing	G. B. Scott	Brooklyn, N. Y	Apr. 30, 1872	126, 336
Telegraph, Printing	J. E. Smith	New York, N. Y	Oct. 17, 1871	120, 116
Telegraph, Printing	J. E. Smith	New York, N. Y	May 21, 1872	127, 111
Telegraph, Printing	H. Van Hoevenbergh	New York, N. Y	Oct. 17, 1871	120, 133
Telegraph, Printing	H. Van Hoevenbergh	Brooklyn, N. Y	Apr. 30, 1872	126, 353
Telegraph, Printing	H. Van Hoevenbergh	Brooklyn, N. Y	Aug. 27, 1872	130, 831
Telegraph, Printing	M. F. Wessmann	Brooklyn, N. Y	Aug. 6, 1872	130, 259
Telegraph, Printing	M. F. Wessmann	Brooklyn, N. Y	Aug. 6, 1872	130, 260
Telegraph, Printing	C. J. Wiley	New York, N. Y	Mar. 25, 1873	137, 117
Telegraph printing-apparatus	T. M. Foote and C. A. Randall	Brooklyn, E. D., N. Y	July 5, 1870	105, 060
Telegraph printing-apparatus	H. Van Hoevenbergh	New York, N. Y	Jan. 9, 1872	122, 687
Telegraph, Protective electric	J. W. Stover and M. G. Crane	Boston and Newton, Mass	Dec. 19, 1871	121, 971
Telegraph punching-apparatus	E. A. Calahan	Brooklyn, N. Y	Feb. 23, 1869	87, 242
Telegraph, Railway	J. G. Smith	Boston, Mass	Aug. 5, 1873	141, 604
Telegraph, Railway-station	E. O. Pohl	Philadelphia, Pa	Jan. 11, 1859	22, 610
Telegraph receiver and transmitter, Automatic	G. Little	Rutherford Park, N. J	July 23, 1872	129, 840
Telegraph receiving and transmitting instrument.	G. Little	Rutherford Park, N. J	Feb. 6, 1872	123, 491
Telegraph receiving-apparatus	G. Little	Rutherford Park, N. J	Apr. 9, 1872	125, 585
Telegraph receiving-magnet	J. J. Clark	New York, N. Y	Mar. 7, 1865	46, 629
Telegraph receiving-magnet	A. Coleman	Perth Amboy, N. J	Apr. 22, 1856	14, 711
Telegraph receiving-register	M. F. Wessmann	Brooklyn, N. Y	Sept. 16, 1873	142, 825
Telegraph recording-instrument	T. A. Edison	Newark, N. J	Mar. 19, 1872	124, 800
Telegraph recording-instrument	G. Little	Rutherford Park, N. J	Oct. 24, 1871	120, 289
Telegraph recording-instrument, Electric	W. Thomson	Glasgow, Scotland	Nov. 29, 1870	109, 688
Telegraph-register	M. G. Farmer	Salem, Mass	Jan. 29, 1856	14, 157
Telegraph-register	R. Henning	Ottawa, Ill	Apr. 5, 1864	42, 253
Telegraph-register	W. H. Sawyer	New York, N. Y	Dec. 2, 1873	145, 128
Telegraph-register, Self-winding	J. J. Clark	Philadelphia, Pa	Jan. 4, 1853	9, 514
Telegraph-register, Self-winding	J. J. Clark	Philadelphia, Pa	Oct. 18, 1853	10, 128
Telegraph-registers, Mode of making battery-connection with.	J. M. Batchelder and M. G. Farmer.	Cambridge and Salem, Mass.	Feb. 7, 1854	10, 496
Telegraph-registers, Paper-reel for	L. W. Worth	Sonoma, Cal	June 11, 1867	65, 628
Telegraph regulator, Printing	L. T. Lindsey	Jackson, Tenn	Oct. 14, 1873	143, 701
Telegraph-relay	B. B. Toye	Toronto, Canada	Dec. 13, 1870	110, 090
Telegraph relay and sounder	J. B. Stearns	Boston, Mass	Mar. 18, 1873	136, 876
Telegraph relay and sounder, Combined	G. Little	Rutherford Park, N. J	Aug. 27, 1872	130, 812
Telegraph relay-instrument	C. Rathbone	Albany, N. Y	May 30, 1871	115, 356
Telegraph-relay, Self-adjusting	L. H. Reynolds	Goshen, N. Y	Sept. 29, 1868	82, 639
Telegraph-relays, Self-adjusting	J. H. Stombs	Winona, Minn	Oct. 28, 1873	144, 157
Telegraph-repeater	W. G. Brownson	Wellsville, Ohio	June 2, 1868	78, 573
Telegraph-repeater	J. H. Bunnell	New York, N. Y	Jan. 28, 1868	73, 774
Telegraph-repeater	J. J. Clark	Philadelphia, Pa	July 24, 1860	29, 247
Telegraph-repeater	M. G. Farmer and A. F. Woodman.	Salem, Mass., and Portland, Me.	Mar. 17, 1857	16, 828
Telegraph-repeater	E. Gray	Chicago, Ill	May 16, 1871	114, 938
Telegraph-repeater	W. Hamilton	Albany, N. Y	Sept. 12, 1865	49, 875
Telegraph-repeater	L. T. Lindsey	Jackson, Tenn	Feb. 25, 1873	136, 251
Telegraph-repeater	C. H. Rudd	Sandusky, Ohio	June 12, 1866	55, 541
Telegraph-repeater	J. E. Smith	Troy, N. Y	Aug. 18, 1857	18, 022
Telegraph-repeater, Automatic	C. H. Haskins	Chicago, Ill	May 30, 1871	115, 314
Telegraph repeater, Duplex	J. B. Stearns	Boston, Mass	Jan. 14, 1873	134, 776
Telegraph repeater, Electro-magnetic	C. S. Bulkley	Macon, Ga	Nov. 12, 1850	7, 769
Telegraph repeating-instrument	W. G. Brownson and D. C. Shull.	Wellsville, Ohio	July 23, 1867	66, 945
Telegraph, Self-acting electric	M. G. Farmer	Salem, Mass	July 22, 1856	15, 373
Telegraph, Semaphoric	H. J. Rogers	Washington, D. C	May 17, 1864	42, 794
Telegraph-signal	R. A. Jones and J. Hedges	Aylesbury, England	Oct. 23, 1866	59, 148
Telegraph, Signal	C. Latimer	Washington, D. C	Aug. 24, 1852	9, 217
Telegraph, Signal	H. I. Rogers	Baltimore, Md	Sept. 27, 1844	3, 765
Telegraph-signal	P. H. Stanislas	Paris, France	June 23, 1863	39, 016
Telegraph-signal	W. H. Ward	Auburn, N. Y	Dec. 5, 1871	121, 561
Telegraph, Signal-apparatus for district	E. A. Calahan	Brooklyn, N. Y	July 16, 1872	129, 526
Telegraph signal-box, Alarm	J. Abbott	Canton, Ohio	May 17, 1870	103, 117
Telegraph signal-box, Fire-alarm	S. Chester	New York, N. Y	Feb. 21, 1871	112, 017
Telegraph signal-box, Fire-alarm	S. D. Cushman	New Lisbon, Ohio	May 17, 1870	103, 150
Telegraph signal-box, Fire-alarm	S. D. Cushman	New Lisbon, Ohio	Sept. 20, 1870	107, 460
Telegraph-signal-box mechanism, Fire-alarm	M. G. Crane	Newton, Mass	Dec. 28, 1869	98, 352

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Invention.	Inventor.	Residence.	Date.	No.
Telegraph signal-code, Electric	F. J. Bolton	London, England	Oct. 2, 1866	58, 562
Telegraph-signal key	F. B. Porter	Detroit, Mich	June 4, 1867	65, 429
Telegraph-signals, Machine for punching paper fillets for transmitting.	J. P. Humaston	New Haven, Conn	Sept. 8, 1857	18, 149
Telegraph-sounder	W. E. Davis	Jersey City, N. J	July 6, 1869	92, 224
Telegraph-sounder	M. W. Goodyear	Chicago, Ill	Apr. 16, 1872	125, 806
Telegraph-sounder	M. W. Goodyear	New York, N. Y	June 24, 1873	140, 266
Telegraph-sounder	G. B. Hicks and G. W. Shawk	Cleveland, Ohio	July 30, 1872	130, 048
Telegraph-sounder	H. Splitdorf	New York, N. Y	Nov. 16, 1869	96, 992
Telegraph-sounder	A. Van Hoevenbergh	Brooklyn, N. Y	Aug. 19, 1873	141, [illegible]66
Telegraph-sounder	E. Wilson	New Haven, Conn	Aug. 7, 1866	57, 032
Telegraph sounder and relay, Combined	C. H. Haskins	Milwaukee, Wis	Aug. 13, 1872	130, 426
Telegraph sounder, relay, &c., Electric	H. S. L. Bryan	Cedar Rapids, Iowa	Apr. 25, 1871	113, 976
Telegraph, Sounding	E. Wilson	New Haven, Conn	Feb. 6, 1866	52, 481
Telegraph-station circuit, Mechanism for opening and closing.	E. Gray	Chicago, Ill	Jan. 17, 1871	110, 970
Telegraph-stations, Connecting	S. Chester	New York, N. Y	Apr. 9, 1867	63, 613
Telegraph switch	A. H. Freeman	Chicago, Ill	Mar. 21, 1871	112, 798
Telegraph switch	J. Lewis	German Flats, N. Y	Oct. 20, 1863	40, 346
Telegraph switch-board	W. G. Brownson	Wellsville, Ohio	July 23, 1867	66, 943
Telegraph switch-board	C. S. Jones	Albany, N. Y	May 18, 1869	90, 270
Telegraph switch-board	W. D. Sargent	Philadelphia, Pa	Sept. 16, 1873	142, 817
Telegraph switch, Electrical	T. A. Edison	New York, N. Y	Nov. 9, 1869	96, 681
Telegraph switch, Printing	P. Kenny	New York, N. Y	May 14, 1872	126, 714
Telegraph, System of fire-alarm and police	S. D. Cushman	New Lisbon, Ohio	July 19, 1870	105, 552
Telegraph, Tariff-indicator for	E. D. Sweet	Chicago, Ill	Jan. 8, 1867	61, 116
Telegraph-transmitter	D. Hermann	New York, N. Y	Dec. 16, 1873	145, 567
Telegraph, Transmitter and circuit for printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 343
Telegraph transmitter and receiver, Automatic	G. Little	Rutherford Park, N. J	June 25, 1872	128, 405
Telegraph transmitter and receiver, Automatic	G. Little	Rutherford Park, N. J	Sept. 2, 1873	142, 484
Telegraph transmitter, Automatic	G. Little	Rutherford Park, N. J	Oct. 24, 1871	120, 288
Telegraph transmitter, Automatic	G. Little	Rutherford Park, N. J	July 23, 1872	129, 839
Telegraph transmitter, Printing	L. T. Lindsey	Jackson, Tenn	Feb. 25, 1873	136, 250
Telegraph-transmitting and paper-feeding apparatus, Clutch for.	G. C. Wessmann	Brooklyn, N. Y	May 7, 1872	126, 505
Telegraph transmitting-instrument	T. A. Edison	Newark, N. J	May 9, 1871	114, 656
Telegraph transmitting-key	M. F. Wessmann	Brooklyn, N. Y	Sept. 16, 1873	142, 826
Telegraph, Transmitting plans of battle-fields by	T. W. Knox	New York, N. Y	Aug. 27, 1867	68, 088
Telegraph type-wheel, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126, 528
Telegraph type-wheel, Printing	T. A. Edison	Newark, N. J	May 7, 1872	126, 529
Telegraph type-wheel, Printing	R. H. Gallaher	New York, N. Y	June 20, 1871	116, 175
Telegraph unison-stop, Printing	T. A. Edison	Newark, N. J	Sept. 17, 1872	131, 344
Telegraph unison-stop, Printing	M. F. Wessmann	Brooklyn, N. Y	Apr. 23, 1872	125, 920
Telegraph unison-stop, Printing	C. J. Wiley	New York, N. Y	Nov. 18, 1873	144, 812
Telegraph-wire	A. Cary	New York, N. Y	June 15. 1869	91, 416
Telegraph-wire	E. D. Rosencrantz	New York, N. Y	Mar. 13, 1860	27, 475
Telegraph-wire, Alloy	C. J. A. Dick	Pittsburgh, Pa	Aug. 20, 1872	130, 702
Telegraph-wire, Apparatus for coating	J. B. Hyde	New York, N. Y	Aug. 22, 1854	11, 552
Telegraph-wire, Apparatus for discharging atmospheric electricity from.	J. N. Gamewell	Camden, S. C	Aug. 7, 1855	13, 389
Telegraph-wire, Composition for coating	J. B. Hyde	New York, N. Y	Mar. 30, 1858	19, 778
Telegraph-wire, &c., Composition for coating	Thomas, Earl of Dondonald	London, England	June 13, 1854	11, 0[illegible]6
Telegraph-wire, Compound for coating and insulating.	R. S. Tucker	Brooklyn, N. Y	Feb. 19, 1867	62, 2[illegible]6
Telegraph-wire connector	G. B. Prescott	New York, N. Y	Jan. 24, 1871	111, 246
Telegraph-wire coupling	A. Cary	New York, N. Y	June 20, 1871	116, 021
Telegraph-wire inclosed in metallic tubing, Insulated.	S. C. Bishop	New York, N. Y	Sept. 8, 1857	18, 131
Telegraph-wire, Insulating	J. M. Batchelder	Cambridge, Mass	June 13, 1854	11, 058
Telegraph-wire, Insulating	A. B. Ely	Boston, Mass	Jan. 9, 1866	51, 935
Telegraph-wire, Insulating	J. Olmsted	Providence, R. I	July 23, 1872	129, 858
Telegraph-wire, Insulating-apparatus for	S. C. Bishop and W. W. Marks	New York, N. Y	July 14, 1868	79, 806
Telegraph-wire, Insulating composition for	S. C. Bishop	New York, N. Y	Mar. 7, 1865	46, 750
Telegraph-wire, Insulating-compound for	J. M. Batchelder	Cambridge, Mass	Apr. 10, 1860	27, 770
Telegraph-wire, &c., Insulating compound for	M. G. Farmer	Salem, Mass	Mar. 5, 1872	124, 201
Telegraph-wire, Machine for covering	J. A. Bailey and J. J. Speed	Brooklyn, N. Y., and Gorham, Me.	Mar. 22, 1864	42, 040.
Telegraph-wire, Machine for making compound	A. Cary	New York, N. Y	June 15, 1869	91, 417
Telegraph-wire, Method of sending and receiving messages simultaneously over the same.	M. G. Farmer	Salem, Mass	Aug. 31, 1858	21, 529
Telegraph-wire, Mode of protecting insulated	D. Spill	Hackney, England	June 15, 1869	91, 378
Telegraph-wire, Mode of protecting insulated	E. O. W. Whitehouse	Stoke Newington, England	June 15, 1869	91, 393
Telegraph-wire, Painting	B. H. Green	Princeton, N. J	Jan. 9, 1849	6, 012
Telegraph-wires, Device for stretching	G. M. Thompson	Boston, Mass	Oct. 13, 1868	83, 109
Telegraph-wires, Insulating support for	L. R. Livingston, J. J. Roggens, and C. Adams.	Pittsburgh, Pa	Oct. 31, 1848	5, 889
Telegraph-wires, Nipper for fastening	C. C. Wolcott	United States Army	Aug. 20, 1872	130, 778
Telegraph-wires on railways, Laying	D. W. Strong	Dutch Flat, Cal	Oct. 15, 1867	69, 947
Telegraph-wires, Protection for underground	E. D. Pritchard	New York, N. Y	Oct. 28, 1873	144, 135
Telegraph-wires, Supporter for	L. R. Livingston, J. J. Roggen, C. Adams, A. Kendall, and A. Vail.	Pittsburgh, Pa., and Washington, D. C.	Oct. 9, 1849	6, 779
Telegraph-wires, Suspending	H. B. Goodyear	New Haven, Conn	Nov. 12, 1861	33, 700
Telegraph-wires, Suspending	E. Pratt and R. Graverend	New York, N. Y	Feb. 27, 1849	6, 149
Telegraph-wires to insulators, Fastening	D. Doren	New York, N. Y	Apr. 23, 1872	126, 038
Telegraphic apparatus	L. Bradley	New York, N. Y	Aug. 28, 1860	29, 761
Telegraphic apparatus	C. H. Burd	Roxbury, Mass	June 11, 1861	32, 510
Telegraphic apparatus	G. Caselli	Florence, Italy	Feb. 3, 1863	37, 563
Telegraphic apparatus	H. Cook	Paris, France	Jan. 18, 1870	98, 927
Telegraphic apparatus	G. B. Hicks	Cleveland, Ohio	Mar. 4, 1862	34, 574
Telegraphic apparatus	G. M. Phelps	Williamsburgh, N. Y	May 28, 1861	32, 452
Telegraphic apparatus, Automatic	G. Little	Rutherford Park, N. J	Nov. 19, 1872	133, 235
Telegraphic apparatus, Circuit-closing roller for	G. Little	Rutherford Park, N. J	June 13, 1871	115, 968
Telegraphic indicator	E. A. Calahan	Brooklyn, N. Y	Mar. 31, 1868	76, 157
Telegraphic machine	M. G. Farmer	Salem, Mass	Nov. 15, 1859	26, 097
Telegraphic machine	G. M. Phelps	Troy, N. Y	Nov. 1, 1859	26, 003
Telegraphic machine	J. Weiss	Bethlehem, Pa	May 15, 1860	28, 334
Telegraphic machine, Self-adjusting and embossing	E. F. Barnes	Brooklyn, N. Y	July 27, 1858	20, 982

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Telegraphic machines, Mode of operating the mechanism of printing.	T. and J. Reeve and S. M. Tyler	Brooklyn, N. Y	July 27, 1858	21, 024
Telegraphic purposes, Apparatus for perforating paper for.	G. Little	Rutherford Park, N. J	June 13, 1871	115, 969
Telegraphic purposes, Arrangement of circuit for	G. Little	Rutherford Park, N. J	June 13, 1871	115, 970
Telegraphic purposes, Machine for punching paper for.	A. Bain	New York, N. Y	July 19, 1864	43, 618
Telegraphic purposes, Rheostat for	G. Little	Rutherford Park, N. J	Sept. 10, 1872	131, 171
Telegraphing	M. Loomis	Washington, D. C	July 30, 1872	129, 971
Telegraphing	N. Parks	Rome, N. Y	Aug. 20, 1861	33, 098
Telegraphing	C. F. Varley	London, England	June 2, 1868	78, 495
Telegraphing, Acoustic	L. H. Everitt	New Orleans, La	Mar. 24, 1868	75, 886
Telegraphing apparatus, Electric	F. O. J. Smith	Westbrook, Me	Dec. 27, 1859	26, 625
Telegraphing, Apparatus for instruction in	E. A. Hill	Chicago, Ill	Jan. 29, 1867	61, 540
Telegraphing, Arrangement of circuit and apparatus for duplex.	J. B. Stearns	Boston, Mass	Nov. 12, 1872	132, 930
Telegraphing by colors	A. F. Ward	Philadelphia, Pa	Jan. 7, 1862	34, 079
Telegraphing by constant circuit	G. Little	Rutherford Park, N. J	Apr. 9, 1872	125, 587
Telegraphing by light	L. O. Calvin and G. H. Gardner	Philadelphia, Pa	Mar. 11, 1862	34, 623
Telegraphing, &c., Collecting electricity for	W. H. Ward	Auburn, N. Y	Apr. 30, 1872	126, 356
Telegraphing, Electric	S. F. Van Choate	Yreka, Cal	Mar. 13, 1860	27, 506
Telegraphing, Electro-magnetic	D. E. Hughes	New York, N. Y	Jan. 4, 1859	22, 531
Telegraphing, Electro-magnetic	A. E. Parks	Brooklyn, N. Y	Apr. 2, 1861	31, 902
Telegraphing from railway-cars while moving, Method of.	D. Chesebro	Syracuse, N. Y	July 12, 1859	24, 721
Telegraphing-instrument, Apparatus for teaching students the use of.	D. W. Putt	Wellsville, Ohio	May 31, 1870	103, 654
Telegraphing-machine	D. E. Hughes	New York, N. Y	Jan. 25, 1859	22, 770
Telegraphing, Mode of	S. K. Zook	New York, N. Y	Nov. 15, 1859	26, 140
Telegraphing, Mode of generating and applying electric currents in.	S. Hoga, W. P. Piggott, and S. Beardmore.	Middlesex County, England	Aug. 9, 1859	25, 016
Telegraphing, System of	F. J. Grace	Coytesville, N. J	Apr. 26, 1870	102, 252
Telegraphy	W. C. Barney	Washington, D. C	Feb. 6, 1872	123, 441
Telegraphy, Circuit and apparatus for	J. B. Stearns	Boston, Mass	Nov. 12, 1872	132, 931
Telegraphy, Electro-magnet for	W. E. Davis	Jersey City, N. J	Dec. 17, 1872	133, 968
Telescope	A. Clark	Cambridge, Mass	Nov. 11, 1851	8, 509
Telescope	W. H. Baker	Marathon, N. Y	Dec. 8, 1863	40, 808
Telescope	W. Kneller and F. Seelhorst	Philadelphia, Pa	Oct. 1, 1867	69, 450
Telescope for measuring distances	T. Atteneder	Philadelphia, Pa	Mar. 4, 1862	34, 608
Telescope, Submarine	W. Day	Brooklyn, N. Y	Apr. 16, 1850	7, 285
Telescope, Submarine	S. P. Mather	Brooklyn, N. Y	Apr. 16, 1845	3, 995
Telescope, Submarine	S. P. Mather	New York, N. Y	July 5, 1864	43, 465
Tellurian	S. P. Campbell	Buffalo, N. Y	July 16, 1867	66, 791
Tellurian	G. S. McKenzie	New York, N. Y	Jan. 23, 1872	122, 954
Tellurian	J. Troll	Belleville, Ill	Aug. 1 1871	117, 579
Tellurium	J. Davis	Allegheny City, Pa	Oct. 27, 1868	83, 474
Tellurium	M. Long	New York, N. Y	Mar. 23, 1869	88, 187
Temperature-alarm	R. Boyle	Detroit, Mich	Sept. 8, 1863	39, 794
Temperature-alarm, Electro-magnetic	J. B. N. Furnier and C. A. Lemaire.	Paris, France	May 4, 1869	89, 757
Temperature-alarm, Electro-magnetic	J. H. Guest	Brooklyn, N. Y	July 14, 1868	79, 972
Temperature, Fusible gage for	B. W. Franklin	New York, N. Y	Jan. 21, 1862	34, 203
Temperature in packing and preserving houses, hospitals, and other buildings, Means of securing uniform.	D. E. Somes	Washington, D. C	Sept. 13, 1864	44, 229
Temperature-regulating instrument	D. B. Van Tuyl	Dayton, Ohio	Oct. 12, 1843	5, 300
Temperature-signal, Electrical	W. Gitlett	Ypsilanti, Mich	Oct. 15, 1872	132, 278
Tempering and molding plastic material, Machine for.	S. C. Salisbury	New York, N. Y	Apr. 19, 1859	23, 710
Tempering and refining steel	A. H. Siegfried	South Bend, Ind	July 16, 1872	129, 432
Tempering-apparatus	H. H. Ray	Arena, Wis	Sept. 26, 1871	119, 406
Tempering cast-steel, Compound for	G. Rich	Smithville, Mo	Apr. 28, 1868	77, 323
Tempering cast-steel, Process for	A. B. Sprout	Hughesville, Pa	May 1, 1866	54, 429
Tempering chisels, Apparatus for	W. M. Everitt	Malden, N. Y	Aug. 7, 1866	56, 916
Tempering clay, Machine for	J. Mathews	Baltimore, Md	July 6, 1809	....
Tempering composition, Steel	F. G. Harris	Willsborough, N. Y	Nov. 5, 1867	70, 559
Tempering-furnace	R. B. Fellows	Shelburne Falls, Mass	Apr. 8, 1856	14, 601
Tempering-furnace	W. H. Passmore	North Wayne, Me	Oct. 7, 1846	4, 797
Tempering furnace, Steel	P. G. Gardiner	New York, N. Y	Oct. 19, 1858	21, 828
Tempering furnace, Steel	J. Thomas	New York, N. Y	Nov. 9, 1858	22, 041
Tempering-knife or flesher	J. Glenn	Champaign County, Ohio	Apr. 24, 1834	....
Tempering metals, Process of	E. H. Grant	Washington, D. C	May 18, 1869	90, 093
Tempering-oven	A. Cary	New York, N. Y	June 27, 1871	116, 267
Tempering-sand	J. B. Broadmeadow	Springfield, Mass	Mar. 21, 1871	112, 896
Tempering sickle-sections, plane-irons, &c., Machine for.	S. F. Reynolds	Auburn, N. Y	Sept. 20, 1870	107, 541
Tempering springs, Mode of	A. Cary	New York, N. Y	June 27, 1871	116, 266
Tempering steel	G. B. Garman	Washington Township, Ind.	Jan. 31, 1871	111, 446
Tempering steel	J. Jenkins	Philadelphia, Pa	May 3, 1870	102, 550
Tempering steel	A. R. and N. B. Reynolds	Auburn, N. Y	Nov. 5, 1867	70, 471
Tempering steel	E. K. Root	Collinsville, Conn	Mar. 10, 1843	2, 995
Tempering steel after it has been welded to iron for cutting tools.	A. R. Reynolds	Auburn, N. Y	Mar. 19, 1867	63, 096
Tempering steel, Apparatus for	C. B. Cottrell	Westerly, R. I	May 22, 1866	55, 004
Tempering steel, Apparatus for	C. B. Cottrell	Westerly, R. I	Nov. 23, 1869	97, 054
Tempering steel, Compound for	W. G. Esser	Milwaukee, Wis	June 18, 1867	65, 892
Tempering steel, Method of	G. Davis	Elizabethport, N. J	Jan. 12, 1869	85, 797
Tempering steel, Mode of	C. Manning	Chillicothe, Ohio	Aug. 21, 1866	57, 349
Tempering steel plates	H. A. Seymour	Bristol, Conn	Apr. 28, 1857	17, 172
Tempering steel plates, Apparatus for	C. Richardson	Newark, N. J	June 18, 1867	65, 946
Tempering steel plates, &c., Apparatus for	H. Urban	Cincinnati, Ohio	Aug. 12, 1873	141, 837
Tempering steel, &c., Pot for lead-bath for	C. V. Wilson	Newark, N. J	June 18, 1867	65, 850
Tempering steel, Process of	W. Hazen	Milwaukee, Wis	Sept. 20, 1864	44, 310
Tempering steel, Process of	A. B. Sprout	Hughesville, Pa	Aug. 16, 1864	43, 871
Temple	C. Hoffman and W. Graichen	Clinton, Mass	Apr. 9, 1861	31, 974
Temple	B. and S. B. Sevalley	Hartford and Manchester, Conn.	Aug. 6, 1861	33, 000

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Invention.	Inventor.	Residence.	Date.	No.
Temple	J. C. Tilton	Sanbornton Bridge, N. H	Dec. 11, 1860	30, 896
Temple	J. H. Woodward	Nashua, N. H	Apr. 24, 1860	28, 043
Temple, Spring	A. Jenks and J. Clewell	Holmesburgh, Pa	Mar. 19, 1827	....
Temple-teeth, Tool for setting	W. W. Dutcher	Milford, Mass	Nov. 27, 1866	59, 984
Templet for paneling-machine	N. Jenkins	New York, N. Y	July 12, 1870	105, 216
Templet, Adjustable	W. S. Nelson	Saint Louis, Mo	Oct. 18, 1864	44, 738
Tender and car frame, Iron	J. W. Goff	Providence, R. I	Apr. 1, 1873	137, 426
Tender-frame, Iron	B. W. Healey	Providence, R. I	June 7, 1870	103, 878
Tenon-bit	E. K. Wisell	Warren, Ohio	Aug. 6, 1850	7, 556
Tenon-compressing machine, Wood	B. D. Sanders	Wellsburgh, W. Va	Mar. 29, 1870	101, 315
Tenon-cutter to certain fixed sizes, Method of adjusting round.	M. Weatherington	Springfield, Ohio	July 14, 1857	17, 816
Tenon-cutting machine	W. H. Harn	Chambersburgh, Pa	Oct. 26, 1842	2, 832
Tenon-cutting machine	J. Hastings, J. Ramsay, and H. G. Chamberlain.	Saint Johnsbury, Vt	Feb. 20, 1855	12, 416
Tenon-cutting machine	J. R. Perry	Port Clinton, Pa	Nov. 15, 1859	26, 122
Tenon-cutting machine	C. P. S. Wardwell	Lake Village, N. H	Aug. 29, 1854	11, 625
Tenon-cutting machine, Device for round	T. R. and G. Bailey	Stockport, N. Y	July 25, 1854	11, 349
Tenon-cutting machine, Double	C. P. S. Wardwell	Lake Village, N. H	Oct. 30, 1855	13, 735
Tenon-cutting machine, Round	M. Gregg	Philadelphia, Pa	Dec. 10, 1840	1, 895
Tenon-cutting tool, Round	L. A. Dole	Salem, Ohio	Jan. 10, 1860	26, 822
Tenon-cutting tool, Round	C. O'Bryan	Salem, Ohio	Oct. 11, 1859	25, 791
Tenon-machine	W. Gilmore	Hudson, N. J	Apr. 18, 1871	113, 873
Tenon-machine	W. Pruett	Kokomo, Ind	July 17, 1866	56, 445
Tenon machine, Round	I. L. Beckwith	Providence, R. I	June 16, 1863	38, 877
Tenon-tool	D. H. Stephens	Riverton, Conn	Nov. 6, 1866	59, 472
Tenons by revolving cylinders, Cutting	J. Fay	Hollis, N. H	Aug. 29, 1831	....
Tenons by two circular saws, Cutting	W. H. Harrison	Philadelphia, Pa	July 14, 1857	17, 823
Tenons in wood, Machine for cutting	E. Basford and E. Johnson	Livermore, Mass	Apr. 28, 1810	....
Tenons, Machine for forming oval	C. W. Cotton	Portsmouth, Ohio	May 11, 1869	90, 041
Tenons, Mode of cutting	C. B. Fitch	Galena, Ill	June 14, 1853	9, 778
Tenons, Sawing	C. Thompson	Poughkeepsie, N. Y	Jan. 30, 1834	....
Tenoning, Adjustable bed and gage to regulate	D. Hodges	Suffolk, Va	May 5, 1857	17, 219
Tenoning and mortising machine	E. Lyman	Northfield, Mass	May 25, 1844	3, 602
Tenoning and boring machine	G. Witter	Sherrill's Mount, Iowa	July 8, 1873	140, 754
Tenoning-chisel	A. J. Cochran	Indianapolis, Ind	Apr. 28, 1868	77, 257
Tenoning-cogs, Machine for	S. W. Long	Owensborough, Ky	Nov. 25, 1873	144, 992
Tenon-cutter heads	J. S. Graham	Rochester, N. Y	Apr. 30, 1867	64, 308
Tenoning-frame	A. Greenwood	Toulon, Ill	Aug. 14, 1860	29, 589
Tenoning-machine	J. Bain and S. C. Brown	Richmond, Ind	Apr. 16, 1861	32, 041
Tenoning-machine	J. Bebel and J. Nelson	Rockford, Ill	Feb. 2, 1869	86, 406
Tenoning-machine	J. Biggs	New York, N. Y	Nov. 12, 1845	4, 268
Tenoning-machine	M. S. Bourland	Buena Vista, Tex	Apr. 18, 1871	113, 731
Tenoning-machine	M. Buck	Lebanon, N. H	Feb. 25, 1873	136, 211
Tenoning-machine	V. Chase	Saint Mary's Park, La	Aug. 12, 1862	36, 138
Tenoning-machine	W. F. Cobb	Whitestown, Ind	May 19, 1868	78, 060
Tenoning-machine	J. J. Curnan	Lyons, Iowa	July 19, 1870	105, 432
Tenoning-machine	D. Evers	Van Wert, Ohio	Nov. 20, 1866	59, 826
Tenoning-machine	W. Gilmore	Hudson City, N. J	Nov. 24, 1868	84, 350
Tenoning-machine	L. Gould	Norwich, Conn	Mar. 7, 1871	112, 444
Tenoning-machine	E. P. Halsted	Worcester, Mass	June 6, 1871	115, 603
Tenoning-machine	L. S. Hicks	Peoria County, Ill	June 29, 1869	91, 846
Tenoning-machine	T. B. Jones	Paterson, N. J	Apr. 1, 1862	34, 836
Tenoning-machine	L. Mason	Turin, N. Y	May 15, 1866	54, 749
Tenoning-machine	J. McCreary	Delaware, Ohio	Sept. 14, 1858	21, 512
Tenoning-machine	W. McKnight	Clearfield, Pa	Sept. 15, 1868	82, 143
Tenoning-machine	A. C. McQuaid	Wenona, Ill	June 20, 1871	116, 075
Tenoning-machine	H. Mellish	Walpole, N. H	Nov. 19, 1833	....
Tenoning-machine	G. W. Passel	Cincinnati, Ohio	June 20, 1871	116, 089
Tenoning-machine	J. Potter	Ellicottsville, N. Y	Aug. 19, 1856	15, 572
Tenoning-machine	P. Putnam and J. E. Crane	Lowell, Mass	Sept. 15, 1857	18, 212
Tenoning-machine	J. Richards	Philadelphia, Pa	Nov. 11, 1873	144, 411
Tenoning-machine	J. Richards and L. H. Berry	Philadelphia, Pa	Oct. 7, 1873	143, 532
Tenoning-machine	S. M. Richardson	Worcester, Mass	Apr. 20, 1869	89, 245
Tenoning-machine	E. W. Roff	Newark, N. J	Dec. 10, 1872	133, 724
Tenoning-machine	W. M. Sack	Oakland, Cal	Oct. 21, 1873	143, 848
Tenoning-machine	C. Sharps and G. E. Adriance	Hector, N. Y	June 12, 1855	13, 049
Tenoning-machine	E. M. Shaw	Baltimore, Md	Aug. 6, 1850	7, 549
Tenoning-machine	H. B. Smith	Lowell, Mass	Jan. 23, 1866	52, 219
Tenoning-machine	W. Steele	Wheeling, Va	Feb. 20, 1855	12, 449
Tenoning-machine	D. Whitlock	Newark, N. J	Aug. 13, 1872	130, 459
Tenoning-machine, Hand	M. Galvin	Scranton, Pa	Mar. 18, 1862	34, 680
Tenoning-machine, Hand	M. Galvin	Wilkesbarre, Pa	July 15, 1862	35, 873
Tenoning machine, Timber	H. Hochholzer and F. Denver	Virginia City, Nev	Nov. 13, 1866	59, 605
Tenoning-tool	O. Schevenell	Marion, Ala	Dec. 11, 1860	30, 889
Tenoning-tool	A. Tippett	Washington, D. C	Nov. 14, 1856	16, 041
Tenoning-tool, Adjustable	T. J. Knapp	Philadelphia, Pa	May 15, 1855	12, 861
Ten-pin alley	C. Robinson	Boston, Mass	Feb. 2, 1869	86, 593
Ten-pin alley, Parlor	C. H. Fowler	West Roxbury, Mass	June 11, 1867	65, 739
Ten-pin alley, Parlor	E. W. Keyes	Boston, Mass	June 18, 1867	65, 816
Ten-pins and returning balls, Setting up	G. W. Eichell	New York, N. Y	Aug. 9, 1853	9, 916
Ten-pins, Apparatus for setting up	T. J. Sloan	New York, N. Y	Apr. 8, 1851	8, 027
Ten-pins, Method of setting up	T. E. Shull	Lewistown, Pa	Dec. 23, 1851	8, 614
Tent	T. Boyd	Boston, Mass	Aug. 27, 1861	33, 130
Tent	F. A. Chapelle	Paris, France	July 22, 1862	35, 922
Tent	N. Cross	New York, N. Y	Sept. 1, 1863	39, 721
Tent	S. M. Davis	Lawrence, Mass	July 23, 1861	32, 861
Tent	D. Fitzgerald	New York, N. Y	Mar. 4, 1862	34, 569
Tent	A. L. Haskell	Boston, Mass	Sept. 24, 1861	33, 346
Tent	B. B. Hawse	Morrisville, Vt	Mar. 18, 1862	34, 717
Tent	S. Heiter	Philadelphia, Pa	May 13, 1862	35, 235
Tent	R. B. Pullan	Cumminsville, Ohio	Dec. 17, 1861	33, 959
Tent	W. Rankin	New York, N. Y	Dec. 24, 1861	34, 011
Tent	J. B. Smith	Chicago, Ill	Sept. 23, 1873	143, 037
Tent	P. E. L. W. Stockman	London, England	July 13, 1869	92, 487
Tent	G. O. Townsend	Boston, Mass	Mar. 4, 1862	34, 603
Tent	E. M. Turner	Fort Worth, Tex	Apr. 8, 1873	137, 579
Tent	W. W. Wells	Chicago, Ill	Oct. 29, 1872	132, 610

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Invention.	Inventor.	Residence.	Date.	No.
Tent	E. C. Williams	Jersey City, N. J	July 2, 1861	32, 715
Tent and cot combined	W. H. Penrose	Fort Lyon, Colo	Oct. 31, 1871	120, 530
Tent and umbrella	J. and G. Ritchie	London, England	Nov. 1, 1870	108, 832
Tent, Conical	H. H. Sibley	United States Army	Apr. 22, 1856	14, 740
Tent-fixtures	J. H. Landell	Newark, N. J	Jan. 4, 1861	32, 481
Tent-frame	W. H. Clark	Cincinnati, Ohio	Aug. 29, 1865	49, 605
Tent-frame	J. G. Dodge	Saint Louis, Mo	Feb. 28, 1860	27, 277
Tent-frame	J. E. Dow	Washington, D. C	June 5, 1849	6, 496
Tent-frame	W. W. Whitcomb	Boston, Mass	May 13, 1873	138, 774
Tent frame, Camp	B. Hinkley	Troy, N. Y	June 9, 1857	17, 504
Tent-frame, Folding	F. A. Guthrie	Addison, Ohio	July 2, 1872	128, 542
Tent-frame, Folding	R. B. Pullan	Cumminsville, Ohio	Sept. 1, 1863	39, 777
Tent, Hammock	G. W. Morgan, C. H. Tyler, and J. McClave.	Mount Vernon, Ohio, and New York, N. Y.	Apr. 22, 1862	35, 032
Tent, Hammock	T. A. Timmins and A. F. W. Edwards.	Philadelphia, Pa	Apr. 8, 1862	34, 931
Tent heater and ventilator	R. Kingsland	New York, N. Y	Dec. 2, 1862	37, 042
Tent, Portable	J. H. Dakin	New Orleans, La	May 30, 1842	2, 655
Tent, Portable wooden	R. K. Hawley and W. W. Maughlin.	Baltimore, Md	Nov. 26, 1861	33, 781
Tent, Suspension bath	H. N. Taft	Sag Harbor, N. Y	Apr. 5, 1870	101, 678
Tent-ventilator	J. W. Ellis	Augusta, Me	Dec. 17, 1861	33, 934
Tent-ventilator and pipe-hole plate	R. and W. Brien	Jersey City, N. J	Oct. 28, 1873	144, 054
Tent-ventilating cap	T. Boyd	Boston, Mass	Aug. 20, 1861	33, 068
Tent-ventilating cap	J. Moakley	New York, N. Y	Aug. 4, 1863	39, 416
Tent-ventilating opening	R. B. Pullan	Cincinnati, Ohio	May 31, 1864	42, 996
Tent-ventilating top-piece	J. Higgins	United States Army	May 19, 1863	38, 583
Tent-ventilating window	H. Warner and B. F. Palmer	Boston, Mass	July 22, 1862	35, 963
Tents, Supporting	G. B. Adams	Cambridge, Mass	Dec. 10, 1861	33, 923
Tenter-bar, Cloth	F. Willig	Joliet, Ill	Nov. 10, 1868	83, 894
Tenter-bar for stretching cloth	J. Force and G. W. Renwick	Elgin, Ill	Oct. 15, 1867	69, 907
Terra-cotta pipes, Forming sockets on	L. Scharff	Conshohocken, Pa	Nov. 15, 1864	45, 084
Terrasphere	E. Root	Indianapolis, Ind	Dec. 18, 1866	60, 642
Terrasphere	E. Root	Terre Haute, Ind	Oct. 15, 1867	69, 842
Terret	W. H. H. Jones and E. S. Harris	Morrison, Ill	Aug. 4, 1868	80, 745
Terret	G. W. Soule	Buffalo, N. Y	Feb. 6, 1872	123, 368
Terret and martingale ring	J. Geraghty	Jersey City, N. J	Aug. 5, 1873	141, 502
Terret-finishing apparatus	C. Hingher	New Brunswick, N. J	Oct. 11, 1870	108, 139
Terret-lining	S. Siebold	Syracuse, N. Y	Mar. 29, 1870	101, 387
Testicle-supporter	S. E. G. Rawson	Saratoga Springs, N. Y	Aug. 4, 1863	39, 452
Testicles, Bandage for the	G. Miliano	New York, N. Y	Dec. 1, 1862	40, 765
Testing instrument, Oil	P. H. Vander Weide	New York, N. Y	June 28, 1870	104, 798
Testing instrument, Petroleum	A. Millochau	Jersey City, N. J	Sept. 5, 1865	49, 777
Testing-plug	J. Allin	Philadelphia, Pa	Nov. 25, 1873	144, 881
Tether	H. L. Tolsom	Upper Gilmanton, N. H	July 3, 1866	56, 028
Tether, Animal	M. and S. C. Leonard	Oberlin, Ohio	Feb. 18, 1868	74, 553
Tether, Animal	I. Lincoln and A. Pratt	Cohasset, Mass	Mar. 12, 1867	62, 761
Tether, Animal	D. W. Rawson	Croydon, N. H	Nov. 12, 1867	70, 899
Tether, Animal	W. S. Sargent and F. Flanders	Franklin, N. H	Sept. 17, 1867	68, 906
Tether, Animal	J. Scribner	Franklin, N. H	Mar. 31, 1868	76, 254
Tether, Animal	J. W. Upson	Tallmage, Ohio	June 21, 1870	104, 667
Tether, Portable animal	A. Ralston	West Middletown, Pa	Feb. 11, 1868	74, 475
Tethering animals	M. Johnson	Colebrook, N. H	Dec. 1, 1863	40, 755
Tethering animals, Apparatus for	D. Kidder	Franklin, N. H	Jan. 22, 1867	61, 435
Tethering animals, Device for	W. Johnson	Fisherville, N. H	Aug. 29, 1865	49, 681
Tethering animals, Device for	W. Johnson	Fisherville, N. H	July 23, 1867	67, 057
Tethering animals, Device for	J. P. Thorp	Southington, Conn	July 2, 1867	66, 417
Tethering animals, Swivel-pin for	W. Lyon	Camp Halleck, Nev	Apr. 4, 1871	113, 318
Tethering-apparatus	S. L. Avery	Norwich, N. Y	Aug. 22, 1865	49, 492
Tethering-stake	B. G. Fitzhugh	Sykesville, Md	Aug. 13, 1867	67, 744
Towel-iron	W. W. Snow	Oneonta N. Y	May 20, 1842	2, 634
Textile and other fabrics air and water tight, Composition for rendering.	A. C. Teubner	New York, N. Y	Jan. 22, 1861	31, 195
Textile and other materials, Machine for cutting	A. Warth	Stapleton, N. Y	Aug. 2, 1870	106, 101
Textile and other materials, Machine for cutting	A. Warth	Stapleton, N. Y	Mar. 14, 1871	112, 752
Textile fabrics and yarn, Dyeing and printing	A. Paraf	Mulhouse, France	Dec. 18, 1866	60, 546
Textile fabrics and yarn, Printing certain	J. Lightfoot	Burnley, England	Oct. 20, 1868	83, 182
Textile fabrics and yarn soiled in dyeing, Process of cleaning.	A. Paraf	Mulhouse, France	Apr. 2, 1867	63, 420
Textile fabrics, Apparatus for bleaching, dyeing, and finishing.	J. Lea and J. Eberhardt	Philadelphia and Conshohocken, Pa.	Apr. 23, 1872	125, 897
Textile fabrics, Bleaching	T. Schnebley	Bay Ridge, N. Y	Sept. 15, 1863	39, 998
Textile fabrics, Composition for cleaning and scouring.	G. E. and E. L. Rolland	Paris, France	Mar. 13, 1866	53, 244
Textile fabrics, Compound for coating	J. Schultz	New York, N. Y	July 11, 1871	116, 997
Textile fabrics, Compound for dressing	J. McGill	Boston, Mass	May 3, 1870	102, 570
Textile fabrics, Fastening for	A. Warth	Stapleton, N. Y	Mar. 14, 1871	112, 753
Textile fabrics, Instrument for inserting rivets in	W. H. Reed	Philadelphia, Pa	Jan. 5, 1864	41, 170
Textile fabrics, Machine for cutting	A. Warth	Stapleton, N. Y	Feb. 27, 1872	124, 179
Textile fabrics, Machine for cutting	A. Warth	Stapleton, N. Y	Feb. 27, 1872	124, 180
Textile fabrics, Machine for hot-pressing	R. R. Wilson	Halifax, England	Mar. 1, 1864	41, 801
Textile fabrics, Machine for piling	A. Warth	Stapleton, N. Y	Mar. 18, 1873	137, 041
Textile fabrics, Machine for piling	A. Warth	Stapleton, N. Y	Apr. 1, 1873	137, 518
Textile fabrics, Machine for printing	J. Green	Lowell, Mass	July 10, 1866	56, 208
Textile fabrics, Machine for straightening the weft or figure of.	J. Greenwood	Clinton, Mass	Feb. 12, 1867	61, 934
Textile fabrics, Manufacture of	T. J. Dunkin	New York, N. Y	Aug. 18, 1863	39, 556
Textile fabrics, Material for the manufacture of	H. V. P. Draper	Hannibal, Mo	Sept. 19, 1871	119, 083
Textile fabrics, Metallic binding for	J. Swamley	New York, N. Y	Oct. 4, 1870	108, 067
Textile fabrics, &c., Mode of producing designs on	E. Leitenberger	Reichstadt, Bohemia	Apr. 14, 1863	38, 198
Textile fabrics, Ornamenting	R. Milligan	Harden, England	Aug. 13, 1850	7, 567
Textile fabrics, Printing and ornamenting	A. A. Despréaux	Paris, France	May 10, 1864	42, 713
Textile fabrics with hydrocarbon, Treating	C. F. A. Semonin	Philadelphia, Pa	Sept. 19, 1871	119, 187
Thaumatrope	J. H. Layman	Cincinnati, Ohio	Oct. 29, 1872	132, 676
T-heads, Machine for facing	J. Griffith and G. W. Wundrum	New York, N. Y	Apr. 4, 1871	113, 653
Theater-chair	W. Dixon	Boston, Mass	June 15, 1869	91, 217
Theatrical scenery	W. Tanner	New York, N. Y	Sept. 3, 1867	68, 467
Theodolite	U. F. Briggs	Oakland, Md	July 16, 1872	129, 311

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Theodolite, Plotting	L. Pitman	Tom's Brook, Va	July 26, 1853	9, 888
Theodolites, Measuring distance with	S. Stone	Long Green, Md	June 6, 1835	
Thermal motor	G. I. Washburn	Worcester, Mass	July 4, 1865	48, 607
Thermo-alarm gage	R Savage	San José, Cal	Feb. 26, 1867	62, 371
Thermo-circulating ventilator	I. Pitman	Providence, R. I	Nov. 8, 1864	44, 970
Thermo-electric battery	M. G. Farmer	Salem, Mass	Nov. 29, 1870	109, 603
Thermo-electric battery	M. G. Farmer and H. J. Smith	Salem and Boston, Mass	Dec. 12, 1865	51, 442
Thermo-electric pairs, Construction of	M. G. Farmer	Salem, Mass	Apr. 18, 1871	113, 864
Thermometer	M. A. Finnell	New York, N. Y	Dec. 17, 1861	33, 935
Thermometer	J. Kendall	New Lebanon, N. Y	June 21, 1870	104, 466
Thermometer	L. C. Tower	Rochester, N. Y	July 2, 1867	66, 266
Thermometer	J. D. Ward	Baltimore, Md	Dec. 20, 1870	110, 314
Thermometer-case for steam-boilers	G. E. Hayes	Buffalo, N. Y	May 8, 1860	28, 172
Thermometer, Churn	C. Tyler	Etna, N. Y	July 9, 1872	128, 930
Thermometer, Electric	G. M. Sternberg	New York, N. Y	Oct. 3, 1871	119, 543
Thermometer, Electrical fire-alarm	J. H. Guest	Brooklyn, N. Y	Oct. 12, 1869	95, 796
Thermometer, Electro-magnetic	G. M. Sternberg	New York, N. Y	Oct. 3, 1871	119, 542
Thermometer, Fire-alarm	A. Guest	Brooklyn, N. Y	Oct. 18, 1870	108, 352
Thermometer, Floating	D. B. Day	New York, N. Y	Mar. 3, 1868	74, 997
Thermometer, Self-registering	M. Ames	New Ipswich, N. H	Sept. 10, 1867	68, 681
Thermometers, Arrangement of air and mercurial	J. B. Currier and A. J. Simpson	Lowell, Mass	Jan. 31, 1860	26, 969
Thermometric regulator for heating-apparatus	L. W. Leeds and C. Vaux	New York, N. Y	Sept. 20, 1859	25, 514
Thermoscope	G. F. Barker and A. M. Mayer	New Haven, Conn., and Hoboken, N. J.	Aug. 26, 1873	142, 190
Thermostat	K. Bender and C. F. Teller	Offenbach, Hesse	Apr. 7, 1868	76, 388
Thermostat	S. Holton, jr	Middlebury, Vt	May 25, 1858	20, 348
Thermostat	H. A. Seymour	Bristol, Conn	Feb. 28, 1860	27, 336
Thermostat	C. A. Wilson	Cincinnati, Ohio	Oct. 18, 1859	25, 860
Thermostat	C. A. Wilson	Cincinnati, Ohio	July 28, 1868	80, 436
Thermostat and fire-alarm signal-box, Combined	A. Rosenbusch and T. W. Kreitz.	Quincy, Ill	July 2, 1872	128, 662
Thermostat, Electrical	J. H. Guest	Brooklyn, N. Y	June 17, 1873	139, 953
Thermostat, Electrical	G. M. Sternberg	Fort Riley, Kans	July 12, 1870	105, 273
Thermostat for regulating heat	T. J. Sloan	New York, N. Y	July 6, 1852	9, 106
Thermostat for steam-boilers	O. M. Stillman and S. Wilcox, jr	Westerly, R. I	Apr. 19, 1859	23, 747
Thief-alarm, (*see* Burglar-alarm)	J. F. Lewis	Pittston, Pa	Mar. 6, 1866	53, 015
Thill, Adjustable	W. P. Robinson	Brimfield, Ill	Aug. 22, 1865	49, 552
Thill and pole coupling	E. Bennett	Oxford, Mich	Aug. 6, 1867	67, 484
Thill and pole for carriages	J. W. Bicknell	New York, N. Y	June 2, 1868	78, 416
Thill-attachment	H. R. Hoagland	Montezuma, N. Y	July 9, 1867	66, 493
Thill-attachment	R. B. Willis	Rochester, N. Y	Jan. 10, 1865	45, 888
Thill-attachment, Safety	G. Smith	Buffalo, N. Y	Aug. 20, 1872	130, 667
Thill-bending machine	J. S. Hamlet	Portsmouth, Ohio	Nov. 16, 1869	96, 803
Thill, Carriage	W. W. T. Greenway	Baltimore, Md	Sept. 14, 1869	94, 933
Thill, Carriage	S. B. Harmon	Portland, Me	Feb. 25, 1868	74, 820
Thill, Carriage	B. Robinson	Thomaston, Me	June 2, 1868	78, 609
Thill, Carriage	B. L. Wood	Taunton, Mass	Sept. 4, 1866	57, 809
Thill clip, Carriage	D. J. Riker	Harlem, N. Y	June 14, 1859	24, 405
Thill-coupling	M. J. Althouse and P. Reifsnider.	Waupun, Wis	Nov. 13, 1866	59, 537
Thill-coupling	W. W. Anderson	Camden, N. J	Nov. 17, 1868	84, 077
Thill-coupling	W. W. Anderson	Camden, N. J	Nov. 22, 1870	109, 484
Thill-coupling	T. H. Andress	Sparta, N. J	Aug. 31, 1869	94, 267
Thill-coupling	W. S. Appleget	Cranberry, N. J	Mar. 16, 1869	87, 899
Thill-coupling	J. Auten	Chili, N. Y	July 16, 1867	66, 772
Thill-coupling	W. Bailey	Utica, N. Y	May 28, 1872	127, 213
Thill-coupling	F. Ballard	Waverly, Md	June 25, 1867	66, 114
Thill-coupling	J. C. Barrett	New Canada, Conn	Nov. 11, 1873	144, 497
Thill-coupling	E. Batwell	Ypsilanti, Mich	Dec. 26, 1871	122, 213
Thill-coupling	A. Bedford	Cold Water, Mich	July 4, 1871	116, 666
Thill-coupling	H. M. Beecher	Plantsville, Conn	July 14, 1868	79, 891
Thill-coupling	L. D. Belnap	Jonesville, Mich	Dec. 26, 1871	122, 146
Thill-coupling	T. R. Bevans and C. Barkenbus	Kalamazoo, Mich	Jan. 16, 1872	122, 699
Thill-coupling	D. Bly	Rochester, N. Y	Apr. 12, 1859	23, 549
Thill-coupling	C. S. Bonney	Penn Yan, N. Y	Apr. 21, 1868	76, 984
Thill-coupling	W. R. Bowman	Danville, Ky	Dec. 9, 1873	145, 390
Thill-coupling	G. I. Bradley	Boston, Mass	May 2, 1871	114, 258
Thill-coupling	W. M. Brayton	Rochester, N. Y	Sept. 28, 1869	95, 311
Thill-coupling	J. F. Bridget	Washington, D. C	Jan. 22, 1867	61, 310
Thill-coupling	C. Bridgman	Saint Cloud, Minn	Sept. 26, 1871	119, 302
Thill-coupling	J. J. Brown	Madison, Wis	Sept. 11, 1866	57, 854
Thill-coupling	T. Burr	Battle Creek, Mich	Mar. 7, 1871	112, 318
Thill-coupling	W. Cable	Boston, Mass	Mar. 25, 1873	137, 176
Thill-coupling	C. C. Caner	Pataskala, Ohio	May 28, 1872	127, 148
Thill-coupling	J. Childs	West Troy, N. Y	Oct. 3, 1871	119, 446
Thill-coupling	E. D. Clapp	Auburn, N. Y	May 2, 1865	47, 520
Thill-coupling	L. C. Clark	Davenport, Iowa	Sept. 17, 1867	68, 844
Thill-coupling	N. J. Clark	Clarkston, Mich	Mar. 21, 1871	112, 783
Thill-coupling	H. E. Clinton	Woodbridge, Conn	Feb. 14, 1860	27, 110
Thill-coupling	G. E. Clow	Port Byron, N. Y	Aug. 14, 1866	57, 090
Thill-coupling	J. L. Cole	Columbus City, Iowa	Jan. 26, 1869	86, 212
Thill-coupling	S. T. J. Coleman and I. W. Sibbet.	Cincinnati, Ohio	Aug. 4, 1857	17, 918
Thill-coupling	J. P. Collins	Troy, N. Y	Dec. 3, 1867	71, 705
Thill-coupling	H. S. Cox	Franklin, Mich	Dec. 5, 1871	121, 593
Thill-coupling	W. H. Cox and T. Larouche	Williamstown, N. Y	Nov. 16, 1869	96, 821
Thill-coupling	P. S. Crawford	Union, Ill	July 12, 1870	105, 178
Thill-coupling	P. D. Crosby	Danbury, Conn	Sept. 21, 1869	95, 093
Thill-coupling	W. H. Curtiss	Painesville, Ohio	Nov. 24, 1868	84, 265
Thill-coupling	G. R. Davis	Kingston, Mich	Aug. 26, 1873	142, 211
Thill-coupling	G. W. and P. Delamater	Ronkonkoma, N. Y	Aug. 20, 1872	130, 624
Thill-coupling	J. Dempsey	Geneva, N. Y	Apr. 20, 1869	89, 032
Thill-coupling	L. Derby	New York, N. Y	Sept. 30, 1862	36, 550
Thill-coupling	L. Derby	New York, N. Y	Sept. 24, 1867	69, 190
Thill-coupling	L. Derby	New York, N. Y	July 21, 1868	80, 152
Thill-coupling	L. Derby	Franconia, N. H	Jan. 16, 1872	122, 760
Thill-coupling	J. Devereaux and R. H. Davis	Jackson, Mich	May 28, 1872	127, 317
Thill-coupling	S. J. Dibble	Wethersfield, Conn	Jan. 21, 1873	134, 981

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Thill-coupling	G. W. Dubuisson	Norwich, Conn	Apr. 19, 1870	102, 099
Thill-coupling	E. Duchamp	Saint Martinsville, La	Aug. 16, 1859	25, 103
Thill-coupling	G. M. Dunlap	Springfield, Ohio	Dec. 16, 1873	145, 635
Thill-coupling	I. N. Ellis	Thorntown, Ind	Apr. 9, 1872	125, 553
Thill-coupling	R. Fink and J. B. Hershock	Lancaster, Pa	Aug. 25, 1868	81, 355
Thill-coupling	H. Fitzsimmons	Houston, Tex	Nov. 26, 1872	133, 428
Thill-coupling	J. H. Fleming	Dundee, Mich	May 23, 1871	115, 184
Thill-coupling	W. G. Foster	Dansville, N. Y	Aug. 29, 1871	118, 600
Thill-coupling	W. G. Foster	Dansville, N. Y	Feb. 20, 1872	123, 881
Thill-coupling	A. Fuhrman	Lloydsville, Pa	Feb. 23, 1869	87, 252
Thill-coupling	C. W. Gage	Horner, N. Y	Nov. 15, 1864	45, 118
Thill-coupling	G. H. Gardner	Philadelphia, Pa	Mar. 31, 1868	76, 183
Thill-coupling	R. M. Garrettson	Sag Harbor, N. Y	Jan. 19, 1869	85, 923
Thill-coupling	J. H. Gee	Cortland, N. Y	June 7, 1870	104, 115
Thill-coupling	W. S. Geer	Marshall, Mich	Aug. 23, 1870	106, 687
Thill-coupling	K. Goddard	Richmond, N. Y	Feb. 25, 1868	74, 816
Thill-coupling	K. Goddard	Richmond, N. Y	Feb. 25, 1868	74, 817
Thill-coupling	W. W. Goff	Avoca, N. Y	Jan. 14, 1868	73, 317
Thill-coupling	N. N. Gordon	Rochester, N. Y	Nov. 10, 1868	83, 843
Thill-coupling	M. C. and B. D. Graves	Tuscola, Mich., and Waterloo, Iowa.	Aug. 15, 1871	118, 009
Thill-coupling	C. W. Griffeth	Cincinnati, Ohio	Jan. 24, 1871	111, 118
Thill-coupling	J. Hale	Somerville, Mass	Nov. 7, 1871	120, 640
Thill-coupling	J. T. Hards	Geneva, Ill	July 9, 1872	128, 797
Thill-coupling	B. F. Harrison	Newark, N. J	July 20, 1869	92, 821
Thill-coupling	A. S. Harry	Wooster, Ohio	Feb. 15, 1870	99, 890
Thill-coupling	I. C. Hart	Galesburgh, Ill	Aug. 4, 1868	80, 626
Thill-coupling	E. A. Harvey	Wilmington, Del	July 13, 1869	92, 608
Thill-coupling	J. Haverly and C. A. Tibitts	La Porte, Ind	Sept. 22, 1868	82, 405
Thill-coupling	G. W. Hobart	Lowell, Mass	Apr. 22, 1873	138, 087
Thill-coupling	S. E. Horner	Shiloh, N. J	Aug. 18, 1868	81, 085
Thill-coupling	B. F. Horton	Ithaca, N. Y	Mar. 21, 1871	112, 811
Thill-coupling	B. Hotchkiss	Fair Haven, Conn	Jan. 4, 1870	98, 499
Thill-coupling	M. Howe	Boston, Mass	Feb. 16, 1869	87, 047
Thill-coupling	S. Hubbell, jr	West Salem, Ohio	Apr. 30, 1872	126, 209
Thill-coupling	W. R. S. Hunter	Blackberry, Ill	Apr. 10, 1866	53, 828
Thill-coupling	H. J. Isles	Bridgeport, Conn	Aug. 13, 1872	130, 374
Thill-coupling	J. W. Innis	Milroy, Ind	Dec. 12, 1865	51, 457
Thill-coupling	J. W. Innis	Salem, Ind	Apr. 30, 1867	64, 226
Thill-coupling	B. W. Jager	Hainesville, N. J	Jan. 16, 1872	122, 724
Thill-coupling	J. H. Jennings	New Bedford, Mass	Sept. 27, 1870	107, 782
Thill-coupling	J. H. Jennings	New Bedford, Mass	July 11, 1871	116, 963
Thill-coupling	F. A. Jewett	Grafton, Mass	Dec. 20, 1870	110, 367
Thill-coupling	D. A. Johnson	Boston, Mass	Apr. 4, 1871	113, 525
Thill-coupling	D. A. Johnson	Boston, Mass	Feb. 20, 1872	123, 909
Thill-coupling	E. D. Johnson and E. A. Cowen	Thornton, Ind	Oct. 3, 1871	119, 616
Thill-coupling	P. Jones	Newark, N. J	Mar. 31, 1868	76, 198
Thill-coupling	S. Keller	East Cleveland, Ohio	Dec. 10, 1872	133, 782
Thill-coupling	C. F. Kidder	Milbury, Mass	July 15, 1873	140, 833
Thill-coupling	H. B. Kinney	Leonardville, N. Y	Sept. 23, 1873	143, 162
Thill-coupling	W. W. Knowles	Plantsville, Conn	Oct. 27, 1868	83, 511
Thill-coupling	J. Knox	Mount Gilead, Ohio	Sept. 3, 1867	68, 515
Thill-coupling	J. Lamb	Aurora, Ind	July 2, 1872	128, 639
Thill-coupling	E. Lane	Philadelphia, Pa	Mar. 2, 1869	87, 501
Thill-coupling	L. P. Larson	Yonkers, N. Y	Jan. 16, 1872	122, 838
Thill-coupling	C. C. Lawrence	Homer, Mich	Sept. 3, 1867	68, 757
Thill-coupling	J. Low	Steubenville, Ohio	Feb. 18, 1873	136, 078
Thill-coupling	J. MaClasky	Perth Amboy, N. J	Aug. 27, 1872	130, 815
Thill-coupling	P. L. Maltbie	Ramapo, N. Y	Aug. 12, 1873	141, 655
Thill-coupling	H. Manwaring	Danville, Ky	Dec. 16, 1873	145, 516
Thill-coupling	P. Markel	Adelphi, Ohio	July 16, 1872	128, 968
Thill-coupling	J. Martin	Henry City, Ill	Mar. 25, 1873	137, 143
Thill-coupling	H. Z. Mast	Fork Meeting House, Md	June 7, 1870	104, 045
Thill-coupling	J. McDermott	Washington, D. C	July 24, 1860	29, 289
Thill-coupling	J. McDermott	Washington, D. C	Feb. 13, 1866	52, 586
Thill-coupling	W. B. Maloney	Smyrna, Del	Feb. 7, 1871	111, 556
Thill-coupling	R. C. Millings	Charleston, S. C	Nov. 27, 1860	30, 747
Thill-coupling	J. C. Moore	Madison, Ind	Aug. 22, 1871	118, 381
Thill-coupling	J. H. Morgan	Lebanon, Ind	July 9, 1872	128, 808
Thill-coupling	E. M. Morrison and J. K. Ross	Noblesville, Ind	Aug. 25, 1868	81, 527
Thill-coupling	R. Morrison	Rahway, N. J	July 24, 1860	29, 194
Thill-coupling	F. B. Morse	Plantsville, Conn	Dec. 6, 1870	109, 927
Thill-coupling	E. M. Naramore	North Underhill, Vt	Oct. 1, 1867	69, 469
Thill-coupling	A. O. Nelson	Boston, Mass	Aug. 22, 1871	118, 383
Thill-coupling	F. Norris	Freedom Plains, N. Y	Feb. 1, 1870	99, 465
Thill-coupling	S. O'Haire	West Troy, N. Y	Apr. 23, 1872	125, 982
Thill-coupling	D. W. Onderdonk	Albion, N. Y	June 1, 1869	90, 866
Thill-coupling	J. H. Ormsby	Dixon, Ill	Sept. 13, 1870	107, 404
Thill-coupling	J. W. Oulton	Amherst, Canada	Oct. 17, 1871	120, 091
Thill-coupling	J. H. Parkhurst	Saint Louis, Mo	May 20, 1873	139, 022
Thill-coupling	A. J. Patterson	Geneseo, N. Y	July 1, 1873	140, 382
Thill-coupling	G. Pennoyer	New York, N. Y	Mar. 17, 1868	75, 698
Thill-coupling	L. Pentz	Canton, Ohio	Nov. 17, 1868	84, 212
Thill-coupling	S. W. Perkins	Geneseo, Ill	Aug. 17, 1869	93, 741
Thill-coupling	I. S. Peters	Marshall, Mich	Mar. 5, 1872	124, 285
Thill-coupling	G. W. Pilson	Towsontown, Md	Jan. 30, 1872	123, 196
Thill-coupling	T. W. Porter	Boston, Mass	Oct. 31, 1871	120, 456
Thill-coupling	I. R. Potter	Dartmouth, Mass	July 21, 1868	80, 214
Thill-coupling	G. W. Price	Adrian, Mich	Mar. 15, 1870	100, 802
Thill-coupling	F. B. Prindle	Southington, Conn	July 25, 1871	117, 328
Thill-coupling	J. M. Pusey	Wilmington, Del	Oct. 21, 1873	143, 929
Thill-coupling	S. S. Putnam	Neponset, Mass	Nov. 2, 1869	96, 349
Thill-coupling	R. Pyle	Wilmington, Del	Oct. 27, 1868	83, 546
Thill-coupling	J. C. Racine	Appleton, Wis	Jan. 23, 1872	122, 963
Thill-coupling	B. R. Rapp	Philadelphia, Pa	Sept. 14, 1869	94, 912
Thill-coupling	R. R. Rapp	West Chester, Pa	Feb. 27, 1872	124, 159
Thill-coupling	B. R. Rapp	West Chester, Pa	Aug. 26, 1873	142, 274

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Thill-coupling	B. Rice	Hastings, N. Y	Sept. 2, 1862	36, 369
Thill-coupling	S. G. Rice	Albany, N. Y	Feb. 5, 1867	61, 761
Thill-coupling	A. J. Ritter	Rahway, N. J	Jan. 24, 1860	26, 926
Thill-coupling	E. S. Roberts	East Canaan, Conn	Apr. 9, 1872	125, 486
Thill-coupling	C. Robinson	Fox Lake, Wis	July 28, 1868	80, 310
Thill-coupling	S. Rogers	Stanfordville, N. Y	Apr. 30, 1867	64, 368
Thill-coupling	S. Rogers	Stanfordville, N. Y	Nov. 19, 1867	71, 066
Thill-coupling	E. O. Rood and S. H. Hackett	Lodi, Ill	Nov. 6, 1866	59, 455
Thill-coupling	L. S. Rowe	Derby Line, Vt	Feb. 7, 1871	111, 574
Thill-coupling	J. Rudy	Norristown, Pa	June 25, 1872	128, 252
Thill-coupling	T. H. Ryder	Mentor, Ohio	Sept. 19, 1871	119, 183
Thill-coupling	J. Sadler	Egremont, Mass	July 24, 1860	29, 317
Thill-coupling	C. W. Saladee	Saint Catharine's, Canada	Oct. 17, 1871	120, 001
Thill-coupling	C. W. Saladee	Saint Catharine's, Canada	Oct. 17, 1871	120, 002
Thill-coupling	B. E. Sampson	Boston, Mass	June 20, 1865	48, 313
Thill-coupling	C. S. Sanford	Lena, Ill	Apr. 16, 1872	125, 846
Thill-coupling	W. H. Saunders	Hastings, N. Y	Jan. 8, 1861	31, 091
Thill-coupling	J. G. Schiller	Youngstown, Ohio	Aug. 27, 1872	130, 945
Thill-coupling	W.C.Shipherd and E.P.Curtiss	Cleveland, Ohio	May 6, 1873	138, 702
Thill-coupling	E. F. Shoenberger	Shoemakertown, Pa	Jan. 9, 1872	122, 669
Thill-coupling	C. A. Slack	Frenchtown, N. J	Feb. 9, 1869	86, 877
Thill-coupling	S. Slack	Lebanon Centre, N. H	Aug. 8, 1871	117, 937
Thill-coupling	G. C. Smith and R. Judson	Matteawan, N. Y	Apr. 14, 1868	76, 666
Thill-coupling	W. C. Spalding and C. P. Southwell	Watertown, Wis	June 15, 1869	91, 280
Thill-coupling	L. Squire	Norwalk, Ohio	May 7, 1867	64, 590
Thill-coupling	C. St. James	Pittsfield, Mass	Jan. 18, 1870	99, 025
Thill-coupling	C. St. James	Pittsfield, Mass	Jan. 23, 1872	122, 974
Thill-coupling	C. E. Sweney	Geneseo, Ill	May 18, 1869	90, 206
Thill-coupling	O. Tackmann	Yonkers, N. Y	June 22, 1869	91, 789
Thill-coupling	O. Tackmann	Yonkers, N. Y	Oct. 17, 1871	120, 124
Thill-coupling	C. Thomas	Boston, Mass	Mar. 15, 1870	100, 951
Thill-coupling	J. C. Thompson	New Haven, Conn	Oct. 14, 1873	143, 596
Thill-coupling	J. P. Thorp	Southington, Conn	June 23, 1868	79, 088
Thill-coupling	C. Twombly	Boston, Mass	Mar. 21, 1871	112, 989
Thill-coupling	A. D. Tyler	North Bridgewater, Mass	Feb. 13, 1872	123, 597
Thill-coupling	W. W. Wallis	Philadelphia, Pa	Apr. 9, 1872	125, 637
Thill-coupling	T. C. Walter	San Francisco, Cal	Sept. 14, 1869	94, 853
Thill-coupling	S. H. Ward	Altona, Ill	Dec. 4, 1866	60, 296
Thill-coupling	E. Warren	Ceresco, Mich	July 11, 1871	116, 898
Thill-coupling	H. K. Waterhouse	Factory Point, Vt	Sept. 26, 1865	50, 189
Thill-coupling	E. J. Watson	Bridgeport, Conn	Feb. 23, 1869	87, 311
Thill-coupling	H. Webster	Cambridge, Vt	May 19, 1868	78, 035
Thill-coupling	H. Will	Columbus City, Iowa	Aug. 4, 1868	80, 690
Thill-coupling	S. G. Wise	Edgerton, Ohio	Sept. 16, 1873	142, 830
Thill-coupling	A. and G. Woeber	Davenport, Iowa	May 29, 1866	55, 191
Thill-coupling	A. and G. Woeber	Davenport, Iowa	May 29, 1866	55, 192
Thill-coupling	C. B. Wood	New York, N. Y	Feb. 7, 1860	27, 086
Thill-coupling	E. Yeiser	Newmanstown, Pa	Apr. 5, 1870	101, 560
Thill-coupling attachment	H. J. Stubbs	Kennett's Square, Pa	Sept. 16, 1873	142, 960
Thill coupling, Carriage	C. H. Bassett	Derby, Conn	May 22, 1866	54, 840
Thill coupling, Carriage	D. C. Breed	Lyndonville, N. Y	Jan. 10, 1865	45, 812
Thill coupling, Carriage	J. J. Brown	Madison, Wis	Apr. 23, 1867	64, 067
Thill coupling, Carriage	M. M. Copp	Albion, N. Y	June 2, 1868	78, 579
Thill coupling, Carriage	C. Fisher	Canton, Mass	Nov. 16, 1869	96, 904
Thill coupling, Carriage	J. Howarth	Monroeville, Ohio	Jan. 23, 1866	52, 170
Thill coupling, Carriage	T. S. Lambert	Peekskill, N. Y	Oct. 20, 1863	40, 345
Thill coupling, Carriage	S. Mills	Madison, Wis	Jan. 15, 1867	61, 230
Thill coupling, Carriage	P. Myers	Newton, Ill	Jan. 15, 1867	61, 235
Thill coupling, Carriage	H. B. Willcox	Philadelphia, Pa	July 21, 1868	80, 262
Thill-coupling clamp	W. Boyd	Hartford, N. Y	May 30, 1871	115, 273
Thill-coupling clamp	J. W. Guider	Saint Joseph, Mo	Mar. 7, 1871	112, 448
Thill-coupling clamp	M. Taylor	Hartford, Conn	Aug. 19, 1873	141, 901
Thill-couplings, Die for forming	L. Burns	Port Chester, N. Y	June 11, 1867	65, 641
Thill-fastener	L. Derby	New York, N. Y	May 12, 1868	77, 804
Thill-fastening	S. S. Meily	Lebanon, Pa	Feb. 9, 1864	41, 524
Thill for two-wheeled vehicle	P. Baillau	New York, N. Y	Sept. 1, 1857	18, 077
Thill-guard	L. J. Parsons	New Bedford, Mass	Oct. 20, 1868	83, 204
Thill-holdback	J. B. Eaton	Fryeburgh, Me	June 29, 1869	91, 831
Thill-holder	J. P. Hisley	Syracuse, N. Y	July 8, 1873	140, 705
Thill-holder, Harness	J. A. Putt	Marlborough, Ohio	Aug. 22, 1871	118, 388
Thill-holder, Metallic	E. Brown	South Boston, Mass	May 16, 1865	47, 765
Thill-holding loop	W. Morley	Rolfe, Iowa	Jan. 23, 1866	52, 187
Thill-iron die	F. B. Morse	Plantsville, Conn	Oct. 26, 1869	96, 250
Thill, Self-adjusting	A. H. Howe	Brookfield, Vt	Nov. 12, 1867	70, 848
Thill-shackle	J. Madden and U. Bushnell	Cleveland, Ohio	Nov. 16, 1869	96, 935
Thill shackles, Manufacture of blanks for carriage	J. B. Clark	Plantsville, Conn	June 25, 1867	66, 130
Thill-shifter	S. Jennings	Patterson, N. Y	Mar. 23, 1869	88, 042
Thill, Shifting cutter	L. S. Clark	Bethel, Conn	Feb. 8, 1870	99, 535
Thill, Shifting cutter	H. L. Taylor	Fredonia, N. Y	Sept. 25, 1866	58, 353
Thill-shifting jack, Carriage	A. H. Ham	Stockport, N. Y	Dec. 1, 1868	84, 545
Thill-strap	E. Howe	Ashtabula, Ohio	Mar. 17, 1868	75, 682
Thill-tug	T. Neely and C. Bishop	Tiffin, Ohio	Oct. 24, 1865	50, 615
Thill-tug	W. H. Noyes	Homer, N. Y	May 23, 1865	47, 903
Thill, Vehicle	J. W. D. F. Moon	Coventry, N. Y	July 9, 1861	32, 779
Thill, Vehicle	A. Muhleisen	Ottawa, Ohio	Nov. 11, 1873	144, 558
Thills and poles to vehicles, Attaching	A. J. Gibson	Clinton, Mass	Aug. 1, 1854	11, 424
Thills and poles to vehicles, Attaching	A. J. Gibson	Clinton, Mass	Apr. 15, 1856	14, 653
Thills, Arrangement of vehicle	N. Warlick	La Fayette, Ala	Oct. 14, 1856	15, 908
Thills, Attaching	C. Boynton	Lyons City, Iowa	July 16, 1867	66, 784
Thills, Bending carriage	J. W. Dann	Columbus, Ohio	Apr. 21, 1866	57, 294
Thills, Device for supporting carriage	A. Sedgwick	Poughkeepsie, N. Y	Feb. 5, 1867	61, 769
Thills, Holdback-iron for carriage	R. B. Prindle	Norwich, N. Y	Feb. 12, 1867	61, 951
Thills, Key-bolt for attaching carriage	C. P. Wilhelm	Bridgeport, Pa	Feb. 22, 1859	23, 055
Thills, Manufacture of shackles for carriage	F. B. Morse	New Haven, Conn	June 11, 1867	65, 762
Thills of vehicles, Attaching breeching to	L. N. Leslie and T. Richardson	Leominster, Mass	Sept. 1, 1863	39, 736
Thills or tongues to vehicles, Attaching	J. S. Miller	Everton, Ind	Oct. 9, 1866	58, 668
Thills, Safety-strap for securing carriage	C. B. Wood	New York, N. Y	Feb. 7, 1860	27, 087

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Thills to axles, Attaching	E. Dugdale	New York, N. Y	Dec. 27, 1864	45, 593
Thills to axles, Attaching	A. Greene	Providence, R. I	Jan. 15, 1856	14, 096
Thills to axles, Attaching	G. Kenny	Milford, N. H	Jan. 11, 1859	22, 604
Thills to axles, Attaching	J. Miller	Bucyrus, Ohio	May 24, 1859	24, 137
Thills to axles, Attaching	A. E. Smith	Bronxville, N. Y	July 1, 1862	35, 785
Thills to axles, Attaching carriage	F. L. Kidder	Williamsburgh, N. Y	Mar. 8, 1859	23, 173
Thills to axles, Attaching carriage	J. W. Sibbet	Cincinnati, Ohio	Dec. 14, 1858	22, 314
Thills to axles, Coupling	N. Richardson	Byberry, Pa	Nov. 11, 1862	36, 916
Thills to axles, Securing	M. Soverel	Orange, N. J	Mar. 11, 1856	14, 417
Thills to axles, Shackle for connecting	A. A. Peatt	Greenfield, Mass	May 6, 1862	35, 170
Thills to carriages, Adjusting	M. J. Mellyn	Roxbury, Mass	Sept. 3, 1867	68, 524
Thills to carriages, Attaching	X. S. Allen	Granger, Ohio	May 7, 1867	64, 468
Thills to carriages, Attaching	A. R. Bartram	Redding, Conn	May 21, 1867	64, 906
Thills to carriages, Attaching	S. S. Bliss	New Bedford, Mass	Oct. 1, 1867	69, 394
Thills to carriages, Attaching	D. Dalzell	South Egremont, Mass	Feb. 5, 1867	61, 813
Thills to carriages, Attaching	C. W. Gage	Homer, N. Y	July 23, 1861	32, 864
Thills to carriages, Attaching	W. H. Hartman and A. K. M. Pickert.	Fostoria, Ohio	Apr. 30, 1867	64, 219
Thills to carriages, Attaching	C. D. Miller	West Meriden, Conn	June 4, 1867	65, 498
Thills to carriages, Attaching	A. Odell	New York, N. Y	Sept. 17, 1867	68, 895
Thills to carriages, Attaching	E. H. Plant	Plantsville, Conn	Aug. 14, 1860	29, 614
Thills to carriages, Attaching	G. Schreyer	Columbus, Ohio	May 21, 1867	65, 017
Thills to carriages, Attaching	W. C. Sherman	Boston, Mass	Nov. 27, 1866	60, 071
Thills to carriages, Attaching	W. Starkey	Bridgeport, N. J	Nov. 19, 1867	71, 078
Thills to carriages, Attaching	T. H. Wood	Monroeville, Ohio	Mar. 5, 1867	62, 586
Thills to sleighs, Attaching	J. M. Batchelor	Foxcroft, Me	Feb. 10, 1857	16, 577
Thills to sleighs, &c., Attaching	H. F. Edwards and W. C. Whiting.	Worcester, Mass	July 16, 1867	66, 817
Thills to vehicles, Attaching	L. W. Boynton	New York, N. Y	Apr. 3, 1860	27, 755
Thills to vehicles, Attaching	J. D. Brunner	Doylestown, Pa	July 16, 1867	66, 789
Thills to vehicles, Attaching	E. M. Butler	Croton Falls, N. Y	Oct. 1, 1867	69, 402
Thills to vehicles, Attaching	G. F. Dietz	Burlingham, N. Y	May 28, 1867	65, 182
Thills to vehicles, Attaching	T. Heise, jr	Buffalo, N. Y	May 21, 1867	64, 865
Thills to vehicles, Attaching	O. L. Mather	Wellsville, N. Y	Nov. 19, 1867	71, 194
Thills to vehicles, Attaching	F. McKoy	West Philadelphia, Pa	May 8, 1866	54, 574
Thills to vehicles, Attaching	L. C. Miner	Hartford, Conn	July 17, 1860	29, 187
Thills to vehicles, Attaching	A. Odell	New York, N. Y	Jan. 17, 1860	26, 859
Thills to vehicles, Attaching	F. Odell	New York, N. Y	Mar. 20, 1860	27, 562
Thills to vehicles, Attaching	E. R. Powell	Cambridge, Vt	May 7, 1867	64, 565
Thills to vehicles, Attaching	R. B. Prindle	Coventry, N. Y	Jan. 18, 1859	22, 672
Thills to vehicles, Attaching	N. H. Shaw	Holderness, N. H	May 14, 1867	64, 715
Thills to vehicles, Attaching	A. Sherman	Poughkeepsie, N. Y	Mar. 20, 1860	27, 574
Thills to wagons, Attaching	T. Wallis, A. B. Mattoon, and C. E. Tutler.	Auburn, N. Y	Mar. 19, 1867	63, 122
Thimble	B. W. Hood	Pawtucket, Mass	Apr. 9, 1861	31, 975
Thimble	J. E. McBeth	New Orleans, La	Aug. 4, 1868	80, 755
Thimble	H. D. Peck	Newton, Mass	Oct. 29, 1867	70, 353
Thimble	W. P. Slensby	New York, N. Y	Apr. 29, 1873	138, 445
Thimble	J. C. R. Steirly	Brooklyn, N. Y	Sept. 13, 1859	25, 450
Thimble	T. R. Timby	Saratoga, N. Y	Oct. 26, 1869	96, 166
Thimble	E. B. Towle	Newburyport, Mass	Jan. 10, 1871	110, 879
Thimble and ferrule die	J. H. Cole	Milbury, Mass	Apr. 28, 1868	77, 170
Thimble and locket, Combined	W. A. Wansleben	Washington, D. C	Apr. 4, 1871	113, 601
Thimble and thread-cutter	J. A. Pettet	Philadelphia, Pa	Oct. 3, 1871	119, 531
Thimble-boxes, Casting	J. G. Holt	Chicago, Ill	May 7, 1861	32, 264
Thimble, Lady's	J. Stephen	Womelsdorf, Pa	Aug. 6, 1867	67, 402
Thimble-puller	A. F. Allen	Providence, R. I	May 5, 1868	77, 437
Thimble-rims on the same body, Making	S. Chandler	New York	Sept. 20, 1816	....
Thimble, Sewing	J. Devlin	Philadelphia, Pa	Dec. 8, 1857	18, 807
Thimble, Sewing	A. H. Law	San Francisco, Cal	Nov. 22, 1870	109, 429
Thimble-skein	R. M. McGrath	La Fayette, Ind	Jan. 28, 1868	73, 738
Thimble-skein	C. Paddock	Alton, Ill	Oct. 17, 1871	120, 092
Thimble skein and boxing	M. Collins	Decatur, Ill	Apr. 18, 1871	113, 856
Thimble-skein pattern	E. F. Hurlbut	Chicago, Ill	May 21, 1861	32, 399
Thimble-skeins, Machine for threading	W. W. Norton	Dundee, Ill	June 9, 1868	78, 684
Thimble with guarded cutter	W. Muller	Boston, Mass	Aug. 30, 1864	44, 045
Thimble with guarded cutter	L. A. Peck	Newton Corner, Mass	Feb. 19, 1867	62, 285
Thimbles, Forging	G. H. Corliss and E. Harris	Providence, R. I	Feb. 19, 1856	14, 280
Thimbles, Making	A. Spencer	....	June 8, 1804	....
Thimbles, Manufacture of	P. S. Bishop	Smithfield, R. I	Sept. 20, 1859	25, 482
Thimbles without soldering, Making rims to ladies' and tailors'.	S. Chandler	New York	Feb. 4, 1811	....
Thorough-brace	F. Davis	Baltimore, Md	Nov. 6, 1834	....
Thorough-brace	J. E. Requa	Sonora, Cal	Feb. 22, 1870	100, 068
Thorough-brace spring	J. Goller	Los Angeles, Cal	May 17, 1870	103, 041
Thrasher	T. Harvey and N. J. Becker	Amsterdam, N. Y	Dec. 22, 1863	41, 004
Thrasher	J. P. Jager	Eureka, Wis	June 30, 1863	39, 049
Thrasher	D. Lippy and J. S. Bradley	Mansfield, Ohio	Nov. 24, 1863	40, 695
Thrasher	W. R. Palmer	Elizabeth City, N. C	June 13, 1854	11, 051
Thrasher and cleaner, Combined grain	A. Cornell	Newtown, Pa	May 21, 1867	64, 948
Thrasher and cleaner, Grain	W. H. and J. Butterworth, jr	Trenton, N. J	Jan. 31, 1871	111, 431
Thrasher and cleaner, Grain	G. Daniels	Philadelphia, Pa	Feb. 13, 1855	12, 378
Thrasher and cleaner, Grain	H. Gill	Mansfield, Ohio	Aug. 4, 1868	80, 541
Thrasher and cleaner, Grain	J. Jones and A. Lyle	Rochester, N. Y	Dec. 21, 1852	9, 485
Thrasher and cleaner, Grain	W. Pierpoint	Salem, N. J	Aug. 13, 1861	33, 049
Thrasher and cleaner, Grain	J. Robinson	West Hebron, N. Y	Jan. 24, 1854	10, 455
Thrasher and cleaner, Grain	J. J. Stoker	Richmond, Ind	Sept. 10, 1872	131, 192
Thrasher and gin, Pea-nut	E. G. Scott	Waverly, Va	Apr. 2, 1872	125, 338
Thrasher and grain-separator	W. C. Leyburn	Sparta, Wis	May 16, 1871	114, 834
Thrasher and grain-separator, Combined	J. S. Landis	Lancaster, Pa	Nov. 22, 1870	109, 428
Thrasher and huller, Clover	J. C. Birdsell	West Henrietta, N. Y	Jan. 27, 1863	37, 488
Thrasher and separator	J. W. Cardwell	Richmond, Va	Mar. 9, 1869	87, 540
Thrasher and separator	W. W. Dingee and A. B. Farquahar.	York, Pa	May 5, 1863	38, 379
Thrasher and separator	S. Pelton	Trenton, N. J	Sept. 20, 1864	44, 374
Thrasher and separator	W. A. Walker	Sparta, Wis	Oct. 4, 1870	107, 986
Thrasher and separator, Feeding-hopper of grain	S. Moore	Central Bridge, N. Y	Oct. 3, 1854	11, 761
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Jan. 14, 1862	34, 131

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Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Jan. 14, 1862	34, 132
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Jan. 14, 1862	34, 133
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 125
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 126
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 127
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 128
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 129
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 130
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 131
Thrasher and separator, Grain	W. F. Cochrane	Springfield, Ohio	Dec. 9, 1862	37, 132
Thrasher and separator, Grain	H. Gill	Mansfield, Ohio	Dec. 13, 1870	110, 131
Thrasher and separator, Grain	G. W. Greer and F. F. Landis	Lancaster, Pa	June 30, 1868	79, 467
Thrasher and separator, Grain	C. S. Hall	Rochester, N. Y	Dec. 19, 1871	121, 939
Thrasher and separator, Grain	J. H. Hamaker and C. Frease	Wilmot, Ohio	June 18, 1872	128, 140
Thrasher and separator, Grain	N. B. Lucas	Otter Creek, Ill	June 28, 1853	9, 825
Thrasher and separator, Grain	A. B. Peterson	Dexter, Mich	Nov. 8, 1853	10, 212
Thrasher and separator, Grain	J. H. Shireman	York, Pa	July 2, 1872	128, 666
Thrasher and separator, Grain	C. R. Soule	Fairfield, Vt	Jan. 24, 1854	10, 461
Thrasher and separator, Grain	J. Zink	Greenville, Va	Feb. 21, 1854	10, 558
Thrasher and separator, Pea-nut	J. H. Walker	Walker's Landing, Tenn	May 28, 1872	127, 392
Thrasher and straw-carrier, Grain	R. Bryan	Penn Yan, N. Y	Aug. 8, 1871	117, 736
Thrasher, Grain	I. L. Garlington	Snapping Shoals, Ga	Mar. 21, 1854	10, 669
Thrasher, Grain	F. Leadbeter	Ypsilanti, Mich	Nov. 12, 1872	132, 969
Thrasher, &c., Grain	H. Ries	Norwalk, Ohio	Aug. 23, 1870	106, 622
Thrasher, Grain	D. H. Shearer	Drakesville, Iowa	Jan. 5, 1864	41, 103
Thrasher, Grain	A. S. Whittemore	Willimantic, Conn	Feb. 18, 1868	74, 650
Thrasher, Grain	A. S. Whittemore	Willimantic, Conn	Mar. 16, 1869	87, 995
Thrasher, Grain, clover, flax, &c	L. Cosler	Yellow Springs, Ohio	June 9, 1868	78, 650
Thrasher, grain-separator, and cleaner	G. W. Heiges	Franklintown, Pa	May 23, 1871	115, 201
Thrasher, huller, and cleaner, Clover	I. N. Young	Swann, Ind	July 16, 1867	66, 765
Thrasher, Rotary rice	D. Flagg, jr	New York	Nov. 29, 1830	....
Thrasher, separator, and cleaner, Grain	E. M. Birdsall	Penn Yan, N. Y	Dec. 27, 1870	110, 542
Thrasher, separator, and clover-huller, Combined	A. Cornell	Newtown, Pa	June 22, 1869	91, 717
Thrasher-shoe	D. W. Hollihan	San Francisco, Cal	Feb. 7, 1871	111, 541
Thrashers, Band-cutting and feeding-attachment to	I. H. Palmer	Lodi, Wis	Jan. 26, 1864	41, 390
Thrashers, Endless apron for	A. Nash	Logansport, Ind	Apr. 9, 1850	7, 271
Thrashers, Feeding-apparatus for grain	W. R. Palmer	Elizabeth City, N. C	Feb. 17, 1852	8, 744
Thrashers, Rewinnowing-attachment for	J. B. Padon	Troy, Ill	Feb. 25, 1873	136, 175
Thrashers, Setting the teeth on the concave of clover.	J. Hibbs	Bristol, Pa	July 2, 1850	7, 474
Thrashing, &c	R. Patten	Columbia, Pa	Feb. 17, 1809	....
Thrashing and cleaning grain	J. Comfort	Bucks County, Pa	Jan. 25, 1810	....
Thrashing and cleaning grain	J. Coppinger	Baltimore, Md	Oct. 31, 1809	....
Thrashing and cleaning grain	A. Densmore	Le Roy, N. Y	July 29, 1815	....
Thrashing and cleaning grain	S. Willard, jr	Hudson, N. Y	Nov. 30, 1807	....
Thrashing and cleaning grain in the field, Machine for.	G. W. Swift	Oxford, Miss	July 15, 1856	15, 349
Thrashing and cleaning machine, Clover	W. Rowe	Charlestown, Va	Apr. 30, 1861	32, 209
Thrashing and cleaning machine, Clover and grass seed.	D. Shattuck	Branchport, N. Y	May 12, 1863	38, 538
Thrashing and cleaning machine, Clover-seed	E. Gruver and J. Gilliford	Mexico, Pa	Jan. 12, 1848	5, 411
Thrashing and cleaning machine, Clover-seed	W. Rowe	Frederick, Md	Aug. 25, 1838	893
Thrashing and cleaning machine, Grain	T. Barnett	....	Feb. 21, 1804	....
Thrashing and cleaning machine, Grain	A. Douglass	Marcellus, N. Y	Sept. 8, 1826	....
Thrashing and cleaning machine, Grain	W. B. Emery	Albany, N. Y	May 5, 1868	77, 471
Thrashing and cleaning machine, Grain	H. Gill and T. Hummel	Mansfield, Ohio	Feb. 23, 1869	87, 254
Thrashing and cleaning machine, Grain	J. Gregg	Londonderry, N. H	Mar. 30, 1821	....
Thrashing and cleaning machine, Grain	I. Hart	Clarksburgh, Va	July 31, 1860	29, 374
Thrashing and cleaning machine, Grain	B. G. H. Hathaway	Rockstream, N. Y	July 5, 1848	5, 659
Thrashing and cleaning machine, Grain	J. Hyde	South Pembroke, N. Y	Feb. 8, 1825	....
Thrashing and cleaning machine, Grain	M. McKeever	Staunton, Va	Mar. 15, 1839	1, 104
Thrashing and cleaning machine, Grain, &c	N. Mills and I. Rogers	Bath, N. H	Jan. 14, 1823	....
Thrashing and cleaning machine, Grain	A. Nourse	Beaufort, S. C	July 19, 1828	....
Thrashing and cleaning machine, Grain	J. A. and H. A. Pitts	Winthrop, Me	Dec. 29, 1837	542
Thrashing and cleaning machine, Grain	H. Spencer	Maryland, N. Y	Nov. 7, 1831	....
Thrashing and cleaning machine, Rice	M. Morrison	Waterbury, Conn	Sep. 15, 1821	....
Thrashing and cleaning machine, Wheat	S. Lane	Hallowell, Me	Apr. 6, 1831	....
Thrashing and cleaning machine, Wheat	E. Miller	....	July 19, 1802	....
Thrashing and clover-hulling machine, Grain	M. Hubbell	Reynoldsville, N. Y	Aug. 2, 1870	105, 945
Thrashing and dressing machine, Flax	S. J. Gold	Cornwall, Conn	Jan. 11, 1831	....
Thrashing and fanning machine	E. Hotchkiss	Brattleborough, Vt	Apr. 8, 1816	....
Thrashing and flax-breaking machine	P. Barker	Worthington, Ohio	Aug. 20, 1827	....
Thrashing and flax-cleaning machine, Grain	J. Carll	New York	Feb. 12, 1823	....
Thrashing and grain-separating machine	J. Miller	Canton, Ohio	Nov. 24, 1868	84, 367
Thrashing and grain-separating machine	J. H. Quick	Trenton, N. J	June 21, 1864	43, 262
Thrashing and grain-separating machine	I. I. Richardson	New York, N. Y	Mar. 27, 1849	6, 232
Thrashing and hulling clover-seed	C. Clarke	Colebrookdale, Pa	Jan. 28, 1830	....
Thrashing and hulling clover-seed	J. Darrah and J. Kinsey	Ruscomb Manor, Pa	Nov. 6, 1830	....
Thrashing and hulling clover-seed and washing and grinding grain, Machine for.	O. Dean, jr., and J. Woodhull	Caledonia, N. Y	Apr. 25, 1831	....
Thrashing and hulling grass-seed	J. Gould	New Portland, Me	Aug. 15, 1835	....
Thrashing and hulling machine, Clover	I. T. Barton	Union City, Mich	Apr. 29, 1873	138, 366
Thrashing and hulling machine, Clover	J. Bradley and J. Nicholas	Gomer, Ohio	May 6, 1873	138, 556
Thrashing and hulling machine, Clover	M. H. Mansfield	Ashland, Ohio	July 24, 1866	56, 583
Thrashing and hulling machine, Clover-seed	G. W. Fosdick and J. Crawford	Dowagiac, Mich	Dec. 16, 1862	37, 162
Thrashing and hulling machine, Clover-seed	Z. Miller	Canal Fulton, Ohio	July 20, 1869	92, 865
Thrashing and hulling machine, Combined	H. Ries	Norwalk, Ohio	Oct. 24, 1871	120, 167
Thrashing and hulling machine, Combined	J. W. Smith	Bryan, Ohio	Nov. 5, 1872	132, 868
Thrashing and separating grain	C. Roberts and J. Cox	Belleville, Ill	Oct. 28, 1851	8, 480
Thrashing and separating machine	W. H. Bassett	Burlington, Kans	June 18, 1872	128, 006
Thrashing and separating machine	J. W. M. Kirkpatrick	Hamburgh, Ark	Apr. 13, 1869	88, 820
Thrashing and separating machine, Field	J. G. Mohler, jr	Ephrata, Pa	May 21, 1872	126, 897
Thrashing and separating machine, Flax	J. Boyce	Muncie, Ind	May 23, 1871	115, 020
Thrashing and separating machine, Grain	H. Aldridge	Michigan City, Ind	June 11, 1861	32, 502
Thrashing and separating machine, Grain	J. Barnes	Mount Morris, N. Y	Oct. 21, 1856	15, 917
Thrashing and separating machine, Grain	N. J. Becker and J. M. Harvey	Amsterdam, N. Y	Aug. 10, 1858	21, 111
Thrashing and separating machine, Grain	J. Culham	Grand Rapids, Mich	Mar. 7, 1871	112, 424
Thrashing and separating machine, Grain	S. Filby	Lewiston, N. Y	Sept. 12, 1871	110, 797

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Thrashing and separating machine, Grain	J. Rayner	Piqua, Ohio	Dec. 27, 1864	45,678
Thrashing and separating machine, Grain	C. Roberts	Belleville, Ill	Apr. 16, 1861	32,085
Thrashing and separating machine, Grain	J. Seebold	New Berlin, Pa	July 23, 1861	32,893
Thrashing and separating machine, Sieve for	T. Nicholson	Titusville, Pa	Jan. 2, 1872	122,485
Thrashing and shelling machine	A. Cady	Florida, N. Y	Dec. 27, 1809	....
Thrashing and shelling machine, Corn	J. Hetzel and J. Bevier	Ithaca, N. Y	Feb. 14, 1831	....
Thrashing and shelling machine, Corn, &c	A. L. Smith	Weedsport, N. Y	Apr. 27, 1831	....
Thrashing and straw-cutting machine	N. Goodsell	Clinton, N. Y	Mar. 21, 1823	....
Thrashing and winnowing machine	L. Hock	Frederick County, Md	Feb. 15, 1809	....
Thrashing and winnowing machine	W. Laighton	Portsmouth, N. H	Nov. 17, 1834	....
Thrashing and winnowing machine	S. Slater	Philadelphia, Pa	Oct. 1, 1830	....
Thrashing and winnowing machine	M. Williams	Charleston Four Corners, N. Y.	Mar. 20, 1866	53,370
Thrashing and winnowing machine, Grain	A. Belchambers	Ripley, Ohio	June 17, 1856	15,116
Thrashing and winnowing machine, Grain	R. W. Currier	East Kingston, N. H	Sept. 17, 1838	926
Thrashing and winnowing machine, Grain	M. Davenport	Phillips, Me	Nov. 23, 1837	480
Thrashing and winnowing machine, Grain	S. C. Hersey	Rochester, N. Y	Nov. 7, 1826	....
Thrashing and winnowing machine, Grain	A. Ralston	Hopewell, Pa	Feb. 21, 1842	2,467
Thrashing and winnowing machine, Grain	E. Warren	Augusta, Me	Mar. 6, 1824	....
Thrashing and winnowing machine, Wheat	S. Ballou	Livermore, Me	Dec. 12, 1821	....
Thrashing and winnowing wheat and small grain	T. D. Burrall	Geneva, N. Y	Dec. 6, 1830	....
Thrashing, break, and cleaning-fan, Columbian	S. Houston	....	May 3, 1804	....
Thrashing, cleaning, grinding, and bolting machine, Wheat.	L. Tibbitts	New Glasgow, Va	Oct. 22, 1831	....
Thrashing clover and hulling and cleaning the seed.	J. C. Birdsell	West Henrietta, N. Y	May 13, 1862	35,209
Thrashing-cylinder	H. Moore	Green Lake, Wis	July 16, 1872	129,245
Thrashing-cylinders, corn-shellers, and grinding-mills, Arrangement of.	C. Bailey	Batavia, Ill	Apr. 23, 1861	32,112
Thrashing-cylinders, Method of balancing	D. R. Averill	Pulaski, N. Y	Oct. 6, 1857	18,369
Thrashing-cylinders, Teeth for	R. B. Killin	Canton, Ohio	Oct. 13, 1863	40,309
Thrashing, fanning, and cleaning grain, Machine for.	E. Miller and J. Andrews	Westmoreland, N. Y	Aug. 15, 1810	....
Thrashing grain	R. R. Eliot	....	Nov. 16, 1797	....
Thrashing grain	J. S. Wood	Pattensburgh, Va	Sept. 10, 1829	....
Thrashing grain and breaking and dressing flax, Machine for.	S. Condon	New Hartford, Conn	Mar. 3, 1809	....
Thrashing grain and breaking flax and hemp, Machine for.	D. Hurlbut, N. Etheredge, and J. McCombs.	Herkimer County, N. Y	Feb. 21, 1826	....
Thrashing grain and breaking flax and hemp, Machine for.	G. Reynolds	New York	July 20, 1824	....
Thrashing grain and breaking flax, &c., Machine for.	A. and N. Remington	Genoa, N. Y	May 19, 1825	....
Thrashing grain and clearing it from smut	G. Bostwick and H. Spenser	Marylandtown, N. Y	Dec. 24, 1824	....
Thrashing grain and clover and for breaking and dressing flax, Machine for.	J. A. Heermance	Red Hook, N. Y	Jan. 16, 1826	....
Thrashing grain and hulling clover-seed, Machine for.	J. Potter	Reading, Pa	Feb. 18, 1826	....
Thrashing grain and seed	J. Comfort	Bucks County, Pa	Jan. 25, 1810	....
Thrashing grain and shelling corn	P. Reading	Trenton, N. J	May 20, 1825	....
Thrashing grain and shelling corn	E. Thurston	New York	Nov. 1, 1830	....
Thrashing grain and shelling corn, Machine for	M. J. Gilbert	Troy, N. Y	Jan. 20, 1838	577
Thrashing grain, hulling clover-seed, shelling corn, &c., Machine for.	H. N. Waterhouse	Butler County, Ky	Mar. 21, 1838	650
Thrashing grain in the field, Machine for	J. C. and T. G. Wilson	Cedar Hill, Tex	Apr. 14, 1857	17,062
Thrashing grain, shelling corn, cutting straw, &c	B. D. Beecher	Woodbury, Conn	Oct. 20, 1830	....
Thrashing, hulling, and separating machine, Discharge-spout for.	M. H. Mansfield	Ashland, Ohio	Apr. 25, 1871	114,021
Thrashing, hulling, and shelling machine	J. S. Dick	Genesee County, N. Y	Mar. 13, 1835	....
Thrashing-knife	H. Spaulding	Fletcher, Vt	Jan. 12, 1869	85,865
Thrashing-machine	N. Adams	Westmoreland, N. Y	Mar. 2, 1832	....
Thrashing-machine	S. S. Allen	Skaneateles, N. Y	Nov. 1, 1828	....
Thrashing-machine	S. S. Allen	Springport, N. Y	May 13, 1830	....
Thrashing-machine	S. S. Allen	Saratoga Springs, N. Y	Apr. 3, 1835	....
Thrashing-machine	J. Allonas	Mansfield, Ohio	June 22, 1869	91,587
Thrashing-machine	J. Allonas	Mansfield, Ohio	Oct. 4, 1870	107,994
Thrashing-machine	J. Allonas	Mansfield, Ohio	Nov. 22, 1870	109,482
Thrashing-machine	M. Ames and J. Wright	Fredericksburgh, Va	July 10, 1834	....
Thrashing-machine	D. Anthony	Sharon, N. Y	Aug. 7, 1847	5,229
Thrashing-machine	D. C. Arnold	....	Dec. 15, 1810	....
Thrashing-machine	J. H. Arnold and J. Bonsall	Morristown, Ohio	July 8, 1830	....
Thrashing-machine	H. C. Atwood	Woodbury, Conn	Jan. 23, 1830	....
Thrashing-machine	G. Austine	Windsor, Pa	Apr. 15, 1843	3,049
Thrashing-machine	H. K. Averill	New Oregon, Iowa	July 6, 1869	92,245
Thrashing-machine	J. F. Axtell	Geneva, N. Y	Feb. 18, 1834	....
Thrashing-machine	B. Ayars	Greenwich, N. J	Feb. 8, 1870	99,519
Thrashing-machine	J. Bailey and J. Spinkle	Rockingham County, Va	June 20, 1836	....
Thrashing-machine	B. Balch and L. Webster	Sweden, N. Y	July 22, 1831	....
Thrashing-machine	S. Ballou	Livermore, Me	May 25, 1826	....
Thrashing-machine	H. Barclay	Lexington, Vt	Apr. 28, 1836	....
Thrashing-machine	D. Barger	Columbia, N. Y	Sept. 11, 1860	29,946
Thrashing-machine	P. Barker	Battle Creek, Mich	May 31, 1864	42,921
Thrashing-machine	S. Barley	Kerr's Creek, Va	June 5, 1847	5,137
Thrashing-machine	M. Barney	Nantucket, Mass	Aug. 5, 1828	....
Thrashing-machine	I. T. Barton	Union City, Mich	May 27, 1873	139,355
Thrashing-machine	D. C. Baughman	Tiffin, Ohio	June 7, 1870	103,832
Thrashing-machine	D. C. Baughman	Tiffin, Ohio	June 6, 1871	115,679
Thrashing-machine	D. C. Baughman	Tiffin, Ohio	June 6, 1871	115,680
Thrashing-machine	J. Beach	Northfield, Mass	Mar. 30, 1810	....
Thrashing-machine	W. Beach	Philadelphia, Pa	Nov. 23, 1831	....
Thrashing-machine	T. and M. Beaty	Washington, D. C.	Feb. 25, 1818	....
Thrashing-machine	G. Beaumont	Mount Pleasant, Pa	May 6, 1836	....
Thrashing-machine	T. Bedee	Sandwich, N. H	Feb. 10, 1836	....
Thrashing-machine	J. H. Bennett	Aurelius, N. Y	Apr. 10, 1828	....
Thrashing-machine	B. B. Bernard	Virginia	Nov. 30, 1807	....
Thrashing-machine	L. C. Bickings	Norristown, Pa	June 17, 1873	139,857
Thrashing-machine	E. M. Birdsall	Penn Yan, N. Y	Mar. 17, 1863	37,895
Thrashing-machine	A. Bloom	Newville, Pa	Aug. 28, 1849	6,679

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Thrashing-machine	E. L. Booth	Canandaigua, N. Y	July 24, 1846	4, 655
Thrashing-machine	J. Bowles	Louisa, Va	June 11, 1842	2, 661
Thrashing-machine	A. W. Bowling	Front Royal, Va	Dec. 26, 1837	530
Thrashing-machine	J. C. Boyd and A. Kitchin	Rushtown, Pa	June 7, 1825	....
Thrashing-machine	H. Branch	New York	Apr. 18, 1832	....
Thrashing-machine	H. Branch	New York	May 9, 1833	....
Thrashing-machine	L. Bronson	Buffalo, N. Y	Jan. 2, 1872	122, 354
Thrashing-machine	C. B. and W. T. Brown	Alton, Ill	June 6, 1865	48, 047
Thrashing-machine	E. Brown	Chenango, N. Y	Jan. 20, 1836	....
Thrashing-machine	C. Bullard, J. Gay, and I. Draper.	Norfolk County, Mass	Dec. 16, 1818	....
Thrashing-machine	E. D. Burlingame	Tecumseh, Mich	July 29, 1862	35, 990
Thrashing-machine	T. D. Burrall	Geneva, N. Y	Mar. 6, 1835	....
Thrashing-machine	W. H. Butterworth	Trenton, N. J	Apr. 5, 1870	101, 578
Thrashing-machine	J. Butts	Charleston, S. C	May 23, 1848	5, 600
Thrashing-machine	D. Campbell	Indian Town, Ill	Oct. 5, 1869	95, 423
Thrashing-machine	G. Cande and J. Tousey	Rochester, N. Y	Apr. 1, 1831	....
Thrashing-machine	H. R. Canine	Waveland, Ind	Jan. 17, 1871	111, 042
Thrashing-machine	M. G. Carleton	Indianola, Iowa	June 17, 1873	139, 866
Thrashing-machine	L. Carman	Oxford, Me	Apr. 2, 1835	....
Thrashing-machine	T. Carpenter, 2d	Elmira, N. Y	Sept. 28, 1831	....
Thrashing-machine	N. Case	North Granville, Ohio	May 23, 1828	....
Thrashing-machine	C. W. Cathcart	New Durham, Ind	Apr. 25, 1844	3, 558
Thrashing-machine	R. L. Caustin	Ledyard, N. Y	Oct. 1, 1830	....
Thrashing-machine	E. Chandler and J. A. Holland.	Kennebec, Me	Apr. 25, 1834	....
Thrashing-machine	P. Cheek	Murfreesborough, Tenn	June 12, 1835	....
Thrashing-machine	F. G. Chesman	Lemont, Ill	Apr. 21, 1871	112, 782
Thrashing-machine	D. A. Church, L. H. Obert, and W. W. and O. F. Willoughby.	Friendship, N. Y., and Chicago, Ill.	Feb. 13, 1847	4, 969
Thrashing-machine	H. Clark	Princeton, Mass	Mar. 18, 1856	14, 444
Thrashing-machine	J. Clark and I. Starks	Genoa, N. Y	Jan. 20, 1830	....
Thrashing-machine	L. N. Clark	Brighton, Mich	Aug. 30, 1864	43, 971
Thrashing-machine	S. Clark	New York	Dec. 28, 1833	....
Thrashing-machine	P. Cleaveland	Yancy Mills, Va	June 25, 1836	....
Thrashing-machine	T. Cohoon and W. Elliot	Washington, D. C	Apr. 12, 1817	....
Thrashing-machine	J. Cooper	Augusta County, Va	Apr. 12, 1830	....
Thrashing-machine	J. Cooper	Greene County, Ohio	Feb. 20, 1836	....
Thrashing-machine	W. Corwithe	New York	Mar. 23, 1830	....
Thrashing-machine	A. B. Crawford	Piqua, Ohio	Sept. 4, 1860	29, 865
Thrashing-machine	A. B. Crawford	Piqua, Ohio	Sept. 25, 1866	58, 338
Thrashing-machine	I. Crawford	Sweden, N. Y	July 20, 1831	....
Thrashing-machine	F. Cross	Sweden, N. Y	Mar. 8, 1831	....
Thrashing-machine	J. Crowley	Sparta, Wis	Aug. 5, 1873	141, 428
Thrashing-machine	B. Cumings	Brookline, N. H	Sept. 1, 1821	....
Thrashing-machine	J. Cummings	Canonsburgh, Pa	Dec. 10, 1840	1, 891
Thrashing-machine	J. Cummings and H. Harrington.	Woodstock, Canada	July 23, 1867	67, 106
Thrashing-machine	D. Davis and J. Holmes	Fredericksburgh, Va	Mar. 3, 1834	....
Thrashing-machine	J. Dawkins	Westport, Ky	Nov. 10, 1831	....
Thrashing-machine	J. Deneale, jr	....	Nov. 20, 1804	....
Thrashing-machine	H. Dewey	Norwich, Conn	Apr. 27, 1833	....
Thrashing machine	J. Dewey, jr	Troy, N. Y	Jan. 29, 1830	....
Thrashing-machine	W. W. Dingee	York, Pa	July 24, 1860	29, 254
Thrashing-machine	W. W. Dingee	Racine, Wis	Oct. 15, 1872	132, 203
Thrashing-machine	A. Douglass	Marcellus, N. Y	Sept. 18, 1823	....
Thrashing-machine	J. Douglass and W. Johnson	Attica, N. Y	May 14, 1830	....
Thrashing-machine	E. L. Dozier	Camden County, N. C	Apr. 3, 1847	5, 050
Thrashing-machine	E. G. Dyer	Hamilton, Ohio	June 17, 1862	35, 648
Thrashing-machine	W. Eaton, jr	Upper Alton, Ill	July 28, 1843	3, 199
Thrashing-machine	W. Eddy and J. A. Taplin	Easton and Fishkill, N. Y	Oct. 3, 1846	4, 784
Thrashing-machine	H. and J. W. Edgar	Wayne County, Ohio	Mar. 23, 1836	....
Thrashing-machine	G. Eichenseer	Waterloo, N. Y	Apr. 16, 1867	63, 788
Thrashing-machine	J. Ellis, N. Hoffman, and J. Lee.	East Coventry and Pottstown, Pa.	July 1, 1873	140, 491
Thrashing-machine	J. D. Emes	Lansingburgh, N. Y	June 4, 1834	....
Thrashing-machine	C. Emmons	New York	Apr. 17, 1828	....
Thrashing-machine	C. Emmons	New York	July 27, 1829	....
Thrashing-machine	W. Emmons	New York	Feb. 7, 1831	....
Thrashing-machine	S. Fahrney	Boonsborough, Md	May 9, 1831	....
Thrashing-machine	F. A. Finn	Salt Point, N. Y	Feb. 11, 1868	74, 3[illegible]0
Thrashing-machine	M. First	Uniontown, Md	Mar. 3, 1828	....
Thrashing-machine	S. Fisher and D. Sperry	Amsterdam, Va	May 19, 1830	....
Thrashing-machine	J. Fisk	Weld, Me	Sept. 9, 1833	....
Thrashing-machine	J. Fitzgerald	New York	July 14, 1846	4, 636
Thrashing-machine	D. Flagg, jr	Gardiner, Me	June 4, 1830	....
Thrashing-machine	D. Flagg, jr	New York	July 10, 1830	....
Thrashing-machine	M. L. Flaglor	New York	July 7, 1832	....
Thrashing-machine	J. B. Ford, A. Sullivan, and A. Gregg.	New Albany, Ind	Jan. 25, 1859	22, 718
Thrashing-machine	J. Foreman	Healdsburgh, Cal	May 16, 1871	114, 794
Thrashing-machine	C. Foster and L. Jones	La Porte, Ind	Oct. 17, 1846	4, 815
Thrashing-machine	T. Fox and W. G. Borland	Little Falls, N. Y	Feb. 8, 1831	....
Thrashing-machine	G. Fuller	Gardiner, Me	June 11, 1829	....
Thrashing-machine	J. S. Fulton	Gallatin, N. Y	June 7, 1870	103, 866
Thrashing-machine	M. Fuos	Castroville, Tex	Feb. 9, 1869	86, 743
Thrashing-machine	M. Fuos	Castroville, Tex	Sept. 13, 1870	107, 355
Thrashing-machine	W. Furbish	Hallowell, Me	Dec. 17, 1834	....
Thrashing-machine	I. Gallop	Plainfield, Conn	Aug. 18, 1834	....
Thrashing-machine	S. Gambell	Onondaga, N. Y	June 24, 1830	....
Thrashing-machine	S. Gambell	Onondaga, N. Y	Oct. 25, 1832	....
Thrashing-machine	J. W. Garver and C. A. Bikle	Hagerstown, Md	Feb. 9, 1869	86, 746
Thrashing-machine	P. Geiser	Waynesborough, Pa	Aug. 12, 1873	141, 7[illegible]5
Thrashing-machine	P. and D. Geiser	Waynesborough, Pa	Nov. 17, 1869	84, 105
Thrashing-machine	F. A. Geisler	Bristol, R. I	Sept. 21, 1869	95, 016
Thrashing-machine	J. C. Gentry	Philadelphia, Pa	Mar. 7, 1831	....
Thrashing-machine	J. Gerdom	Albany, N. Y	Nov. 5, 1872	132, 822
Thrashing-machine	J. G. Gilbert	New York, N. Y	July 13, 1852	9, 114
Thrashing-machine	R. P. Gillet	Victor, N. Y	June 13, 1831	....

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Thrashing-machine	R. Gillman	New York	Apr. 29, 1822	
Thrashing-machine	N. Goldsborough	Easton, Md	May 6, 1836	
Thrashing-machine	E. A. Goods	Philadelphia, Pa	Jan. 18, 1870	98, 951
Thrashing-machine	E. and D. T. Gordon	Oswego, N. Y	Oct. 27, 1831	
Thrashing-machine	J. Goulding	Bangor, Mass	Mar. 19, 1812	
Thrashing-machine	F. and H. Grieb	Hagerstown, Md	Oct. 19, 1838	985
Thrashing-machine	E. W. Griffin	Pepperell, Mass	Feb. 1, 1870	99, 310
Thrashing-machine	J. Haertter	Pottsville, Pa	May 23, 1848	5, 504
Thrashing-machine	A. G. Hagerström	Red Wing, Minn	Sept. 2, 1873	142, 462
Thrashing-machine	L. Hale	Hollis, N. H	Jan. 7, 1835	
Thrashing-machine	C. S. Hall	Rochester, N. Y	Feb. 25, 1873	136, 238
Thrashing-machine	G. B. Hamlin	Willimantic, Conn	Feb. 15, 1870	99, 888
Thrashing-machine	G. B. Hamlin	Willimantic, Conn	June 11, 1872	127, 872
Thrashing-machine	H. Hanna	Pittsburgh, Pa	Dec. 1, 1868	84, 546
Thrashing-machine	M. Harder, G. W. Douglass, H. Becker, and D. Anthoring.	Cobleskill and Worcester, N. Y.	June 9, 1863	38, 863
Thrashing-machine	E. Harman	Upper Wakefield, Pa	Aug. 5, 1829	
Thrashing-machine	J. Harman, jr	Upper Wakefield, Pa	Feb. 11, 1831	
Thrashing-machine	P. Harrington	Petersburgh, Va	July 20, 1831	
Thrashing-machine	J. Haws	Hudson, N. Y	Dec. 31, 1829	
Thrashing-machine	H. Hebuling	Harrison County, Ohio	Apr. 8, 1835	
Thrashing-machine	H. Heckman	Danville, N. Y	Aug. 19, 1862	36, 214
Thrashing-machine	J. Hersey	Matthews County, Va	Feb. 9, 1818	
Thrashing-machine	B. Hinkley	Fayette, Me	June 23, 1833	
Thrashing-machine	H. Hizer and A. B. Crawford	Wooster, Ohio	June 14, 1843	3, 136
Thrashing-machine	D. Hoats	Mifflinburgh, Pa	July 20, 1846	4, 653
Thrashing-machine	R. Holden	Philadelphia, Pa	May 20, 1825	
Thrashing-machine	O. Holmes	New Lenox, Ill	Jan. 31, 1865	46, 108
Thrashing-machine	W. Holmes	Brooklyn, N. Y	June 10, 1856	15, 074
Thrashing-machine	B. S. Hort	Georgetown, S. C	Feb. 21, 1812	
Thrashing-machine	E. B. Hort	Charleston, S. C	Feb. 18, 1828	
Thrashing-machine	G. Hotchkiss	Windsor, N. Y	July 25, 1834	
Thrashing-machine	J. Houpt, jr	Bucks County, Pa	Dec. 14, 1812	
Thrashing-machine	R. Howard and J. B. Flagg	Kennebec City, Me	Nov. 5, 1825	
Thrashing-machine	T. Howe	Turner, Me	Dec. 3, 1822	
Thrashing-machine	B. Hoyle	Martin's Ferry, Ohio	Dec. 10, 1861	33, 886
Thrashing-machine	B. Hoyle, jr., and A. Ralston	Martin's Ferry, Ohio	Aug. 27, 1861	33, 148
Thrashing-machine	S. D. Huffman	New Germantown, N. J	Apr. 6, 1869	88, 716
Thrashing-machine	R. Humphrey	Victor, N. Y	Dec. 27, 1830	
Thrashing-machine	O. Hurd	Bridgeport, Conn	Jan. 31, 1832	
Thrashing-machine	H. E. Hurlburt	Hammondsport, N. Y	Jan. 3, 1871	110, 658
Thrashing-machine	J. Hyde	Pembroke, N. Y	Dec. 9, 1826	
Thrashing-machine	T. Ingersoll	Murray, N. Y	Mar. 23, 1830	
Thrashing-machine	A. Jackson	Lebanon, Tenn	Nov. 2, 1858	21, 963
Thrashing-machine	W. N. Jackson	Muncie, Ind	Feb. 14, 1871	111, 848
Thrashing-machine	F. P. Jaquith	Hoosick Falls, N. Y	Nov. 28, 1871	121, 377
Thrashing-machine	I. Jennings	Brookfield, N. Y	Mar. 30, 1810	
Thrashing-machine	G. Jessup	Troy, N. Y	Dec. 14, 1830	
Thrashing-machine	G. Jessup	Newark, N. J	July 18, 1848	5, 667
Thrashing-machine	W. G. Johnson	Bridgetown, N. J	Apr. 3, 1835	
Thrashing-machine	A. Johnston	Lockport, N. Y	Jan. 14, 1873	134, 891
Thrashing-machine	H. Johnston	Washington County, Tenn	May 29, 1835	
Thrashing-machine	J. Jones, jr	New Haven, Conn	Feb. 25, 1818	
Thrashing-machine	T. Judson and J. Hotchkiss	Woodbury, Conn	Nov. 27, 1812	
Thrashing-machine	S. Kable	Beaver Creek Township, Ohio.	May 10, 1832	
Thrashing-machine	D. Kane	Tivoli, Iowa	Sept. 1, 1868	81, 647
Thrashing-machine	J. S. Keller and I. L. Stoner	Ephrata Township, Pa	Jan. 16, 1872	122, 726
Thrashing-machine	B. H. Kepner	Nora, Ill	Aug. 22, 1865	49, 533
Thrashing-machine	W. Kirk	Baltimore, Md	July 22, 1823	
Thrashing-machine	D. O. B. Ladd	Racine, Wis	Jan. 14, 1873	134, 901
Thrashing-machine	W. Laighton	Portsmouth, N. H	June 6, 1835	
Thrashing-machine	G. W. Lee	Homeworth, Ohio	July 12, 1870	105, 344
Thrashing-machine	S. Leonard	Hampden, Me	Mar. 27, 1834	
Thrashing-machine	N. Lindsey	Catskill, N. Y	May 7, 1830	
Thrashing-machine	E. Lindsley	Neenah, Wis	Dec. 1, 1868	84, 557
Thrashing-machine	D. Lippy and J. S. Blymer	Mansfield, Ohio	Apr. 8, 1873	137, 695
Thrashing-machine	W. Loomis	Springfield, N. Y	Mar. 6, 1828	
Thrashing-machine	I. Lukens	Upper Dublin Township, Va.	Sept. 2, 1834	
Thrashing-machine	A. and J. Lupton and J. Jacob	Frederick County, Va	July 28, 1830	
Thrashing-machine	J. Lutz, J. A. Eberly, and H. Becker.	East Cocalico Township, Pa.	Mar. 16, 1869	87, 949
Thrashing-machine	J. A. Lutz	Bucyrus, Ohio	June 4, 1872	127, 494
Thrashing-machine	B. Maltby	Gates, N. Y	July 30, 1831	
Thrashing-machine	M. H. Mansfield	Ashland, Ohio	May 2, 1871	114, 313
Thrashing-machine	S. Mapes	Buffalo, N. Y	July 20, 1869	92, 735
Thrashing-machine	W. B. Marks	Petersburgh, Va	Apr. 8, 1831	
Thrashing-machine	J. Marshall, jr	Sweden, N. Y	Aug. 1, 1834	
Thrashing-machine	I. W. Martin	Goodville, Pa	June 29, 1869	92, 072
Thrashing-machine	R. A. Martindale	Hobbleville, Ind	July 22, 1873	141, 153
Thrashing-machine	J. Matthias	Manchester, Md	Aug. 27, 1834	
Thrashing-machine	L. H. Maus	Danville, Pa	Feb. 5, 1836	
Thrashing-machine	T. Mayfield	Baltimore, Md	Dec. 28, 1818	
Thrashing-machine	D. G. McCoy	Dublin, Md	Mar. 20, 1835	
Thrashing-machine	M. McDonald	Topsham, Me	July 9, 1822	
Thrashing-machine	A. McNaught	Alliance, Ohio	May 23, 1871	115, 081
Thrashing-machine	J. H. Melick	Albany, N. Y	Aug. 28, 1866	57, 541
Thrashing-machine	J. Melvin	Readfield, Me	June 18, 1834	
Thrashing-machine	J. H. Miller	Arcadia, N. C	Jan. 31, 1871	111, 367
Thrashing-machine	J. R. Miller	Dryden, N. Y	Apr. 30, 1823	
Thrashing-machine	R. Miller	Marietta, Pa	Mar. 15, 1830	
Thrashing-machine	P. W. Mills	Conneaut, Ohio	Jan. 19, 1858	19, 148
Thrashing-machine	J. R. Moffitt	Saint Louis, Mo	Apr. 6, 1858	19, 865
Thrashing-machine	J. R. Moffitt	Piqua, Ohio	May 24, 1859	24, 158
Thrashing-machine	D. Moyer	Cootstown, Pa	Feb. 10, 1830	
Thrashing-machine	N. C. Munroe	Windham, N. Y	Apr. 14, 1831	

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Thrashing-machine	J. and E. C. Nichols and D. Shepard.	Battle Creek, Mich	Nov. 6, 1866	59,440
Thrashing-machine	A. Noble	Alfred, Me	Jan. 12, 1824	....
Thrashing-machine	I. Norton	Schuylersville, N. Y	Jan. 6, 1831	....
Thrashing-machine	S. Norton	New Lebanon, N. Y	June 29, 1833	....
Thrashing-machine	G. Oerllein	Utica, Minn	June 15, 1869	91,257
Thrashing-machine	W. Ottinger	Whitemarsh, Pa	Oct. 1, 1830	....
Thrashing-machine	S. E. Oviatt	Richfield, Ohio	July 10, 1860	29,095
Thrashing-machine	S. E. Oviatt	Richfield, Ohio	May 14, 1861	32,309
Thrashing-machine	S. E. Oviatt	Richfield, Ohio	Apr. 18, 1865	47,326
Thrashing-machine	S. E. Oviatt	Richfield, Ohio	Dec. 8, 1868	84,706
Thrashing-machine	S. E. Oviatt	West Richfield, Ohio	Apr. 23, 1872	125,904
Thrashing-machine	E. G. Owen	Baltimore, Md	Nov. 26, 1829	....
Thrashing-machine	W. F. Pagett	White Post, Va	May 22, 1835	....
Thrashing-machine	J. B. Palmer	Baltimore, Md	July 20, 1831	....
Thrashing-machine	N. Palmer	Hudson, N. Y	May 16, 1865	47,746
Thrashing-machine	N. Palmer	Hudson, N. Y	Apr. 10, 1866	53,860
Thrashing-machine	N. Palmer	Hudson, N. Y	Jan. 1, 1867	60,778
Thrashing-machine	N. Palmer	Hudson, N. Y	Jan. 1, 1867	60,928
Thrashing-machine	N. Palmer	Hudson, N. Y	Jan. 1, 1867	60,929
Thrashing-machine	W. M. Palmer	Palmyra, Me	Aug. 1, 1854	11,439
Thrashing-machine	F. W. Pampel	Frederick, Md	May 31, 1870	103,769
Thrashing-machine	A. Parsons	Rockfield, Me	July 2, 1836	....
Thrashing-machine	A. S. Pelton	Clinton, Conn	May 14, 1850	7,368
Thrashing-machine	W. P. Penn	Belleville, Ill	June 18, 1861	32,582
Thrashing-machine	W. H. Perry	Ripley, Ohio	Nov. 9, 1869	96,611
Thrashing-machine	J. Peters	Harrisburgh, Pa	June 12, 1830	....
Thrashing-machine	M. E. Phillips	Lena, Ill	Dec. 24, 1867	72,675
Thrashing-machine	E. B. Pike	Litchfield, Me	Oct. 5, 1827	....
Thrashing-machine	A. V. Pitts	Chicago, Ill	Nov. 14, 1871	120,826
Thrashing-machine	J. Pope	Hallowell, Me	July 30, 1822	....
Thrashing-machine	J. W. Post and J. Ryan	Philadelphia, Pa	Sept. 10, 1828	....
Thrashing-machine	D. Porter	Boonsville, N. Y	Nov. 19, 1833	....
Thrashing-machine	C. M. Powers	Ridgewood, N. J	Apr. 15, 1873	137,863
Thrashing-machine	W. M. Pratt	Chicago, Ill	Aug. 8, 1871	117,812
Thrashing-machine	W. Prescott	Pottsville, Pa	Oct. 25, 1831	....
Thrashing-machine	H. Read	Ypsilanti, Mich	Aug. 22, 1865	49,551
Thrashing-machine	N. Read	Boston, Mass	Feb. 22, 1817	....
Thrashing-machine	N. Read	Belfast, Me	Feb. 18, 1818	....
Thrashing-machine	P. Reading	Trenton, N. J	Apr. 15, 1823	....
Thrashing-machine	P. Reading	Trenton, N. J	June 3, 1826	....
Thrashing-machine	J. Redifer	Philadelphia, Pa	July 25, 1831	....
Thrashing-machine	J. Reid	Marshfield, Mass	Apr. 14, 1863	38,179
Thrashing-machine	C. Reef	Hartleton, Pa	June 24, 1843	3,150
Thrashing-machine	C. C. Reynolds	New York, N. Y	Sept. 3, 1867	68,547
Thrashing-machine	G. Reynolds	New York	Jan. 21, 1823	....
Thrashing-machine	S. D. Reynolds	Lane, Ill	Aug. 17, 1858	21,214
Thrashing-machine	G. M. Rhoades and G. B. Hamlin.	Hamilton, N. Y., and Willimantic, Conn.	Mar. 16, 1869	87,874
Thrashing-machine	W. Richards	Culpeper County, Va	Mar. 2, 1812	....
Thrashing-machine	A. Richison	New Carlisle, Ohio	Apr. 22, 1831	....
Thrashing-machine	F. W. Robinson	Richmond, Ind	May 7, 1872	126,402
Thrashing-machine	J. S. Rollins	New Gloucester, Me	June 2, 1836	....
Thrashing-machine	J. Rollman	Sinking Springs, Pa	Sept. 20, 1859	25,527
Thrashing-machine	J. I. Rollow	Fredericksburgh, Va	July 5, 1859	24,704
Thrashing-machine	C. E. Roper	Canton, Ohio	June 27, 1871	116,356
Thrashing-machine	J. Ross	Boundbrook, N. J	Feb. 6, 1835	....
Thrashing-machine	W. Ross	Pennfield, N. Y	Apr. 1, 1830	....
Thrashing-machine	W. W. Ross	Chillisquaque Township, Pa.	Mar. 30, 1835	....
Thrashing-machine	C. and T. H. Russell and W. K. Miller.	Massillon, Ohio	July 13, 1869	92,650
Thrashing-machine	A. Savage	Wheatland, N. Y	Mar. 28, 1822	....
Thrashing-machine	W. Schnelby	Hackensack, N. Y	June 21, 1870	104,503
Thrashing-machine	G. W. Scott and T. J. Moore	Bloomington, Ill	Oct. 1, 1872	131,790
Thrashing-machine	P. Shaffer	Richmond Township, Pa	Nov. 16, 1831	....
Thrashing-machine	C. H. Shank and S. Stephenson	Hummelstown, Pa	Nov. 12, 1861	33,714
Thrashing-machine	J. Shaw	Augusta, Me	Nov. 19, 1834	....
Thrashing-machine	G. L. Sheldon	New Marlborough, Mass	Sept. 13, 1864	44,224
Thrashing-machine	T. N. Shipton	Lewistown, Pa	Apr. 10, 1849	6,284
Thrashing-machine	J. H. Siddall	Philadelphia, Pa	July 12, 1859	24,767
Thrashing-machine	J. I. Sigler	Martin's Ferry, Ohio	Apr. 12, 1859	23,647
Thrashing-machine	S. Skiff	Sharon, Conn	Dec. 5, 1812	....
Thrashing-machine	J. F. Skinner	Brasher Iron Works, N. Y	Jan. 7, 1868	73,204
Thrashing-machine	J. U. Slingluff	Eggleville, Pa	Jan. 12, 1869	85,769
Thrashing-machine	W. J. Sloan	Bloom, Ill	Sept. 3, 1867	68,390
Thrashing-machine	A. Slover and W. Sperry	New York	June 29, 1830	....
Thrashing-machine	A. L. Smith	Brutus, N. Y	Nov. 24, 1830	....
Thrashing-machine	C. Smith	New York	Sept. 6, 1823	....
Thrashing-machine	H. E. Smith	Philadelphia, Pa	June 1, 1858	20,449
Thrashing-machine	J. Smith	Burlington, Wis	Nov. 25, 1873	144,874
Thrashing-machine	J. P. Smith	Hudson, N. Y	Apr. 3, 1866	53,694
Thrashing-machine	S. Smith	Albany, N. Y	Aug. 23, 1817	....
Thrashing-machine	T. Smith	Enfield, N. Y	Feb. 3, 1834	....
Thrashing-machine	W. H. Smith	La Crosse, Wis	Mar. 16, 1869	87,881
Thrashing-machine	Sneed and Carpenter	Albemarle County, Va	May 9, 1835	....
Thrashing-machine	C. L. Snyder	Hardin, Ill	Oct. 29, 1867	70,240
Thrashing-machine	E. S. Snyder	Charlestown, Va	June 11, 1850	7,430
Thrashing-machine	S. Spencer	Groton, N. Y	June 6, 1865	48,108
Thrashing-machine	W. Sperry	New York	Oct. 1, 1830	....
Thrashing-machine	D. Stafford	Syracuse, N. Y	May 19, 1840	1,613
Thrashing-machine	P. H. Standish	Santa Clara, Cal	Aug. 20, 1861	33,109
Thrashing-machine	I. Starr	Prairieville, Mich	Feb. 9, 1869	86,707
Thrashing-machine	J. Stowitts	Gorham, N. Y	July 13, 1830	....
Thrashing-machine	E. D. Street	East Haven, Conn	Oct. 30, 1866	59,201
Thrashing-machine	F. A. Stuart	Catharine, N. Y	June 5, 1844	3,630
Thrashing-machine	J. B. Suitt	Indianapolis, Ind	Sept. 16, 1873	142,961
Thrashing-machine	R. P. Sutherland	Chatham, N. Y	Apr. 26, 1834	....

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Invention.	Inventor.	Residence.	Date.	No.
Thrashing-machine	F. R. and W. O. Sutton	Wellington, Ill	July 1, 1873	140, 440
Thrashing-machine	J. M. Syme	New Bedford, Mass	Nov. 29, 1809	
Thrashing-machine	J. P. Tenant and W. Eaton	Wooster, Ohio	Dec. 17, 1834	
Thrashing-machine	J. T. Thornton	Elmira, Ill	Jan. 19, 1869	85, 974
Thrashing-machine	J. T. Turner		Oct. 19, 1803	
Thrashing-machine	S. Turner	Aurelius, N. Y	Jan. 11, 1831	
Thrashing-machine	S. Turner and N. Barnes	Aurelius, N Y	Nov. 27, 1830	
Thrashing-machine	B. and J. Tyler and J. B. Andrews.	Windsor, Vt	Apr. 23, 1822	
Thrashing-machine	J. Tyler	Brooklyn, Conn	July 7, 1835	
Thrashing-machine	P. Upton and J. B. Lobdell	Battle Creek, Mich	Nov. 21, 1871	121, 220
Thrashing-machine	I. Van Doren	Hopewell Township, N. J	June 13, 1831	
Thrashing-machine	R. C. Van Houton	New York	Mar. 28, 1811	
Thrashing-machine	W. Verill	Elwood, N. J	Aug. 5, 1873	141, 526
Thrashing-machine	J. Vosburgh	Kinderhook, N. Y	July 20, 1831	
Thrashing-machine	D. S. Wagener	Penn Yan, N. Y	May 1, 1860	28, 118
Thrashing-machine	J. W. Walker	Wilmington, N. C	Feb. 9, 1811	
Thrashing-machine	J. Wardrop		Nov. 5, 1794	
Thrashing-machine	S. D. Warner	Richmond, Ill	Nov. 19, 1867	71, 093
Thrashing-machine	T. Warner	Genesee, N. Y	May 11, 1815	
Thrashing-machine	E. Warren	New York	Jan. 29, 1830	
Thrashing-machine	E. Warren	New York	Apr. 28, 1831	
Thrashing-machine	E. Warren	New York	May 17, 1833	
Thrashing-machine	E. Warren	New York	May 29, 1835	
Thrashing-machine	E. Warren	New York	May 23, 1848	5, 588
Thrashing-machine	J. T. and E. Warren	New York, N. Y	July 14, 1845	4, 115
Thrashing-machine	J. T. Watkins	Santa Clara, Cal	Dec. 17, 1872	134, 114
Thrashing-machine	D. A. Webster	New York	June 29, 1833	
Thrashing-machine	W. K. Weed	New York	Feb. 12, 1834	
Thrashing-machine	H. Wehler	Hampton, Pa	May 20, 1873	139, 218
Thrashing-machine	P. Weller	Fowlersville, N. Y	Mar. 7, 1846	4, 398
Thrashing-machine	M. D. Wells and H. Hagans	Morgantown and Brandonville, Va.	Nov. 23, 1858	22, 141
Thrashing-machine	A. Wemple	Chicago, Ill	Apr. 23, 1872	126, 117
Thrashing-machine	J. S. West	Portland, N. Y	Apr. 26, 1831	
Thrashing-machine	G. Westinghouse	Schenectady, N. Y	Jan. 2, 1872	122, 420
Thrashing-machine	G. Westinghouse and L. Smith	Schenectady and Sharon Springs, N. Y.	Dec. 27, 1864	45, 683
Thrashing-machine	J. R. Wheeler	Brighton, N. Y	Apr. 9, 1833	
Thrashing-machine	S. Wheeler	Albany, N. Y	Apr. 2, 1872	125, 238
Thrashing-machine	J. Whitehill	Frederick County, Md	Apr. 22, 1835	
Thrashing-machine	L. and E. Whitman, jr.	Winthrop, Me	Mar. 20, 1844	3, 497
Thrashing-machine	A. S. Whittemore	Willimantic, Conn	June 1, 1869	90, 904
Thrashing-machine	A. S. Whittemore and J. E. Atwood.	Willimantic and Mansfield, Conn.	Mar. 1, 1870	100, 478
Thrashing-machine	H. Whittier	West Roxbury, Mass	Oct. 18, 1870	108, 421
Thrashing-machine	E. Wickwire	Alexander, N. Y	Sept. 28, 1831	
Thrashing-machine	M. Wilder	East Princeton, Mass	Jan. 1, 1867	60, 813
Thrashing-machine	J. M. Wilders	Croxton Keyrial, England	Nov. 18, 1873	144, 721
Thrashing-machine	D. A. Willbanks	Harmony Grove, Ga	Dec. 6, 1859	26, 389
Thrashing-machine	J. P. Williams	Eldridge, Va	Feb. 13, 1834	
Thrashing-machine	R. S. Williams	Norristown, Pa	Dec. 12, 1871	121, 739
Thrashing-machine	C. Wilson	New York	Aug. 19, 1834	
Thrashing-machine	A. Wimple	Chicago, Ill	Apr. 15, 1873	137, 809
Thrashing-machine	W. J. Wood	Batavia, N. Y	Oct. 1, 1830	
Thrashing-machine	W. J. Wood	Rochester, N. Y	Apr. 19, 1831	
Thrashing-machine	J. A. Woodward	Platteville, Wis	June 2, 1863	38, 779
Thrashing machine	L. Yale and P. C. Curtis	Utica, N. Y	Sept. 17, 1833	
Thrashing-machine	B. Yeakel	Allentown, Pa	Sept. 10, 1867	68, 825
Thrashing-machine	G. H. Zschech	Indianapolis, Ind	Dec. 26, 1871	122, 303
Thrashing-machine and cleaning clover-seed	W. Morgridge	Chesterville, Me	Feb. 12, 1834	
Thrashing-machine and clover-seed huller	J. Parsons, jr	Rush, Pa	June 29, 1833	
Thrashing-machine and clover-seed machine	S. West	Harford County, Md	Mar. 1, 1833	
Thrashing-machine and corn sheller	D. Knauer	East Nantmeal Township, Pa.	Sept. 25, 1834	
Thrashing-machine and corn-sheller, Combined	J. Bowman	Princeville, Ill	Nov. 15, 1870	109, 289
Thrashing-machine and grain-cleaner	A. Porter	New Vineyard, Me	Jan. 23, 1835	
Thrashing-machine and grain-separator	L. B. Lathrop	San José, Cal	Jan. 14, 1868	73, 348
Thrashing-machine and grain-separator	J. Smith	Burlington, Wis	May 16, 1871	114, 984
Thrashing-machine and grain-separator, Combined	L. P. Teed	Lewisburgh, Pa	June 9, 1868	78, 843
Thrashing-machine and grist-mill attached	M. Wilson	Springfield, Va	Apr. 18, 1832	
Thrashing-machine and hair-picker	J. Bean	Readfield, Me	Nov. 5, 1834	
Thrashing-machine and hemp and flax breaker	D. A. Webster	New York, N. Y	Dec. 16, 1833	
Thrashing-machine and hulling clover-seed	L. Cooley	Philadelphia, Pa	Nov. 11, 1830	
Thrashing-machine and separator	M. H. Mansfield	Ashland, Ohio	May 23, 1871	115, 223
Thrashing-machine and separator	H. W. Matthews	Chicago, Ill	Aug. 27, 1867	68, 095
Thrashing-machine and separator, Combined	J. Seip and H. J. Schmeyer	Macungie, Pa	Sept. 21, 1869	95, 050
Thrashing-machine and straw-cutter	J. Stewart	Cambridge, Md	Nov. 17, 1834	
Thrashing-machine and straw-cutter, Combined	D. Kaufman	Boiling Springs, Pa	Feb. 21, 1865	46, 474
Thrashing-machine band-cutter	H. Barber	Juneau, Wis	May 26, 1863	38, 647
Thrashing-machine band-cutter	S. Cartmel	Henry, Ill	July 6, 1869	92, 162
Thrashing-machine band-cutter	W. P. French	Washington, Iowa	June 25, 1867	66, 143
Thrashing-machine band-cutter	W. U. Hoover	Macomb, Ill	June 20, 1865	48, 279
Thrashing-machine band-cutter	L. Sumner	Oskaloosa, Iowa	May 25, 1869	90, 605
Thrashing-machine band-cutter and feeder	W. U. Hoover	Macomb, Ill	Mar. 21, 1865	46, 905
Thrashing-machine-band-cutter and feeder	J. Sullivan and J. Minks	Newark, Ind	July 8, 1873	140, 658
Thrashing-machine band-cutter and feeder, Combined.	P. G. Briggs, H. A. Butler, and H. Granger.	Macon, Mo	Dec. 8, 1868	84, 726
Thrashing-machine band-cutter and feeder, Combined.	S. C. Myers and J. McCauley	McAllisterville, Pa	Jan. 31, 1871	111, 469
Thrashing-machine-band-cutter platform	J. A. Walsh	Mount Hope, Wis	Feb. 11, 1873	135, 678
Thrashing-machine band-cutting attachment	J. Lee, jr., and J. Lee, sr	Duquoin, Ill	Apr. 25, 1871	114, 159
Thrashing-machine beater	J. Crowley	Sparta, Wis	May 17, 1870	103, 147
Thrashing-machine, Chaffing-straw	R. Bradley	Williston, Vt	Oct. 6, 1835	
Thrashing machine, Clover, &c	S. Kern	Strasburgh, Va	May 8, 1838	729
Thrashing machine, Clover	J. P. Ridings	Hillsborough, Ohio	June 19, 1835	
Thrashing machine, Clover and flax	S. H. Lintan	Burrows, Ind	July 6, 1869	92, 326
Thrashing machine, Clover and timothy seed	A. Burgess and H. Baldwin	Washington, Conn	Oct. 10, 1835	

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Invention.	Inventor.	Residence.	Date.	No.
Thrashing-machine clover-hulling attachment	J. H. Golladay	New Lisbon, Ohio	Oct. 18, 1870	108, 347
Thrashing machine, Clover-seed	J. Brooks	Brownburgh, Va	Dec. 15, 1837	515
Thrashing machine, Clover seed	W. B. Davis	Reading, Ohio	June 20, 1838	794
Thrashing machine, Clover-seed or rice	M. Davenport	Phillips, Me	Oct. 6, 1835	......
Thrashing-machine, Concave	L. C. Bickings	Norristown, Pa	Dec. 2, 1873	145, 044
Thrashing-machine, Concave	C. S. Hall	Rochester, N. Y	July 25, 1871	117, 410
Thrashing-machine, Concave	J. Nichols	Battle Creek, Mich	June 22, 1869	91, 658
Thrashing-machine, Concave	I. Zellers	Greenwich, N. J	Jan. 24, 1842	2, 432
Thrashing-machine, corn-sheller, and apple-grinder	J. Bevier	Sempronius, N. Y	Dec. 11, 1832	......
Thrashing-machine, Cylinder and concave	J. Hart and W. Holladay	Spottsylvania County, Va	Sept. 17, 1833	......
Thrashing-machine, Cylinder and concave	W. E. Osborne	Brighton, N. Y	Apr. 30, 1831	......
Thrashing-machine dust-conveyor	J. and P. W. Brownback	East Coventry, Pa	Nov. 12, 1872	132, 894
Thrashing-machine dust-conveyor	J. B. Hunsberger	Vincent, Pa	June 11, 1872	127, 884
Thrashing-machine dust-conveyor	J. B. Hunsberger	Vincent, Pa	Nov. 19, 1872	133, 227
Thrashing-machine dust-conveying attachment	J. Bierbower	Philadelphia, Pa	May 27, 1873	139, 289
Thrashing-machine dust-fan	C. S. Allen	Flat Rock, Mich	July 9, 1872	128, 838
Thrashing-machine fan-attachment	W. C. Rentgen and P. H. Humes	Keokuk, Iowa	Mar. 26, 1861	31, 825
Thrashing-machine feed-apparatus	G. W. Carpenter	Medina, Mich	Nov. 13, 1866	59, 555
Thrashing-machine feed-attachment	D. F. Slane	Chillicothe, Ohio	June 28, 1870	104, 895
Thrashing-machine feed-attachment	B. Thompson	Horton, Iowa	Sept. 6, 1870	107, 203
Thrashing-machine feed-cutter	G. W. Lee	Sandy, Ohio	May 4, 1869	89, 669
Thrashing-machine feeder	W. Ostermeyer	Kane, Ill	Feb. 9, 1869	86, 684
Thrashing-machine-feeding apparatus	E. Valentine and M. T. Ridout	Milwaukee, Wis	July 25, 1865	49, 044
Thrashing machine, Field	G. Rieke	Kairo Township, Minn	Apr. 4, 1871	113, 445
Thrashing machine, Field	A. W. Tucker	Waxahachie, Tex	Dec. 31, 1867	72, 940
Thrashing-machine, Float and tooth	A. W. Summers	Gates, N. Y	Mar. 21, 1831	......
Thrashing-machine for beating off pea-nuts from the vines.	T. L. Colville and S. Shepherd	Wilmington, N. C., and Nashua, N. H.	Oct. 20, 1857	18, 436
Thrashing-machine for conducting the straw and grain from the thrasher.	L. Whitman	Winthrop, Me	Aug. 25, 1840	1, 728
Thrashing-machine gearing	L. B. Hubbell	Alton, Ill	Jan. 16, 1866	52, 048
Thrashing-machine gearing	L. Miller	Canton, Ohio	Mar. 19, 1861	31, 764
Thrashing machine, Grain	J. Brown	Jackson, Tenn	Oct. 21, 1834	......
Thrashing machine, Grain	J. and D. Fitzgerald	New York	Oct. 30, 1834	......
Thrashing machine, Grain	J. Gearhart	Rush Township, Pa	Aug. 27, 1835	......
Thrashing machine, Grain	W. Hodgson	......	Apr. 28, 1794	......
Thrashing machine, Grain	W. Hoyt	Brookville, Ind	Sept. 9, 1825	......
Thrashing machine, Grain	J. Pope	......	July 22, 1802	......
Thrashing machine, Grain	N. Read	Belfast, Me	Dec. 23, 1817	......
Thrashing machine, Grain	J. Shaw	Kennebec County, Me	May 10, 1826	......
Thrashing machine, Grain	W. Small	Augusta, Me	Sept. 9, 1825	......
Thrashing machine, Grain	W. Small	Augusta, Me	Jan. 10, 1826	......
Thrashing machine, Grain	I. S. Spencer	Guilford, Conn	Sept. 23, 1856	15, 786
Thrashing machine, Grain	A. Townsend	Le Roy, N. Y	Dec. 30, 1841	2, 408
Thrashing machine, Grain	A. West	Greene, Me	July 26, 1838	857
Thrashing machine, Grain	S. West	Harford County, Md	Nov. 11, 1834	......
Thrashing machine, Grain	J. S Wood	Botetourt County, Va	Jan. 9, 1829	......
Thrashing machine, Grain, &c	L. Yale and S. W. and N. Stimson	Little Falls, N. Y	May 17, 1838	739
Thrashing machine, Grain and corn	S. Mulliken	......	Mar. 11, 1791	......
Thrashing machine, Grain and grass-seed	D. W. Webster	Amesbury, Mass	Feb. 9, 1828	......
Thrashing-machine grain-measuring attachment	B. Baker	Addison, Mich	June 21, 1870	104, 536
Thrashing-machine grain-measuring attachment	J. Hemingway	Burnside, Ill	May 7, 1872	126, 392
Thrashing-machine grain-measuring attachment	W. A. Workman	Fairfield, Iowa	Dec. 14, 1869	97, 978
Thrashing-machine grain separating and cleaning attachment.	W. A. Myers	York, Pa	May 2, 1871	114, 463
Thrashing-machine grain-separator	J. W. Breese	Canandaigua, Mich	May 14, 1872	126, 670
Thrashing-machine grain-separator	J. W. Huntoon	Saint Louis, Mo	Jan. 31, 1871	111, 347
Thrashing-machine grain-separator	Z. Miller	Canal Fulton, Ohio	Jan. 30, 1872	123, 188
Thrashing-machine, Horse-power	J. Lammon	Macedon, N. Y	Dec. 14, 1831	......
Thrashing-machine, Horse-power	A. Parker	Portland, Me	May 14, 1834	......
Thrashing-machine, Horse-power	N. P. Stanton	Syracuse, N. Y	July 21, 1831	......
Thrashing-machine, Horse-power	J. V. A. Wemple	Florida, N. Y	Mar. 25, 1834	......
Thrashing-machine jack	I. Sherck	Flatrock, Ohio	May 18, 1869	90, 315
Thrashing-machine measuring and tallying attachment.	W. F. Abbott	Marengo, Ill	Feb. 25, 1868	74, 784
Thrashing-machine measuring-attachment	J. Hemingway	Burnside's, Ill	July 2, 1872	128, 622
Thrashing machine, Pea and bean	J. F. Smith	Portsmouth, Va	July 24, 1860	29, 315
Thrashing machine, Portable grain	H. and J. W. Edgar	Wayne County, Ohio	June 6, 1835	......
Thrashing-machine, &c., propelled by animal-power	T. D. Burrall and J. F. Axtell	Geneva, N. Y	June 13, 1832	......
Thrashing-machine reel	H. Hanna	Pittsburgh, Pa	Apr. 9, 1872	125, 566
Thrashing machine, Rice	J. Butts	Georgetown, S. C	May 20, 1830	......
Thrashing machine, Rice, &c	W. Mathews	Charleston, S. C	Aug. 27, 1835	......
Thrashing machine, Rice	S. Rogers	Asheville, N. C	July 25, 1831	......
Thrashing machine, Rice	E. Sands	Cincinnati, Ohio	May 24, 1830	......
Thrashing machine, Rice	E. Warren	New York	Feb. 22, 1828	......
Thrashing machine, Rice	I. S. Palmer	Philadelphia, Pa	Dec. 6, 1831	......
Thrashing-machine riddle	D. Murphy	Dubuque, Iowa	Feb. 14, 1871	111, 766
Thrashing-machine riddle	F. W Robinson	Richmond, Ind	Sept. 28, 1858	21, 628
Thrashing-machine sacking-attachment	W. Masterton	Stockton, Cal	May 20, 1873	139, 073
Thrashing-machine separating and winnowing attachment.	J. Seip and H. J. Schmeyer	Macungie, Pa	Sept. 17, 1872	131, 468
Thrashing-machine separator	T. Crumling	Cross Roads, Pa	Dec. 29, 1868	85, 368
Thrashing-machine separator	G. W. Howe	Vineland, N. J	Jan. 7, 1873	134, 671
Thrashing-machine separator	H. H. Kurtz	Salisbury, Pa	Feb. 11, 1873	135, 821
Thrashing-machine separator	I. Lebo	Winterville, Pa	Sept. 20, 1870	107, 510
Thrashing-machine separator	C. Miller	Clay Township, Pa	Mar. 28, 1871	113, 076
Thrashing-machine separator	S. R. Perkins	Greenville, Mich	Oct. 14, 1873	143, 588
Thrashing-machine separator	A. and P. Staffer	Salt Creek, Ind	Feb. 1, 1870	99, 366
Thrashing-machine separator	A. Wissler	Brunnerville, Pa	Oct. 18, 1870	108, 546
Thrashing-machine separator-attachment	M. A. Keller	Littlestown, Pa	Aug. 16, 1870	106, 370
Thrashing-machine shaker	M. A. Keller	Littlestown, Pa	Dec. 7, 1869	97, 520
Thrashing-machine shaker	J. P. Smith	Claverack, N. Y	June 9, 1868	78, 766
Thrashing-machine shaker-attachment	D. Frost	Dupage, Ill	Jan. 22, 1867	61, 333
Thrashing-machine shaker-frame	L. P. Teed	White Deer Mills, Pa	Jan. 6, 1863	37, 367
Thrashing-machine, shelling corn and dressing flax.	W. P. Barton	Batavia, N. Y	Feb. 28, 1833	......
Thrashing-machine side-gear	J. Duchesne	Lacon, Ill	June 2, 1868	78, 582
Thrashing-machine side-gear	C. F. Duvall	Milwaukee, Wis	Sept. 11, 1866	57, 888
Thrashing-machine spike	A. B. Colton	Athens, Ga	Nov. 6, 1860	30, 563

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Thrashing-machine straw-carrier	O. Abell	Witoka, Minn	July 25, 1871	117, 238
Thrashing-machine straw-carrier	L. Bronson	Lockport, N. Y	Aug. 13, 1861	33, 061
Thrashing-machine straw-carrier	M. P. Morgan	Scott, N. Y	Oct. 8, 1861	33, 445
Thrashing-machine straw-carrier	F. W. Robinson	Richmond, Ind	Aug. 31, 1858	21, 367
Thrashing-machine straw-carrier	C. Russell and W. K. Miller	Massillon, Ohio	May 17, 1870	103, 086
Thrashing-machine straw-carrier	G. Weiland	Buffalo, N. Y	Mar. 26, 1861	31, 855
Thrashing-machine straw-carrier and grain-separator.	W. Pierpont	Salem, N. J	Dec. 24, 1861	34, 010
Thrashing-machine straw-conveyer	M. Beebe	Clarendon, N. Y	Mar. 28, 1838	663
Thrashing-machine straw-conveyer	C. D. Decker	Bonus, Ill	Aug. 19, 1873	141, 858
Thrashing-machine straw-stacking attachment	W. Carr	Yellow Springs, Ohio	May 6, 1873	138, 612
Thrashing-machine swinging-gear	J. Kline and V. Becker	Chicago, Ill	Jan. 10, 1865	45, 838
Thrashing-machine teeth	J. Wrightson	Tobacco Stick, Md	May 17, 1839	1, 153
Thrashing-machine-tooth die	C. H. Thompson	Alliance, Ohio	Apr. 26, 1870	102, 332
Thrashing-machine, Vibrating	M. Pennock	Kennett's Square, Pa	May 26, 1827	....
Thrashing machine, Wheat	W. Booker	....	Mar. 11, 1797	....
Thrashing machine, Wheat	T. C. Martin	....	June 2, 1798	....
Thrashing machine, Wheat	W. Thomson	....	Aug. 2, 1791	....
Thrashing-machines and grain-cleaners, Construction of endless aprons in.	A. Townsend	Pavilion, N. Y	Oct. 1, 1850	7, 691
Thrashing-machines, Brace for supporting	I. G. Worthway	Kenosha, Wis	June 11, 1867	65, 587
Thrashing-machines, Casting cylinders for	L. Whitman and E. Whitman	Winthrop, Me., and Baltimore, Md.	Aug. 21, 1860	29, 738
Thrashing-machines, Construction of	D. W. Harris	Yorkshire, N. Y	Sept. 24, 1850	7, 666
Thrashing-machines, Device for conducting grain to.	A. W. Lockhart	Sacramento, Cal	Sept. 15, 1868	82, 135
Thrashing-machines, Device for elevating straw from.	G. Vedder	Battle Creek, Mich	May 1, 1866	54, 449
Thrashing-machines, Device for removing dust from.	E. Rose	Vernon, Ind	Nov. 2, 1869	96, 482
Thrashing-machines, Endless apron of	A. Junge	Belleville, Ill	Oct. 20, 1857	18, 455
Thrashing-machines, Endless belt for	J. R. Moffitt	Piqua, Ohio	Nov. 30, 1852	9, 433
Thrashing-machines, Endless chain for	J. E. Owens, C. Lane, and E. G. Dyer.	Hamilton, Ohio	July 13, 1858	20, 892
Thrashing-machines, Machine for measuring, registering, and receiving grain direct from.	P. Barker	Moscow, Mich	June 8, 1858	20, 474
Thrashing-machines, Method of removing straw and separating the grain in.	J. Criswell	Cecil, Pa	Nov. 26, 1840	1, 864
Thrashing-machines, Mode of preventing dust from rising from.	J. Ross	Boundbrook, N. J	Oct. 8, 1838	971
Thrashing-machines, Operating shakers of	I. Cummins	Vienna, N. J	Sept. 9, 1862	36, 443
Thrashing-machines, Shaking the screens or aprons in.	J. Lincoln	Uniontown, Pa	May 8, 1840	1, 590
Thrashing-machines, Side-board for	B. C. Smith	Ashland, Ind	Apr. 23, 1867	64, 041
Thrashing machinery, Grain	W. Barnes	Brookhaven, N. Y	Dec. 14, 1829	....
Thrashing-power, Traveling	R. W. Faris	Murfreesborough, Tenn	Sept. 9, 1873	142, 621
Thrashing, shelling, and hulling grain and cutting straw, Machine for.	T. Elliott, jr	Middletown, Ky	Mar. 26, 1839	1, 111
Thrashing wheat and grain and cutting straw	L. Rice	Lockport, N. Y	Apr. 1, 1829	....
Thrashing, winnowing, and flax-breaking machine.	E. Warren	New York	Aug. 11, 1827	....
Thread and needle box	H. Babcock	New York, N. Y	Mar. 21, 1865	46, 868
Thread and needle case, Combined	T. R. Timby	Saratoga, N. Y	May 3, 1870	102, 730
Thread and twine cutter	J. W. Strange	Bangor, Me	Mar. 31, 1868	76, 113
Thread and yarn holder	F. F. Myrick	Dublin, N. H	Jan. 28, 1868	73, 825
Thread and yarn, Manufacture of	S. M. Allen	Niagara Falls, N. Y	Apr. 17, 1860	27, 877
Thread cabinet, Spool	J. P. Thompson	Philadelphia, Pa	June 25, 1872	128, 262
Thread, &c., Card for wrapping	H. Sutro	New York, N. Y	Aug. 20, 1872	130, 672
Thread case, Spool	L. O. Smith	Philadelphia, Pa	July 23, 1872	129, 688
Thread-clew, Enveloped	L. M. F. Patureau	Paris, France	May 24, 1864	42, 902
Thread-cutter	F. Egge and R. W. Churchill	Bridgeport, Conn	Sept. 6, 1870	107, 016
Thread-cutter	W. L. Gallaudet	New York, N. Y	Nov. 19, 1867	71, 157
Thread-cutter	J. J. Henry	Baltimore, Md	May 30, 1871	115, 469
Thread-cutter	J. J. McLaughlin	Nashville, Tenn	Sept. 26, 1871	119, 383
Thread-cutter	M. J. Pitrat	Gallipolis, Ohio	July 29, 1873	141, 235
Thread-cutter	C. A. Woodbury	Woodstock, Vt	June 23, 1868	79, 093
Thread-cutter and spool, Combined	W. C. McIntire	Washington, D. C	Feb. 16, 1869	87, 057
Thread-cutter and thimble, Combined	B. M. Wilkerson	Tuscaloosa, Ala	June 18, 1872	128, 195
Thread cutting and pulling tool	T. Sullivan	New York, N. Y	Feb. 21, 1860	27, 244
Thread-cutting machine, India-rubber	H. Davenport	New York, N. Y	Dec. 23, 1856	16, 269
Thread, Device for winding skeins of	A. T. Ring	Newton, Mass	July 12, 1859	24, 782
Thread, Dish for waxing	G. A. Brigham	Marlborough, Mass	Apr. 26, 1859	23, 752
Thread, &c., dressing and finishing machine	E. Burgy and L. Guillemin	Bale, Switzerland, and Dieboldsheim, France.	Feb. 7, 1865	46, 314
Thread dressing and finishing machine	O. Hall and T. Merrick	West Willington, Conn	Aug. 21, 1860	29, 690
Thread dressing and winding machine	J. Short	New Brunswick, N. J	June 3, 1873	139, 521
Thread-dressing machine	H. Conant and L. C. Ives	Willimantic and Hartford, Conn.	Dec. 4, 1860	30, 824
Thread-dressing machine	G. Hall, jr	West Willington, Conn	Aug. 27, 1861	33, 141
Thread-dressing machine	O. and G. Hall	Willington, Conn	Dec. 4, 1860	30, 814
Thread-dressing machine	O. Hall and T. Merrick	West Willington, Conn	Aug. 7, 1860	29, 484
Thread-dressing machine	J. Loeb	New York, N. Y	Sept. 11, 1860	29, 981
Thread-dressing machinery, Sewing	H. Daniels	Pawtucket, R. I	Apr. 29, 1862	35, 084
Thread, Dressing sewing	J. M. Heck	Plymouth, Conn	May 15, 1855	12, 885
Thread-evener	J. B. Meldrum	Paterson, N. J	June 24, 1873	140, 215
Thread-finishing machine	S. Barbour	Lisburn, Ireland	Sept. 24, 1867	69, 159
Thread-finishing device	T. Kohn	Hartford, Conn	July 25, 1865	48, 958
Thread for parti-colored printing and for properly weaving the same, Method of preparing.	S. Vigoureux	Paris, France	Apr. 24, 1866	54, 271
Thread from skeins, Apparatus for winding	J. Crutchett	Stroud, England	Jan. 17, 1865	45, 953
Thread from skeins, Winding	M. Ormsbee	Boston, Mass	May 27, 1856	14, 969
Thread from waste in doubling and twisting machinery, Preventing.	J. Golding	Dedham, Mass	Aug. 15, 1837	352
Thread, Gaging	J. E. Atwood	Mansfield Centre, Conn	Apr. 12, 1859	23, 539
Thread-guard	G. W. Dalbey	Carrollton, Miss	May 18, 1869	90, 155
Thread guard and cutter, Spool	L. P. Laffray	Amsterdam, N. Y	June 25, 1872	128, 317
Thread holder and cutter	J. Cleary	Brooklyn, N. Y	Nov. 2, 1869	96, 310
Thread, Machine for making double-tapered	G. V. Sheffield	Boston, Mass	Mar. 18, 1873	137, 033
Thread, Machine for trebling single	L. Dimock and I. Dimock	Hebron and Mansfield, Conn.	May 13, 1856	14, 838

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Thread, Machinery for doubling, twisting, and reeling.	F. Cheney	Manchester, Conn	Oct. 9, 1847	5, 328
Thread, Machinery for trebling a single	A. A. Swift	Florence, Mass	Sept. 11, 1855	13, 562
Thread, Machinery for trebling single strands of	M. Celerier	Philadelphia, Pa	July 5, 1859	24, 615
Thread, Mode of packing	R. Langdon	Hartford, Conn	June 20, 1821	....
Thread, Mode of producing variegated	R. Kershaw	Philadelphia, Pa	Oct. 16, 1866	58, 836
Thread of one fiber with another fiber, Machinery for coating.	A. Loiseau	Berney, France	Feb. 3, 1863	37, 584
Thread of wood, Machine for making	W. Bell	Fayette County, Ky	June 1, 1825	....
Thread or cordage, Preparing and manufacturing asclepias for.	G. Smith	New York, N. Y	May 28, 1813	....
Thread or yarn previous to weaving, Method of treating.	J. Davis	Manchester, Great Britain	Dec. 4, 1866	60, 148
Thread-pointer	E. Eaton	Hartford, Conn	Sept. 17, 1867	68, 858
Thread-polishing	W. W. Trapp	Hartford, Conn	Sept. 29, 1868	82, 661
Thread polishing and dressing machine	S., jr., and R. A. Semple	Mount Holly, N. J	Feb. 16, 1869	87, 005
Thread-polishing machine	L. C. Ives	Hartford, Conn	July 17, 1860	29, 174
Thread-polishing machine	P. Kerr	Paisley, England	Feb. 25, 1868	74, 832
Thread-polishing machine	S., sr., J., S., jr., and R. A. Semple.	Mount Holly, N. J	Mar. 7, 1871	112, 386
Thread-polishing machine	W. W. Trapp	Hartford, Conn	Jan. 14, 1868	73, 269
Thread-polishing machinery	B. Richardson	Haydensville, Mass	July 13, 1858	20, 925
Thread-sorting machine	J. B. Waring	South Manchester, Conn	Aug. 20, 1861	33, 117
Thread-spooling apparatus	A. S. Phillips	South Boston, Mass	Oct. 22, 1867	70, 113
Thread-spooling machine	C. K. Bradford	Lynn, Mass	Sept. 1, 1857	18, 081
Thread-spooling machine	A. M. Wade	Lawrence, Mass	Aug. 3, 1869	93, 254
Thread-spooling machine	A. B. Glover	Yonkers, N. Y	Oct. 24, 1865	50, 575
Thread-spooling machinery	C. M. Spencer	Manchester, Conn	Jan. 31, 1860	27, 012
Thread, Trebling a single strand and twisting sewing.	H. Kelsea	North Branch, N. H	July 17, 1855	13, 267
Thread, warp, or yarn, Machinery for dressing sewing.	J. D. Minder	Killingly, Conn	May 19, 1857	17, 334
Thread-waste to cotton-wool, Reducing	O. Griswold	Hartford, Conn	July 17, 1837	275
Thread-waste to wool, Machinery for reducing	W. Gray	Hebron, Conn	July 29, 1837	302
Thread-wheel or tub-wheel	E. Davis	Bangor, Me	Apr. 9, 1831	....
Thread-winding for shuttle-quills	L. Ruggles	Boston, Mass	Aug. 16, 1810	....
Thread-winding guide	T. B. De Forest	Birmingham, Conn	Apr. 9, 1861	31, 960
Thread-winding machine	J. A. Bradshaw	Lowell, Mass	May 28, 1861	32, 445
Thread-winding machine	D. M. Church	Holyoke, Mass	Nov. 1, 1870	108, 758
Thread-winding machine	L. Dimock	Hebron, Conn	Aug. 23, 1859	25, 181
Thread-winding machine	F. C. and T. Ehrenberg	New York, N. Y	Apr. 14, 1868	76, 724
Thread-winding machine	E. M. Stevens	Boston, Mass	Feb. 5, 1861	31, 358
Thread-winding machine	H. Willis and G. Rice	Worcester, England	June 29, 1869	91, 891
Thread-winding-machine counting-attachment	W. Grover	Holyoke, Mass	Feb. 25, 1868	74, 911
Thread-winding machine, Spool	W. Clark	Newark, N. J	July 16, 1872	128, 951
Thread-winding machine, Spool	W. Weild	Manchester, England	Jan. 2, 1866	51, 907
Thread with metal, Mode of coating	C. Günther	Berlin, Prussia	June 1, 1869	90, 740
Thread with wool, Covering cotton	J. Taylor	Newark, N. J	Dec. 5, 1854	12, 040
Thread with wool or silk, Covering	J. and J. Haslam	New York and Searsdale, N. Y.	Feb. 27, 1855	12, 467
Threading-tube	D. Saunder	Brooklyn, N. Y	Apr. 14, 1868	76, 823
Threshold	E. Baker	Meriden, N. H	Dec. 26, 1871	122, 210
Threshold	W. D. St. Clair	Chicago, Ill	Mar. 1, 1870	100, 461
Threshold, Movable	S. W. Curtis	Erieville, N. Y	Nov. 19, 1872	133, 207
Threshold, Water-proof	A. Heavener	Plano, Ill	Nov. 25, 1862	36, 997
Throstle and spindle frame	B. Brundred	Oldham, N. J	May 7, 1830	....
Throstle-frame and bobbin-regulator	J. Brown and J. Standish	Cranston, R. I	June 13, 1831	....
Throstle-frames, Giving tension to the endless-band of.	J. Morse	Woonsocket, R. I	Nov. 13, 1855	13, 795
Throstle-frames, Regulating the twist in	J. Smith	Northbridge, Mass	Feb. 8, 1859	22, 899
Throstle-spindle	C. Lewis and G. Taylor	Poughkeepsie, N. Y	June 26, 1822	....
Throstle-spindle, Lubricating	G. W. Dougherty and T. G. McLaughlin.	Crozerville and Philadelphia, Pa.	Sept. 9, 1856	15, 690
Throstle-spindles, Making	G. Brewster	Norwich, Conn	Mar. 13, 1824	....
Thumb-supporter	J. S. Borden	Bloomfield, Ill	Dec. 27, 1870	110, 426
Ticket and pencil holder	R. B. Robbins	Adrian, Mich	Aug. 13, 1872	130, 535
Ticket and punch for cutting coupons therefrom, Railway.	H. M. Stow	San Francisco, Cal	Dec. 29, 1868	85, 409
Ticket-book, Conductor's	R. De Roode	Lexington, Ky	Dec. 3, 1867	71, 590
Ticket-box	N. C. Burson and J. W. Robertson.	Onarga, Ill	May 16, 1871	114, 757
Ticket-box	E. Hambujer	New York, N. Y	June 20, 1865	48, 274
Ticket-box and fare-detector, Railway-conductor's	E. Cowles	Cleveland, Ohio	Aug. 24, 1869	94, 081
Ticket-box, Conductor's	H. Hise	Ottawa, Ill	Jan. 1, 1867	60, 891
Ticket-box for railway-cars	D. A. Hopkins	Elmira, N. Y	Apr. 18, 1854	10, 804
Ticket-box for railway-cars	G. C. Thomas	Brooklyn, N. Y	Nov. 25, 1873	145, 030
Ticket-box for railway-cars	G. C. Thomas	Brooklyn, N. Y	Dec. 30, 1873	146, 108
Ticket-box for railway passenger-trains	A. Todd, jr	Pultneyville, N. Y	Dec. 14, 1869	97, 834
Ticket-box, Portable	W. J. Hooper	Baltimore, Md	Aug. 13, 1872	130, 500
Ticket-box, Railway-conductor's	N. B. Lyman	Buffalo, N. Y	Mar. 19, 1872	124, 839
Ticket-case	L. J. Blades	Harrington, Del	Dec. 9, 1873	145, 388
Ticket-case	J. Stokes, jr	New York, N. Y	Nov. 11, 1873	144, 420
Ticket-case	T. Van Kannel	Cincinnati, Ohio	Nov. 3, 1868	83, 807
Ticket case for railway-stations	J. F. Birchard	Milwaukee, Wis	Apr. 25, 1871	114, 099
Ticket case, Railway	F. Brewster	Cleveland, Ohio	Jan. 26, 1869	86, 277
Ticket case, Railway	J. H. Duffield	Glassborough, N. J	Jan. 28, 1862	34, 245
Ticket-case, Railway-conductor's	J. T. Smith	Louisville, Ky	Mar. 15, 1870	100, 940
Ticket-checking apparatus, Electrical	M. Bebro	Manchester, Great Britain	Feb. 28, 1871	112, 207
Ticket-clip	A. B. Culver	Westfield, N. Y	Oct. 26, 1869	96, 086
Ticket cutter	L. O. Crocker	Braintree, Mass	Sept. 21, 1869	95, 001
Ticket, Duplex	T. A. Jebb	Buffalo, N. Y	Mar. 25, 1873	137, 081
Ticket, Duplex railway	T. A. Jebb	Buffalo, N. Y	Mar. 25, 1873	137, 208
Ticket-fastener	S. D. Fay	Franklin, Pa	Apr. 23, 1867	64, 088
Ticket-holder	A. F. R. Arndt	Cleveland, Ohio	Apr. 4, 1871	113, 479
Ticket-holder	V. G. Arnold	Boston, Mass	Feb. 21, 1865	46, 519
Ticket-holder	J. Bramble and A. H. Nirdlinger.	Fort Wayne, Ind	Nov. 10, 1868	83, 915
Ticket-holder	S. M. and H. J. Brown	Holly, Mich	Apr. 21, 1868	76, 987

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Ticket-holder	W. J. Campbell	Saint Louis, Mo	Dec. 5, 1871	121, 584
Ticket-holder	E. P. Fraissinet and H. E. Reboul.	Paris, France	Nov. 20, 1855	13, 817
Ticket-holder	C. H. Kimball	Chelsea, Mass	Mar. 16, 1869	87, 781
Ticket-holder	C. Mahon	Macon, Ga	Nov. 13, 1866	59, 618
Ticket-holder	J. B. Porter and T. Reece	Philadelphia, Pa	Feb. 6, 1872	123, 360
Ticket-holder	O. E. Pray	Portsmouth, N. H	Mar. 22, 1870	101, 037
Ticket-holder	E. J. Richardson	Lowell, Mass	Jan. 7, 1868	73, 121
Ticket-holder	J. W. Rockafellow	Stockton, N. J	May 14, 1872	126, 747
Ticket-holder	I. W. Shaler	New York, N. Y	Oct. 5, 1858	21, 703
Ticket-holder	S. A. Simison	Earlville, Ill	July 16, 1867	66, 898
Ticket-holder	G. M. Van Buren	New York, N. Y	Dec. 28, 1869	98, 448
Ticket-holder	H. Wexel	Providence, R. I	Mar. 7, 1871	112, 520
Ticket-holder	E. M. Wright	Castile, N. Y	May 9, 1871	114, 740
Ticket holder, Railway	J. O. Harris	Ottawa, Ill	Feb. 21, 1865	46, 469
Ticket holder, Railway	J. C. Maloy	Johnstown, Pa	Oct. 7, 1873	143, 517
Ticket holder, Railway, &c	C. Taylor	Little Falls, N. Y	Aug. 16, 1859	25, 226
Ticket holder, Railway-car	O. G. and S. G. Fessenden	Stamford, Conn	Apr. 28, 1868	77, 266
Ticket holder, Railway	M. L. Mickles and L. S. Olmsted	Aurora, Ill	Mar. 30, 1858	19, 789
Ticket-holder, Traveler's	S. T. McDougall	New York, N. Y	Oct. 11, 1859	25, 750
Ticket nipper for coupon-tickets, Alarm	I. Hyde	Oakland, Cal	July 19, 1870	105, 459
Ticket, Passenger	N. D. Morgan	Mount Pleasant, N. Y	Dec. 23, 1862	37, 264
Ticket printing and registering apparatus	J. Dyer	Chicago, Ill	Dec. 17, 1872	134, 042
Ticket-punch	J. Gardner	San Francisco, Cal	Nov. 23, 1869	97, 071
Ticket, Railway	H. E. Alexander	New York, N. Y	Dec. 29, 1868	85, 351
Ticket, Railway	C. A. Chamberlain	Pittsburgh, Pa	Dec. 7, 1869	97, 601
Ticket, Railway	C. A. Chamberlain	Pittsburgh, Pa	Oct. 11, 1870	108, 107
Ticket, Railway	T. A. Jebb	Buffalo, N. Y	Sept. 10, 1872	131, 276
Ticket, Railway	T. A. Jebb	Buffalo, N. Y	Sept. 17, 1872	131, 448
Ticket, Railway	T. A. Jebb	Buffalo, N. Y	Sept. 24, 1872	131, 687
Ticket, Railway	W. E. Prall	Washington, D. C	Jan. 5, 1869	85, 692
Ticket, Railway	J. I. Smith	Louisville, Ky	Feb. 7, 1871	111, 692
Ticket, Railway	J. P. Whitehead	Chicago, Ill	Jan. 25, 1870	99, 125
Ticket-recorder	E. R. Brown	Chicago, Ill	Apr. 15, 1862	34, 939
Ticket-register	S. Sichel and S. Feust	New York, N. Y	June 16, 1868	79, 017
Ticket-register	G. R., jr., and J. Solomon	New York, N. Y	Aug. 21, 1866	57, 398
Ticket register, Railway-car	W. Apperly	Louisville, Ky	May 1, 1855	12, 772
Tickets, Apparatus for dating railway and other	J. B. Edmondson and J. Carson	Manchester, England	Nov. 3, 1863	40, 462
Tickets, Book of railway-fare	T. A. Jebb and L. Brush	Buffalo, N. Y	Mar. 25, 1873	137, 209
Tickets, Case for holding railway and other	T. Edmonson	Salford, England	May 16, 1854	10, 941
Tickets, Identifying railway, &c	A. S. Chittenden	Bergen County, N. J	May 23, 1865	47, 798
Tickets, Machine for numbering railway	G. J. Hill	Buffalo, N. Y	Feb. 5, 1861	31, 350
Tickets, Machine for printing railway and other	T. Edmondson	Salford, England	May 23, 1854	10, 947
Tickets, &c., Rack for coupon	E. P. Bacon	Milwaukee, Wis	Sept. 29, 1863	40, 088
Tidal-alarm	A. Hildreth	Thomaston, Me	Jan. 26, 1858	19, 196
Tidal-alarm apparatus	M. R. Fletcher	Concord, N. H	June 26, 1855	13, 126
Tidal-motor and air-condenser, Combined	J. B. Atwater	Geneva, Ill	Jan. 23, 1872	122, 930
Tide-gage, Telegraphic	A. Boyd	Lumberland, N. Y	Sept. 4, 1855	13, 519
Tide-mill	J. Cleaveland	Saint Mary's, Md	Oct. 22, 1816	....
Tide-mill	J. Dickerson	..	July 30, 1791	....
Tide-mill	R. C. Grant	Pomeroy, Ohio	July 26, 1845	4, 125
Tide-mill	F. Rittal	Lincoln, Mass	Jan. 28, 1815	....
Tide-mill	T. Rowand	Philadelphia, Pa	Nov. 10, 1846	4, 843
Tide-mill	J. P. Sawin and J. Skinner	Roxbury, Mass	May 17, 1810	....
Tide-mill	R. Spedden	Talbot County, Md	Aug. 1, 1827	....
Tide-motor	W. W. Virdin	Baltimore, Md	June 2, 1868	78, 557
Tide or current mill propelled by a suspended water-wheel and head-block.	J. Bennet	Chesterville, Me	Oct. 25, 1832	....
Tide or current wheel	F. H. Southworth	Saint Louis, Mo	Jan. 23, 1840	1, 478
Tide-power	J. R. Leon	Havana, Cuba	Mar 30, 1869	88, 491
Tide-power	H. M. Western	New York	Dec. 23, 1829	....
Tide-power for machinery	J. Staples, jr		Mar. 18, 1803	....
Tide-water or river wheel	W. Stubbs	Chillicothe, Ohio	May 1, 1809	....
Tide-wheel	J. G. Ross	New York, N. Y	Nov. 9, 1844	3, 816
Tide-wheel	W. H. Sears	Cheshire, Conn	Jan. 16, 1866	52, 082
Tide-wheel, Self-feathering adjusting	R. L. Nelson	Ocala, Fla	Nov. 13, 1855	13, 793
Tides and currents, Representation of	R. F. Watts	Fort Gaines, Ga	Sept. 1, 1843	3, 248
Tides to propel machinery, Applying the rising and falling of.	H. B. Fernald	Portland, Me	Aug. 17, 1835	....
Tidy-pin	G. Doolittle	Bridgeport, Conn	Nov. 4, 1873	144, 325
Tidy-pin	H. H. Newton	Cleveland, Ohio	June 7, 1870	103, 915
Tidy-pin	H. H. Newton	Cleveland, Ohio	June 6, 1871	115, 633
Tie: *See* Bag-tie. Bale-tie. Band-tie. Cattle-tie. Cotton-tie. Horse-tie. Horse and cattle tie. Neck-tie. Railway-tie. Railway cross-tie. Tilting-tie. Trunk-tie. Wire-tie.				
Tie and sill plates, Seat and cap for	P. S. Clinger	Conestoga Centre, Pa	Apr. 12, 1870	101, 825
Tie-bar for holding bent wood	J. G. Niccum	Indianapolis, Ind	Mar. 29, 1870	101, 302
Tie-lifter	J. H. Koontz	Yorktown, Ind	Mar. 19, 1872	124, 749
Tie-strap	T. S. Judson	Matteawan, N. Y	Mar. 17, 1868	75, 683
Tile, &c	G. A. Davidson	Malden, N. Y	July 16, 1872	129, 007
Tile	D. H. Watts	Philadelphia, Pa	Nov. 14, 1871	121, 029
Tile and brick	R. O. Lowrey	Tabor, Iowa	Feb. 5, 1867	61, 746
Tile and building-block, Flooring and paving	W. Wintershalter	Philadelphia, Pa	Oct. 22, 1867	70, 144
Tile and pipe machine	R. Woodcock	Joliet, Ill	Mar. 12, 1867	62, 914
Tile, Brick-drain	N. Jones	Centreville, Ind	Aug. 17, 1869	93, 890
Tile-cutter	O. F. Monfort	Dearborn, Mich	Aug. 16, 1870	106, 390
Tile-cutter	J. Shellaberger	Shane's Crossing, Ohio	June 9, 1868	78, 694
Tile, Combined bordering and drain	C. Biehl	Albany, N. Y	Mar. 28, 1871	113, 007
Tile-ditcher	I. T. Baker	Gratiot, Ohio	Apr. 18, 1871	113, 722
Tile, Drain	H. F. Baker	Centreville, Ind	Dec. 6, 1870	109, 862
Tile, Drain	A. W. Conley	Economy, Ind	Feb. 14, 1871	111, 727
Tile, Drain	J. Leffler	Rochester, N. Y	Nov. 25, 1873	144, 993
Tile, Drain	F. E. Scott	Centreville, Ind	June 14, 1870	104, 210

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Tile-dressing machine	G. and V. G. Barney	Swanton, Vt., and Minneapolis, Minn.	Sept. 20, 1870	107, 435
Tile-dressing machine	J. Reilly	Baltimore, Md	Nov. 28, 1865	51, 219
Tile, Fire-proof illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 182
Tile for bordering, Gardening	F. B. Francher	Lansingburgh, N. Y	Sept. 17, 1867	68, 971
Tile for fire-proof buildings, Composition	B. Kreischer	New York, N. Y	Mar. 21, 1871	112, 929
Tile for floors, sidewalks, &c	J. Gray	San Francisco, Cal	Dec. 15, 1868	84, 877
Tile, Hollow	B. Kreischer	New York, N. Y	Mar. 21, 1871	112, 930
Tile-kiln	J. B. Dixon	Geneva, N. Y	May 1, 1866	54, 307
Tile-machine	S. M. Bartlett	La Salle, Mich	Sept. 13, 1864	44, 132
Tile-machine	J. Braislin	Burlington, N. J	Nov. 3, 1863	40, 456
Tile-machine	J. Christen	New Orleans, La	Aug. 23, 1870	106, 550
Tile-machine	G. Clayton	Cleveland, Ohio	Aug. 15, 1871	117, 983
Tile-machine	J. Foster	Brooklyn, N. Y	Feb. 17, 1857	16, 672
Tile-machine	G. Graessle	Rossville, Ohio	June 12, 1855	13, 059
Tile-machine	S. Hawkins	Carmel, Ind	Sept. 21, 1869	94, 958
Tile-machine	A. and A. C. Hockett	Plainfield, Ind	Oct. 6, 1868	82, 837
Tile-machine	J. B. Hughes	Terre Haute, Ind	Aug. 2, 1870	106, 062
Tile-machine	J. B. Hughes	Terre Haute, Ind	June 27, 1871	116, 447
Tile-machine	J. B. Hughes	Terre Haute, Ind	June 27, 1871	116, 448
Tile-machine	G. Jackson	Albany, N. Y	Oct. 5, 1869	95, 479
Tile-machine	F. M. Mattice	Buffalo, N. Y	May 18, 1858	20, 286
Tile-machine	S. Mattix and J. McPherson	Clinton County, Ind	June 29, 1869	91, 951
Tile-machine	J. C. McKenzie	Adrian, Mich	May 11, 1869	89, 878
Tile-machine	C. J. Merrill	Upper Alton, Ill	Sept. 9, 1873	142, 576
Tile-machine	A. Moorhous	Indianapolis, Ind	Jan. 17, 1871	111, 078
Tile-machine	S. and D. Nill	Covington, Ohio	Aug. 17, 1869	93, 830
Tile-machine	Z. F. Parus	Baltimore, Md	June 27, 1871	116, 480
Tile-machine	J. W. Penfield	Willoughby, Ohio	Jan. 4, 1870	98, 519
Tile-machine	W. L. Reck	Drake County, Ohio	Sept. 8, 1868	82, 034
Tile-machine	J. Shellaberger	Shane's Crossing, Ohio	July 28, 1868	80, 512
Tile-machine	G. S. Tiffany	Palmyra, Mich	Oct. 4, 1859	25, 687
Tile machine, Drain	H. Bissell	Hartford, Conn	July 4, 1871	116, 668
Tile machine, Drain	R. G. Carlyle	San Francisco, Cal	Apr. 20, 1869	89, 199
Tile machine, Drain	F. M. Mattice	Cleveland, Ohio	June 21, 1870	104, 615
Tile machine, Drain	J. W. Milroy	Galveston, Ind	Nov. 19, 1867	71, 040
Tile machine, Drain	W. W. and F. Wheeler and L. F. Eaton	West Meriden, Conn	Nov. 19, 1872	133, 277
Tile, Malt-kiln	T. G. Arnold	New York, N. Y	July 21, 1868	80, 110
Tile-mold	J. C. Field	Buffalo, N. Y	May 8, 1866	54, 518
Tile-mold	P. McIntyre	Norwich, Conn	July 2, 1872	128, 498
Tile or slab for flooring and wainscoting and for the manufacture of furniture	E. H. Woodward	New York, N. Y	Nov. 30, 1869	97, 333
Tile or slab for floors, &c., Composition	I. Marsh, jr	Milton, Pa	June 2, 1868	78, 601
Tile, pipe, &c., Kiln for burning	J. Hornsby	Woodbridge, N. J	Sept. 20, 1870	104, 496
Tile-rack and cut-off	P. L. Sword	Adrian, Mich	Sept. 29, 1863	40, 149
Tile, Roof	W. Cranage	Cleveland, Ohio	Dec. 3, 1867	71, 583
Tile, Roofing	J. F. Grassle	Hamilton, Ohio	Apr. 27, 1858	20, 059
Tile, Roofing	A. and P. Roux	Marseilles, France	Aug. 6, 1872	130, 156
Tile, Roofing	G. Shove	Yarmouth Port, Mass	Apr. 12, 1870	101, 775
Tile-squaring machine	A. T. Merriman	Rutland, Vt	Jan. 1, 1867	60, 922
Tile support, Boiler	W. Dillon	Wheeling, W. Va	July 4, 1871	116, 693
Tiles, Apparatus for laying drain	I. Stripe	New Berlin, Ohio	Dec. 24, 1872	134, 228
Tiles, Block for forming	J. Molyneux	Bordentown, N. J	Sept. 11, 1860	30, 026
Tiles, bricks, &c., Apparatus for making	W. Hodgson	Richmond, Va	May 22, 1805	....
Tiles, bricks, &c., Compound for preserving drain	E. Milner	Marquette, Mich	Jan. 24, 1871	111, 133
Tiles, bricks, &c., Machine for making	B. Hamblet	Portland, Me	Dec. 28, 1835	....
Tiles, floors, &c., Composition for forming	J. Newbrand	Green Point, N. Y	Oct. 27, 1868	83, 529
Tiles for flooring, &c., Manufacture of	W. Berner	Pottsville, Pa	July 21, 1868	80, 120
Tiles for flooring, Manufacture of	T. J. Mayall	Roxbury, Mass	Oct. 16, 1860	30, 417
Tiles, Laying	M. A. Burnham	New York, N. Y	Nov. 14, 1871	120, 850
Tiles, Laying drain	H. T. Divelbiss and J. S. Brasfield	Saratoga Township and Whitefield Township, Ill.	Jan. 30, 1872	123, 002
Tiles, Machine for finishing drain	A. L. Brown	London, Ohio	May 21, 1872	126, 929
Tiles, Machine for making drain	T. A. Collins, J. D. Evans, and F. J. Smedley	Smyrna, Del	Sept. 26, 1865	50, 097
Tiles, Machine for making drain	J. W. Milroy and J. Cook	Galveston, Ind	Oct. 6, 1868	82, 861
Tiles, Machine for manufacturing roofing	C. Messenger	Cleveland, Ohio	Mar. 16, 1869	88, 795
Tiles, &c., Machine for pressing roofing	C. J. Merrill	Upper Alton, Ill	Aug. 27, 1872	130, 856
Tiles, Method of cutting clay for	A. W. Duty	....	May 8, 1799	....
Tiles, Method of manufacturing	W. Boulton and J. Worthington	Burslem, England	July 17, 1866	56, 504
Tiles, Mode of making draining	B. A. Shaffer	Cass County, Ind	May 14, 1867	64, 714
Tiles, Mold for forming roofing	P. A. Brown	Indianapolis, Ind	Dec. 29, 1868	85, 362
Tiles, Mold for making drain	H. Felthoff and L. D. Tingley	Prince William, Ind	May 19, 1868	77, 969
Tiles, plates, beams, &c., Connecting metallic	S. T. Savage	Albany, N. Y	Nov. 9, 1858	22, 035
Tiling and covering buildings with wood	H. B. Adams	Brooklyn, N. Y	Nov. 7, 1865	50, 784
Tiling for floors and ceilings, Fire-proof	J. Bounds	Philadelphia, Pa	July 16, 1872	128, 944
Till, Alarm	J. F. Baldwin	Nashua, N. H	May 17, 1870	103, 124
Till-alarm	J. F. Baldwin	Nashua, N. H	June 3, 1873	139, 530
Till-alarm	J. F. Baldwin	Nashua, N. H	June 17, 1873	139, 939
Till-alarm	J. F. Baldwin	Nashua, N. H	Dec. 23, 1873	145, 777
Till-alarm	G. L. Geiger	Philadelphia, Pa	Aug. 19, 1873	142, 012
Till-alarm	A. D. Hoffman	Minneapolis, Minn	Oct. 27, 1868	83, 498
Till-alarm	A. D. Hoffman	Chicago, Ill	Feb. 22, 1870	100, 037
Till-alarm	W. Malick	Erie, Pa	Dec. 16, 1873	145, 514
Till, Alarm	E. Reed	Saint Louis, Mo	May 10, 1870	102, 864
Till, Alarm	C. and W. H. Tucker	Indianapolis, Ind	Dec. 13, 1870	110, 092
Till-alarm	E. O. Wood	Nashua, N. H	Dec. 23, 1873	145, 824
Till alarm and lock	J. J. Wagenhorst	Philadelphia, Pa	Feb. 18, 1868	74, 639
Till-alarm attachment	E. B. White	Nashua, N. H	July 5, 1859	24, 685
Till alarm-lock	W. H. Tucker	Indianapolis, Ind	Sept. 19, 1871	119, 202
Till-check	R. B. Zwahlen	New York, N. Y	May 11, 1869	89, 962
Till-lock	C. B. and W. H. Jackson	Rockton, Pa	Nov. 12, 1872	133, 033
Till-lock	J. P. Schmucker	Lattasburgh, Ohio	Aug. 10, 1869	93, 644
Till-lock	C. Tucker	La Crosse, Wis	June 5, 1866	55, 397
Till-lock alarm	J. F. Baldwin	Nashua, N. H	Apr. 20, 1869	89, 193
Tiller and planter, Cylindrical	J. F. Schemerhorn and R. Porter	Carroll County, Ind., and New York, N. Y.	Apr. 10, 1841	2, 040

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Tiller-ropes of vessels from fire, Means of protecting.	W. Y. Gill	Henderson, Ky	Apr. 6, 1858	19, 841
Tiller, Ship's	J. T. Chabot	Buffalo, N. Y	Jan. 3, 1860	26, 650
Tiller, Soil	W. and D. M. Hunter	Meadville, Pa	Sept. 14, 1869	94, 751
Tiller, Steam	R. Creuzbaur	Williamsburgh, N. Y	Nov. 15, 1870	109, 183
Tiller-wheel	C. Tiers and J. Myers	Philadelphia, Pa	Jan. 18, 1830	....
Tillers, Method of attaching	J. G. Hull	New York, N. Y	Sept. 19, 1848	5, 786
Tillers with the rudder-head of vessels, Method of connecting.	H. Waterman	Bath, Me	May 26, 1843	3, 106
Tilling and cultivating machine	H. Belmont	Romford, England	Dec. 13, 1870	110, 100
Tilting chair	J. Enger	Portland, Me	Nov. 18, 1873	144, 603
Tilting chair	S. S. Hayward	Norwich, N. Y	Sept. 19, 1871	119, 143
Tilting chair	L. Haywood	Gardner, Mass	Oct. 31, 1871	120, 382
Tilting chair	F. A. Parker	Gardner, Mass	Mar. 25, 1873	137, 091
Tilting chair	C. R. Peters and W. P. Saylor	San Francisco, Cal	July 4, 1871	116, 629
Tilting chair	C. D. Smith	Baldwinsville, Mass	Apr. 21, 1868	77, 116
Tilting chair	C. D. Smith	Baldwinsville, Mass	Apr. 21, 1868	77, 117
Tilting chair	E. N. Tuttle	Fitchburgh, Mass	May 6, 1873	138, 544
Tilting chair	E. R. White	Mulford, Pa	May 2, 1871	114, 376
Tilting chair	G. C. Winchester	Ashburnham, Mass	Apr. 29, 1873	138, 461
Tilting gate	J. Bartholf	Hillsborough, Wis	July 22, 1873	141, 027
Tilting-machine	B. Mathews	Key Port, N. J	May 21, 1872	126, 975
Tilting-machine	G. J. Smale	Chicago, Ill	Jan. 28, 1873	135, 250
Timber and loading vessels therewith, Means of raising floating.	A. Bulman	Newburgh, N. Y	Oct. 21, 1873	143, 873
Timber and making laths, hoops, &c., Machine for slitting.	B. Beach	Clarksville, Ohio	Nov. 10, 1841	2, 340
Timber, Apparatus for saturating	W. B. Smith	La Fayette, Ill	Feb. 19, 1867	62, 295
Timber, Boring	J. Beckwith	Saratoga, N. Y	Dec. 21, 1830	....
Timber by boiling the same in lime-water, Mode of preserving.	S. Ringgote and E. Earle	Savannah, Ga	Aug. 6, 1838	877
Timber, Composition for preservation of	J. Dain	Utica, Ohio	July 31, 1860	29, 363
Timber-cutting machine	D. Cram	Clarksburgh, Va	Apr. 15, 1813	....
Timber-fastening	H. Stanley and R. Comins	Troy, N. Y	Aug. 2, 1864	43, 718
Timber frames, Clamp for raising	E. G. Ford and H. Weible	Delphos, Ohio	Jan. 22, 1867	61, 332
Timber from being injured by worms under water, Preserving.	G. Lovett	New York	Apr. 1, 1815	....
Timber, &c., from decay, Mode of preserving	I. H. Kyan	Cheltenham, England	June 23, 1838	800
Timber from decay, Process of preserving	C. Brown	Albemarle County, Va	Nov. 3, 1868	83, 758
Timber from destruction and decay, Protecting	A. Gotthilff	New York, N. Y	June 14, 1837	232
Timber girder-rest	J. Preston	Boston, Mass	May 16, 1871	114, 851
Timber-grapple	M. N. Ward	Bangor, Me	Dec. 8, 1868	84, 780
Timber-holding clamp	P. Scholl	Cashtown, Pa	Dec. 12, 1871	121, 816
Timber, Impregnating	P. Von Schmidt	Washington, D. C	June 6, 1846	4, 560
Timber, Machine for boring	T. J. Russell	Franklin Square, Ohio	Oct. 3, 1844	3, 776
Timber, Machine for dressing crooked	E. H. Branson	Fredericksburgh, Va	Nov. 15, 1853	10, 246
Timber, Machine for dressing polygonal	H. Allen	Norwich, Conn	June 6, 1854	11, 006
Timber, Metallic solution for preservation of	W. Flockton	Great Britain	Feb. 16, 1837	130
Timber, Mode of uniting	A. C. Twining	New Haven, Conn	Oct. 28, 1862	36, 812
Timber of old-field pines, Treating	J. H. Gatling	Murfreesborough, N. C	Mar. 28, 1871	113, 158
Timber, &c., Preserving	R. Bill	London, England	Sept. 21, 1837	391
Timber, Preserving	E. Earle	Savannah, Ga	Sept. 20, 1838	934
Timber, Preserving	A. Hamar	Hungary, Austria	Dec. 12, 1865	51, 528
Timber, &c., Preserving	C. Morgan	Point Coupee, La	Apr. 12, 1833	....
Timber, Preserving	F. Ransome	Ipswich, Great Britain	May 29, 1866	55, 216
Timber, Slitting	R. Beale and M. Bucklin	Grafton, N. H	May 23, 1836	....
Timber-slitting machine	W. Barker	Kingston, Pa	Mar. 24, 1826	....
Timber, Splicing	H. M Claflen	Cleveland, Ohio	Apr. 25, 1865	47, 395
Timber-splitting machine	D. Wright	Franklin, N. Y	Jan. 15, 1818	....
Timber, Tool for checking	A. M. Dorr	Lake Valley, Saho Post-Office, Cal.	Feb. 15, 1870	99, 863
Time adjuster, Automatic meridian	J. A. Miller	Paducah, Ky	July 16, 1872	129, 244
Time-alarm	L. Baum	Washington, D. C	Jan. 7, 1868	73, 154
Time-alarm	T. H. Smith	Urbana, Ohio	May 17, 1870	103, 251
Time and price register	H. Smith	Lowell, Mass	Nov. 17, 1868	84, 226
Time-check, Watchman's	T. Hahn	Stuttgart, Germany	Apr. 22, 1873	138, 084
Time-check, Watchman's	A. Meyer	Stuttgart, Germany	July 25, 1871	117, 442
Time-check, Watchman's	D. Shive	Philadelphia, Pa	Apr. 19, 1870	102, 165
Time-check, Watchman's	L. A. G. Vielle and J. L. Robellaz	New Albany, Ind	Dec. 26, 1871	122, 292
Time-detector, Watchman's	J. E. Buerk	Boston, Mass	June 6, 1865	48, 048
Time-detector, Watchman's	J. Bürk	Schwenningen, Germany	Jan. 1, 1861	31, 052
Time-detector, Watchman's	J. Dunning	Bangor, Me	Apr. 25, 1871	113, 9?8
Time-detector, Watchman's	A. Meyer	Stuttgart, Germany	Dec. 28, 1869	98, 289
Time-globe	L. P. Juvet	Glen's Falls, N. Y	Jan. 1, 1867	60, 740
Time-globe	L. P. Juvet	Glen's Falls, N. Y	May 21, 1867	64, 989
Time globe, Solar	T. R. Timby	Saratoga Springs, N. Y	July 7, 1863	39, 183
Time-indicator	G. Byington	Rochester, N. Y	Dec. 25, 1855	13, 977
Time-indicator, Letter-box	J. T. Young	Washington, D. C	Apr. 5, 1870	101, 697
Time indicator, Meridian	E. Provear	Leominster, Mass	Oct. 13, 1868	82, 984
Time-indicator, Office	J. S. Smith	Middletown, Conn	Oct. 10, 1871	119, 891
Time-indicator, Office	E. A. Wood	Utica, N. Y	Apr. 18, 1871	113, 828
Time-indicator, Railway	C. C. Gale	Cleveland, Ohio	Dec. 3, 1867	71, 601
Time-indicator, Railway	F. Moffet	Chicago, Ill	Jan. 31, 1860	27, 006
Time-indicator, Railway	R. C. Taylor	Brockport, N. Y	Feb. 12, 1867	61, 961
Time-indicator, Railway-train	J. C. S. Fitzpatrick	Kalamazoo, Mich	Mar. 14, 1865	46, 787
Time indicator, Solar	J. Higgins	East Cambridge, Mass	Dec. 18, 1866	60, 630
Time instrument, Solar	F. M. Pahnetrat	Paris, France	Aug. 23, 1870	106, 718
Time-keeper	H. C. Fay	Troy, N. Y	May 11, 1858	20, 201
Time-keeper	J. Stephenson	Canandaigua, N. Y	Nov 3, 1863	40, 508
Time-keeper escapement	J. Bishop	Austin, Tex	Oct. 12, 1858	21, 738
Time-keeper escapement	S. Carpenter	Flushing, N. Y	May 18, 1858	20, 252
Time-keeper escapement	J. W. Einhans	New York, N. Y	Jan. 4, 1859	22, 495
Time-keeper escapement	C. Fasoldt	Rome, N. Y	Feb. 1, 1859	22, 791
Time-keeper escapement	J. Jennet	Meadville, Pa	Sept. 7, 1858	21, 425
Time-keeper escapement	E. Paulus	Philadelphia, Pa	Aug. 10, 1858	21, 146
Time-keeper, Marine	I. Gill	Charleston, S. C	Jan. 15, 1810	....
Time-keeper regulator	D. Bickford	Westerly, R. I	Mar. 30, 1858	19, 744
Time-keeper regulator	R. S. Mershon	Philadelphia, Pa	Apr. 26, 1859	23, 810

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Time-keeper, Revolutionary astronomical	T. Newell	Sheffield, Mass	July 7, 1809	....
Time-keeper, Silent-moving	S. Jocelin	....	May 8, 1800	....
Time-keepers, Application of the conical pendulum to.	J. C. Briggs	Concord, N. H	Aug. 21, 1855	13, 451
Time-keepers, Composition balance for	J. Bliss and F. Creighton	New York, N. Y	Aug. 4, 1845	4, 135
Time-keepers, Compensation-balance for	C. W. Hawkes and G. P. Reid	Boston and Waltham, Mass	Jan. 2, 1855	12, 129
Time-keepers, Method of adjusting the tripper to the escapement-lever of.	E. B. Horn	Boston, Mass	Dec. 28, 1858	22, 428
Time-keepers, Method of regulating the winding of	J. Dillon	Washington, D. C	Nov. 23, 1858	22, 110
Time-keepers, Mode of regulating the conical pendulum of.	J. C. Briggs	Concord, N. H	July 15, 1856	15, 356
Time-keepers, Register for regulating	H. M. Beeman	Hartford, Conn	Sept. 11, 1866	57, 848
Time-keepers, Spring and barrel for	A. Philippe	Geneva, Switzerland	July 5, 1864	43, 464
Time-lock	C. F. Atwood	Hancock, Wis	July 12, 1870	105, 291
Time-lock	J. Burge	Circleville, Ohio	Feb. 6, 1872	123, 378
Time-lock	L. A. Haines	Wakefield, Md	May 25, 1869	90, 529
Time lock	L. A. Haines	Wakefield, Md	Aug. 23, 1870	106, 691
Time-lock	S. W. Hollen	Cincinnati, Ohio	Dec. 12, 1871	121, 782
Time-piece	L. Curtis	Concord, Mass	July 12, 1816	....
Time-piece	A. W. Hall	New York, N. Y	Feb 16, 1864	41, 617
Time-piece	H. J. Holden	Genoa, N. Y	Mar. 13, 1866	53, 146
Time-piece	C. King	New York, N. Y	June 16, 1868	78, 972
Time-piece	D. F. Launy	....	Mar. 21, 1803	....
Time-piece	W. Pardie	Poughkeepsie, N. Y	Feb. 20, 1836	....
Time-piece	S. B. Terry	Plymouth, Conn	Oct. 5, 1852	9, 310
Time-piece	S. Willard	....	Feb. 8, 1802	....
Time-piece	S. R. Wilmot	New Haven, Conn	June 22, 1852	9, 062
Time-piece alarm	R. Wilson	Williamsport, Pa	July 3, 1832	....
Time-piece, Calendar-movement	E. Homrighous	Shelbyville, Ill	July 27, 1869	93, 088
Time-piece escapement	J. Fulton	Louisville, Ky	Oct. 7, 1851	8, 409
Time-piece escapement	W. C. Kellum	San Francisco, Cal	Nov. 19, 1867	71, 019
Time-piece escapement	D. J. Mozart	New York, N. Y	Feb. 28, 1865	46, 576
Time-piece escapement	G. P. Reed	Roxbury, Mass	Dec. 14, 1858	22, 305
Time-piece escapement	H. Reinecke	New York, N. Y	June 18, 1867	65, 944
Time-piece escapement	S. W. Robinson	Detroit, Mich	Nov. 13, 1866	59, 658
Time-piece escapement	M. Tromly	Cincinnati, Ohio	Feb. 22, 1870	100, 217
Time-piece for lighting lamps, Alarm	W. H. and R. T. Andrews	Cheshire and Plymouth, Conn.	Sept. 21, 1852	9, 267
Time-piece, Globe	T. R. Timby	Saratoga Springs, N. Y	May 2, 1865	47, 584
Time-piece, Lever-escapement for	N. Spicer	Saint Paul, Minn	Dec. 20, 1859	26, 531
Time-piece regulator	S. F. Estell	Richmond, Ind	Jan. 14, 1868	73, 240
Time-piece regulator	G. P. Reed	Boston, Mass	Feb. 5, 1867	61, 867
Time piece, Solar	T. R. Timby	Saratoga Springs, N. Y	Nov. 3, 1863	40, 519
Time-piece, Universal	A. W. Hall	New York, N. Y	Mar. 28, 1865	47, 065
Time-piece, Universal	W. B. Purdy	Huntingdon, Pa	Feb. 21, 1865	46, 496
Time-piece-winding ratchet	W. H. Lamb	San Francisco, Cal	Feb. 16, 1869	86, 931
Time-pieces, Equalizing the main-spring of	J. P. Adams	Ipswich, Mass	Aug. 16, 1870	106, 304
Time-pieces, Maintaining power for	J. Tuerlinga	New York, N. Y	Jan. 6, 1857	16, 344
Time-pieces, Mode of applying springs in	L. Beach	Bristol, Conn	Sept. 25, 1849	6, 739
Time-pieces, Pallet for	C. E. Mason	Elgin, Ill	May 12, 1868	77, 827
Time-printing machine, Automatic	J. C. Hinchman	Brooklyn, N. Y	May 20, 1873	139, 153
Time-printing machine, Automatic	J. C. Hinchman	Brooklyn, N. Y	May 20, 1873	139, 154
Time-register	R. Schone	New York, N. Y	Dec. 4, 1860	30, 841
Time-register for hiring purposes	A. Courvoisier	Denver, Colo	Jan. 11, 1870	98, 669
Time-register for showing the days of the week and month.	W. H. Akins	Ithaca, N. Y	Dec. 20, 1853	10, 355
Time-register, Workman's	B. T. Harris	Brooklyn, N. Y	Aug. 11, 1857	17, 997
Time-register, Workman's	B. T. Harris	Brooklyn, N. Y	May 10, 1859	23, 918
Time-register, Workman's	B. T. Harris	Brooklyn, N. Y	June 25, 1872	128, 225
Time-register, Workman's	W. A. L. Kirk	Hamilton, Ohio	Feb. 11, 1868	74, 381
Time-registers, Device for operating the index of	R. McKenna	Rossville, Tenn	May 31, 1859	24, 224
Time-reporter	T. Archerfeld	Elkton, Md	Apr. 18, 1865	47, 266
Time-signal, Railway	T. S. and W. A. Foster	Fitchburgh, Mass	June 25, 1872	128, 383
Time-signal, Railway	W. Wickersham	Boston, Mass	July 9, 1872	128, 771
Time-table, Adjustable	L. J. Smith	New York, N. Y	Oct. 4, 1870	107, 970
Time-table indicator	L. Wright	Rochester, N. Y	Oct. 18, 1870	108, 548
Time-table, Railway, &c	C. M. Plumb	North Orange, N. J	Feb. 14, 1860	27, 152
Time-table, Railway revolving	A. H. Van Cleve	South Amboy, N. J	Apr. 27, 1869	89, 524
Time tell-tale	H. Maule	Philadelphia, Pa	May 14, 1861	32, 303
Time tell-tale	E. Roberts	Philadelphia, Pa	Mar. 26, 1861	31, 853
Tin and other coatings from sheet-metal, Method of removing.	B. H. Harmon and D. B. Sturdevant.	Clifton Springs, N. Y	Aug. 18, 1868	81, 164
Tin and sheet-metal punching machine	J. Annear	Philadelphia, Pa	Dec. 8, 1868	84, 670
Tin, &c., Apparatus for coating metal plates with	H. W. Butterworth	Philadelphia, Pa	Sept. 3, 1867	68, 351
Tin-bending machine	G. W. Merk	Leavenworth, Kans	Jan. 5, 1858	19, 038
Tin boilers for cooking-stoves with cast-iron bottom, Making.	G. North	Philadelphia, Pa	Dec. 11, 1849	6, 943
Tin-bottom cutter, Oval	J. Meinig	Cincinnati, Ohio	July 18, 1871	117, 095
Tin boxes, Making	C. J. Haywood	Durham, Conn	June 5, 1860	28, 634
Tin boxes, Making	C. J. Haywood	Durham, Conn	Aug. 2, 1864	43, 689
Tin boxes, Manufacture of	J. D. Lane	New York, N. Y	Apr. 7, 1868	76, 474
Tin can	J. J. Burkert	New York, N. Y	Apr. 12, 1870	101, 707
Tin can	S. E. Gunn	Chicago, Ill	Dec. 12, 1871	121, 869
Tin can	G. E. Hegerman	Brooklyn, N. Y	Aug. 11, 1868	80, 951
Tin can	R. Judson and J. P. Schenck, jr	Matteawan, N. Y	Nov. 2, 1869	96, 440
Tin can	J. F. Merrill	Cincinnati, Ohio	Mar. 7, 1871	112, 477
Tin can, Air-tight	J. W. Wright	New York, N. Y	Mar. 18, 1873	136, 949
Tin-can opener	E. T. Orne	Chicago, Ill	Mar. 13, 1866	53, 173
Tin-can seam	C. R. Otis	Chicago, Ill	Nov. 16, 1869	96, 949
Tin cans, caddies, &c., Mode of manufacturing	J. W. Millet	Batchellerville, N. Y	May 3, 1864	42, 624
Tin cans, Instrument for opening	J. Willard	Norwich, Conn	Aug. 21, 1866	57, 422
Tin cans, Knife for opening	C. A. Ruff	Providence, R. I	Mar. 7, 1865	46, 709
Tin cans, Machine for bending tops and bottoms of bodies of.	E. W. Bliss	Brooklyn, N. Y	Sept. 29, 1868	82, 481
Tin cans, Machine for making	C. Barry	Philadelphia, Pa	Dec. 3, 1867	71, 680
Tin cans, Machine for making	W. S. Buck	Philadelphia, Pa	Jan. 8, 1867	60, 994
Tin cans, Machine for opening	W. K. Baldwin	Chicago, Ill	May 15, 1866	54, 668
Tin cans, Machine for severing	H. T. Vaders	Lansdale, Pa	Dec. 2, 1873	145, 260

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Tin cans, Manufacture of	F. W Devoe	New York, N. Y	Apr. 19, 1864	42, 355
Tin cans, Manufacture of	G. W. Prince	Cambridge, Mass	June 28, 1864	43, 371
Tin cans, Manufacturing	J. E. Vansant	Louisville, Ky	Oct. 20, 1863	40, 372
Tin cans, Metallic cap for	G. H. Perkins	Brooklyn, N. Y	June 14, 1870	104, 193
Tin cans, Opening	J. Osterhoudt	New York, N. Y	Oct. 2, 1866	58, 554
Tin cans, Sheets for forming bodies of square or rectangular.	J. Bowers	Baltimore County, Md	Jan. 14, 1873	134, 726
Tin cans, Tool for opening	W. C. Dick	New York, N. Y	Nov. 1, 1864	44, 856
Tin cans when being soldered, Machine for supporting.	A. Brooks	Columbus, Ind	Jan. 21, 1868	73, 573
Tin cans, Wiring	T. Evans	Watkins, N. Y	Dec. 4, 1860	30, 806
Tin case, Forming-machine for square	J. H Murrill	Baltimore, Md	May 4, 1869	89, 593
Tin-coated foil	D. S. Hines	Brooklyn, N. Y	May 7, 1867	64, 531
Tin, Coating metal with	C. Winzen	Albany, N. Y	Feb. 15, 1859	22, 995
Tin, Crystallizing	G. F. Valentine	Albany, N. Y	Aug. 26, 1818	....
Tin cups, &c., Mode of securing handles to	J. Fleming	Pittsburgh, Pa	Sept. 10, 1872	131, 261
Tin cutting and bending machines, Arrangement of the bending-roller in.	W. H. Horton	Newburyport, Mass	Dec. 3, 1850	7, 809
Tin-, &c., cutting machine	W. Bulkley and O. M. Inman	Berlin, Conn	Nov. 3, 1841	2, 325
Tin-cutting machine	C. B. Merriam	Middlebury, Vt	June 18, 1872	128, 159
Tin-foil in sheets, Manufacture of	J. J. Crooke	New York, N. Y	Feb. 7, 1854	10, 501
Tin-foil, Manufacture of	J. J. Crooke	New York, N. Y	May 21, 1861	32, 355
Tin-foil, Manufacture of	W. W. Huse	Brooklyn, N. Y	Mar. 1, 1859	23, 068
Tin-folding machine	C. H. Raymond	Southington, Conn	Sept. 6, 1859	25, 369
Tin-folding machine	C. H. Raymond	Woodstock, Vt	May 8, 1866	54, 599
Tin from iron in tinner's clippings, Process of separating.	T. F. Wells	New York, N. Y	June 25, 1872	128, 265
Tin from scrap, Apparatus for separating	F. W. Dorn	New York, N. Y	Mar. 26, 1872	124, 890
Tin from sheet metal, Mode of removing	D. B. Sturtevant and B. H. Harmon.	Clifton Springs, N. Y	Mar. 24, 1868	75, 809
Tin from tin-plate clippings, &c., Process of utilizing the.	J. M. Patterson	Woodbury, N. J	June 2, 1863	38, 758
Tin from tin-scrap, Process and apparatus for removing.	C. A. Seely	New York, N. Y	May 28, 1872	127, 375
Tin from tin-scrap, Removing	C. Lennig	Philadelphia, Pa	Dec. 19, 1871	121, 948
Tin from tinner's waste, Apparatus for removing	T. F. Wells	New York, N. Y	June 18, 1872	128, 001
Tin from waste-tin scrap, Recovering	H. Panton	New York, N. Y	Apr. 8, 1873	137, 712
Tin-grooving machine	H. J. Noyes	Ashtabula, Ohio	May 30, 1871	115, 348
Tin-gutter machine	J. N. Adams	Chillicothe, Mo	May 3, 1870	102, 465
Tin into ware, Mode of working sheet	C. Whiting and E. Parsons	....	Apr. 14, 1804	....
Tin-lined lead-pipe, Manufacture of	W. A. Shaw	New York, N. Y	July 25, 1865	49, 040
Tin pans, Manufacture of	E. F. Parker and J. Smead	Proctorsville, Vt	Mar. 3, 1857	16, 752
Tin pans, Wiring	E. A. Smead	Tioga, Pa	June 16, 1857	17, 590
Tin-plate ware	E. M. Converse	Southington, Conn	Nov. 19, 1833	....
Tin-plate, Forming locks in	E. Manly	Marion, N. Y	Feb. 10, 1863	37, 629
Tin-plate, Making	D. Noble	Philadelphia, Pa	May 9, 1814	....
Tin-plate, Manufacturing	A. Burk	New York	Feb. 11, 1815	....
Tin-plate with lead, Coating	J. M. Truman	Philadelphia, Pa	Sept. 29, 1831	....
Tin salts from tinner's waste, Preparing	A. Ott	New York, N. Y	Mar. 21, 1871	112, 839
Tin scrap and galvanized iron, Method of utilizing waste.	D. McDaniel, W. B. Spear, and J. W. Richards.	Philadelphia, Pa	July 16, 1872	129, 417
Tin-scrap and obtaining useful products, Treating	H. Panton	New York, N. Y	Feb. 4, 1873	135, 578
Tin-scrap for the manufacture of stannate of potash, &c., Treating.	A. Ott	New York, N. Y	Sept. 27, 1870	107, 711
Tin-scrap or waste, Mode of utilizing	C. Küehn	Vienna, Austria	May 19, 1868	77, 987
Tin-scrap to obtain useful products, Treating	D. D. Parmelee	New York, N. Y	Apr. 19, 1870	102, 148
Tin-scrap, Utilizing	E. Hirschberg	New York, N. Y	May 21, 1872	127, 056
Tin tubing, Connecting	A. R. Treadway and S. R. Warren.	New Haven, Conn	Feb. 9, 1864	41, 551
Tin-tubing machine	J. N. Adams	Chillicothe, Mo	May 3, 1870	102, 466
Tin-ware	L. Lehman	Monee, Ill	May 19, 1868	78, 104
Tin-ware from rusting, Mode of preventing	P. M. Hinman	Rochester, N. Y	Nov. 5, 1867	70, 437
Tin-ware, Machine for bending oval handles for	J. Miller	Washington, Pa	Oct. 27, 1868	83, 523
Tin-ware, Machine for making	S. Peck	Southington, Conn	Apr. 23, 1819	....
Tin-ware, Machine for manufacture of	S. J. Olmsted	Binghamton, N. Y	Jan. 17, 1860	26, 860
Tin-ware, Machine for pressing and grooving seams in.	J. Schumacher and H. Upjohn	Ann Arbor, Mich	July 28, 1868	80, 511
Tin-ware, Manufacturing	B. Langdon	Saint Albans, Vt	May 10, 1805	....
Tin-ware, "Setting-down" machine for the manufacture of.	L. Smith	Southington, Conn	Apr. 24, 1847	5, 083
Tin-ware-stamping die	J. Neuberger and P. J. Illig	Buffalo, N. Y	Mar. 24, 1868	75, 961
Tinder-box	I. Ives	Farrington, Conn	Oct. 25, 1816	....
Tinker's pot	G. Burkhardt	Homer, Ill	Mar. 30, 1869	88, 271
Tinman's and jeweler's furnace	R. M. Potter	Jersey City, N. J	Oct. 8, 1872	132, 104
Tinman's forming-tool	W. H. Henderson	Franklin, Ind	May 1, 1866	54, 341
Tinman's furnace	E. B. Gibbud	Waterbury, Conn	Aug. 22, 1865	49, 517
Tinman's furnace	S. Timmins	Philadelphia, Pa	Mar. 20, 1866	53, 362
Tinman's machine	C. Brombacher	Tarrytown, N. Y	Apr. 5, 1870	101, 577
Tinman's machine.	C. H. Raymond	Southington, Conn	Aug. 30, 1859	25, 278
Tinman's machine	C. H. Raymond	Southington, Conn	Mar. 30, 1869	88, 411
Tinman's shears, Holder for	A. Worden	Ypsilanti, Mich	Jan. 31, 1860	27, 018
Tinned and galvanized articles of metal, Machine for separating.	H. E. Fowler	Wolcottville, Conn	Sept. 3, 1867	68, 357
Tinned iron vessels, Joint for	H. Everett	Philadelphia, Pa	Jan. 29, 1867	61, 525
Tinner's beading-machine wheel	B S. Partridge	Pilatka, Fla	May 31, 1870	103, 648
Tinner's bench, Revolving	W. Culveyhouse	Ligonier, Ind	Jan. 12, 1869	85, 731
Tinner's bending-machine	I. Grim	Polo, Ill	Aug. 3, 1869	93, 194
Tinner's clippings, Process of utilizing	F. W. Dorn	New York, N. Y	Sept. 26, 1871	119, 267
Tinner's clippings, Treating	F. G. Morton	Bermondsey, Great Britain	Mar. 4, 1873	136, 532
Tinner's die	P. W. Armstrong	Logan, Ohio	Feb. 18, 1868	74, 481
Tinner's fire-pot	J. B. Cary	Millersburgh, Iowa	Apr. 23, 1867	63, 991
Tinner's folding-machine	R. H Birt	Kokomo, Ind	July 23, 1867	67, 097
Tinner's forming-machine	W. Stine	Elmore, Ohio	Jan. 7, 1868	73, 20[illegible]
Tinner's furnace	W. H. H. Coon	Saint Paul, Minn	June 18, 1872	128, 122
Tinner's shears	L. Skeels	Ostrander, Ohio	Dec. 23, 1856	16, 200
Tinner's swage	B. Codington	La Fayette, Ind	June 6, 1871	115, 575

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Tinner's tool	A. Bingham	Hamilton, Canada	Nov. 26, 1872	133, 295
Tinner's tool	G. F. Brochon	Portland, Conn	Aug. 6, 1872	130, 106
Tinner's use, Machine for	W. Forshee and J. L. Judd	Marathon, N. Y	Aug. 11, 1868	80, 937
Tinner's waste, Mode of utilizing	C. Goty and A. Guillemin	Cincinnati, Ohio	Aug. 14, 1866	57, 252
Tinning	P. Naylor	New York, N. Y	Mar. 10, 1868	75, 449
Tinsmith's furnace	M. Conner	Plymouth, Mich	Nov. 1, 1870	108, 762
Tinsmith's furnace	M. Conner	Plymouth, Mich	Dec. 6, 1870	109, 805
Tinsmith's machine	B. Buckland	Plantsville, Conn	June 15, 1869	91, 209
Tinsmith's shears	H. S. Pratt	Hartford, Conn	Sept. 3, 1861	33, 227
Tinsmith's shears	E. P. Ralph and J. Hannan	Gallipolis, Ohio	Aug. 17, 1869	93, 746
Tinsmith's shears	O. W. Stow	Plantsville, Conn	May 24, 1870	103, 386
Tinsmith's shears, Gage-attachment for	O. W. Stow	Plantsville, Conn	June 7, 1870	104, 076
Tinsmith's stake	E. H. Meigs	East Berlin, Conn	June 30, 1868	79, 376
Tinsmith's stake	A. W. Whitney	Woodstock, Vt	Aug. 11, 1868	81, 048
Tip-chair	B. A. Carlan	New York, N. Y	Jan. 14, 1873	134, 850
Tipping-chair	A. White	Chelsea, Mass	Oct. 22, 1872	132, 508
Tipping-chair	H. K. White	Chelsea, Mass	June 3, 1873	139, 639
Tipping-hook and lid-lifter	W. E. Simonds	Hartford, Conn	Nov. 5, 1872	132, 778
Tire-bender	T. M. and A. F. Stansbury	Canton, Ill	Aug. 25, 1868	81, 550
Tire-bender	J. Tomlinson	Onslow, Iowa	Feb. 4, 1873	135, 498
Tire-bender	W. Willhide	Fetterman, W. Va	Sept. 28, 1869	95, 398
Tire-bending	L. Butler and I. Hinckley	Cobleskill, N. Y	Mar. 26, 1830	....
Tire bending and punching machine	J. M. Bryan	Penningtonville, Pa	June 2, 1868	78, 420
Tire, Bending and setting	I. C. Singer	Ebensburgh, Pa	Mar. 10, 1863	37, 890
Tire bending and shrinking machine	J. Gettemy	Donegal, Pa	Dec. 24, 1867	72, 476
Tire bending and shrinking machine	J. Naugle	Mooresville, Ind	Jan. 30, 1872	123, 190
Tire bending and upsetting apparatus	J. T. Woodward	Bowling Green, Ky	June 21, 1870	104, 527
Tire-bending apparatus	G. Farner	Marion, Pa	Feb. 25, 1862	34, 506
Tire-bending apparatus	J. Metzgar	Rancho Gap, Pa	June 15, 1869	91, 252
Tire-bending machine	W. Bailey	London Grove, Pa	Aug. 14, 1860	29, 556
Tire-bending machine	D. Ballou	Havanna, N. Y	June 5, 1866	55, 224
Tire-bending machine	T. C. Barton	New York, N. Y	July 31, 1837	322
Tire-bending machine	W. Beers	Milan, Ohio	Oct. 8, 1872	132, 045
Tire-bending machine	F. E. Coleman	Kirkwood, N. Y	Apr. 29, 1873	138, 231
Tire-bending machine	W. James	Ashford, Conn	June 19, 1826	....
Tire-bending machine	W. Jones	Ashford, Conn	July 14, 1827	....
Tire-bending machine	J. Klepper	Wooster, Ohio	July 30, 1861	32, 948
Tire-bending machine	F. Mills	Mount Vernon, Ind	Aug. 13, 1867	67, 788
Tire-bending machine	W. and J. H. Mosher and J. J. Harris.	Greene, N. Y	Feb. 14, 1860	27, 143
Tire-bending machine	J. Naugle	Mooresville, Ind	Nov. 23, 1869	97, 107
Tire-bending machine	J. Naylor	Hedgesville, W. Va	Mar. 24, 1868	75, 781
Tire-bending machine	J. A. Niman and B. Fidler	Mansfield, Ohio	Apr. 30, 1867	64, 351
Tire-bending machine	W. Patterson	Constantine, Mich	Mar. 29, 1859	23, 388
Tire-bending machine	D. F. Pomeroy	Painesville, Ohio	Oct. 10, 1871	119, 716
Tire-bending machine	G. J. Riblet	Boothsville, W. Va	July 16, 1872	129, 169
Tire-bending machine	G. L. Riblet	Boothsville, W. Va	May 2, 1871	114, 476
Tire-bending machine	R. Tyrrell	Sumner, Ill	June 23, 1868	79, 089
Tire-bending machine	D. Wetzell	Springfield, Mo	Nov. 19, 1867	71, 100
Tire-bending machine	A. Whitcomb	Choconut, Pa	Aug. 21, 1839	1, 296
Tire-bending machine	R. L. Wright	Blue Rock, Pa	May 23, 1854	10, 970
Tire-bending machine, Carriage	C. Cooper and A. Tustin	Lebanon, Pa	Sept. 28, 1825	....
Tire-bending machine, Wagon	J. Meredith	Lebanon, Pa	Sept. 9, 1825	....
Tire-bending machine, Wagon	W. and I. H. Mosher	Greene, N. Y	Sept. 6, 1859	25, 346
Tire, Carriage	W. Williams	New York, N. Y	Feb. 23, 1869	87, 229
Tire, Carriage-wheel	H. Silvester	Saint Louis, Mo	Apr. 2, 1872	125, 341
Tire, Carriage-wheel	G. Souther	South Boston, Mass	Aug. 1, 1854	11, 446
Tire, Cast-steel	J. B. Tarr	Fairhaven, Mass	Oct. 20, 1868	83, 223
Tire, Combined metal and rubber	J. H. Cheever	New York, N. Y	Feb. 2, 1869	86, 504
Tire-cooler	H. Bloedel	Fond du Lac, Wis	Dec. 26, 1865	51, 685
Tire-cooler	T. S. Brown and G. W. Gould	Boston, Mass., and Camden, Me.	June 15, 1869	91, 306
Tire-cooler	E. Stodtmeister	Cape Girardean, Mo	Dec. 21, 1869	98, 204
Tire-cooler	J. Wampach	Shakopee, Minn	Aug. 4, 1868	80, 687
Tire cutting, punching, and bending machine	J. C. Jordon	Watertown, Wis	June 13, 1871	115, 868
Tire cutting, punching, and upsetting machine	H. B. Sevey	Vienna, Me	July 18, 1871	117, 116
Tire-drilling machine	T. C. Barton	New York, N. Y	July 31, 1837	323
Tire-fastener	R. Hatrick	Paterson, N. J	May 16, 1865	47, 718
Tire for locomotive-wheels	W. W. Snow	Jersey City, N. J	Apr. 23, 1861	32, 154
Tire for railway-car wheels	T. T. Abbott	Manchester, N. H	Jan. 14, 1851	7, 896
Tire for railway-wheels, Cast-iron	L. B. Tyng	Lowell, Mass	July 5, 1859	24, 678
Tire for steam-carriages, Rubber	L. Stearne	London, England	Feb. 28, 1871	112, 295
Tire for traction-engines, Elastic	O. Hyde	Oakland, Cal	Jan. 24, 1871	111, 213
Tire for traction-wheels, Rubber-block	G. W. Fitts	Oberlin, Ohio	Aug. 8, 1871	117, 760
Tire-frame attachment	N. H. Mead	Waterport, N. Y	July 14, 1868	79, 909
Tire-handling tool	J. Brubaker and H. Bonholtzer	Lancaster County, Pa	Nov. 29, 1859	26, 250
Tire-heater	P. P. Hemstreet	Galesburgh, Ill	Sept. 1, 1868	81, 633
Tire-heater	J. R. Humphreys	Pennsville, N. J	Dec. 3, 1867	71, 759
Tire-heater	A. Ingalls	Independence, Iowa	Jan. 22, 1861	31, 170
Tire-heater	C. E. Pierce	Saint Charles, Ill	Mar. 3, 1868	75, 550
Tire-heater	C. H. Reno	Barrington, N. Y	Oct. 1, 1867	69, 367
Tire-heater	H. Stroud, jr	Clinton, Ill	Dec. 17, 1867	72, 337
Tire-heater	R. F. Thompson	Batavia, N. Y	Sept. 23, 1873	143, 041
Tire-heater	I. M. Williams	Clinton County, Ohio	Dec. 7, 1869	97, 740
Tire-heater, Rotary	G. T. Ridings	Shelbyville, Mo	July 10, 1866	56, 270
Tire heater, Wagon	I. N. Whitaker	Foreston, Ill	June 12, 1860	28, 721
Tire-heating apparatus	M. Darrow	Rochester, N. Y	July 23, 1867	66, 952
Tire-heating apparatus	J. P. White	Philadelphia, Pa	June 29, 1858	20, 767
Tire-heating apparatus, Wagon	S. G. Reed	Worcester, Mass	July 28, 1863	39, 357
Tire-heating furnace	M. Battel	Albany, N. Y	Apr. 19, 1859	23, 653
Tire-heating furnace	O. M. Brown	Toledo, Ohio	Mar. 31, 1863	38, 029
Tire-heating furnace	J. Degree	Hinesburgh, Vt	Nov. 7, 1871	120, 723
Tire-heating furnace	D. Marvin	Canandaigua, N. Y	Jan. 21, 1831	....
Tire-heating furnace	J. G. Rogers	Williamsburgh, Ohio	Oct. 7, 1873	143, 465
Tire hoop and band bending machine	D. Shepardson	Hamilton, N. Y	Feb. 7, 1831	....
Tire-machine	W. Bowden	White's Corners, N. Y	Nov. 21, 1871	121, 078
Tire-machine	J. W. Cleveland	North Tunbridge, Vt	May 4, 1869	89, 556
Tire-machine	C. L. Crowell	Peoria, Ill.	Aug. 15, 1865	49, 387

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Tire-machine	G. T. Ridings	Shelbyville, Mo	July 10, 1866	56, 269
Tire-machine	S. Roe, jr	Boonville, Mo	Oct. 25, 1870	108, 634
Tire-measuring implement, Wheel	J. Foster	Long Branch, N. J	July 24, 1866	56, 546
Tire or hoop bender	M. Scott	Fairfield, Iowa	June 21, 1864	43, 231
Tire-rolling machine	W. Harris	Jersey City, N. J	Nov. 18, 1862	36, 953
Tire-rolling machine	H. W. Petin	Rive de Gier, France	Sept. 6, 1870	107, 194
Tire-rolling machine	T. E. Vickers	Sheffield, England	June 30, 1868	79, 416
Tire-setter	R. Cawthorne	Lyons, Iowa	June 16, 1868	78, 926
Tire-setter	J. Pailca	Ledyard, N. Y	Jan. 16, 1872	122, 778
Tire setting and cooling apparatus	C. B. Guy	Postville, Iowa	Feb. 22, 1870	100, 028
Tire setting and cooling machine	J. Courtleyow	Chariton, Iowa	Sept. 29, 1868	82, 605
Tire-setting device, Wagon	F. Mills	Mount Vernon, Ind	May 25, 1869	90, 458
Tire-setting machine	A. Shogren and H. A. Adams	Sandwich, Ill	May 31, 1870	103, 669
Tire-setting machine	R. B. Wheatley	Grand View, Ind	Mar. 17, 1868	75, 713
Tire-setting machine	J. H. Williams	Pleasant Hill, Ohio	Oct. 18, 1870	108, 544
Tire-shrinker	J. Adkins	Warrenton, Ga	Mar. 30, 1869	88, 534
Tire-shrinker	E. B. Decker	Bedford, Ill	Jan. 7, 1868	73, 170
Tire-shrinker	J. P. Howell	New York, N. Y	Apr. 24, 1866	54, 165
Tire-shrinker	J. Macy	Pine, Oreg	Apr. 28, 1868	77, 297
Tire-shrinker	J. Robison	Johnson's Creek, N. Y	Feb. 26, 1867	62, 501
Tire-shrinker	A. Rogers	Freeport, Ill	Aug. 13, 1867	67, 806
Tire-shrinker	C. S. Sherk	Grantville, Pa	Nov. 8, 1870	109, 147
Tire-shrinking	A. P. Cassel	Wataga, Ill	Oct. 16, 1860	30, 387
Tire-shrinking	S. S. Greene	Rome, N. Y	May 29, 1860	28, 471
Tire-shrinking	L. Wilkinson	New Haven, Conn	Nov. 5, 1867	70, 664
Tire shrinking and punching machine	W. Britton	Abingdon, Ill	June 9, 1868	78, 719
Tire shrinking and removing furnace, Portable	W. B. Smith	Charleston, S. C	June 15, 1869	91, 279
Tire-shrinking apparatus	L. B. Lathrop	San José, Cal	Feb. 4, 1862	34, 305
Tire-shrinking device	H. W. Caswell	Yarmouth, Me	Aug. 28, 1866	57, 475
Tire-shrinking device	J. Ferris and W. E. Bacon	Litchfield, Ill	Sept. 13, 1864	44, 172
Tire-shrinking device	J. Olmstead	Chicago, Ill	Jan. 12, 1864	41, 262
Tire-shrinking device	C. V. Statler	Wataga, Ill	Jan. 10, 1865	45, 872
Tire-shrinking device	C. Weitman	Independence, Iowa	Nov. 19, 1861	33, 767
Tire-shrinking device	C. Weitman	Hazelton, Iowa	Dec. 19, 1865	51, 636
Tire-shrinking machine	J. Elliott	Milford, Wis	Jan. 7, 1868	73, 175
Tire-shrinking machine	D. Ellenwood, jr	Garrettsville, Ohio	June 25, 1867	66, 078
Tire-shrinking machine	G. Huntington	Almont, Mich	Aug. 14, 1866	57, 141
Tire-shrinking machine	C. Jackson	York, Ill	Apr. 2, 1867	63, 523
Tire-shrinking machine	J. B. and M. R. Jackson	Rochester, N. Y	Nov. 12, 1867	70, 854
Tire-shrinking machine	J. M. Kellogg	Duquoin, Ill	Oct. 31, 1865	50, 716
Tire-shrinking machine	J. A. Lloyd	Saint Paul, Minn	Jan. 31, 1865	46, 118
Tire-shrinking machine	T. Pratt	Valparaiso, Ind	Oct. 23, 1866	59, 067
Tire-shrinking machine	M. Scott	Fairfield, Iowa	Sept. 26, 1865	50, 171
Tire-shrinking machine	T. Tully	Litchfield, Ill	Aug. 21, 1866	57, 410
Tire-shrinking machine	C. H. Wakefield	Montpelier, Vt	Mar. 5, 1867	62, 580
Tire-shrinking machine	W. Werts	Chicago, Ill	Jan. 25, 1870	99, 268
Tire-shrinking machine	A. E. Wing	Battle Creek, Mich	Feb. 26, 1867	62, 384
Tire-tightener	W. Bellairs and W. Ough	Atkinson, Ill	Nov. 18, 1873	144, 729
Tire-tightener	M. C. Chamberlin	Wabasha, Minn	Aug. 29, 1871	118, 587
Tire-tightener	P. Daniels	Jackson, Mich	Apr. 17, 1866	53, 957
Tire-tightener	H. H. Day	New York, N. Y	July 30, 1872	130, 024
Tire-tightener	M. E. Jacobs	Winnebago, Ill	Sept. 9, 1873	142, 633
Tire-tightener	A. O. Morgan	Nashville, Ohio	Dec. 22, 1868	85, 235
Tire-tightener	W. D. G. Quigley	Spring Valley, N. Y	Apr. 15, 1873	137, 957
Tire-tightener	S. Shirley	Santa Clara, Cal	May 19, 1868	78, 141
Tire tightener, Wagon	G. Hillegass	Philadelphia, Pa	Apr. 24, 1866	54, 159
Tire tightener, Wagon	L. B. Hurd	Watkins, N. Y	Apr. 19, 1870	102, 008
Tire tightener, Wagon	J. Kafader	Jacksonville, Oreg	Apr. 30, 1872	126, 215
Tire-tightening device	H. Beckwith	Grass Lake, Mich	Nov. 21, 1871	121, 039
Tire-tightening device, Carriage	J. B. West	Genesco, N. Y	Mar. 29, 1870	101, 330
Tire-tightening device, Carriage-wheel	H. and H. Pearson	De Peyster, N. Y	Jan. 5, 1869	85, 608
Tire-upsetter	W. M. Hughes	San Francisco, Cal	Feb. 23, 1869	87, 260
Tire-upsetting	H. Abbott	Wakeman, Ohio	Nov. 13, 1855	13, 775
Tire-upsetting	H. Barringer	Watagа, Ill	June 19, 1860	28, 728
Tire-upsetting	G. W. Cooper	Morenci, Mich	June 29, 1858	20, 700
Tire-upsetting	R. Hazen and V. Gibbs	Homer, Mich	July 7, 1857	17, 738
Tire-upsetting	L. Kile	Williamsfield, Ohio	Apr. 10, 1860	27, 813
Tire-upsetting	G. McCown	Altoona, Ill	Mar. 20, 1860	27, 555
Tire-upsetting	A. Stedman	Homer, N. Y	June 6, 1865	48, 110
Tire-upsetting	B. Upton	Elyria, Ohio	May 21, 1861	32, 390
Tire-upsetting	C. M. Wilkins	West Andover, Ohio	Feb. 12, 1861	31, 422
Tire upsetting and stretching machine	C. Seymour	La Porte, Ind	Sept. 2, 1862	36, 372
Tire-upsetting apparatus	G. M. Beardsley	Fentonville, Mich	Apr. 9, 1867	63, 691
Tire-upsetting apparatus	M. P. Larry	Windham, Me	May 5, 1863	38, 398
Tire-upsetting apparatus	L. W. Loomis	Homer, N. Y	Sept. 18, 1866	58, 111
Tire-upsetting apparatus	S. Martin	Parshallville, Mich	Apr. 5, 1864	42, 210
Tire upserting, Carriage	E. J. Dodge	Port Washington, Wis	Aug. 31, 1858	21, 327
Tire-upsetting device	A. H. Ford	Williamsfield, Ohio	May 26, 1868	78, 201
Tire-upsetting device	A. Stow	Calais, Vt	June 19, 1866	55, 735
Tire-upsetting machine	P. J. Ayres	Lydon, N. Y	Mar. 8, 1870	100, 488
Tire-upsetting machine	D. L. Badley	Afton, Iowa	Aug. 12, 1873	141, 687
Tire-upsetting machine	H. Barringer	Berry, Ill	July 8, 1856	15, 272
Tire-upsetting machine	W. Bowden	Hamburgh, N. Y	Aug. 30, 1870	102, 775
Tire-upsetting machine	J. M. Brahn	Red Bank, N. J	Sept. 23, 1862	36, 504
Tire-upsetting machine	I. D. Card	Danville, Cal	Aug. 25, 1863	39, 629
Tire-upsetting machine	C. L. Crowell and R. Smith	Peoria, Ill	May 17, 1859	24, 009
Tire-upsetting machine	G. W. Dalbey	Carrollton, Miss	Aug. 17, 1869	93, 683
Tire-upsetting machine	G. Danielson	Boston, Mass	Sept. 23, 1862	36, 509
Tire-upsetting machine	L. A. Dole	Salem, Ohio	Jan. 12, 1864	41, 257
Tire-upsetting machine	O. Foster	Kenosha, Wis	Aug. 7, 1860	29, 477
Tire-upsetting machine	R. W. Gates	Homer, Mich	Jan. 6, 1857	16, 331
Tire-upsetting machine	R. Gibbs	Spring Hill, Mo	Sept. 2, 1873	142, 455
Tire-upsetting machine	A. S. Hart	San Francisco, Cal	Dec. 21, 1869	98, 057
Tire-upsetting machine	E. Hitt and A. Lent	Katonah, N. Y	Oct. 31, 1871	120, 521
Tire-upsetting machine	H. L. Howard	Mendon, Mich	Dec. 12, 1865	51, 456
Tire-upsetting machine	A. Ingalls	Independence, Iowa	Apr. 29, 1862	35, 097
Tire-upsetting machine	M. D. King	King's Ferry, N. Y	Dec. 31, 1872	134, 384
Tire-upsetting machine	J. W. Lawson	Ann Arbor, Mich	June 24, 1862	35, 695

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Invention.	Inventor.	Residence.	Date.	No.
Tire-upsetting machine	G. McKown	Altona, Ill	June 17, 1862	35,616
Tire-upsetting machine	M. Mead	Battle Creek, Mich	Jan. 14, 1862	34,156
Tire-upsetting machine	J. Olmstead and W. A. Walker	Victoria, Ill	Aug. 7, 1860	29,513
Tire-upsetting machine	C. J. Peterson	Brevard Station, N. C	Mar. 4, 1873	136,455
Tire-upsetting machine	J. Robison	Potter Centre, N. Y	Sept. 23, 1862	36,533
Tire-upsetting machine	W. C. Salmon and G. F. Bliss	Placerville, Cal	Feb. 19, 1861	31,478
Tire-upsetting machine	E. Shopbell	Ashland, Ohio	Aug. 31, 1869	94,346
Tire-upsetting machine	C. V. Statler	Wataga, Ill	Aug. 7, 1860	29,529
Tire-upsetting machine	T. Sullivan	Corning, N. Y	Apr. 26, 1870	102,448
Tire-upsetting machine	F. R. Wilson	Auburn, Cal	Dec. 9, 1862	37,121
Tire-upsetting machine	A. Winship	Turner, Me	May 4, 1869	89,823
Tire-upsetting machine	J. L. and A. H. Yeager	Lampeter Square, Pa	Sept. 16, 1873	142,833
Tire-upsetting machine	A. Yount	Kokomo, Ind	Oct. 15, 1872	132,346
Tire-upsetting machine, Wagon	E. Cook	Valparaiso, Ind	May 29, 1866	55,199
Tire-upsetting machine, Wagon	G. Huntington	Norwichville, Canada	June 13, 1865	48,245
Tire-upsetting machine, Wagon	E. Shopbell	Ashland, Ohio	Jan. 2, 1866	51,872
Tire-upsetting, punching, and cutting machine	J. C. Jordon and E. Doty	Watertown, and Janesville, Wis.	June 22, 1869	91,752
Tire, Vehicle	A. Brady	New York, N. Y	May 24, 1864	42,832
Tire, Vehicle-wheel	W. H. Davis	Lexington, Ind	Sept. 12, 1871	118,846
Tire, Vehicle-wheel	L. Righter	Salem, Ohio	Dec. 5, 1871	121,663
Tire, Wagon	J. Dodder	Washington, D. C	Aug. 24, 1869	93,973
Tire, Wagon	B. F. Morey	Clinton, Ind	Jan. 19, 1869	86,029
Tire, Wheel	E. Coleman	Woburn, Mass	Aug. 14, 1866	57,092
Tire, Wheel	J. H. Rogers	Mount Morris, N. Y	Feb. 17, 1836	....
Tires and carriage-springs, Machine for bending	F. M. Ray	Catskill, N. Y	Dec. 24, 1834	....
Tires and hoops, Punching and bending	W. Hinds	Springfield, N. Y	Mar. 7, 1833	....
Tires, Apparatus for lifting and removing	G. W. Creamer	Fillmore, Pa	Dec. 15, 1863	40,913
Tires, axle-trees, &c., Machine for upsetting	O. Pater	Ypsilanti, Mich	June 29, 1869	92,089
Tires, &c., by castings, Method of forming wheel	W. Butcher, jr., and T. Shaw	Sheffield, England, and Philadelphia, Pa.	June 11, 1867	65,642
Tires by continuous rolling, Machine for making	P. G. Gardiner	New York, N. Y	Mar. 11, 1851	7,968
Tires, Clamping and upsetting	O. L. Cowles and A. L. Deming	Teconsha and Homer Townships, Mich.	Aug. 19, 1856	15,558
Tires, Cooling and setting	P. Kopper	Fond du Lac, Wis	May 29, 1860	28,492
Tires for locomotive-wheels, Machine for rolling	S. Jaqua	Paterson, N. J	Dec. 16, 1862	37,206
Tires from engine driving-wheels, Apparatus for drawing.	W. H. Bryant	Chicago, Ill	Nov. 12, 1867	70,796
Tires for railway-car wheels, Making	J. Evans	Portsmouth, Ohio	Mar. 3, 1857	16,724
Tires for wheels, Adjustable	D. J. Kirkman and E. H. Gray	Winchester, Ill	June 25, 1867	66,030
Tires, hoops, bands, &c., Machine for binding wagon.	J. Butler	Cobleskill, N. Y	Sept. 24, 1829	....
			Mar. 9, 1858	19,550
Tires, Machine for fitting wagon	E. L. Dorsey	Johnson County, Ind	Sept. 30, 1851	8,395
Tires, Machine for making wheel	J. C. Vaughn	Greenbush, N. Y	Jan. 29, 1861	31,244
Tires, Machine for rolling railway	S. Jaqua	Paterson, N. J	Mar. 29, 1859	23,414
Tires, Machine for rolling wheel	N. Washburn	Worcester, Mass	Apr. 3, 1849	6,254
Tires, Machinery for making iron-wheel	T. W. Allen and C. W. Noyes	Greenbush, N. Y	June 6, 1854	11,049
Tires, Making car and other wheel	A. Krupp	Essen, Prussia	July 28, 1846	4,673
Tires, Manufacture of car-wheel	D. Saunders, jr., J. G. Bissett, and S. Saunders.	Cincinnati, Ohio, Covington, Ky., and Pittsburgh, Pa.		
Tires, Method of expanding	S. Penberthy	Chicago, Ill	Oct. 3, 1857	18,553
Tires, Method of tightening	S. W. Corbin	Vallonia Springs, N. Y	Apr. 21, 1868	77,002
Tires, Method of welding	I. Lamplugh	Peoria, Ill	Oct. 20, 1868	83,177
Tires, Mode of constructing wagon-wheel	J. L. Blinn	Austin, Tex	Oct. 20, 1857	18,431
Tires, Mode of heating wheel	A. Gregory	Pike, N. Y	Aug. 28, 1847	5,259
Tires, Mold for casting	W. Brooks	New York, N. Y	July 21, 1863	39,316
Tires, Mold for casting steel	G. Nimmo	Jersey City, N. J	Sept. 20, 1864	44,335
Tires on carriage-wheels, Mode of fastening India-rubber.	J. A. Greene	Brooklyn, N. Y	Dec. 15, 1868	84,878
Tires on carriage-wheels, Mode of tightening	N. J. Skaggs	Talladega, Ala	Nov. 3, 1857	18,556
Tires on wheels, Adjusting	W. S. Harrison	Carson's Landing, Miss	July 3, 1860	28,982
Tires on wheels, Fastening	W. C. Whiting and H. F. Edwards.	Worcester, Mass	May 12, 1863	38,524
Tires on wheels, Machine for setting	J. H. Williams	Pleasant Hill, Ohio	June 9, 1857	17,532
Tires on wheels, Method of securing	A. C. Barnes	Albia, Iowa	Mar. 5, 1867	62,593
Tires on wheels, Mode of securing	W. A. Ashe	New York, N. Y	July 1, 1856	15,214
Tires on wheels, Mode of setting	A. O. Wheeler	Saint Augustine Depot, Ill	Dec. 6, 1870	109,982
Tires on wheels of railway-cars, Putting	T. Banks	Manchester, England	Aug. 25, 1842	2,761
Tires on wheels, Setting	A. Fagerström	Wyoming, Pa	Oct. 29, 1867	70,183
Tires on wheels, Tightening	E. Bass	Calhoun County, Ga	Sept. 11, 1860	29,947
Tires, Reducing wheel	I. Hobson	Stont's Grove, Ill	June 15, 1858	20,559
Tires, Roll for forming	J. H. Gage	Nashua, N. H	June 21, 1859	24,453
Tires, Securing wheel	A. Huegler	Sullivan, Mo	Mar. 14, 1871	112,599
Tires, Shortening	A. Voorhees	Grand Rapids, Mich	May 22, 1860	28,426
Tires, Tightening carriage-wheel	J. M. Dick	Buffalo, N. Y	Sept. 8, 1859	18,138
Tires, Tightening carriage-wheel	P. S. Sanford	Westport, Mass	June 28, 1864	43,343
Tires, Tightening carriage-wheel	R. B. Scott	Philadelphia, Pa	Mar. 23, 1858	19,721
Tires, Tightening wheel	S. R. Bolton	Prescott, Wis	May 31, 1870	103,550
Tires, Tightening wheel	D. J. Kirkman and E. K. Gray	Winchester, Ill	Nov. 6, 1866	59,409
Tires, Tightening wheel	T. R. Markillie	Winchester, Ill	June 2, 1868	78,461
Tires, Tightening wheel	F. B. Morse	Milwaukee, Wis	Dec. 18, 1866	60,639
Tires to carriage-wheels, Method of securing	P. D. Crosby	Danbury, Conn	Mar. 26, 1872	124,937
Tires to carriage-wheels, Mode of attaching rubber	D. Ham	Iowa City, Iowa	July 13, 1869	92,606
Tires to locomotive-wheels, Attaching	E. Mellon	Scranton, Pa	Oct. 2, 1866	58,447
Tires to railway-car wheels, Securing	L. Pusey	Philadelphia, Pa	Apr. 20, 1858	20,004
Tires to wheels, Adjusting	W. J. Garland and N. Morgan	Winchester, Ill	July 30, 1867	67,187
Tires to wheels, Mode of attaching rubber	J. A. Green	Brooklyn, N. Y	June 15, 1869	91,435
Tires to wheels, Mode of securing	W. H. Hovey	Holly, Mich	May 19, 1868	77,981
Tires upon wheels, Mode of securing	J. L. Irwin	Franklin, Ala	Aug. 7, 1855	13,392
Tires upon wheels, Setting	G. H. Thatcher	Ballston, N. Y	Dec. 12, 1846	4,888
Tivoli-table	C. Frolich	New York, N. Y	July 9, 1861	32,811
Toast-rack	D. Sherwood	Lowell, Mass	July 13, 1869	92,718
Toast-rack	D. Sherwood	Lowell, Mass	Feb. 8, 1870	99,718
Toaster	M. E. A. W. Evard	Leesburgh, Va	Apr. 7, 1868	76,316
Toaster or broiler, Wire	S. Ayres and H. J. Chamberlin	Worcester, Mass	Oct. 11, 1864	44,590
Toasting-fork	H. H. Taylor and G. H. Graham	Rochester, N. Y	Feb. 15, 1870	99,971
Tobacco and grain curer	H. R. Robbins	Baltimore, Md	Aug. 3, 1869	93,347

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Invention.	Inventor.	Residence.	Date.	No.
Tobacco and match box	T. Huckans	New Baltimore, N. Y	Aug. 14, 1866	57, 139
Tobacco and match box, Combined	C. Remhof	Brooklyn, N. Y	Feb. 4, 1873	135, 488
Tobacco, Arrangement of flues for drying	W. B. Hix	Rome, Ga	Jan. 8, 1861	31, 081
Tobacco-bags	G. W. Johnson	Danville, Va	Apr. 12, 1870	101, 883
Tobacco-bags, Manufacture of	G. Aymard	New York, N. Y	Aug. 21, 1866	57, 275
Tobacco, Bailing-apparatus for packing	I. H. Stone	Saint Louis, Mo	Sept. 19, 1865	50, 047
Tobacco, Belting	R. T. Sitterly	Calloway County, Mo	Feb. 18, 1868	74, 619
Tobacco-belting knife	J. B. Worsham	Hibernia, Mo	May 14, 1867	64, 823
Tobacco, Bleaching	H. Mearns	North Fork, Ky	Nov. 1, 1870	108, 808
Tobacco-box	G. H. Bliss	Brooklyn, N. Y	July 27, 1869	92, 930
Tobacco-box	G. M. Bull	New Baltimore, N. Y	July 21, 1868	80, 130
Tobacco-box	C. Doering	Charlestown, Mass	Feb. 15, 1870	99, 764
Tobacco-box	A. Friedrich and C. Walter	New York, N. Y	July 17, 1860	29, 152
Tobacco-box	J. P. Jamison	New York, N. Y	Feb. 2, 1869	86, 550
Tobacco-box	H. Kurth, F. Dahis, and C. Robitaille.	Brooklyn, N. Y	July 31, 1860	29, 387
Tobacco-box	W. C. Thomas and E. T. Pilkinton.	Richmond, Va	May 21, 1872	127, 118
Tobacco-box	C. Tollner, jr	New York, N. Y	Feb. 2, 1869	86, 606
Tobacco-box, &c., clasp	C. C. Ashley	Brooklyn, N. Y	Sept. 20, 1864	44, 364
Tobacco-box fastening	G. N. Cummings	Providence, R. I	Jan. 30, 1866	52, 359
Tobacco, Box for packing and preserving	L. Wertheimer	New York, N. Y	June 10, 1873	139, 747
Tobacco-box or drum	J. Potter	Quincy, Ill	Aug. 16, 1870	106, 504
Tobacco-boxes, Machine for recessing	I. M. Reames	Oxford, N. C	Apr. 22, 1873	138, 193
Tobacco-boxes, Packing	W. Cills	Philadelphia, Pa	July 19, 1870	105, 428
Tobacco, Bunching and pressing	D. Harris	Quincy, Ill	Nov. 5, 1872	132, 827
Tobacco carrier and dresser	F. A. Pauck	Saint Mary's, Ohio	May 11, 1869	90, 018
Tobacco-cartridge	A. C. Breckenridge	Meriden, Conn	Nov. 28, 1865	51, 255
Tobacco-case	H. E. Robbins	Hartford, Conn	May 6, 1862	35, 178
Tobacco-case	J. W. Stone	Lynchburgh, Va	June 17, 1873	140, 093
Tobacco, Case for curing and transporting	G. E. Tuckett	Hamilton, Canada	Feb. 22, 1870	100, 087
Tobacco-casing machine	E. Holbrook, jr	Louisville, Ky	Oct. 18, 1870	108, 355
Tobacco-casing machine	E. R. Morrison	Pittsburgh, Pa	May 19, 1868	78, 117
Tobacco-cask, Key-band for	J. M. Talbott	Richmond, Va	Sept. 14, 1840	1, 790
Tobacco, Cast-iron press-case for	G. D. Allen	Richmond, Va	June 30, 1837	250
Tobacco, Chemical compound for destroying nicotine in	S. O. Bentley	Canton, Ohio	May 28, 1872	127, 215
Tobacco, Composition for treating	S. C. Dawson	Philadelphia, Pa	Mar. 6, 1866	52, 976
Tobacco, Composition to destroy the appetite for	E. Douglass	Gorham, Me	June 15, 1869	91, 218
Tobacco, Compound for restoring damaged	W. A. Wright	Liberty, Va	Sept. 21, 1869	95, 063
Tobacco, Compound for sweetening, coloring, and flavoring.	F. M. Sterry	Morrisania, N. Y	Jan. 1, 1867	60, 955
Tobacco-compress	J. H. McGowan	Cincinnati, Ohio	July 7, 1868	79, 769
Tobacco-crimping machine	R. Kinsley	Springfield, Mass	Apr. 6, 1858	19, 856
Tobacco-cultivator	Z. D. Blakistone	Saint Mary's County, Md	Mar. 18, 1873	136, 898
Tobacco, Curing	M. and T. Baker	Louisa County, Va	Mar. 4, 1828	....
Tobacco, Curing	J. D. Culp	Gilroy, Cal	Feb. 4, 1873	135, 468
Tobacco, Curing	B. A. Davis	Petersburgh, Va	Nov. 5, 1867	70, 420
Tobacco, Curing	W. W. Huse	Brooklyn, N. Y	July 11, 1865	48, 689
Tobacco, Curing	T. G. Newbill	Franklin County, Va	Jan. 11, 1831	....
Tobacco, Curing	P. Ranch	South Lebanon, Pa	Feb. 14, 1865	46, 387
Tobacco, Curing	J. Robinson	Charlotte, Va	Feb. 25, 1809	....
Tobacco-curing apparatus	B. C. Bibb, G. F. Needham, and G. W. Dorsey.	Baltimore and Port Republic, Md.	June 25, 1861	32, 610
Tobacco-curing apparatus	N. W. Broome	Baltimore, Md	Aug. 11, 1868	80, 906
Tobacco-curing apparatus	C. W. Flippen	Laurel Grove, Va	Apr. 2, 1872	125, 277
Tobacco, Curing leaf	J. D. Culps	Gilroy, Cal	Jan. 30, 1873	[illegible]
Tobacco-cutter	C. J. Addy	Roxbury, Mass	Mar. 12, 1867	62, 799
Tobacco-cutter	J. M. Aguayo	Boston, Mass	June 20, 1871	116, 136
Tobacco-cutter	A. E. and J. B. Blood	Lynn, Mass	Nov. 29, 1864	45, 219
Tobacco-cutter	S. A. Bostwick	Laconia, N. H	Dec. 28, 1869	98, 340
Tobacco-cutter	T. L. Church	Syracuse, N. Y	Nov. 17, 1863	40, 607
Tobacco-cutter	J. G. Dreher	Pine Grove, Pa	Oct. 11, 1870	108, 119
Tobacco-cutter	G. Dunn	Media, Pa	July 16, 1872	129, 541
Tobacco-cutter	J. Eiberwiser	Cincinnati, Ohio	Mar. 12, 1872	124, 426
Tobacco-cutter	N. W. Lee	North Providence, R. I	May 28, 1867	65, 095
Tobacco-cutter	S. Lee	Taunton, Mass	Jan. 6, 1863	37, 294
Tobacco-cutter	H. U. and H. A. Morse	Canton, Mass	June 25, 1861	32, 640
Tobacco-cutter	W. H. Pease	Dayton, Ohio	Dec. 18, 1860	30, 929
Tobacco-cutter	W. H. Pease	Dayton, Ohio	Feb. 16, 1864	41, 637
Tobacco-cutter	E. L. Pratt	Boston, Mass	Dec. 31, 1867	72, 898
Tobacco-cutter	A. J. Rayner	Buffalo, N. Y	Dec. 31, 1867	72, 757
Tobacco-cutter	T. M. Richardson	Stockton, Me	June 29, 1869	92, 101
Tobacco-cutter	J. I. Robbins	Cincinnati, Ohio	Apr. 17, 1866	54, 017
Tobacco-cutter	D. T. Robinson	Boston, Mass	Feb. 11, 1868	74, 248
Tobacco-cutter	T. Schug and C. B. Alsover	Easton, Pa	Jan. 23, 1872	123, 050
Tobacco-cutter	L. W. Spencer	New York, N. Y	Mar. 24, 1868	75, 805
Tobacco-cutter	W. N. C. Willson	Summit Point, W. Va	Mar. 15, 1870	100, 959
Tobacco-cutter and nut-cracker	H. Tilden	Boston, Mass	May 29, 1866	55, 177
Tobacco-cutter feed-motor	J. Eiberweiser	Cincinnati, Ohio	Oct. 29, 1872	132, 644
Tobacco-cutter, Hand	E. K. Haynes	Hanover, N. H	July 9, 1867	66, 587
Tobacco cutter, Lump	E. Holbrook, jr	Louisville, Ky	Apr. 26, 1864	42, 484
Tobacco cutter, Plug	A. and T. Schuneman	Detroit, Mich	Sept. 28, 1869	95, 272
Tobacco-cutter, Pocket	E. L. Gilman and S. S. Smith	Somerville, Mass	Nov. 10, 1868	83, 955
Tobacco-cutter, Self-cleaning	W. J. Faul	New York, N. Y	July 8, 1873	140, 693
Tobacco-cutter, Self-feeding	R. Smith	Sherbrooke, Canada	Dec. 13, 1864	45, 451
Tobacco cutter, Sheet	E. Holbrook, jr	Louisville, Ky	Apr. 26, 1864	42, 483
Tobacco, Cutting	A. Kinsley		Aug. 12, 1797	....
Tobacco, Cutting	E. Murdock	Albany, N. Y	July 18, 1854	11, 330
Tobacco, Cutting and pressing	W. W. Huse	Brooklyn, N. Y	Sept. 27, 1864	44, 429
Tobacco-cutting box	W. T. Farre	Montreal, Canada	July 25, 1871	117, 269
Tobacco-cutting knife	J. T. Mapes	New York	Jan. 22, 1831	....
Tobacco-cutting machine	J. G. Baker	Philadelphia, Pa	July 25, 1871	117, 365
Tobacco-cutting machine	N. H. Borgfeldt	New York, N. Y	May 6, 1873	138, 606
Tobacco-cutting machine	J. W. Crossley	Bridgeport, Conn	May 7, 1867	64, 498
Tobacco-cutting machine	L. F. Hildebrand	Chicago, Ill	Oct. 23, 1866	59, 015
Tobacco-cutting machine	W. W. Huse	Brooklyn, N. Y	Mar. 21, 1865	46, 908
Tobacco-cutting machine	W. W. Huse	Brooklyn, N. Y	May 21, 1867	64, 980

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Invention.	Inventor.	Residence.	Date.	No.
Tobacco-cutting machine	F. S. Kinney	New York, N. Y	June 24, 1873	140, 203
Tobacco-cutting machine	P. Lorillard		June 28, 1800	....
Tobacco-cutting machine	H. A. Morse	Canton, Mass	May 16, 1865	47, 742
Tobacco-cutting machine	L. Planer	New York, N. Y	Mar. 14, 1865	46, 820
Tobacco-cutting machine	E. L. Pratt	Boston, Mass	May 21, 1867	65, 006
Tobacco-cutting machine	F. W. Ritterhoff	New York, N. Y	Feb. 20, 1866	52, 747
Tobacco-cutting machine	F. W. Ritterhoff and C. A. Colquitt.	New York, N. Y	Feb. 23, 1864	41, 721
Tobacco-cutting machine	F. W. Ritterhoff, C. A. Colquitt, and W. Mulchahey.	New York, N. Y	Apr. 4, 1865	47, 131
Tobacco-cutting machine	D. T. Robinson	Boston, Mass	Apr. 24, 1866	54, 210
Tobacco-cutting machine	C. E. Rymes	Somerville, Mass	Apr. 21, 1868	77, 102
Tobacco-cutting machine	J. W. Smith	New Haven, Conn	Oct. 15, 1867	69, 853
Tobacco-cutting mechine	W. J. Stratton and H. G. Tidemann.	Saint Louis, Mo., and New York, N. Y.	Aug. 8, 1865	49, 317
Tobacco-cutting machine	M. Winter	New York, N. Y	July 13, 1869	92, 684
Tobacco-cutting machine, Smoking	H. M. Smith	Richmond, Va	May 29, 1866	55, 173
Tobacco-cutting machine, Spun	J. Martin	Petersburgh, Va	Nov. 19, 1833	....
Tobacco, Dressing cut	G. Wales	Liberty, N. Y	Mar. 26, 1850	7, 226
Tobacco-dressing machine	J. H. Howe	Utica, N. Y	Oct. 17, 1871	120, 069
Tobacco-dressing machine	R. Meginnity and J. Dessenger	Detroit, Mich	Sept. 15, 1868	82, 144
Tobacco-dressing machine	S. G. Rice	Albany, N. Y	Nov. 8, 1864	44, 975
Tobacco-dressing machine	H. Suggett	New York, N. Y	Nov. 12, 1872	132, 935
Tobacco-dryer	L. Burdick, H. J. Chase, and F. P. and W. S. Isherwood.	Toledo, Ohio	June 22, 1869	91, 601
Tobacco-dryer	S. F. Cotterill	Dayton, Ohio	Nov. 3, 1868	83, 694
Tobacco-dryer	W. H. Pease	Dayton, Ohio	June 20, 1865	48, 306
Tobacco-dryer	J. M. Smith	Milton, N. C	June 17, 1873	139, 977
Tobacco-dryer	J. Watt	Chicago, Ill	July 16, 1872	128, 988
Tobacco, Drying and curing	D. G. Tuck	Halifax County, Va	Oct. 1, 1830	....
Tobacco drying and curing kiln	E. Pendleton	Louisa County, Va	Dec. 18, 1826	....
Tobacco-drying by flues or stoves	D. G. Tuck	Halifax Court House, Va	Feb. 15, 1831	....
Tobacco-drying house	H. M. Dunbar	Miller's Falls, Mass	Aug. 6, 1872	130, 287
Tobacco-drying house	E. W. Ellsworth	South Windsor, Conn	Nov. 4, 1873	144, 194
Tobacco-drying house	J. J. Streeter	Hinsdale, N. H	May 7, 1872	126, 499
Tobacco-drying machine	J. H. Balsley	Dayton, Ohio	Feb. 14, 1865	46, 323
Tobacco-drying machine	W. W. Huse	Brooklyn, N. Y	Jan. 27, 1863	37, 509
Tobacco-drying machine	T. W. Lafetra	New York, N. Y	Apr. 4, 1854	10, 750
Tobacco-dust, Mode of utilizing	A. F. Stayman	Baltimore, Md	Jan. 15, 1867	61, 275
Tobacco-elevator	R. O. Robertson	Barnesville, Va	Aug. 15, 1871	118, 153
Tobacco-elevator	G. Robinson	Louisville, Ky	Dec. 7, 1869	97, 702
Tobacco-finisher	A. P. Southard	Saint Louis, Mo	June 10, 1873	139, 742
Tobacco, Flavoring, coating, and putting up	J. Kerr	Boston, Mass	Mar. 25, 1873	137, 084
Tobacco for packing, Shaping and arranging	J. K. Earickson and J. R. Harris	Saint Louis, Mo	Feb. 18, 1873	135, 897
Tobacco for pressing, Machine for preparing	E. S. Collins and T. N. Read	Aspen Wall, Va	Sept. 27, 1859	25, 557
Tobacco for pressing, Machine for preparing	D. Smith	South Hill, Va	Jan. 15, 1844	3, 404
Tobacco-fork	S. D. Lilley	Ripley, Ohio	Oct. 13, 1863	40, 271
Tobacco, fruit, &c., Process and apparatus for treating and curing.	U. T. Bowdon	Oxford, N. C	Aug. 20, 1872	130, 695
Tobacco, Granulating	C. H. Lilienthal	Yonkers, N. Y	May 3, 1870	102, 560
Tobacco granulating and finishing machine	N. H. Borgfeldt and F. W. Ritterhoff.	New York, N. Y	May 26, 1868	78, 360
Tobacco-granulating machine	R. Appleby	Beverly, N. J	Nov. 19, 1872	133, 136
Tobacco-granulating machine	N. H. Borgfeldt	New York, N. Y	Mar. 12, 1867	62, 811
Tobacco-granulating machine	J. H. Harris	Newark, N. J	July 11, 1865	48, 680
Tobacco-hand-tying machine	D. C. Delinger	Russellville, Ohio	Apr. 21, 1868	77, 010
Tobacco-hanger	D. C. Burr and J. A. Johnson	Cromwell, Conn	Nov. 11, 1873	144, 503
Tobacco-hanger	J. Carrier	Marlborough, Conn	Dec. 10, 1872	133, 755
Tobacco-hanger	A. G. Ferriss	New Milford, Conn	Mar. 26, 1872	124, 943
Tobacco-hanger	F. G. Johnson	Brooklyn, N. Y	Aug. 27, 1872	130, 806
Tobacco-hanger	E. Kempshall	New Britain, Conn	June 10, 1873	139, 718
Tobacco-hanger	C. E. Phelps	Warehouse Point, Conn	Dec. 3, 1872	133, 541
Tobacco-hanging hook	H. N. Strong	Portland, Conn	Aug. 19, 1873	141, 899
Tobacco, hay, and cotton press	L. H. Mass	Browningsville, Ky	Feb. 21, 1871	112, 065
Tobacco, hay, and cotton press	V. J. Sbryock	Folsomville, Ind	Dec. 28, 1869	98, 434
Tobacco-hill preparer	B. T. Hardesty	Sunderlandville, Md	Feb. 11, 1868	74, 350
Tobacco-hiller	Z. D. Blakistone	Saint Mary's County, Md	Mar. 18, 1873	136, 897
Tobacco-holder	J. Y. Leslie	Brooklyn, N. Y	Feb. 4, 1862	34, 308
Tobacco-hook	A. Putnam, jr	Chester, Vt	Mar. 21, 1865	46, 940
Tobacco in plugs, Pressing	G. King	Farmville, Va	June 12, 1855	13, 061
Tobacco into boxes, Pressing	A. Snead	Richmond, Va	Sept. 11, 1841	2, 253
Tobacco-knife	W. A. Bernard	Danville, Va	June 18, 1872	128, 010
Tobacco-knife	S. S. Davis	New York, N. Y	May 10, 1864	42, 644
Tobacco-knife	I. S. Goldman	Winterset, Iowa	Oct. 21, 1873	143, 900
Tobacco leaves and stems, Machine for breaking	N. H. Borgfeldt	New York, N. Y	Sept. 7, 1869	94, 555
Tobacco-leaves, Machine for booking	J. Wise	Elizabeth, N. J	Nov. 8, 1870	109, 092
Tobacco-leaves, Machine for cleaning and preparing	J. L. Jones	Oxford, N. C	Aug. 5, 1873	141, 563
Tobacco-leaves, Machine for spreading	M. M. Kluck	Hartford, Conn	Feb. 8, 1870	99, 687
Tobacco-leaves, Machinery for cleaning	J. E. Allen	Granville County, N. C	Oct. 3, 1848	5, 817
Tobacco-leaves, Machinery for smoothing	G. W. Macon	Louisburgh, N. C	Apr. 18, 1846	4, 458
Tobacco-leaves, Process of stripping	W. W. Huse	Brooklyn, N. Y	Nov. 18, 1862	36, 956
Tobacco-leaves, Reducing stems of	W. W. Huse	Brooklyn, N. Y	Aug. 16, 1864	43, 853
Tobacco-machine	J. H. Dickason	Hannibal, Mo	Dec. 7, 1869	97, 616
Tobacco-machine	J. Scales	Toronto, Canada	Mar. 26, 1872	124, 979
Tobacco, Machine for fine-cutting	E. Holmes	Lynn, Mass	June 26, 1866	55, 861
Tobacco, Machine for making plug	P. H. Mayo	Richmond, Va	July 13, 1869	92, 462
Tobacco, Machine for making plug	J. E. Withers	Toronto, Canada	Dec. 24, 1867	72, 578
Tobacco, Machine for making plug	J. Blackie	New York, N. Y	Mar. 13, 1866	53, 105
Tobacco, Machine for manufacturing	J. Caldwell and C. Batterman		Jan. 26, 1793	....
Tobacco, Machine for manufacturing	J. B. Rappelyea and J. Barns	Covington, Conn	Nov. 19, 1833	....
Tobacco, Machine for manufacturing plug	J. L. Jones	Oxford, N. C	Aug. 5, 1873	141, 562
Tobacco, Machine for manufacturing plug	L. W. Spencer	New York, N. Y	June 25, 1872	128, 434
Tobacco, Machine for packing	D. Eaton	Saint Louis, Mo	June 11, 1872	127, 859
Tobacco, Machine for packing, wrapping, and labeling.	J. H. Trowbridge	New Haven, Conn	Oct. 7, 1873	143, 545
Tobacco, Machine for preparing	H. Walter, sr	Elizabeth City, N. J	Aug. 12, 1862	36, 185
Tobacco, Machine for preparing plug chewing	W. J. Van Horn and W. Alexander.	Louisiana, Mo	Dec. 27, 1859	26, 632

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Invention.	Inventor.	Residence.	Date.	No.
Tobacco, Machine for sheeting and pressing	W. H. Watson	Brooklyn, N. Y	Apr. 6, 1869	88, 757
Tobacco, Machine for straightening	J. A. Hunter	New London, Va	May 26, 1868	78, 376
Tobacco, Machine for straightening and pressing	W. W. Justis	Genito, Va	Sept. 11, 1860	29, 976
Tobacco, Machine for stripping and booking	O. Dean	Richmond, Va	Jan. 16, 1872	122, 816
Tobacco-machine, Lump	E. Holbrook, jr	Louisville, Ky	Apr. 26, 1864	42, 485
Tobacco-machine, Plug	L. W. Spencer	New York, N. Y	Aug. 30, 1870	106, 883
Tobacco, Machinery for manufacturing	J. Maurey	Petersburgh, Va	Aug. 15, 1834	....
Tobacco, Machinery for manufacturing	E. and C. F. Robinson and J. E. H. Andrew.	Stockport, England	July 23, 1872	129, 751
Tobacco, Manufacture of	J. Allen, jr., and C. Geoghegan	Richmond, Va	Apr. 3, 1827	....
Tobacco, Manufacture of	W. W. Huse	Brooklyn, N. Y	Sept. 23, 1862	36, 520
Tobacco, Manufacture of chewing	H. M. Cochran	McConnellsville, Ohio	Apr. 7, 1863	38, 095
Tobacco, Manufacture of chewing	W. and D. Rinehart	Pittsburgh, Pa	Jan. 5, 1869	85, 613
Tobacco, Manufacture of plug	L. W. Spencer	New York, N. Y	Aug. 30, 1870	106, 882
Tobacco, Manufacture of plug and bunch	I. Eppinger	New York N. Y	Feb. 25, 1873	136, 312
Tobacco, Manufacture of smoking	J. Ball	Elmira, N. Y	Dec. 17, 1867	72, 356
Tobacco, Manufactured	R. N. Blackwood	Lewis County, Mo	Aug. 13, 1872	130, 405
Tobacco, Manufacturing	J. Allen, jr., and C. Geoghegan	Richmond, Va	Aug. 10, 1833	....
Tobacco, Manufacturing	C. Geoghegan and J. Allen, jr	Richmond, Va	Dec. 6, 1831	....
Tobacco, Manufacturing	P. Lorillard	New York, N. Y	Apr. 25, 1810	....
Tobacco, Manufacturing chewing	E. Chassaing	Baltimore, M. D	Mar. 24, 1835	....
Tobacco, Manufacturing plug	R. D. Hay	Crooked Creek, N. C	Sept. 13, 1870	107, 368
Tobacco, Medicated smoking	W. A. Wright	Lynchburgh, Va	Feb. 7, 1871	111, 711
Tobacco, Method of preparing chewing	W. W. Huse	Brooklyn, N. Y	Nov. 18, 1862	36, 955
Tobacco, Mill shape or mold for manufacturing	G. F. Marks	Petersburgh, Va	Jan. 14, 1868	73, 354
Tobacco, Mode of securing desirable color to	F. M. Pearl	Owensborough, Ky	Mar. 22, 1864	42, 019
Tobacco, Mode of squeezing and straightening	M. D. Elsom	Howardsville, Va	Feb. 15, 1859	22, 944
Tobacco-package	E. L. Felgner	Baltimore, Md	Mar. 18, 1873	136, 984
Tobacco-package	G. Robinson	Louisville, Ky	Dec. 9, 1873	145, 451
Tobacco, &c., packages, Machine for making	C. J. Van Oeckelen	New York, N. Y	Aug. 30, 1864	44, 028
Tobacco, Packing	J. B. Allen	Richmond, Va	Jan. 15, 1836	....
Tobacco, Packing	M. Falk	New York, N. Y	Mar. 24, 1868	75, 887
Tobacco, Packing	L. H. Marburgh	Baltimore, Md	Feb. 11, 1868	74, 395
Tobacco-packing bag	G. W. Gail	Baltimore, Md	Jan. 28, 1868	73, 794
Tobacco-packing case	S. F. Hess	Rochester, N. Y	Jan. 25, 1870	99, 188
Tobacco-packing machine	J. H. Trowbridge	New Haven, Conn	Feb. 1, 1870	99, 372
Tobacco, Packing shred	D. C. Mayo	Richmond, Va	Mar. 3, 1868	75, 038
Tobacco, Packing smoking	F. W. Beck and E. W. Siebert	Baltimore, Md	Dec. 3, 1867	71, 684
Tobacco pail or chest	J. Steel	Sheldon, Ill	Apr. 30, 1872	126, 340
Tobacco-paper	P. M. Consuegra and K. Antigüedad.	New York, N. Y	Feb. 2, 1869	86, 369
Tobacco-paper, Manufacture of	P. M. Consuegra and K. Antigüedad.	New York, N. Y	Feb. 2, 1869	86, 368
Tobacco-pipe	S. Andrews	Perth Amboy, N. J	Mar. 12, 1867	62, 802
Tobacco-pipe	T. C. Andrews	Leverington, Pa	Jan. 21, 1862	34, 187
Tobacco-pipe	J. H. Anthony	Cambridge, Ind	July 19, 1870	105, 408
Tobacco-pipe	Z. R. Bennett	Williamsburgh, N. Y	Apr. 5, 1870	101, 417
Tobacco-pipe	A. J. Bowen	Baltimore, Md	June 10, 1862	35, 559
Tobacco-pipe	L. K. Bowen	Baltimore, Md	Dec. 6, 1864	45, 380
Tobacco-pipe	H. Bradford	New York, N. Y	Sept. 15, 1863	39, 987
Tobacco-pipe	T. Burnham	Bridgeport, Conn	Sept. 19, 1871	119, 075
Tobacco-pipe	C. Chinnock	Brooklyn, N. Y	June 16, 1863	38, 883
Tobacco-pipe	J. Cook	West Groton, Mass	Feb. 4, 1868	74, 050
Tobacco-pipe	M. M. Coppuck	Philadelphia, Pa	Sept. 18, 1866	58, 072
Tobacco-pipe	G. Corey	Brooklyn, N. Y	Jan. 5, 1869	85, 565
Tobacco-pipe	J. Cunningham	Bangor, Me	Nov. 21, 1865	51, 024
Tobacco-pipe	H. G. Dayton	Maysville, Ky	May 12, 1868	77, 803
Tobacco-pipe	A. T. Dietz	Philadelphia, Pa	Jan. 2, 1866	51, 812
Tobacco-pipe	F. Doellbor	Philadelphia, Pa	June 13, 1865	48, 162
Tobacco-pipe	P. J. Droyer	Elizabeth, N. J	Mar. 7, 1871	112, 432
Tobacco-pipe	O. Ernst	New York, N. Y	Mar. 25, 1862	34, 745
Tobacco-pipe	O. Ernst	New York, N. Y	July 22, 1862	35, 926
Tobacco-pipe	A. Fessenden	East Boston, Mass	Nov. 29, 1864	45, 233
Tobacco-pipe	F. Fickey, jr	Baltimore, Md	Nov. 3, 1863	40, 536
Tobacco-pipe	F. Fickey, jr	Baltimore, Md	Dec. 8, 1863	40, 881
Tobacco-pipe	H. C. Finlayson	New York, N. Y	Oct. 17, 1871	120, 033
Tobacco-pipe	G. W. Francis and W. L. Woods	Washington, D. C	Apr. 11, 1865	47, 199
Tobacco-pipe	J. S. Hawley	Virginia City, Nev	July 30, 1867	67, 299
Tobacco-pipe	R. Heneage	Buffalo, N. Y	Aug. 5, 1862	36, 092
Tobacco-pipe	J. and G. Hochapfel	Strasburg, France	Mar. 5, 1867	62, 631
Tobacco-pipe	C. Hoffmann	Philadelphia, Pa	Aug. 8, 1865	49, 268
Tobacco-pipe	E. Holmes	Lynn, Mass	Mar. 15, 1864	41, 921
Tobacco-pipe	R. A. Hooe	Washington, D. C	Jan. 14, 1862	34, 148
Tobacco-pipe	E. Hoyt	Stamford, Conn	Sept. 26, 1865	50, 127
Tobacco-pipe	E. Hoyt	Stamford, Conn	July 31, 1866	56, 752
Tobacco-pipe	E. Hoyt	Stamford, Conn	Jan. 1, 1867	60, 733
Tobacco-pipe	C. S. Hutchinson	Burlington, N. J	Mar. 1, 1864	41, 778
Tobacco-pipe	P. Jeanne	Brooklyn, N. Y	Feb. 6, 1866	52, 419
Tobacco-pipe	A. Kühn and L. Nax	Philadelphia, Pa	July 5, 1864	43, 416
Tobacco-pipe	H. Kurth	New Lotts, N. Y	Dec. 2, 1862	37, 044
Tobacco-pipe	G. Lautenschlager and G. L. Gott.	New York, N. Y	Jan. 30, 1866	52, 297
Tobacco-pipe	F. Liller	Baltimore, Md	May 30, 1865	47, 964
Tobacco-pipe	R. Livingston	New York, N. Y	Jan. 30, 1866	52, 302
Tobacco-pipe	E. A. Marshall	New York, N. Y	Sept. 3, 1861	33, 225
Tobacco-pipe	R. Masson	Tremont, N. Y	June 5, 1866	55, 321
Tobacco-pipe	A. D. Milne	Tiverton, R. I	Mar. 4, 1862	34, 585
Tobacco-pipe	J. M. Mur	New York, N. Y	Oct. 17, 1871	119, 941
Tobacco-pipe	R. Nagler	Brooklyn, N. Y	Mar. 7, 1865	46, 693
Tobacco-pipe	J. A. Pease	New York, N. Y	Jan. 21, 1862	34, 231
Tobacco-pipe	J. W. Petty	New Orleans, La	July 31, 1866	56, 795
Tobacco-pipe	H. R. Robbins	Baltimore, Md	Apr. 21, 1868	77, 096
Tobacco-pipe	W. G. Ruge	Holstein, Mo	May 30, 1870	115, 363
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	Feb. 7, 1865	46, 269
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	Mar. 26, 1867	63, 310
Tobacco-pipe	F. Schulte	Philadelphia, Pa	Nov. 14, 1865	50, 962
Tobacco-pipe	C. E. Searles	Stamford, Conn	July 30, 1867	67, 356
Tobacco-pipe	W. Selfe	Cincinnati, Ohio	Dec. 27, 1870	110, 594

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Tobacco-pipe	T. Shaw	Philadelphia, Pa	Apr. 22, 1862	35, 042
Tobacco-pipe	O. Sjöberg	Chicago, Ill	Aug. 11, 1868	81, 020
Tobacco-pipe	A. F. Stayman	Baltimore, Md	Aug. 21, 1866	57, 402
Tobacco-pipe	J. D. Stewart	Baltimore, Md	June 20, 1865	48, 320
Tobacco-pipe	J. B. Stockton	Edmonton, Ky	Nov. 26, 1867	71, 548
Tobacco-pipe	T. Tellgmann	Stamford, Conn	Dec. 4, 1866	60, 282
Tobacco-pipe	J. W. Truman	Macon, Ga	Jan. 15, 1867	61, 283
Tobacco-pipe	L. C. Walker	Baltimore, Md	Mar. 21, 1865	46, 959
Tobacco-pipe	W. F. Warburton	Philadelphia, Pa	May 16, 1871	114, 997
Tobacco-pipe	M. N. Ward	Old Town, Me	Oct. 29, 1861	33, 616
Tobacco-pipe	C. A. Wright	Milwaukee, Wis	Jan. 30, 1872	123, 214
Tobacco-pipe and cigar-holder	J. W. Evans	New York, N. Y	May 11, 1858	20, 199
Tobacco-pipe and cigar-holder	G. M. Ross and W. H. West	New York, N. Y	July 10, 1866	56, 272
Tobacco-pipe bowls, Machine for trimming	D. A. Dickinson	Baltimore, Md	May 31, 1864	42, 990
Tobacco-pipe case	J. Speirs	Boston, Mass	Nov. 27, 1866	60, 078
Tobacco-pipe machine	J. H. Hollely	Brooklyn, N. Y	June 28, 1870	104, 850
Tobacco-pipe, Pocket	P. C. Rowe	Boston, Mass	July 12, 1864	43, 526
Tobacco-pipe stem	F. Fickey, jr	Baltimore, Md	July 5, 1864	43, 454
Tobacco-pipe stem	D. D. Foley	Washington, D. C	Aug. 23, 1864	43, 907
Tobacco-pipe stem	C. Hingher	New Brunswick, N. J	Oct. 23, 1866	59, 017
Tobacco-pipe stem	E. Larssen	Stavanger, Norway	Sept. 14, 1869	94, 831
Tobacco-pipe stem	T. Smith and H. J. Brown	Detroit, Mich	Feb. 21, 1865	46, 505
Tobacco-pipes, Composition for lining	G. H. Cook	New Brunswick, N. J	Jan. 7, 1862	34, 106
Tobacco-pipes, Compound for use in	W. E. Turner	Neosho Falls, Kans	Jan. 7, 1873	134, 743
Tobacco-pipes, Glazing and coloring	J. H. Starck	Milwaukee, Wis	May 5, 1868	77, 673
Tobacco-pipes, Machine for making	D. A. Dickinson	Baltimore, Md	May 31, 1864	42, 991
Tobacco-pipes, Machine for making	M. R. Griswold	Watertown, Conn	May 23, 1865	47, 814
Tobacco-pipes, stems, and cigar-holders, Composition for the manufacture of.	J. R. Cole	Demopolis, Ala	Mar. 22, 1870	101, 101
Tobacco-plant cutter	J. N. Cady	South Hannibal, N. Y	Apr. 15, 1873	137, 760
Tobacco-plants, Removing suckers from	G. R. Hughes	Glasgow, Mo	May 17, 1864	42, 774
Tobacco, Plug and bunch	I. Eppinger	New York, N. Y	June 17, 1873	140, 020
Tobacco-plug-cutting machine	P. M. Guerrant and P. M. Rowlett.	New Concord, Ky	Feb. 9, 1869	86, 748
Tobacco-plug from mold, Removing	G. Neudecker	Saint Louis, Mo	Feb. 26, 1867	62, 358
Tobacco-pouch	R. E. Dixon	New York, N. Y	May 20, 1862	35, 305
Tobacco-pouch	J. G. Ernst	Baltimore, Md	May 28, 1867	65, 188
Tobacco-pouch	D. Reed	New York, N. Y	Mar. 4, 1873	136, 457
Tobacco-pouch	W. S. Sims	Newark, N. J	Feb. 26, 1867	62, 448
Tobacco, Preparation of	G. Jaques	Somerville, Mass	Dec. 27, 1859	26, 594
Tobacco, Preparation of chewing	D. A. Alden	Malden, Mass	May 16, 1871	114, 901
Tobacco, Preparation of fine-cut	P. N. Greer	New York, N. Y	Dec. 20, 1864	45, 489
Tobacco, Preparation of maize-leaf as a substitute for.	J. G. Goshon and S. M. Ely	Shirleysburgh, Pa	Feb. 20, 1855	12, 417
Tobacco, Preparing	E. Goodwin	New York, N. Y	Jan. 23, 1872	123, 011
Tobacco, Preparing	G. Neudecker	Richmond, Va	Oct. 22, 1867	70, 012
Tobacco, Preparing chewing	E. Goodwin	New York	Feb. 16, 1843	2, 959
Tobacco, Preparing chewing	H. D. Smith	New York, N. Y	Mar. 14, 1865	46, 826
Tobacco, Preparing smoking	A. F. Stayman	Baltimore, Md	May 7, 1867	64, 591
Tobacco-press	H. H. Alms	Kansas City, Mo	Feb. 14, 1871	111, 800
Tobacco-press	J. W. Barber	Cincinnati, Ohio	June 19, 1866	55, 759
Tobacco-press	J. A. Bawsel	Powhatan Court House, Va	May 31, 1859	24, 187
Tobacco-press	G. Booker	Richmond, Va	Feb. 8, 1832	....
Tobacco-press	J. T. Bowman	Pattonsburgh, Va	July 5, 1837	257
Tobacco-press	J. Briggs	Louisville, Ky	Oct. 21, 1862	36, 751
Tobacco-press	J. Briggs	Louisville, Ky	May 19, 1863	38, 624
Tobacco-press	E. Brown	Richmond, Va	Apr. 30, 1819	....
Tobacco-press	J. Bucey	West River, Md	Dec. 23, 1841	2, 398
Tobacco-press	E. S. Collins	Aspen Wall, Va	Apr. 17, 1860	27, 888
Tobacco-press	E. and W. B. Cunningham	Powhatan Court House, Va	May 3, 1859	23, 831
Tobacco-press	L. P. Dick and D. R. Musselman.	Louisville, Ky	Dec. 28, 1869	98, 357
Tobacco-press	J. H. Fellows	Lewisport, Ky	Dec. 20, 1864	45, 558
Tobacco-press	S. Fraser	Nottingham, Md	Mar. 23, 1820	....
Tobacco-press	J. Gates	Covington, Ky	Sept. 17, 1872	131, 395
Tobacco-press	C. T. Gilmor	Baltimore, Md	Nov. 2, 1869	96, 422
Tobacco-press	T. G. Hardesty	Tracy's Landing, Md	May 29, 1841	2, 113
Tobacco-press	I. T. Hardy and C. Peper	Saint Louis, Mo	Oct. 22, 1872	132, 362
Tobacco-press	W. W. Huse	Brooklyn, N. Y	Jan. 27, 1863	37, 507
Tobacco-press	W. S. Kimball	Rochester, N. Y	Feb. 2, 1869	86, 415
Tobacco-press	R. Kinsley	Lynchburgh, Va	Nov. 13, 1855	13, 790
Tobacco-press	D. La Du	Warner, N. Y	Feb. 11, 1873	135, 648
Tobacco-press	G. Lindsay and W. Cameron	Petersburgh, Va	Sept. 13, 1859	25, 427
Tobacco-press	A. M. McLean	Russellville, Ky	Mar. 2, 1836	....
Tobacco-press	W. R. Musser and J. Coleman.	Baltimore, Md., and Lynchburgh, Va.	Feb. 2, 1858	19, 256
Tobacco-press	N. M. Pepper	Danbury, N. C	Dec. 26, 1871	122, 276
Tobacco-press	T. N. Read	Aspen Wall, Va	May 22, 1860	28, 410
Tobacco-press	T. N. Read	Danville, Va	Nov. 12, 1867	70, 900
Tobacco-press	E. Richardson	West River, Md	July 16, 1841	2, 170
Tobacco-press	E. Shoavler	Richmond, Va	Apr. 22, 1835	....
Tobacco-press	J. Sweeney	Chicago, Ill	June 26, 1860	28, 912
Tobacco-press	J. M. Talbott	Richmond, Va	Nov. 6, 1866	59, 478
Tobacco-press	W. H. Tappey, W. C. Lumsden, and A. Steel.	Petersburgh, Va	June 29, 1869	91, 985
Tobacco-press	J. H. Washington	Baltimore, Md	Oct. 12, 1837	424
Tobacco-press	W. H. Watson	Yonkers, N. Y	June 26, 1866	55, 937
Tobacco-press	W. T. Watson	Nottingham, Md	Dec. 4, 1866	60, 298
Tobacco-press	J. W. Weems	West River, Md	Dec. 15, 1835	....
Tobacco-press	F. J. Witovec	Saint Louis, Mo	May 6, 1873	138, 549
Tobacco-press	A. N. Zell	Lancaster, Pa	Mar. 7, 1871	112, 521
Tobacco press and cutter	S. G. Rice	Albany, N. Y	Nov. 20, 1866	59, 748
Tobacco-press, Double-lever	C. Johnson	New Glasgow, Va	June 3, 1808	....
Tobacco press or box fastening	C. E. Rymes	Charlestown, Mass	Dec. 15, 1863	40, 948
Tobacco-press, Portable	W. S. Ford	Evansville, Ind	June 7, 1870	103, 860
Tobacco-press, Portable	J. F. Morgan	Leonardtown, Md	Sept. 3, 1872	131, 110
Tobacco-press retainer	A. P. Cochran	Louisville, Ky	Aug. 26, 1862	36, 276
Tobacco-press retainer	E. Thomas	Craigsville, Va	July 6, 1869	92, 227

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Tobacco press, Sheet	E. Holbrook, jr	Louisville, Ky	Apr. 26, 1864	42, 482
Tobacco-presses, Box-clamp for	T. I. Robertson	Madison, N. C	Oct. 28, 1873	144, 142
Tobacco, Pressing	J. Henry	Lynchburgh, Va	July 24, 1860	29, 279
Tobacco, Pressing and cutting	H. Moore	Reedsville, N. C	Dec. 16, 1845	4, 314
Tobacco pressing and cutting machine	W. W. Huse	Brooklyn, N. Y	Jan. 27, 1863	37, 508
Tobacco pressing and packing apparatus	J. K. Earickson and J. R. Harris.	Saint Louis, Mo	Feb. 25, 1873	136, 225
Tobacco pressing and sheeting machine	G. W. Rucker, O. C. Swan, and T. W. Rucker.	Saint Louis, Mo	Aug. 2, 1870	105, 981
Tobacco-pressing machine	J. Blackie	New York, N. Y	Aug. 21, 1866	57, 280
Tobacco-pressing machine	T. and G. Cope	Liverpool, England	Sept. 7, 1869	94, 568
Tobacco-pressing machine	J. D. King	Cincinnati, Ohio	July 25, 1865	48, 955
Tobacco-pressing machine	E. Parker	Rock Island, Ill	Apr. 27, 1852	8, 909
Tobacco-pressing machine	W. H. Watson	Yonkers, N. Y	Sept. 4, 1866	57, 800
Tobacco-pressing machine	W. H. Watson	New York, N. Y	Nov. 6, 1866	59, 489
Tobacco-pressing machine	W. H. Watson	Yonkers, N. Y	Nov. 27, 1866	60, 100
Tobacco-pressing machinery	W. Cameron	Petersburgh, Va	Nov. 9, 1858	22, 014
Tobacco-prize	C. T. Gilmor	Baltimore, Md	Nov. 2, 1869	96, 421
Tobacco, Process for maturing and curing green leaf.	J. Ashcroft	Brooklyn, N. Y	Feb. 20, 1872	123, 760
Tobacco, Putting up smoking	E. J. Hallett	New York, N. Y	Mar. 31, 1863	38, 052
Tobacco, Rammer for packing	J. R. Sutton	Brooklyn, N. Y	Feb. 1, 1870	99, 370
Tobacco-reel	S. and E. Hardy	Kennebec, Me	Dec. 30, 1820	....
Tobacco, Renovating	E. Huse	Newburyport, Mass	July 22, 1844	3, 673
Tobacco-ridger	O. W. Gaslee	Glastenbury, Conn	Aug. 30, 1870	106, 810
Tobacco-ridger	J. R. Whittemore	Chicopee Falls, Mass	Sept. 9, 1873	142, 753
Tobacco-roller	C. A. Jackson	Petersburgh, Va	May 3, 1870	102, 549
Tobacco-rolling machine	D. W. De Forest	Petersburgh, Va	May 27, 1873	139, 375
Tobacco-rolling machine	J. W. Stone	Paris, Tenn	May 17, 1870	103, 255
Tobacco-rolling machine	J. Wettstein	Lynchburgh, Va	June 15, 1869	91, 391
Tobacco-rolling machinery	W. P. Marston	Danville, Va	Apr. 25, 1846	4, 485
Tobacco rolling, pressing, and cutting machine	G. Robinson	Louisville, Ky	Dec. 7, 1869	97, 703
Tobacco-screw	N. Hoag and W. H. Tappey	Petersburgh, Va	Mar. 27, 1860	27, 631
Tobacco shearing and booking machine	I. W. Bisbing and J. S. McCune	Philadelphia, Pa., and Camden, N. J.	Mar. 25, 1873	137, 170
Tobacco sheeting and pressing machine	W. H. Watson	New York, N. Y	Feb. 25, 1868	74, 777
Tobacco-smoke purifier	J. Bavier	Newark, N. J	Mar. 28, 1865	46, 989
Tobacco, Smoking	A. S. Rosenbaum	New York, N. Y	May 2, 1871	114, 342
Tobacco-smoking device	H. J. Hale	New York, N. Y	Feb. 13, 1866	52, 564
Tobacco-smoking tube	J. M. Alexander	Delhi, Ohio	Nov. 5, 1867	70, 385
Tobacco spinning and turning-off wheel	J. Vanderpool and J. Eagles	Newark, N. J	Apr. 8, 1812	....
Tobacco-spinning machine	E. Breul	Hanover, Hanover	Mar. 24, 1863	37, 948
Tobacco-spinning machine	J. Martin	Petersburgh, Va	Nov. 19, 1833	....
Tobacco-spinning machinery	H. M. Smith	Richmond, Va	Dec. 20, 1837	524
Tobacco-stemming	G. Briant	Richmond, Va	Nov. 11, 1830	....
Tobacco stems and leaves, Apparatus for breaking	N. H. Borgfeldt	New York, N. Y	Sept. 10, 1867	68, 597
Tobacco-stems, Coloring and curing	B. Payn	Albany, N. Y	Jan. 18, 1859	22, 668
Tobacco-stems, Curing	T. Hoyt	New York, N. Y	Jan. 8, 1850	7, 001
Tobacco-stems, Machine for preparing	N. H. Borgfeldt	New York, N. Y	Dec. 7, 1869	97, 596
Tobacco-stopper	J. M. Brown	Portland, Me	Feb. 7, 1865	46, 211
Tobacco-stopper	W. H. Waite	New York, N. Y	Jan. 5, 1869	85, 626
Tobacco-stripper	C. Müller	Albany, N. Y	Aug. 22, 1871	118, 259
Tobacco stripping and booking machine	O. Dean	Richmond, Va	Nov. 26, 1872	133, 420
Tobacco stripping and booking machine	J. R. Tunnicliff	Van Hornesville, N. Y	May 16, 1871	114, 888
Tobacco-stripping machine	J. R. Tunnicliff and J. L. Thomson.	Van Hornesville and Syracuse, N. Y.	Dec. 16, 1873	145, 699
Tobacco-substitute, Composition for	J. B. Webster	Stockton, Cal	July 13, 1869	92, 497
Tobacco, Substitute for	J. C. Lange	Pittsburgh, Pa	Mar. 9, 1869	87, 572
Tobacco, Substituting the leaves of sunflower and rhubarb-plant for the formation of cigars and smoking.	W. D. Groff	Marietta, Pa	Jan. 8, 1839	1, 066
Tobacco, Tables used for drying cut	G. Campbell	Schenectady, N. Y	Jan. 7, 1829	....
Tobacco-topper	J. S. Ackley and D. S. Ranney	Modus, Conn	Jan. 28, 1873	135, 305
Tobacco-transplanter	C. E. Bates	South Deerfield, Mass	July 15, 1873	140, 606
Tobacco, Treating	G. Arnd	New York, N. Y	Nov. 5, 1867	70, 386
Tobacco, Treating	F. W. Kreymborg	New York, N. Y	Sept. 10, 1872	131, 281
Tobacco, Treating	J. B. Posada	New York, N. Y	May 18, 1869	90, 301
Tobacco, Treating	S. G. Rice	Albany, N. Y	Aug. 9, 1870	106, 207
Tobacco, Treating	J. A. Stafford and H. C. Fowler	Cleveland, Ohio	Mar. 18, 1873	136, 872
Tobacco, Treating smoking	W. A. Wright	Lynchburgh, Va	Feb. 7, 1871	111, 712
Tobacco, Twisting	J. J. Heriges	Philadelphia, Pa	June 13, 1831	....
Tobacco, Unwinder for booked	G. Storm	New York, N. Y	Dec. 5, 1871	121, 683
Toe-calk	T. Symonds	Portland, Me	Nov. 28, 1865	51, 242
Toe-calk blank, Mode of manufacturing	A. Reese	McClure Township, Pa	Dec. 22, 1868	85, 130
Toe-nails, Clamp for preventing ingrowing of	E. E. Stedman	Ravenna, Ohio	Mar. 25, 1873	137, 106
Toe-nails, Tip for preventing the ingrowing of	E. E. Stedman	Ravenna, Ohio	Nov. 5, 1872	132, 872
Toggle-joint press for cotton, hay, &c., Construction of.	R. Harding	South Berwick, Me	Sept. 3, 1842	2, 769
Toggle-joint press, Rotary	T. W. Harvey	Jamestown, N. Y	Apr. 27, 1832	....
Toggle-joint, Screw-press	L. Hale	Hollis, N. H	Dec. 12, 1831	....
Toggle-press	J. Hale	Hollis, N. H	Apr. 20, 1831	....
Toilet and nursery table	H. Havekorst	Leavenworth City, Kans	June 8, 1869	91, 012
Toilet and writing case, Combined	L. B. Brooks	Salem, Mass	Jan. 5, 1864	41, 135
Toilet-box	S. W. H. Ward	New York, N. Y	Nov. 1, 1870	108, 858
Toilet-bracket	J. S. Fletcher	South Bend, Ind	Dec. 3, 1872	133, 640
Toilet-bracket	L. Pearson and B. H. Slusser	South Bend, Ind	Sept. 24, 1872	131, 558
Toilet-cabinet, Lady's	J. C. Vetter	Indianapolis, Ind	June 24, 1873	140, 324
Toilet-case	F. E. Dapron	Davenport, Iowa	May 2, 1871	114, 418
Toilet-case	F. A. Hovey	Athens, N. Y	July 16, 1872	129, 564
Toilet-case, Pocket	F. B. Braillard	New York, N. Y	Feb. 20, 1866	52, 669
Toilet-comb	I. S. and J. W. Hyatt	Albany, N. Y	Feb. 18, 1873	135, 918
Toilet-comb	J. P. Noyes	Binghamton, N. Y	Apr. 14, 1868	76, 650
Toilet-comb	I. H. Southworth	Essex, Conn	Aug. 23, 1864	43, 931
Toilet, Composition for	S. American	Chicago, Ill	Sept. 11, 1861	29, 944
Toilet-furniture	D. Freed	Huntingdon, Pa	Sept. 20, 1853	10, 030
Toilet-glass	R. H. Brown	Detroit, Mich	Mar. 5, 1867	62, 526
Toilet-glass	A. Ober	Beverly, Mass	June 25, 1867	66, 168
Toilet-glass	J. H. Ryan	Boston, Mass	Jan. 29, 1867	61, 635

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Toilet-glass	J. Stofer	Cleveland, Ohio	July 23, 1867	66, 999
Toilet-glass	J. Vickery	Philadelphia, Pa	Oct. 29, 1872	132, 633
Toilet-glass, Adjustable	G. Chappell	Peekskill, N. Y	Feb. 13, 1866	52, 531
Toilet-glass joint	H. Wayne	Cincinnati, Ohio	Oct. 17, 1854	11, 816
Toilet-paste	J. D. Young	San Francisco, Cal	July 4, 1871	116, 786
Toilet-powder	I. A. Bergrath	Nashville, Tenn	June 4, 1867	65, 468
Toilet-rack	O. H. Cooke and F. Kenfield	Morristown, Vt	Oct. 7, 1873	143, 501
Toilet-rack	D. A. Russell	Walpole, N. H	Feb. 20, 1872	123, 935
Toilet-stand	W. S. How	Cincinnati, Ohio	Aug. 13, 1867	67, 764
Toilet-stand	D. Sherwood	Lowell, Mass	May 6, 1873	138, 538
Toilet-table	F. Kopper	New York, N. Y	Nov. 19, 1867	71, 022
Toilet-table and wash-stand, Combined	N. Steinhauser	Lancaster, Pa	July 16, 1872	129, 612
Tomatoes, Concentrating the juice of	C. T. Provost	New York, N. Y	June 21, 1870	104, 494
Tomatoes, Drying	M. P. Smith	Baltimore, Md	Apr. 1, 1873	137, 327
Tombs, Tablet for	H. F. Bailey	Amsterdam, N. Y	Apr. 5, 1870	101, 567
Tombstone	R. P. Henry and G. W. Fox	Akron, Ohio	Nov. 26, 1861	33, 782
Tombstone	J. H. and G. W. Smith	Port Chester, N. Y	July 22, 1862	35, 978
Tombstone	T. Windell	New Albany, Ind	Apr. 24, 1860	28, 029
Tongs	S. Collinson	Buffalo, N. Y	Nov. 5, 1867	70, 413
Tongs, Adjustable pipe	W. Kearney	Belleville, N. J	Dec. 24, 1872	134, 207
Tongs and cutter, Pipe	J. Peace	Camden, N. J	Feb. 12, 1867	62, 062
Tongs and cutter, Pipe	J. E. Roache	New York, N. Y	Dec. 31, 1872	134, 440
Tongs and poker, Combined	S. D. Yerkes	Downington, Pa	Aug. 21, 1866	57, 431
Tongs and wrench, Combined pipe	V. K. McElheny	Pittsburgh, Pa	Oct. 12, 1869	95, 706
Tongs, Automatic	R. M. Eastman	Boston, Mass	July 6, 1869	92, 291
Tongs, Blacksmith's	A. J. Dexter	North Foster, R. I	July 19, 1870	105, 555
Tongs, Blacksmith's	W. Hart	Mayville, Wis	Dec. 29, 1857	18, 971
Tongs, Blacksmith's	C. W. Le Count	Norwalk, Conn	Oct. 24, 1865	50, 603
Tongs, Blacksmith's	E. Reese	Manassas Station, Va	May 13, 1862	35, 260
Tongs, Blacksmith's	J. Woodville	Washington, Ind	July 16, 1872	129, 506
Tongs, Butter	J. S. Clark	Auburn, Mass	Aug. 7, 1866	56, 904
Tongs, Butter	J. S. Clark	Auburn, Mass	Jan. 8, 1867	61, 051
Tongs, Cast-iron	E. H. Buell	Marlborough, Conn	Mar. 6, 1828	......
Tongs, Clothes	J. T. Bever	Bethel, Ill	July 3, 1866	55, 991
Tongs, Clothes	E. A. Foulke	Paris, Ill	Nov. 25, 1873	144, 972
Tongs, Clothes	B. Ott	La Crosse, Wis	Mar. 19, 1867	63, 083
Tongs, Crucible	F. Villard	Mount Eaton, Ohio	Jan. 29, 1867	61, 582
Tongs, Culinary	A. Greenleaf	Brooklyn, N. Y	Dec. 16, 1873	145, 564
Tongs, Egg	W. F. Hellen	Washington, D. C	July 9, 1867	66, 492
Tongs, Fire	J. Bradbury	Berlin, Conn	Nov. 7, 1871	120, 566
Tongs, Fire	J. Bradbury	Berlin, Conn	Nov. 7, 1871	120, 567
Tongs, Fire	S. Douglass	Kalamazoo, Mich	May 10, 1870	102, 785
Tongs, Fire	A. M. George	Sand Fly, Tex	Jan. 17, 1871	111, 054
Tongs, Fire	M. C. Heptinstall	Enfield, N. C	July 13, 1869	92, 530
Tongs, Fire	B. Holly	Lockport, N. Y	Oct. 24, 1865	50, 584
Tongs, Fire	D. Moore	Brooklyn, N. Y	Feb. 23, 1858	19, 436
Tongs, Fire	J. J. Percival	Speedwell, Va	June 7, 1870	103, 920
Tongs, Fire	D. R. Russell	Carrollton, Miss	Mar. 16, 1869	87, 876
Tongs, Fire	F. Stith	Memphis, Tenn	Apr. 13, 1869	88, 830
Tongs, Fire	C. Swett	Copiah County, Miss	June 10, 1873	139, 832
Tongs, Flooring	E. J. Houston	Nacoochee, Ga	Feb. 18, 1873	135, 916
Tongs for coal, &c	J. M. Meschutt	New York, N. Y	Nov. 16, 1858	22, 086
Tongs for forging the arms on fifth-wheels	W. Terrell	Ansonia, Conn	Oct. 4, 1870	108, 066
Tongs for oil-wells, Grapple	O. B. Latham	Seneca Falls, N. Y	Dec. 5, 1865	51, 325
Tongs, Gas-fitter's	A. B. Lipsey	New York, N. Y	Aug. 15, 1865	49, 424
Tongs, Gas-pipe	D. Bannister	Philadelphia, Pa	May 1, 1866	54, 278
Tongs, Griping	W. J. Hallefas	Brooklyn, N. Y	Jan. 14, 1873	134, 798
Tongs, Guttering	J. Schwartz	Philadelphia, Pa	May 20, 1873	139, 198
Tongs, Heater for curling	J. Fletcher	Cleveland, Ohio	Aug. 27, 1872	130, 911
Tongs, Hog	H. W. Hill	Decatur, Ill	Dec. 2, 1873	145, 105
Tongs, Ice	E. Bacher	Findley, Ohio	May 21, 1872	127, 012
Tongs, Ice	A. Day	Detroit, Mich	May 18, 1869	90, 243
Tongs, Ice	W. T. Farre	Montreal, Canada	Mar. 11, 1873	136, 593
Tongs, Ice	R. Hayden	Middletown, Conn	Mar. 2, 1869	87, 491
Tongs, Ice	E. C. Johnson	South Providence, R. I	Sept. 16, 1873	142, 916
Tongs, Ice	R. M. Mansur	Augusta, Me	Nov. 5, 1867	70, 586
Tongs, Ice	J. Tyler	Providence, R. I	Feb. 15, 1859	22, 991
Tongs, &c., joint	W. E. Clark	Troy, N. Y	Aug. 2, 1870	105, 908
Tongs, Lamp-chimney	J. Euteneuer	Peoria, Ill	Dec. 17, 1867	72, 275
Tongs, lid-lifter, hook, &c., Combined	B. Owen and B. Pickering	Dayton, Ohio	Jan. 15, 1867	61, 240
Tongs or excavator, Wrecking	R. Hunter	Charleston, S. C	Jan. 18, 1870	98, 870
Tongs or grappling-irons for raising sunken bodies	E. and T. J. Lobdell	Plympton and Boston, Mass	Aug. 18, 1837	362
Tongs, Pie	J. F. Brewer	Plantsville, Conn	Apr. 23, 1872	125, 878
Tongs, Pie or plate	A. Lawrence	Lowell, Mass	Mar. 13, 1866	53, 227
Tongs, Pipe	J. R. Brown	Boston, Mass	Nov. 30, 1858	22, 157
Tongs, Pipe	J. R. Brown	Boston, Mass	Aug. 2, 1859	24, 927
Tongs, Pipe	J. R. Brown	Boston, Mass	July 7, 1868	79, 724
Tongs, Pipe	J. R. Brown	Cambridgeport, Mass	Aug. 26, 1873	142, 143
Tongs, Pipe	J. R. Brown	Cambridgeport, Mass	Nov. 4, 1873	144, 253
Tongs, Pipe	J. R. Brown	Cambridgeport, Mass	Dec. 30, 1873	145, 929
Tongs, Pipe	W. Campbell	Quincy, Ill	Aug. 6, 1872	130, 278
Tongs, Pipe	E. Cash	Brooklyn, N. Y	Feb. 19, 1867	62, 250
Tongs, Pipe	E. B. Clark	Philadelphia, Pa	June 21, 1870	104, 426
Tongs, Pipe	J. Clark	Astoria, N. Y	Jan. 18, 1870	98, 925
Tongs, Pipe	A. G. Coes	Worcester, Mass	June 1, 1858	20, 407
Tongs, Pipe	A. G. Coes	Worcester, Mass	Apr. 26, 1870	102, 371
Tongs, Pipe	R. Cox	Philadelphia, Pa	May 15, 1866	54, 694
Tongs, Pipe	R. Crain	Dennison Post-Office, Pa	Aug. 3, 1869	93, 179
Tongs, Pipe	J. D. Davis	Fitchburgh, Mass	Jan. 11, 1870	98, 747
Tongs, Pipe	W. H. Downing	Shamburgh, Pa	Jan. 2, 1872	122, 308
Tongs, Pipe	J. M. Evarts	New Haven, Conn	July 7, 1868	79, 642
Tongs, Pipe	M. H. Freeman	Somerville, Mass	Nov. 13, 1866	59, 582
Tongs, Pipe	S. F. Gamage	Boston, Mass	May 30, 1867	48, 017
Tongs, Pipe	H. Getty	Brooklyn, N. Y	Jan. 13, 1863	37, 395
Tongs, Pipe	H. H. Gilmore	Boston, Mass	Apr. 6, 1868	19, 842
Tongs, Pipe	A. Gomersall	Philadelphia, Pa	Nov. 19, 1872	133, 092
Tongs, Pipe	H. Herbert	Cincinnati, Ohio	Dec. 20, 1864	45, 496
Tongs, Pipe	H. Herbert	Cincinnati, Ohio	Aug. 28, 1866	57, 506

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Tongs, Pipe	A. H. Jareeki	Erie, Pa	Apr. 22, 1873	138, 161
Tongs, Pipe	J. Johnson	Saco, Me	Feb. 19, 1867	62, 137
Tongs, Pipe	W. Kearney and F. Kearney	Union Township and Newark, N. J.	July 1, 1862	35, 702
Tongs, Pipe	W. Kenyon, jr	Steubenville, Ohio	Feb. 18, 1868	74, 607
Tongs, Pipe	A. B. Lipsey	West Hoboken, N. J	Sept. 17, 1872	131, 357
Tongs, Pipe	S. Lynch	New York, N. Y	May 3, 1870	102, 690
Tongs, Pipe	F. H. Merrill	San Francisco, Cal	May 20, 1873	139, 174
Tongs, Pipe	J. Moulton	Boston, Mass	Jan. 16, 1866	52, 065
Tongs, Pipe	A. G. Page	Fitchburgh, Mass	May 15, 1866	54, 820
Tongs, Pipe	B. Riley	San Francisco, Cal	May 18, 1869	90, 307
Tongs, Pipe	J. E. Roache	New York, N. Y	Apr. 2, 1872	125, 221
Tongs, Pipe	D. C. Stillson and J. C. Chapman	Charlestown, Mass	Oct. 31, 1865	50, 748
Tongs, Pipe	J. Stratton	New Haven, Conn	Nov. 14, 1871	120, 910
Tongs, Rigging	G. Dohn	Sacramento, Cal	May 31, 1870	103, 585
Tongs, Smith's	J. C. Gardner	Kingham, Mass	June 5, 1866	55, 275
Tongs, Stove	N. L. Hatch	Cape Elizabeth, Me	Apr. 20, 1869	89, 044
Tongs, Tinman's	S. T. Dickinson, jr	Belvidere, N. J	Dec. 12, 1871	121, 763
Tongs, Tin-worker's	J. D. James, jr	Washington, D. C	Mar. 1, 1870	100, 413
Tongs, Tubing	G. A. Holden	Ruggville, Pa	Oct. 29, 1872	132, 579
Tongs, Wrench and pipe	J. A. Morrison	Brady's Bend, Pa	June 20, 1871	116, 077
Tongue and groove joint	R. Barton	New York, N. Y	Apr 18, 1871	113, 835
Tongue and thill coupling	J. I. Peck	Deansville, N. Y	Jan. 18, 1870	98, 998
Tongue-brace and balance for wagons	A. J. Mapes	Independence, Mo	Oct. 25, 1870	108, 610
Tongue bracket, Wagon	F. Bremerman	Indianapolis, Ind	Oct. 8, 1872	131, 933
Tongue holder, Carriage	T. Heaton	Farmington, Ill	Oct. 15, 1867	69, 805
Tongue holder, Wagon	O. F. Bryant	Carver, Minn	Oct. 5, 1869	95, 559
Tongue-iron, Self-adjusting	W. I. Temple	Princeton, Mass	Aug. 7, 1855	13, 405
Tongue-support	B. Nunamacker	Earlham, Iowa	Apr. 16, 1872	125, 839
Tongue support, Cart	E. J. Weed	Stamford, Conn	June 25, 1872	128, 344
Tongue support, Vehicle	H. Sprague	Marcellus, N. Y	June 4, 1872	127, 522
Tongue support, Wagon	I. Albright, jr., and J. Y. Bloomingdale.	New Salem, N. Y	Feb. 1, 1870	99, 388
Tongue support, Wagon	G. Alexander	Romney, Ind	Sept. 21, 1869	94, 989
Tongue support, Wagon	W. Beers	Milan, Ohio	May 23, 1871	115, 016
Tongue support, Wagon	F. Bremerman	Indianapolis, Ind	Feb. 9, 1869	86, 807
Tongue support, Wagon	N. A. De Long	New Scotland, N. Y	Dec. 8, 1868	84, 682
Tongue support, Wagon	A. F. Gue	Eastmanville, Mich	Dec. 6, 1870	109, 817
Tongue support, Wagon	O. Higley and S. Toothaker	Fredonia, Ohio	Mar. 5, 1867	62, 651
Tongue support, Wagon	J. O. Houck	Iowa City, Iowa	Dec. 29, 1868	85, 446
Tongue support, Wagon	J. Krehbiel	Williamsville, N. Y	May 2, 1871	114, 448
Tongue support, Wagon	O. Lapham	El Paso, Ill	Sept. 24, 1867	69, 227
Tongue support, Wagon	C. K. Lehmann	Savannah, Ga	Aug. 6, 1872	130, 142
Tongue support, Wagon	D. D. Robinson	Niles, Mich	Sept. 20, 1870	107, 546
Tongue support, Wagon	L. E. Stilwell	Franklinville, N. Y	May 23, 1871	115, 133
Tongue supporter, Wagon	C. J. Babcock	Rives Junction, Mich	Sept. 26, 1871	119, 297
Tonguing and grooving apparatus	P. Emmons	New York, N. Y	Dec. 7, 1852	9, 443
Tonguing and grooving boards and working moldings, &c., Machine for.	S. Shepherd and D. Baldwin	Nashua, N. H	Feb. 21, 1838	612
Tonguing and grooving cutter	C. Brobst	Winamac, Ind	July 19, 1870	105, 417
Tonguing and grooving cutter	D. C. Devall	New York, N. Y	Mar. 23, 1869	88, 143
Tonguing and grooving cutter	H. Knowles	Washington, D. C	Apr. 17, 1849	6, 370
Tonguing and grooving cutter	H. Knowles	New York, N. Y	Jan. 2, 1855	12, 134
Tonguing and grooving knife	W. B. McClain	Sandusky, Ohio	Oct. 15, 1872	132, 303
Tonguing and grooving machine	H. H. Baker	New Market, N. J	Sept. 6, 1859	25, 313
Tonguing and grooving machine	C. W. Brown	Boston, Mass	Aug. 14, 1844	3, 704
Tonguing and grooving machine	P. Geiser and L. P. Thompson	Waynesborough, Pa	Aug. 30, 1870	106, 930
Tonguing and grooving machine	D. F. Sutton and B. Meilink	Toledo, Ohio	Oct. 10, 1871	119, 896
Tonguing and grooving machine	W. Watson	Chicago, Ill	Jan. 4, 1853	9, 524
Tonguing and grooving machinery	R. Kittle	Dansville, N. Y	Jan. 15, 1850	7, 024
Tonguing and grooving tool	E. F. Beugler	Williamsport, Pa	Feb. 1, 1870	99, 392
Tonguing boards, Machine for	S. Albro	Buffalo, N. Y	July 13, 1852	9, 111
Tonguing boards, Machine for	R. Crosby and H. D. Edgcomb	New York, N. Y	Apr. 13, 1852	8, 870
Tonguing, grooving, and molding cutter	J. M. Patton and W. F. Fergus	Philadelphia, Pa	May 10, 1853	9, 720
Tonguing, grooving, and planing boards	J. D. Beers	Philadelphia, Pa	Jan. 18, 1834	....
Tonguing, jointing, and rebating, Tool for	J. A. Fry	Edinburgh, Va	Feb. 18, 1851	7, 938
Tonic and aperient alterative pill	J. J. Oellig	Waynesborough, Pa	Oct. 28, 1837	446
Tonnage, &c., Apparatus for ascertaining	W. O. Reim	Springfield, Ohio	Feb. 26, 1867	62, 366
Tonnage of vessels, Hydrostatic scale for	I. R. Amsden	Buffalo, N. Y	Aug. 3, 1869	93, 158
Tonsil-instrument	I. Warren	Boston, Mass	Jan. 17, 1854	10, 434
Tonsillarum-sector	W. B. Fahnestock	Lancaster, Pa	May 25, 1832	....
Tool	J. H. Baker, A. Doney, and F. N. Owen.	Saratoga Springs, N. Y	Dec. 23, 1873	145, 830
Tool	B. Boardman	Norwich, Conn	July 10, 1866	56, 166
Tool	O. T. Gilman	Washington, D. C	Feb. 18, 1862	34, 420
Tool	J. L. Nettleton	New Haven, Conn	Sept. 3, 1867	68, 453
Tool	A. W. Park	Norwich, Conn	May 30, 1867	48, 027
Tool	A. J. Prescott	Catawissa, Pa	Jan. 21, 1868	73, 648
Tool	C. Richmond	Worcester, Mass	Sept. 4, 1866	57, 769
Tool	J. A. Smith	New York, N. Y	Nov. 20, 1866	59, 866
Tool	J. A. Thayer	East Boston, Mass	June 24, 1862	35, 715
Tool	S. L. Tracy	Cleveland, Ohio	July 9, 1867	66, 652
Tool-box, Blacksmith's	B. G. Devoe, T. Rogers, and J. C. Beals.	Fredericktown, Ohio, and Searsport, Me.	Jan. 30, 1872	123, 245
Tool-chest	G. F. Card	Piper City, Ill	Dec. 13, 1870	110, 007
Tool, Combination	B. S. Burch	Petersburgh, Va	June 6, 1871	115, 695
Tool, Combination	G. J. Ferriss	Washington, D. C	May 14, 1867	64, 652
Tool, Combination	G. W. Gregory	New York, N. Y	May 3, 1870	102, 677
Tool, Combination	D. Heaton	Providence, R. I	May 7, 1872	126, 544
Tool, Combination	D. Heaton	Providence, R. I	Nov. 12, 1872	132, 908
Tool, Combination	J. B. Lambkin	Champaign, Ill	Feb. 14, 1871	111, 754
Tool, Combination	J. Lyle	Newark, N. J	Apr. 23, 1867	64, 121
Tool, Combination	J. M. Marsh	Oxford, Mass	Mar. 31, 1868	76, 218
Tool, Combination	G. W. Stockwell	Natchez, Miss	May 31, 1870	103, 678
Tool, Combination	T. Williams	Providence, R. I	May 6, 1873	138, 548
Tool, Combination	J. S. Zerbe	Delaware, Ohio	Oct. 19, 1869	95, 964
Tool, Combination household	H. R. Ives	Montreal, Canada	Dec. 17, 1872	134, 664
Tool, Combined	W. Bartle	Franklin, Pa	Mar. 11, 1873	136, 693

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Tool, Combined	G. J. Capewell	Cheshire, Conn	May 16, 1871	114, 759
Tool, Combined	B. W. Collier	Oxford, Miss	Nov. 5, 1867	70, 529
Tool, Combined	J. W. Currier	Newbury, Vt	May 16, 1871	114, 770
Tool, Combined	J. W. Currier	Newbury, Vt	Jan. 2, 1872	122, 443
Tool, Combined	T. Garrick	Providence, R. I	Mar. 12, 1872	124, 566
Tool, Combined	E. Grauier	Paris, France	Oct. 12, 1869	95, 793
Tool, Combined	G. H. Miller	Dyersburgh, Tenn	Oct. 18, 1870	108, 377
Tool, Combined	J. D. Wilkinson and E. O. Boyle	Plattsburgh, N. Y	Oct. 27, 1868	83, 577
Tool, Combined	F. W. Farrar	Waterford, Pa	Sept. 16, 1873	142, 782
Tool, Compound	E. Omenstetter and J. F. Parker	Philadelphia, Pa	May 6, 1873	138, 683
Tool, Compound	A. S. Perham	Washington, D. C	Feb. 1, 1870	99, 470
Tool, Compound	W. X. Stephens	Waterford, N. Y	July 30, 1867	67, 370
Tool, Compound	J. Critchley	Portsmouth, N. H	Dec. 19, 1865	51, 563
Tool, Expanding	R. S. Torrey	Bangor, Me	Aug. 6, 1867	67, 464
Tool-extractor	P. H. Niles	Boston, Mass	Aug. 26, 1851	8, 315
Tool-haft, Adjustable	E. L. Abercrombie	Florence, Mass	Apr. 19, 1870	102, 075
Tool-handle	E. J. Amor	New York, N. Y	June 8, 1869	91, 064
Tool-handle	C. W. Bioren	Philadelphia, Pa	Nov. 20, 1866	59, 757
Tool-handle	I. S. Clough and J. N. Bunnell	Brooklyn, N. Y., and Unionville, Conn.	Jan. 6, 1863	37, 333
Tool-handle	J. B. Davis	New York, N. Y	Aug. 2, 1870	105, 919
Tool-handle	L. H. Farnsworth	Hudson, Mass	Apr. 23, 1867	64, 006
Tool-handle	G. W. Griswold	Carbondale, Pa	June 20, 1854	11, 122
Tool-handle	W. B. Hill	Battle Creek, Mich	Sept. 9, 1873	142, 568
Tool-handle	F. M. Johnson	Brooklyn, N. Y	Sept. 3, 1872	131, 102
Tool-handle	W. M. Knight	Greenfield, Mass	Mar. 12, 1872	124, 443
Tool-handle	C. D. Leet	Springfield, Mass	July 16, 1872	129, 414
Tool-handle	W. H. McCoy	Miller's Falls, Mass	Apr. 29, 1873	138, 423
Tool-handle	E. Murray	New York, N. Y	Nov. 8, 1870	109, 038
Tool-handle	L. C. Rodier	Springfield, Mass	Jan. 22, 1861	31, 189
Tool-handle	J. G. Rogers	San Francisco, Cal	Aug. 14, 1860	29, 622
Tool-handle	W. Runte	New York, N. Y	Mar. 26, 1867	63, 308
Tool-handle	S. F. Streeter	Greenfield, Mass	Dec. 2, 1873	145, 252
Tool-handle	S. W. Weatherhead	Northfield, Mass	Dec. 10, 1872	133, 908
Tool-handle	A. Weed	Boston, Mass	Feb. 13, 1872	123, 652
Tool-handle	F. A. Will and J. Finch	San Francisco, Cal	Apr. 23, 1872	125, 922
Tool-handle fastener	J. G. Wilbur and H. H. Hurlburt.	Kilbourne City, Wis	Oct. 10, 1871	119, 807
Tool-handle fastening	J. M. De Witt	Chicago, Ill	May 4, 1869	89, 564
Tool-handle fastening	A. R. Sweat	Harlan, Iowa	Mar. 12, 1872	124, 517
Tool-handle socket	W. Bennett	New York, N. Y	June 29, 1858	20, 693
Tool-handle socket	W. H. Johnson	Philadelphia, Pa	Aug. 4, 1868	80, 744
Tool-handles, Attaching	G. W. Harris and A. Franz	New York, N. Y	May 29, 1866	55, 096
Tool-handles, Attaching	J. Henn	New Britain, Conn	Mar. 9, 1858	19, 606
Tool-handles, Attaching	G. Raymond	Fitchburgh, Mass	Aug. 4, 1868	80, 565
Tool-handles, Attaching	L. P. Wilcox	Brooklyn, N. Y	July 2, 1867	66, 434
Tool-handles, Bushing for	A. C. Kasson	Milwaukee, Wis	Dec. 22, 1868	85, 230
Tool-handles, &c., Machine for turning	H. Plumb	Honesdale, Pa	Mar. 23, 1858	19, 711
Tool-handles, Securing	A. Vittaly and C. Kolb	Newark, N. J	June 13, 1854	11, 099
Tool-holder	J. R. Bailey	Woonsocket, R. I	Aug. 10, 1869	93, 580
Tool-holder	J. R. Bailey	Woonsocket, R. I	Jan. 18, 1870	98, 837
Tool-holder	J. R. Bailey	Woonsocket, R. I	Jan. 18, 1870	98, 838
Tool-holder	A. Belchamber	Ripley, Ohio	Oct. 15, 1872	132, 240
Tool-holder	R. P. Buttler	Mansfield, Pa	June 7, 1870	103, 975
Tool-holder	D. H. Chamberlain	Boston, Mass	Feb. 7, 1854	10, 500
Tool-holder	E. W. H. Cooper	Hartford, Conn	May 7, 1867	64, 494
Tool-holder	F. T. Cordis	Longmeadow, Mass	July 17, 1866	56, 377
Tool-holder	W. W. Draper	Greenfield, Mass	May 10, 1864	42, 647
Tool-holder	E. Hall	Rutland, Vt	Feb. 7, 1854	10, 504
Tool-holder	O. Hanks	Cincinnati, Ohio	May 31, 1870	103, 739
Tool-holder	J. W. Haskell	Boston, Mass	July 14, 1868	79, 974
Tool-holder	L. L. Lamb	Chelsea, Mass	Feb. 11, 1873	135, 715
Tool-holder	W. J. Linton	Detroit, Mich	Aug. 18, 1868	81, 182
Tool-holder	W. J. Linton	Detroit, Mich	Aug. 18, 1868	81, 183
Tool-holder	J. P. Manton	Providence, R. I	Dec. 24, 1867	72, 654
Tool-holder	I. F. Murch	Sumner, Me	Mar. 4, 1873	136, 450
Tool-holder	F. A. Potter	North Providence, R. I	May 5, 1868	77, 522
Tool-holder	W. Pratt	Providence, R. I	July 7, 1868	79, 684
Tool-holder	C. H. Reid	Danbury, Conn	Dec. 29, 1868	85, 329
Tool-holder	H. D. Richardson	East Hampton, Mass	May 4, 1869	89, 688
Tool-holder	E. Ripley	Troy, N. Y	Aug. 17, 1869	93, 906
Tool-holder	S. Stevens	Worcester, Mass	Oct. 30, 1860	30, 548
Tool-holder	C. P. Benoit	Detroit, Mich	Feb. 21, 1865	46, 438
Tool-holder, Adjustable	J. Wheelock	Worcester, Mass	Nov. 11, 1873	144, 583
Tool-holder and cutter-head for boring-bars	E. F. Edgecomb	Mechanic's Falls, Me	Dec. 12, 1871	121, 766
Tool-holder for grinders	E. Babcock and T. B. Farrell	Laurens, N. Y	Aug. 17, 1869	93, 663
Tool-holder for grinding	A. P. M. Jeffers	Allegan, Mich	Nov. 3, 1868	83, 636
Tool-holder for grinding	G. Lissenden and J. Lacey	Chicago, Ill	June 30, 1863	39, 054
Tool-holder for grinding	P. V. Dunn	Calamus, Wis	Apr. 13, 1869	88, 856
Tool holder for grinding, Edge	P. Leonard	Sharon, Pa	Feb. 22, 1870	100, 047
Tool-holder for grindstones	I. F. Brown	New London, Conn	Dec. 24, 1867	72, 447
Tool-holder for slide-rests	J. Allender	New London, Conn	May 2, 1854	10, 853
Tool-holders, Operating catch in	G. A. Medeira	Chambersburgh, Pa	Apr. 19, 1832	....
Tool holding and guiding machine	F. Hardenbergh	Providence, R. I	Nov. 2, 1869	96, 426
Tool-post	C. Wright	Newark, N. J	Mar. 11, 1862	34, 659
Tool post or holder	G. W. Anesley	Marengo Township, Mich	May 17, 1870	103, 005
Tool, Pruning	L. L. Lamb	Chelsea, Mass	Aug. 19, 1873	141, 934
Tool-receptacle	W. Gleason	Rochester, N. Y	Nov. 12, 1867	70, 830
Tool-rest	A. Thomas	Worcester, Mass	Sept. 20, 1870	107, 564
Tool-rest	N. Puckett	Terre Haute, Ind	Jan. 1, 1867	60, 936
Tool, Self-centering	A. H. Suplee	San Francisco, Cal	Nov. 26, 1872	133, 498
Tool-shank	S. Farrenburg	Taylorsville, Ind	July 14, 1868	79, 818
Tool-sharpener	J. C. Cooke	Middletown, Conn	Oct. 2, 1860	30, 208
Tool-sharpening machine	J. Sears	Chicago, Ill	Mar. 25, 1873	137, 244
Tool, Soldering	W. W. Draper	Greenfield, Mass	July 11, 1865	48, 703
Tool-stock	A. L. Carrier	Washington, D. C	Oct. 30, 1866	59, 181
Tool-supporter	Z. M. Crane	Dalton, Mass	Nov. 19, 1867	70, 963
Tool supporter or rack				

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Tools, Art of making edged	H. G. Spafford	Troy, N. Y	Dec. 19, 1822	....
Tools, implements, machinery, &c., Mode of finishing.	J. Allen and G. D. Smith	New York, N. Y., and Washington, D. C.	Jan. 15, 1867	61, 133
Tools of steel, Manufacturing edged	E. Gordon	Philadelphia, Pa	June 26, 1812	....
Tools, Socket for holding	H. Aiken	Franklin, N. H	Dec. 27, 1839	1, 443
Tooth burr and drill, Pneumatic	G. F. Green	Kalamazoo, Mich	Apr. 28, 1868	77, 370
Tooth-extractor	H. J. Batchelder	West Fairlee, Vt	Oct. 28, 1856	15, 965
Tooth-extractor	E. Bryan	New York	July 13, 1829	....
Tooth-extractor	M. R. Hanson	Bangor, Me	Mar. 12, 1836	....
Tooth-extractor	M. I. Hill	Bloomfield, Ind	June 7, 1841	2, 119
Tooth-extractor	E. Osgood	Bangor, Me	Jan. 9, 1849	6, 011
Tooth-extractor, Vertical	D. H. Dickey	Boston, Mass	Aug. 30, 1838	902
Tooth-extractor, Vertical	I. W. Rutherford	Albany, N. Y	Jan. 4, 1831	....
Tooth-key	C. Addle	Winthrop, Me	July 31, 1833	....
Tooth-key	B. F. Killam	Braintree, Vt	Aug. 2, 1859	24, 940
Tooth-mallet, Pneumatic	G. F. Green	Kalamazoo, Mich	Mar. 30, 1869	88, 290
Tooth-paste case	G. F. J. Colburn	Newark, N. J	Feb. 4, 1868	73, 953
Tooth-pick	W. E. Blake	New York, N. Y	Aug. 30, 1870	106, 773
Tooth-pick	A. Krizek	Philadelphia, Pa	June 1, 1869	90, 855
Tooth-pick machine	S. Noble and J. P. Cooley	Granville, Mass	Feb. 20, 1872	123, 790
Tooth-picks, Machine for making	S. Noble and J. P. Cooley	Granville, Mass	May 28, 1872	127, 360
Tooth-picks, Manufacture of	B. F. Sturtevant	Boston, Mass	June 2, 1863	38, 768
Tooth-plugger	M. L. Battle	Bainbridge, Ga	Jan. 25, 1870	99, 050
Tooth-plugger	T. L. Buckingham	Philadelphia, Pa	Aug. 26, 1873	142, 205
Tooth-plugger	E. Coburn, jr	Lewiston, Me	Mar. 31, 1868	76, 161
Tooth-plugger, Automaton	B. Bannister and G. F. Green	Kalamazoo, Mich	Dec. 10, 1867	71, 950
Tooth-powder box	E. Queru	New York, N. Y	May 28, 1867	65, 270
Tooth-powder lozenge	C. E. Blake	San Francisco, Cal	Oct. 1, 1867	69, 393
Tooth-powder or dentrifice	W. H. Farnham	Sparta, Wis	June 4, 1872	127, 408
Tooth-wash	P. Rinypeyron	San Francisco, Cal	Sept. 14, 1869	94, 840
Toothache by steam, Machine for relieving	L. Merritt and S. C. Rogers	New York	Dec. 27, 1815	....
Toothed wheel	J. Cowell	Ansonia, Conn	July 14, 1868	79, 957
Top	N. D. Clark	Oakland, Cal	July 23, 1872	129, 651
Top	C. L. Johnson	Utica, N. Y	June 9, 1868	78, 745
Top, Child's flying	H. Benton	Guilford, Conn	May 14, 1861	32, 272
Top driver or spinner	C. Page	West Meriden, Conn	Feb. 5, 1867	61, 857
Top-joints and their connections	C. W. Saladee	Saint Catharine's, Canada	Dec. 19, 1871	122, 063
Top-joints and their connections	C. W. Saladee	Saint Catharine's, Canada	Feb. 20, 1872	123, 936
Top, Spinning	L. Cramer	Brooklyn, N. Y	Jan. 10, 1865	45, 816
Top, Spinning	P. Eley	New York, N. Y	May 16, 1871	114, 781
Top, Spinning	L. O. Franke	Baltimore, Md	Sept. 14, 1869	94, 733
Top, Spinning	R. Hoadley	Ansonia, Conn	Apr. 16, 1867	63, 891
Top, Spinning	E. E. Jones and G. L. Kitson	Philadelphia, Pa	June 19, 1866	55, 666
Top, Spinning	F. Millward	Cincinnati, Ohio	June 14, 1859	24, 430
Top, Spinning	J. Spencer	Chicago, Ill	July 22, 1873	141, 089
Top-spinning sword	W. Mullally	Boston, Mass	Nov. 26, 1867	71, 319
Top, Whistling	W. E. Woodbridge	Perth Amboy, N. J	June 27, 1854	11, 187
Torch	G. Brueck	New York, N. Y	July 2, 1872	128, 586
Torch	I. W. Shaler	Brooklyn, N. Y	Sept. 5, 1871	118, 751
Torch and fire kindler	A. T. Harrison	Clinton, Ill	Feb. 9, 1869	86, 667
Torch and fire lighter, Combined	P. Ryan	Albany, N. Y	Feb. 4, 1873	135, 592
Torch and match safe	W. J. Ludlow	Chardon, Ohio	Jan. 8, 1867	61, 013
Torch, Electrical	J. K. Simpson	New York, N. Y	Oct. 8, 1867	69, 715
Torch, Fire-test	G. E. Shaw	Pittsburgh, Pa	Jan. 29, 1867	61, 572
Torch, Fishing	G. Haneline	Akron, Ohio	Apr. 27, 1869	89, 309
Torch for night processions	I. Edge	Jersey City, N. J	June 12, 1860	28, 661
Torch, Gas	G. C. Brower	New Orleans, La	June 5, 1860	28, 556
Torch, Gas-lighting	W. E. Heath	Pembroke Terrace, Great Britain.	June 25, 1867	66, 021
Torch, Gas-lighting	T. W. Houchin	Morrisania, N. Y	Sept. 17, 1872	131, 445
Torch, Hydrocarbon	W. K. Horner	Ypsilanti, Mich	Aug. 15, 1871	118, 132
Torch, Lamp-lighter's	C. D. Walters and J. Wilson	Harrisburgh, Pa	May 29, 1866	55, 183
Torch-light	F. A. Morley	Syracuse, N. Y	May 17, 1870	103, 073
Torpedo	E. Ford	Baltimore, Md	Apr. 14, 1814	....
Torpedo	H. Holden	New York, N. Y	Aug. 15, 1865	49, 474
Torpedo	J. S. Morris	Buffalo, N. Y	Nov. 20, 1866	59, 924
Torpedo	C. Nelson	New York, N. Y	Feb. 18, 1873	136, 000
Torpedo and boat, Submarine	H. J. Smith	Boston, Mass	Dec. 31, 1872	134, 493
Torpedo and cartridge	E. Gomez	New York, N. Y	Mar. 15, 1870	100, 884
Torpedo-boat	G. M. Ramsey	New York, N. Y	Aug. 8, 1865	49, 300
Torpedo for oil-wells, &c	A. T. Ballantine	Morristown, N. J	Oct. 10, 1865	50, 324
Torpedo for oil-wells, &c	A. T. Ballantine	Titusville, Pa	Aug. 11, 1868	80, 896
Torpedo for oil-wells	E. Beach	Titusville, Pa	Sept. 29, 1868	82, 586
Torpedo for oil-wells	J. F. Boynton	Syracuse, N. Y	Sept. 5, 1865	49, 706
Torpedo for oil-wells	F. Crocker	Titusville, Pa	Jan. 12, 1869	85, 730
Torpedo for oil-wells	J. Dickey	Venango City, Pa	Sept. 14, 1869	94, 813
Torpedo for oil-wells	J. Dickey	Venango City, Pa	Aug. 30, 1870	106, 794
Torpedo for oil-wells	J. C. Dickey	Titusville, Pa	Sept. 26, 1871	119, 330
Torpedo for oil-wells	J. C. Dickey	Titusville, Pa	Nov. 7, 1871	120, 574
Torpedo for oil-wells	A. Hamar	Philadelphia, Pa	Mar. 25, 1873	137, 198
Torpedo for oil-wells	A. Hamar	Philadelphia, Pa	Apr. 15, 1873	137, 916
Torpedo for oil-wells	J. F. Hervey	Marietta, Ohio	July 16, 1872	129, 409
Torpedo for oil-wells	E. A. L. Roberts	Titusville, Pa	Mar. 12, 1867	62, 890
Torpedo for oil-wells	E. A. L. Roberts	Titusville, Pa	Feb. 9, 1869	86, 691
Torpedo for oil-wells	E. A. L. Roberts	Titusville, Pa	Jan. 9, 1872	122, 654
Torpedo for oil-wells	H. J. Smith	Boston, Mass	Sept. 6, 1870	107, 201
Torpedo for oil-wells	H. H. Thomas	Titusville, Pa	May 25, 1869	90, 408
Torpedo for wells	A. Hamar	Philadelphia, Pa	June 25, 1872	128, 229
Torpedo-ram	E. R. Chamberlain	Sharonville, Ohio	June 20, 1865	48, 260
Torpedo, Self-tamping	S. A. Briggs	Tidioute, Pa	Apr. 29, 1873	138, 373
Torpedo, Self-tamping	M. Gotham	Oil City, Pa	Mar. 25, 1873	137, 196
Torpedo, Submarine	W. R. King	Washington, D. C	May 3, 1870	102, 556
Torpedo, Submarine	J. Mac Donough	New York, N. Y	Apr. 24, 1866	54, 183
Torpedoes, Apparatus for detecting and exploding submarine.	H. M. Naglee	San Francisco, Cal	July 7, 1863	39, 162
Torpedoes, Apparatus for operating	J. L. Lay	Buffalo, N. Y	Mar. 14, 1865	46, 850
Torpedoes, Automatic tamping-device for	A. P. Gotham	Tidioute, Pa	June 25, 1872	128, 299
Torpedoes, mines, &c., Exploding	S. E. Sanborn	Philadelphia, Pa	Oct. 20, 1863	40, 362

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Torpedoes for harbor defense, Method of applying	J. D. Hall	Philadelphia, Pa	June 21, 1864	43,199
Torpedoes in artesian wells, Exploding	E. A. L. Roberts	New York, N. Y	Apr. 25, 1865	47,458
Torpedoes in oil-wells, Exploding	R. Bocklen	Brooklyn, N. Y	Mar. 19, 1867	62,926
Torpedoes, Method of removing submerged	C. Sholl	Brooklyn, N. Y	Jan. 5, 1864	41,146
Torpedoes, Mode of exploding	E. Gomez	New York, N. Y	Nov. 14, 1871	120,963
Torpedoes, Picket-boat and apparatus for discharging.	W. W. W. Wood and J. L. Lay.	United States Navy, of Philadelphia, Pa., and United States Navy.	Mar. 14, 1865	46,851
Torpedoes, Propulsion of marine	J. A. Howell	United States Navy	Nov. 21, 1871	121,052
Torpedoes under water, Apparatus for discharging	P. Plant	Washington, D. C	Nov. 18, 1862	36,965
Torsion-spring for cars	B. Hershey	Erie, Pa	Mar. 28, 1871	113,166
Torsion-spring for railway-cars	B. Hershey	Erie, Pa	Apr. 25, 1871	114,136
Torsion-spring, Vehicle	R. Dudley	Erie, Pa	Oct. 8, 1872	132,063
Torsion-spring, Vehicle	B. Hershey	Erie, Pa	June 20, 1871	116,186
Torsion-spring, Vehicle	B. Hershey and R. F. Gaggin	Erie, Pa	June 20, 1871	116,187
Torsion-spring, Vehicle	J. Kieser	New York, N. Y	May 28, 1872	127,169
Torsion-spring, Vehicle	C. W. Saladee	Saint Catharine's, Canada.	Jan. 9, 1872	122,537
Torsion-spring, Vehicle	C. W. Saladee	Saint Catharine's, Canada.	Oct. 29, 1872	132,695
Torsion-spring, Vehicle	C. W. Saladee	Saint Catharine's, Canada.	Oct. 29, 1872	132,696
Torsion-springs, Manufacture of	C. W. Saladee	Saint Catharine's, Canada.	Feb. 27, 1872	124,013
Torsional spring for vehicle, Compound	C. W. Saladee	Saint Catharine's, Canada.	Dec. 17, 1872	134,006
Tortoise-shell, Machinery for dressing	J. R. Morse	Lowell, Mass	May 2, 1846	4,494
Tourniquet	F. W. Bond	Cypress Hills, N. Y	May 5, 1863	38,442
Tourniquet	J. Dunton	Philadelphia, Pa	Dec. 16, 1862	37,156
Tourniquet	T. S. Lambert	Peekskill, N. Y	Jan. 7, 1862	34,112
Tourniquet-clamp	J. Lusk, jr	Eckford, Mich	June 4, 1867	65,407
Tournure	B. Johnson	Philadelphia, Pa	Nov. 23, 1858	22,124
Tournure	A. W. Thomas	Philadelphia, Pa	May 9, 1871	114,624
Tournure	A. Waldmann	Philadelphia, Pa	July 25, 1871	117,490
Tow-boat and warping-windlass, Steam	J. L. Sullivan	Boston, Mass	Apr. 2, 1814	....
Tow-boat, Steam	J. S. Sullivan	Boston, Mass	Dec. 4, 1816	....
Tow-line for boats	A. Bull	Carlisle, Pa	Jan. 30, 1830	....
Tow-line holder	R. Davis	Philadelphia, Pa	Nov. 11, 1830	....
Tow line, rope, &c	A. Bull	Caroline, N. Y	Dec. 29, 1831	....
Tow-lines, Mode of detaching	J. H. Carr and E. Andrews	Palo Alto and Pottsville, Pa.	Feb. 6, 1866	52,385
Towel	J. and J. Cash, jr	Coventry, England	Nov. 19, 1867	70,955
Towel and clothes rack	C. Carrier	Columbus, N. Y	Oct. 6, 1868	82,691
Towel and clothes rack	L. M. Fitch	Morrisville, N. Y	Apr. 15, 1873	137,904
Towel-bracket and sponge-holder	J. F. Chandler	Boston, Mass	Apr. 4, 1871	113,398
Towel-crane	R. A. Smith	East Weare, N. H	Apr. 30, 1872	126,338
Towel-dryer	S. E. Grout	West Concord, Vt	Mar. 16, 1869	87,842
Towel-dryer	S. E. Grout	West Concord, Vt	Feb. 8, 1870	99,668
Towel-holder	H. Alsop	Elkhart City, Ill	Feb. 21, 1871	112,004
Towel or clothes rack	J. M. Keep	New York, N. Y	May 31, 1870	103,751
Towel-rack	H. W. Curtis	Philadelphia, Pa	Feb. 27, 1872	124,120
Towel-rack	E. E. Everett	Philadelphia, Pa	Jan. 21, 1868	73,517
Towel-rack	R. Maxwell	Tucker County, Va	Aug. 16, 1859	25,130
Towel-rack	F. Myers	New York, N. Y	Nov. 29, 1870	109,648
Towel-rack	O. Plummer	Worcester, Mass	Sept. 12, 1871	118,970
Towel-rack	J. Rearden	Brooklyn, N. Y	Apr. 15, 1873	137,960
Towel-rack	C. W. Royse	Peterborough, N. H	Mar. 19, 1867	63,101
Towel-rack	C. Schermerhorn	New York, N. Y	Dec. 9, 1873	145,367
Towel-rack	P. A. Snyder	Jersey City, N. J	May 23, 1871	115,250
Towel-rack and boot-jack, Combined	C. Darustaedt	Meriden, Conn	June 3, 1873	139,551
Towel-roller	W. H. Lewis	New York, N. Y	Dec. 31, 1867	72,870
Towel-stand or clothes-horse	J. Cram	Boston, Mass	Nov. 28, 1854	11,989
Tower, Elevating	J. W. Davis	Washington, D. C	Nov. 12, 1872	133,017
Towing-apparatus for boats, Disengaging	J. H. Wygant, C. Preston, and C. J. Westervelt.	Hackensack, N. J	Sept. 23, 1873	143,050
Towing-apparatus for vessels	J. M. Kilner	Chester, England	July 21, 1868	80,075
Towing-boats	E. S. Townsend	Palmyra, N. Y	Mar. 12, 1823	....
Towing boats, Mode of	S. Howard	Savannah, Ga	May 24, 1820	....
Towing boats, Tug for	W. Everson	New York, N. Y	Jan. 3, 1871	110,754
Towing-hook for canal-boats	L. R. Shipman	Bloomsbury, Pa	Aug. 16, 1870	106,514
Toy	D. Adams	Lansingburgh, N. Y	Dec. 10, 1867	71,940
Toy	J. J. Arnaud	Boston, Mass	Aug. 5, 1873	141,414
Toy	C. Ball	Augusta, Mich	Apr. 29, 1873	138,365
Toy	J. H. Barnes	Troy, N. Y	June 2, 1868	78,567
Toy	A. R. Batchelder	Newburyport, Mass	June 3, 1873	139,533
Toy	H. L. Beach	Montrose, Pa	Feb. 13, 1872	123,548
Toy	J. W. Beatty	Petroleum Centre, Pa	Jan. 9, 1872	122,552
Toy	E. S. Belton	New Orleans, La	Mar. 9, 1869	87,621
Toy	E. C. Bracket	Dedham, Mass	Feb. 11, 1868	74,292
Toy	L. Brian	New York, N. Y	July 1, 1873	140,402
Toy	C. H. Cassidy	Philadelphia, Pa	Dec. 22, 1868	85,212
Toy	D. Checkeni	New York, N. Y	Apr. 21, 1868	76,892
Toy	A. H. Church	Hubbardstown, Mass	Dec. 29, 1868	85,366
Toy	C. L. Combs	Washington, D. C	Feb. 8, 1870	99,644
Toy	A. Ffolliott	Uniontown, D. C	July 9, 1872	128,869
Toy	J. G. Fine	Cincinnati, Ohio	Aug. 9, 1870	106,262
Toy	A. C. Funston	Philadelphia, Pa	Feb. 25, 1868	74,815
Toy	H. N. Gallagher	Worcester, Mass	Oct. 17, 1871	119,927
Toy	M. Grebner	New York, N. Y	June 10, 1873	139,783
Toy	A. W. Hall, C. F. Ritchel, and S. Loyd.	New York, N. Y	Jan. 2, 1872	122,317
Toy	J. H. Harbison	Philadelphia, Pa	Apr. 4, 1871	113,654
Toy	J. M. Hartz	New York, N. Y	Mar. 12, 1872	124,575
Toy	J. E. Hawkins	Lansingburgh, N. Y	Jan. 7, 1868	73,006
Toy	H. J. Heald	Birmingham, Conn	Mar. 1, 1870	100,290
Toy	J. L. Holt	Providence, R. I	Oct. 20, 1868	83,160
Toy	K. Horde	Washington, D. C	Nov. 5, 1867	70,569
Toy	F. Hubbard and E. B. Severance.	Durham, Conn	Apr. 29, 1873	138,401
Toy	H. C. Ketcham	Bloomfield, N. Y	May 2, 1865	47,552
Toy	H. T. Lee	Chicago, Ill	June 24, 1873	140,206
Toy	C. Liebrich	Philadelphia, Pa	Apr. 27, 1858	20,075
Toy	W. E. Lincoln	Providence, R. I	Apr. 23, 1867	64,117

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Invention.	Inventor.	Residence.	Date.	No.
Toy	R. McCully	Philadelphia, Pa	Feb. 23, 1869	87, 275
Toy	J. McMahel	Hamilton, Ohio	Apr. 23, 1867	64, 020
Toy	R. G. Messinger	Norwich, Conn	July 22, 1873	141, 009
Toy	T. Morley	Newark, N. J	Apr. 22, 1873	138, 038
Toy	E. L. Morris	Boston, Mass	June 25, 1872	128, 239
Toy	S. Patterson	Newark, N. J	Aug. 1, 1871	117, 559
Toy	J. Pusey	Philadelphia, Pa	Apr. 28, 1868	77, 320
Toy	E. Santin	New York, N. Y	Nov. 16, 1869	96, 972
Toy	J. Schwennesen	Chicago, Ill	June 11, 1872	127, 927
Toy	J. Schwennesen	Chicago, Ill	July 8, 1873	140, 649
Toy	G. W. Sizer	Brooklyn, N. Y	May 21, 1867	65, 022
Toy	E. L. Taylor	Hartford, Conn	Mar. 1, 1870	100, 466
Toy	S. N. Trump	Rossville, Md	July 23, 1872	129, 874
Toy	N. S. Warner	Bridgeport, Conn	July 2, 1872	128, 516
Toy	C. Wiggers	Cincinnati, Ohio	Jan. 16, 1872	122, 875
Toy	J. T. Williams	Philadelphia, Pa	Sept. 18, 1866	58, 160
Toy	D. Willis	Jersey City, N. J	June 1, 1869	90, 801
Toy	W. R. Withers	Newark, N. J	Mar. 25, 1873	137, 119
Toy, Alphabet	R. J. Clay	Flushing, N. Y	May 26, 1868	78, 361
Toy and doll	F. E. Darrow and D. E. Peck	Bristol, Conn	Jan. 23, 1866	52, 142
Toy-animals, Covering or hide for	H. C. Grube	New York, N. Y	Sept. 12, 1871	118, 853
Toy, Aquatic	A. W. Hart	Washington, D. C	Dec. 6, 1870	109, 992
Toy, Automatic	A. W. Browne	Bloomfield, N. J	Feb. 11, 1873	135, 770
Toy, Automatic	H. L. Brower	New York, N. Y	July 15, 1873	140, 883
Toy, Automatic	A. H. Dean	Bridgeport, Conn	Nov. 25, 1873	144, 892
Toy, Automatic	W. F. Goodwin	Washington, D. C	Jan. 22, 1867	61, 416
Toy, Automatic	W. F. Goodwin	New York, N. Y	Aug. 25, 1868	81, 491
Toy automatic swimmer	I. F. Eaton	New York, N. Y	June 24, 1873	140, 259
Toy-automaton	J. S. Brown	Washington, D. C	Dec. 8, 1863	40, 891
Toy-automaton	R. J. Clay	New York, N. Y	July 15, 1873	140, 765
Toy-ball	G. Hartz	New York, N. Y	Nov. 15, 1870	109, 204
Toy-ball	H. Splitdorf	New York, N. Y	Jan. 18, 1870	99, 023
Toy-ball	H. Trebe	Indianapolis, Ind	Aug. 3, 1869	93, 249
Toy-ball player	I. P. Tice	New York, N. Y	July 23, 1867	67, 083
Toy-bank	D. A. Stiles	Middletown, Conn	July 16, 1872	129, 615
Toy-bank, Race-course	J. Hall	Watertown, Mass	Aug. 15, 1871	118, 011
Toy-bedstead	D. M. Reynolds	Chicago, Ill	June 25, 1872	128, 249
Toy-bird	J. H. Bellamy	Charlestown, Mass	Feb. 23, 1869	87, 238
Toy-block	H. Fairbanks	Saint Johnsbury, Vt	Feb. 4, 1873	135, 417
Toy-block	S. L. Hill	Williamsburgh, N. Y	Dec. 26, 1865	51, 720
Toy-block	E. H. Muldaur	Dover, Del	May 14, 1872	126, 827
Toy-block	J. S. Ostrander	New York, N. Y	Feb. 27, 1872	124, 078
Toy-block for object-teaching	N. Muller	New York, N. Y	Oct. 21, 1873	143, 835
Toy-block, Mosaic	T. G. Harold	Brooklyn, N. Y	Feb. 21, 1865	46, 525
Toy-blocks, Connecting architectural	A. B. Swift	Brooklyn, N. Y	Mar. 22, 1870	101, 179
Toy blow-gun	T. C. Bush	New Haven, Conn	Jan. 12, 1869	85, 788
Toy-boat	G. J. Colby and L. H. Thomas	Waterbury, Vt	Apr. 10, 1866	53, 787
Toy-boat	J. W. Pilkington	Bridgeport, Conn	Nov. 19, 1872	133, 250
Toy boomerang-pistol	O. B. Brown	Malden, Mass	Apr. 21, 1868	76, 886
Toy-bow	F. W. Judd	New Britain, Conn	Mar. 2, 1869	87, 344
Toy bow-gun	H. Tilden	Boston, Mass	Jan. 12, 1869	85, 874
Toy breech-loading fire-arm	F. Denzler	New York, N. Y	Apr. 29, 1862	35, 086
Toy building-blocks	G. H. Chinnock	New York, N. Y	Dec. 4, 1866	60, 141
Toy building-blocks	A. Oberndorf, jr	Baltimore, Md	Oct. 28, 1873	144, 124
Toy-cannon	J. O. Couch	Middlefield, Conn	May 1, 1860	28, 066
Toy-cannon	G. E. Hutchinson	Cleveland, Ohio	June 23, 1868	79, 073
Toy-carriage	J. and A. Condell	Plainville, Conn	Feb. 9, 1869	86, 814
Toy-carriage	C. C. Johnson	South Gardner, Mass	Sept. 24, 1872	131, 688
Toy-carriage	J. W. Pilkington	Bridgeport, Conn	June 6, 1871	115, 636
Toy-carriage	F. W. Porter	Springfield, Vt	Jan. 24, 1871	111, 149
Toy-cart	A. L. Taylor	Springfield, Vt	Jan. 12, 1869	85, 873
Toy-catapult	W. S. How	Cincinnati, Ohio	July 15, 1873	140, 922
Toy-chairs, Manufacture of	D. A. Stiles	Meriden, Conn	June 14, 1864	43, 161
Toy, Child's	G. W. Boynton	Auburn, N. Y	Nov. 19, 1867	70, 949
Toy, Child's	L. Broad	Saint Louis, Mo	Apr. 23, 1867	64, 066
Toy, Child's	E. T. Colburn	Boston, Mass	Feb. 11, 1868	74, 308
Toy, Combination	R. Went	Brooklyn, E. D., N. Y	Feb. 15, 1870	99, 987
Toy cross-bow	J. M. Keep	New York, N. Y	Feb. 5, 1867	61, 837
Toy-cue	E. W. Keyes	Boston, Mass	Oct. 22, 1867	70, 003
Toy-dancer, Automatic	H. L. Brower	New York, N. Y	Sept. 23, 1873	143, 121
Toy-dancer, Automatic	W. A. P. La Grove	Brooklyn, N. Y	Sept. 23, 1873	143, 082
Toy, Dancing	J. M. Cromwell	New York, N. Y	Mar. 28, 1865	46, 997
Toy, Dancing	G. L. and L. P. Wild	Washington, D. C	Nov. 29, 1870	109, 698
Toy-device for making soap-bubbles	S. B. Bliss	New York, N. Y	Oct. 7, 1873	143, 432
Toy, Elastic	L. P. Porter	New York, N. Y	Feb. 15, 1859	23, 001
Toy-engine	J. L. Warner	New York, N. Y	Oct. 15, 1867	69, 873
Toy-engine and whistle, Combined	W. W. Mildrum	East Berlin, Conn	Feb. 27, 1866	52, 872
Toy-fish	R. Hunter	New York, N. Y	Dec. 1, 1868	84, 628
Toy for producing a crying sound	R. J. Clay	New York, N. Y	Jan 16, 1872	122, 707
Toy fortune-teller	C. T. Ford	Salem, Mass	Nov. 26, 1867	71, 374
Toy-game	C. Robinson	Cambridgeport, Mass	July 6, 1869	92, 366
Toy-gun	W. J. Blackman	Columbus, Miss	Apr. 27, 1869	89, 380
Toy-gun	E. and A. Buckman	Brooklyn, N. Y	Sept. 20, 1870	107, 442
Toy-gun	S. R. Dummer	New York, N. Y	Jan. 1, 1867	60, 863
Toy-gun	E. C. Edmonds	Albany, N. Y	Mar. 30, 1869	88, 463
Toy-gun	C. T. Ford and E. Trask	Salem, Mass	Dec. 21, 1869	98, 047
Toy-gun	J. D. Frary	New Britain, Conn	Aug. 2, 1864	43, 677
Toy-gun	R. Frisbie	Cromwell, Conn	Feb. 4, 1868	73, 966
Toy-gun	J. Goodale	Boston, Mass	Dec. 20, 1870	10, 228
Toy-gun	A. Hall	New York, N. Y	Jan. 22, 1867	61, 419
Toy-gun	S. Hubbard	Quincy, Ill	Feb. 25, 1868	74, 825
Toy-gun	A. James	Chicago, Ill	Mar. 25, 1873	137, 060
Toy-gun	J. Johnson	New York, N. Y	Nov. 29, 1859	26, 269
Toy-gun	J. Lair and J. F. Rawzell	Indianapolis, Ind	Oct. 24, 1871	120, 284
Toy-gun	A. I. Lenhart	New Brunswick, N. J	Dec. 26, 1871	122, 122
Toy-gun	A. I. Lenhart	New Brunswick, N. J	Jan. 30, 1872	123, 268
Toy-gun	C. S. Locke	Watertown, Mass	Sept. 29, 1868	82, 536
Toy-gun	W. Mills	Greenville, N. J	Oct. 15, 1872	132, 171

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Invention.	Inventor.	Residence.	Date.	No.
Toy-gun	W. Mills and D. J. Wolfe	Jersey City, N. J	Dec. 23, 1873	145, 745
Toy-gun	R. Y. Murphy	Chicago, Ill	Oct. 7, 1873	143, 457
Toy-gun	G. H. Snow and G. H. Coe	New Haven, Conn	Jan. 5, 1869	85, 704
Toy-gun	E. Sperry	Miama Village, Kans	July 9, 1867	66, 531
Toy-gun	F. A. Spofford and M. G. Raffington.	Columbus, Ohio	Sept. 29, 1868	82, 561
Toy-gun	G. Stackhouse	Mount Washington, Pa	June 18, 1872	128, 078
Toy-gun	W. H. Stevens	Syracuse, N. Y	June 12, 1860	28, 698
Toy-gun	C. B. Thayer	Syracuse, N. Y	May 4, 1869	89, 607
Toy-gun	E. Trask and C. T. Ford	Fitchburgh and Salem, Mass.	Mar. 16, 1869	87, 887
Toy-gun	N. P. Whittelsey	West Meriden, Conn	July 11, 1865	48, 754
Toy gun and pistol	H. M. Quackenbush	Herkimer, N. Y	June 6, 1871	115, 638
Toy-gun, Ball	C. Robinson	Boston, Mass	May 3, 1870	102, 594
Toy gun or pistol	F. Fuller	New York, N. Y	Dec. 3, 1867	71, 732
Toy-gun, Revolving-spring	C. Bringe	Geneva, N. Y	Aug. 31, 1869	94, 279
Toy-gun, Torpedo	E. W. Keyes	Boston, Mass	Mar. 24, 1868	75, 767
Toy-gymnast	F. A. Bancher	New York, N. Y	Nov. 18, 1873	144, 651
Toy, Gyroscopic	A. C. Würtele	New York, N. Y	June 17, 1873	139, 988
Toy harpoon-gun	E. Sperry	Saint Louis, Mo	Dec. 7, 1869	97, 719
Toy-head for canes	A. Cook	Orange, N. J	June 23, 1868	79, 208
Toy-hoop	S. E. Cleveland	Buffalo, N. Y	Jan. 12, 1869	85, 727
Toy-hoop	G. M. Crawford and H. L. Hervey.	Philadelphia, Pa	Nov. 19, 1867	71, 138
Toy-hoop	P. Hessemer	Washington, D. C	June 14, 1870	104, 150
Toy-hoop	A. M. Hill	New Haven, Conn	Sept. 12, 1871	118, 855
Toy-hoop	C. C. Johnson	Springfield, Vt	Mar. 23, 1869	88, 174
Toy-hoop	J. L. Lay	Buffalo, N. Y	Oct. 6, 1868	82, 724
Toy-hoop	I. E. Loughborough	Pittsford, N. Y	July 16, 1872	129, 150
Toy-hoop	H. J. May	Brooklyn, N. Y	Oct. 12, 1869	95, 822
Toy-hoop	R. Shaler	Madison, Conn	Aug. 9, 1864	43, 799
Toy-hoop	C. L. Taylor	Norwich, Conn	July 27, 1869	93, 022
Toy-hoop	C. L. Taylor	Norwich, Conn	May 10, 1870	102, 988
Toy-hoop	R. Ward	Newark, N. J	Dec. 27, 1870	110, 519
Toy-horn	W. A. Harwood	Brooklyn, N. Y	Oct. 28, 1873	144, 026
Toy-horse	J. A. Crandall	New York, N. Y	Feb. 26, 1861	31, 571
Toy horse and carriage	J. B. Cuzner	Bridgeport, Conn	Mar. 7, 1871	112, 325
Toy-house	E. S. Russell	Plymouth, Mass	July 7, 1868	79, 782
Toy-house	J. B. Smith	Chicago, Ill	Apr. 22, 1873	138, 208
Toy-houses, Building-blocks for	C. C. Johnson	South Gardner, Mass	July 30, 1872	129, 960
Toy, Humming	M. B. Sumner	Boston, Mass	July 4, 1871	116, 773
Toy humming-wheel	A. F. Ablo	New Orleans, La	Dec. 14, 1869	97, 850
Toy humming-wheel	W. D. Porter	Petersburgh, Va	Nov. 5, 1867	70, 610
Toy, Illusion	J. A. Minor	Middletown, Conn	Apr. 21, 1868	77, 072
Toy-locomotive	J. E. Wickham	Hartford, Conn	Oct. 11, 1870	108, 224
Toy locomotive and track	E. Beggs	Paterson, N. J	Sept. 19, 1871	119, 306
Toy-locomotive steam-engine	A. L. Dewey	Westfield, Mass	July 4, 1871	116, 568
Toy looking-glasses, Cast-iron frame for	R. Frisbie	Cromwell, Conn	Feb. 5, 1867	61, 729
Toy magic arrow	H. C. Griffin	Franklin, N. H	June 4, 1867	65, 376
Toy, "Magnetic Cupid"	J. Swaim	Philadelphia, Pa	Jan. 10, 1854	10, 423
Toy, Mechanical	G. W. Brown	Forestville, Conn	June 25, 1872	128, 357
Toy, Mechanical	R. J. Clay	New York, N. Y	Oct. 1, 1872	131, 849
Toy, Mechanical	E. E. Newell	Bristol, Conn	June 18, 1872	128, 164
Toy, Mechanical	H. G. Pearson	New York, N. Y	Jan. 14, 1868	73, 379
Toy, Mechanical	E. F. Stephens and W. J. Cox	Jersey City, N. J	Sept. 3, 1872	131, 128
Toy, Mechanical	H. S. Vroom	Hoboken, N. J	Sept. 11, 1866	58, 006
Toy money-box	J. H. Chappel	Brooklyn, N. Y	July 26, 1070	105, 645
Toy money-box	R. Frisbee	Cromwell, Conn	July 1, 1873	140, 358
Toy money-box	J. Hall	Watertown, Mass	Dec. 23, 1873	145, 734
Toy money-box	C. C. Johnson	Somerville, Mass	Oct. 28, 1873	144, 106
Toy money-box	H. W. Prouty	Boston, Mass	Aug. 5, 1873	141, 516
Toy money-box	H. Quinn	East Boston, Mass	July 2, 1872	128, 508
Toy money-box	F. W. Smith, jr	Bridgeport, Conn	Mar. 8, 1870	100, 564
Toy money-box	T. A. Taylor	Salem, Mass	July 15, 1873	140, 798
Toy-monument	G. W. Fisher	Rochester, N. Y	Dec. 19, 1871	121, 936
Toy-pails from wood, Machine for cutting	H. Mellish	Walpole, N. H	Apr. 2, 1867	63, 415
Toy parlor ten-pin	D. Zink	New Albany, Ind	Jan. 26, 1869	86, 337
Toy-perambulator	J. S. Krinks	Bridgeport, Conn	Apr. 8, 1873	137, 693
Toy-pistol	J. W. Bailey	New Orleans, La	Mar. 24, 1868	75, 831
Toy-pistol	A. L. Carrier	Washington, D. C	Apr. 6, 1869	88, 608
Toy-pistol	A. Cutler and N. Jenkins	New York, N. Y	June 25, 1861	32, 619
Toy-pistol	W. H. Emory	Ashburnham, Mass	Mar. 24, 1868	75, 885
Toy-pistol	R. Frisbie	Cromwell, Conn	Feb. 25, 1868	74, 904
Toy-pistol	W. D. Gridley	New Britain, Conn	Oct. 13, 1868	83, 058
Toy-pistol	J. Hall	Watertown, Mass	Nov. 19, 1867	71, 162
Toy-pistol	B. Haviland and G. P. Gunn	Herkimer, N. Y	May 21, 1872	126, 954
Toy-pistol	O. W. Horr	Chicopee Falls, Mass	May 27, 1873	139, 391
Toy-pistol	J. P. Kirk	Brooklyn, N. Y	Aug. 24, 1869	94, 119
Toy-pistol	T. E. Marable	Petersburgh, Va	Dec. 15, 1868	85, 017
Toy-pistol	H. M. Quackenbush	Herkimer, N. Y	Dec. 26, 1871	122, 193
Toy-pistol	H. M. Quackenbush	Herkimer, N. Y	Dec. 2, 1873	145, 238
Toy-pistol	E. Ripley	Troy, N. Y	Oct. 20, 1868	83, 211
Toy-pistol	C. Robinson	Boston, Mass	Mar. 29, 1870	101, 382
Toy-pistol	R. Shaler	Madison, Conn	Mar. 15, 1864	41, 943
Toy-pistol	B. Sherwood and D. Fitzgerald	New York, N. Y	June 25, 1867	66, 048
Toy-pistol	W. J. Shipman	Portsmouth, Ohio	Oct. 15, 1867	69, 851
Toy-pistol	C. F. Smith	Torrington, Conn	Jan. 4, 1870	98, 641
Toy-pistol	F. A. Spofford and M. G. Raffington.	Columbus, Ohio	Oct. 1, 1867	69, 500
Toy-pistol	G. Stackpole	New York, N. Y	Oct. 13, 1868	83, 004
Toy-pistol, &c	R. Welch	Chicago, Ill	July 16, 1872	128, 990
Toy pistol or gun	G. S. Hastings	Plainville, Conn	Dec. 23, 1873	145, 798
Toy-pistol, Repeating	E. and A. Buckman	East Greenbush, N. Y	Jan. 5, 1869	85, 638
Toy-projector	E. V. B. Hoes	Green Bay, Wis	Sept. 26, 1871	119, 358
Toy-propeller	A. M. Allen	New York, N. Y	Jan. 25, 1870	99, 127
Toy-propeller	A. M. Allen	New York, N. Y	Feb. 1, 1870	99, 389
Toy-propeller	A. M. Allen	New York, N. Y	Feb. 28, 1871	112, 104
Toy-propeller	G. W. Jones	Philadelphia, Pa	Nov. 18, 1873	144, 767

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Invention.	Inventor.	Residence.	Date.	No.
Toy-propeller, Single-wheel	W. Sellers	New York, N. Y	Sept. 12, 1871	118, 977
Toy putty-blower	N. Joseph	San Francisco, Cal	Dec. 2, 1873	145, 109
Toy-puzzle	B. F. Ellis	Newton, Pa	Mar. 11, 1873	136, 645
Toy-puzzle	S. Loyd	New York, N. Y	Mar. 21, 1871	112, 823
Toy railway and car	B. Douglass	Appleton, Wis	Mar. 24, 1868	75, 876
Toy, Reciprocating-ball	T. D. Haehnlen	Philadelphia, Pa	Jan. 7, 1868	73, 093
Toy-revolver and fire-cracker holder	A. M. Smith	Brooklyn, N. Y	May 28, 1872	127, 377
Toy, Revolving-bar	H. N. Gallager	Worcester, Mass	Apr. 26, 1870	102, 247
Toy-ring	W. Hutchings	Newark, N. J	June 13, 1871	115, 962
Toy-rocker	A. W. Browne	Bloomfield, N. J	Oct. 29, 1872	132, 625
Toy, Rocking	J. A. Crandall	New York, N. Y	May 17, 1859	24, 008
Toy rolling-cage	A. M. Allen	New York, N. Y	Mar. 22, 1870	101, 076
Toy rope-dancer	D. Cheekeni	Brooklyn, N. Y	June 11, 1867	65, 644
Toy, Roundabout	F. H. Keeney	Newport, Ky	July 16, 1867	66, 714
Toy row-boat	N. S. Warner	Bridgeport, Conn	Feb. 9, 1869	86, 718
Toy safe or bank	J. Hall	Watertown, Mass	Dec. 21, 1869	98, 055
Toy-safe with puzzle-lock	A. and G. F. Wright	Clinton, Mass	May 5, 1868	77, 560
Toy savings-bank	R. Frisbie	Cromwell, Conn	Aug. 20, 1872	130, 575
Toy savings-bank	J. Serrill	Philadelphia, Pa	Feb. 16, 1869	87, 006
Toy savings-bank	W. P. X. Smith	New York, N. Y	Jan. 4, 1870	98, 643
Toy sewing-machine	E. A. Goodes	Philadelphia, Pa	Mar. 19, 1872	124, 808
Toy, ("Sibyl's Cave")	J. S. Griffith	Philadelphia, Pa	Dec. 22, 1868	85, 087
Toy-sled	J. H. Brown	New York, N. Y	July 17, 1866	56, 358
Toy spinning-top	A. Linn	Philadelphia, Pa	June 4, 1872	127, 619
Toy, Spring	J. H. Brown	New York, N. Y	Dec. 11, 1866	60, 336
Toy spring and arrow	W. S. McNeil	Bridgeport, Conn	Feb. 16, 1869	86, 993
Toy, Spring-cup	H. B. Ames	Great Barrington, Mass	Feb. 18, 1868	74, 479
Toy spring-gun	M. Ferrant	Minneapolis, Minn	Dec. 17, 1872	133, 930
Toy spring-gun	A. Hall	New York, N. Y	May 23, 1865	47, 815
Toy spring-gun	A. Hall	New York, N. Y	May 29, 1866	55, 089
Toy spring-gun	W. H. Stevens	New York, N. Y	Apr. 12, 1864	42, 317
Toy-steamboat	A. and E. Buckman	Brooklyn, N. Y	Nov. 5, 1872	132, 798
Toy-steamboat	E. P. Ryder	Brooklyn, N. Y	May 7, 1872	126, 414
Toy steam-engine	A. Buckman	Brooklyn, N. Y	Dec. 12, 1871	121, 702
Toy steam-engine	A. Buckman	Brooklyn, N. Y	Mar. 5, 1872	124, 194
Toy steam-engine	A. L. Dewey	Westfield, Mass	Jan. 5, 1869	85, 572
Toy steam-engine	R. Frisbie	Cromwell, Conn	Aug. 15, 1871	118, 007
Toy steam-engine	P. Macy	Rochester, N. Y	June 22, 1869	91, 758
Toy-steam-engine boiler	R. Frisbie	Cromwell, Conn	Jan. 9, 1872	122, 593
Toy steam-fire-engine	A. and E. Buckman	Brooklyn, N. Y	Nov. 5, 1872	132, 799
Toy steam-locomotive	F. W. Clark	New York, N. Y	June 18, 1872	128, 018
Toy-target	G. F. Fessenden	Arlington, Mass	Nov. 24, 1868	84, 461
Toy-target	B. L. Stone	San Francisco, Cal	Apr. 27, 1869	89, 516
Toy, Teacher's	E. F. Anderson	Mansfield, Conn	July 6, 1869	92, 244
Toy-toad	G. E. Bringman	Baltimore, Md	Aug. 16, 1870	106, 461
Toy-toad	J. Fallows	Philadelphia, Pa	Aug. 29, 1871	118, 441
Toy-toad	J. Fallows	Philadelphia, Pa	Dec. 5, 1871	121, 502
Toy-top	H. Foulkes	Utica, N. Y	Oct. 5, 1869	95, 455
Toy-top	T. E. Sparks	Norwich, Conn	Aug. 17, 1869	93, 760
Toy-top	F. O. and W. W. Tucker	Meriden, Conn	June 12, 1866	55, 591
Toy-torpedo	T. J. Johnson	Cincinnati, Ohio	Oct. 4, 1870	108, 028
Toy torpedo and explosive compound	C. Nelson	New York, N. Y	June 11, 1867	65, 764
Toy-torpedoes, Making	E. B. Sample and J. Sparks	Brooklyn, N. Y	Nov. 9, 1869	96, 621
Toy-velocipede	H. C. Alexander	New York, N. Y	July 6, 1869	92, 243
Toy-velocipede	H. C. Alexander	New York, N. Y	Dec. 21, 1869	98, 007
Toy-velocipede	E. Eaton	Hartford, Conn	May 4, 1869	89, 567
Toy-velocipede	W. Sellers	New York, N. Y	Feb. 11, 1873	135, 851
Toy-velocipede	N. S. Warner	Bridgeport, Conn	Sept. 7, 1869	94, 676
Toy-wagon	H. W. Eastman	Baltimore, Md	Apr. 2, 1872	125, 126
Toy walking-figure	R. Weir	Cohoes, N. Y	Oct. 16, 1866	58, 922
Toy-watch	E. W. Bridge	Philadelphia, Pa	Nov. 19, 1872	133, 196
Toy-watch	L. Flagg and G. D. Briggs	Pawtucket, R. I	Oct. 31, 1865	50, 699
Toy-watch	J. Laubereau	Paris, France	Nov. 10, 1868	83, 978
Toy watches, lockets, &c., Constructing	L. Flagg and G. D. Briggs	Pawtucket, R. I	Oct. 13, 1863	40, 255
Toy, Wheel	J. Syrcher	Buffalo, N. Y	Jan. 1, 1867	60, 961
Toy, Whirligig	J. Groves and E. B. Turner	Providence, R. I	Apr. 7, 1868	76, 439
Toy whirling-jack	F. W. Flagg	Middletown, Conn	June 19, 1866	55, 766
Toy-whistle	M. Miller	Brooklyn, N. Y	June 6, 1871	115, 628
Toy-whistle	J. Waters	West Sutton, Mass	Sept. 23, 1873	143, 044
Toy, Whistling	G. F. Pfeiffer	New York, N. Y	Dec. 24, 1872	134, 308
Toy, Whistling	C. Weber	West Meriden, Conn	Aug. 24, 1869	94, 155
Toy wind-wheel	M. Miller	Brooklyn, N. Y	Jan. 1, 1867	60, 772
Toy, Wrestling	J. T. Walker	Palmyra, N. Y	Feb. 26, 1867	62, 455
Toys, Composition for the manufacture of	R. Borcherdt and H. Bergman	Tompkinsville, N. Y	Nov. 21, 1865	51, 009
Toys, Dancing-motion for	J. M. Keep	New York, N. Y	Mar. 30, 1869	88, 305
Toys, Mechanical movement for	W. D. Grimshaw	Ansonia, Conn	Sept. 3, 1872	130, 987
Toys, Mechanical movement for	W. Tellner	New York, N. Y	July 16, 1872	129, 622
Toys, Steam-motor for	P. Ely	New York, N. Y	Mar. 26, 1867	63, 148
Trace and brace by connected springs, Elastic	R. Giddins	Baltimore, Md	Dec. 10, 1808	......
Trace and pad buckle	E. B. Winslow	Chatham, Ill	Sept. 17, 1867	69, 058
Trace-attachment	P. J. Schmitz	Winona, Minn	Mar. 12, 1872	124, 451
Trace-attachment	A. Thompson	Ottumwa, Iowa	Aug. 27, 1867	68, 323
Trace-attachment for whiffletrees	J. W. Currier	Holyoke, Mass	Nov. 26, 1867	71, 285
Trace-carrier	J. H. Harris	Vermont, Ill	Mar. 23, 1869	88, 038
Trace-carrier	R. Porter	Ottumwa, Iowa	Jan. 31, 1871	111, 473
Trace-carrier	P. A. Snyder	Butlerville, Ohio	May 14, 1872	126, 753
Trace-carrier	R. H. Warriner	Toledo, Ohio	Feb. 18, 1873	135, 951
Trace carrier, Harness	E. A. Cooper	Lancaster, N. Y	Aug. 22, 1871	118, 344
Trace carrier, Harness	E. A. Cooper	Lancaster, N. Y	Jan. 2, 1872	122, 364
Trace-clamp	D. H. Clock	Monroeville, Ohio	Dec. 17, 1867	72, 266
Trace-clip	P. Schoomaker	New Britain, Conn	Apr. 14, 1868	76, 826
Trace clip, Harness	J. D. S. Newell	Tensas Parish, La	Feb. 16, 1869	86, 938
Trace, cockeye, and button-hole for harness	P. Phillippi	Cass County, Ill	Nov. 19, 1872	133, 117
Trace-connection	J. E. Peirce	West Boylston, Mass	Oct. 30, 1866	59, 258
Trace-connection	J. E. Seavey	Kennebunkport, Me	Apr. 18, 1865	47, 366
Trace-connection, Elastic	H. Quinn	Charlestown, Mass	Aug. 10, 1869	93, 639
Trace-coupler	P. A. Hause	Catonsville, Md	Aug. 13, 1867	67, 761

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Invention.	Inventor.	Residence.	Date.	No.
Trace-coupling	J. R. Finley	Delphi, Ind	Nov. 28, 1871	121, 350
Trace coupling, Harness	C. K. Bradford	Lynn, Mass	June 10, 1856	15, 057
Trace-detacher	W. H. Stimely	Buchanan, Pa	May 6, 1873	138, 706
Trace eyelet, Harness	N. Hiatt	Plum Hollow, Iowa	Oct. 28, 1873	144, 096
Trace eyelet, Harness	S. Walters	Dallas City, Ill	Mar. 11, 1873	136, 796
Trace-fastener	S. R. Atkins and D. H. Hull	Plantsville, Conn	June 21, 1859	24, 515
Trace-fastener	D. H. Clock and F. D. Ryan	Newville, Ind	Dec. 12, 1865	51, 425
Trace-fastener	F. W. Dean	Tremont, Ill	Oct. 27, 1868	83, 476
Trace-fastener	A. B. Dowell	Vinton, Iowa	May 9, 1871	114, 654
Trace-fastener	G. W. Fink	Pleasant Plains, Ill	Aug. 20, 1867	67, 967
Trace-fastener	B. J. Hartman	Wooster, Ohio	Dec. 17, 1867	72, 394
Trace-fastener	C. Hayden	Newark, N. J	Sept. 3, 1867	68, 505
Trace-fastener	L. Herr	West Lampeter, Pa	Mar. 24, 1868	75, 757
Trace-fastener	I. C. McAllaster	Milo, Mich	Dec. 17, 1867	72, 311
Trace-fastener	F. B. Morse	New Haven, Conn	July 27, 1869	93, 111
Trace-fastener	T. Peck	Stratford, Conn	Aug. 25, 1868	81, 403
Trace-fastener	E. D. and J. P. Rhoads	Dayton, Ind	May 19, 1868	78, 011
Trace-fastener	J. L. Short	Gosport, Iowa	Sept. 3, 1867	68, 535
Trace-fastener	J. W. Singleton	Quincy, Ill	Sept. 17, 1872	131, 470
Trace-fastener	F. M. Snively	Bellaire, Ohio	May 27, 1873	139, 432
Trace-fastener	S. Walker	Boston, Mass	Aug. 28, 1860	29, 847
Trace-fastener	F. M. Weller	Evanston, Ind	Jan. 19, 1864	41, 334
Trace-fastener	F. M. Weller	Chicago, Ill	Oct. 6, 1868	82, 906
Trace fastener, Harness	J. W. Briggs	Cleveland, Ohio	Dec. 1, 1857	18, 790
Trace-fastener, Safety	J. F. Morley	Lansing, Mich	July 18, 1871	117, 195
Trace-fastener, Whiffletree	J. F. Morley	Lansing, Mich	Aug. 27, 1872	130, 817
Trace-fastening	C. W. Blakeslee	Watertown, Conn	July 19, 1870	105, 415
Trace-fastening	J. Brown	Matteawan, N. Y	Oct. 27, 1868	83, 454
Trace-fastening	L. C. Clark	Plantsville, Conn	Oct. 15, 1867	69, 771
Trace-fastening	S. W. Cox and J. H. Trowbridge	New Haven, Conn	Oct. 22, 1861	33, 519
Trace-fastening	D. W. De Forest	Brooklyn, N. Y	Oct. 8, 1867	69, 546
Trace-fastening	J. C. De Witt	West Bloomfield, N. J	Aug. 31, 1858	21, 394
Trace-fastening	C. Graham	New York, N. Y	Jan. 26, 1869	86, 149
Trace-fastening	S. C. Hawkins	Patchogue, N. Y	Jan. 12, 1869	85, 820
Trace-fastening	D. E. Holmes	Halifax, Mass	Oct. 24, 1865	50, 585
Trace-fastening	W. Koss	McGregor, Iowa	June 3, 1862	35, 454
Trace-fastening	B. A. Lewis	New Britain, Conn	May 28, 1867	65, 096
Trace-fastening	W. W. Mallery and C. H. Sage	Copenhagen, N. Y	Dec. 28, 1869	98, 283
Trace-fastening	O. Palmer	Cincinnati, Ohio	Apr. 5, 1870	101, 656
Trace fastening	W. J. Reynolds	Webster, N. Y	Dec. 28, 1858	22, 454
Trace-fastening	L. W. Turner and H. H. Mix	Meriden, Conn	July 22, 1862	35, 959
Trace-fastening	J. R. Watkins	Baltimore, Md	Dec. 18, 1866	60, 599
Trace-fastening	A. Zink	Lancaster, Ohio	Apr. 5, 1859	23, 523
Trace-fastening, Adjustable	P. S. Van Wagner	Stoney Creek, Saltfleet Township, Canada.	Nov. 16, 1869	96, 832
Trace, Harness	T. S. Judson	Matteawan, N. Y	Dec. 3, 1867	71, 835
Trace, Harness	E. Maher	New York, N. Y	Dec. 4, 1860	30, 855
Trace, Harness	R. J. Steele, jr	Rockingham, N. C	Mar. 17, 1868	75, 593
Trace, Harness	R. Williams	Philadelphia, Pa	Dec. 16, 1873	145, 708
Trace-holder	S. Stout	Tremont, Ill	May 19, 1868	78, 154
Trace holder, Harness	R. M. Dill	Morgantown, Ind	Aug. 2, 1870	106, 037
Trace-hook	A. Hodgdon	Lowell, Mass	May 24, 1864	42, 852
Trace-hook	G. L. Miller	Pontiac, Mich	May 5, 1868	77, 515
Trace-hook	W. H. Morgan	Alliance, Ohio	Sept. 6, 1870	107, 085
Trace hook and clip, Harness	W. H. Morgan	Alliance, Ohio	Sept. 6, 1870	107, 086
Trace-hook attachment	J. B. Kook and J. S. Shrawder	Fairviewville, Pa	June 20, 1871	116, 067
Trace-lock	G. L. Hart	New Britain, Conn	June 20, 1871	116, 052
Trace-lock	J. B. Shaw	New Haven, Conn	Feb. 28, 1865	46, 590
Trace-lock	D. Tuttle	Hartford, Conn	Nov. 6, 1866	59, 483
Trace, Rope	T. Newman	New Orleans, La	June 9, 1868	78, 757
Trace safety-bar, Vehicle	R. Rolph	Coventry, N. Y	Mar. 20, 1860	27, 566
Trace support and buckle	J. H. and H. C. Hill	Clinton, Ill	Aug. 3, 1869	93, 201
Trace-supporting hook	M. Reilly	Covington, Ky	Aug. 13, 1867	67, 675
Trace-supporting stud	J. Letchworth	Buffalo, N. Y	July 26, 1870	105, 700
Trace-trimmer	W. L. Hutchinson	Burlington, Iowa	Aug. 1, 1865	49, 110
Trace-trimmer	A. Stempel	Newark, N. J	Oct. 4 1859	25, 706
Trace tug-loop	M. Gumfory	West Middlesex, Pa	May 26, 1868	78, 277
Traces, Combined button and loop for	J. Albert	Baltimore, Md	Sept. 25, 1866	58, 195
Traces, &c., Creasing-device for	H. S. Foust	Wilmot, Ohio	July 16, 1872	129, 123
Traces to carriages, Means of attaching	W. L. Hubbell	Brooklyn, N. Y	Nov. 19, 1861	33, 742
Traces to vehicles, Device for attaching	I. C. Ham	Charlestown, Mass	Aug. 10, 1869	93, 532
Traces to whiffletrees, Attaching	E. Brown	Leominster, Mass	Oct. 31, 1865	50, 682
Traces to whiffletrees, Attaching	E. Calderwood	Portland, Me	June 27, 1865	48, 364
Traces to whiffletrees, Attaching	W. De Garmo	Northumberland, N. Y	Jan. 1, 1847	4, 919
Traces to whiffletrees, Attaching	L Humiston	New Haven, Conn	Mar. 19, 1861	31, 718
Traces to whiffletrees, Fastening	B. D. Reed	Independence, Iowa	July 29, 1862	36, 027
Trachea-tube	B. Segnitz	New York, N. Y	July 9, 1861	32, 789
Tracing drawings, &c., Apparatus for	G. Zweifel and E. Stevens	Pomeroy, Ohio	Apr. 2, 1872	125, 372
Tracing-muslin, Composition for preparing	J. K. Park	Marlborough, N. Y	Sept. 15, 1857	18, 209
Track-cleaner	A. Day	Detroit, Mich	Apr. 27, 1869	89, 296
Track-cleaner	A. A. Freeman and S. Ford	Philadelphia, Pa	Feb. 25, 1868	74, 811
Track cleaner, Railway	E. H. Ashcroft	Boston, Mass	Mar. 28, 1854	10, 715
Track cleaner, Railway	A. Blakely	Fairfield, Iowa	Mar. 5, 1872	124, 321
Track cleaner, Railway	A. Day	Detroit, Mich	Apr. 9, 1872	125, 547
Track cleaner, Railway	S. W. Emery	Portland, Me	Nov. 5, 1872	132, 715
Track cleaner, Railway	G. P. Floyd	Quincy, Mass	May 5, 1868	77, 602
Track cleaner, Railway	R. A. and T. Kendall	Mineral Point, Wis	Nov. 10, 1868	83, 860
Track cleaner, Railway	W. King	Springfield, Ill	May 7, 1867	64, 541
Track cleaner, Railway	J. A. Matthews	Saint Louis, Mo	Mar. 20, 1866	53, 317
Track cleaner, Railway	J. Paradis	Brooklyn, N. Y	May 28, 1872	127, 361
Track cleaner, Railway	P. I. Schopp	Louisville, Ky	Dec. 10, 1872	133, 726
Track cleaner, Railway	M. F. Wickersham	Springfield, Ill	Dec. 7, 1869	97, 577
Track cleaner, Street-railway	A. Higley and D. Atwood	Cleveland, Ohio	Feb. 6, 1872	123, 345
Track-cleaning machine, Railway	J. N. Dennison and E. Kirkpatrick.	Plainfield, N. J	July 29, 1839	1, 267
Track-cleaning machine, Railway	W. and J. Thorn, jr	Plainfield, N. J	Jan. 29, 1849	1, 483
Track-clearer	E. Abbiati	New York, N. Y	Dec. 24, 1867	72, 439
Track-clearer	E. Abbiati	New York, N. Y	Nov. 18, 1873	144, 724

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Track-clearer	F. Buse	Fergus Falls, Minn	Dec. 2, 1873	145, 090
Track-clearer	M. J. Cogan and M. E. Russell	Mobile, Ala	Dec. 3, 1867	71, 704
Track-clearer	H. Fellows	Bloomington, Ind	Mar. 14, 1871	112, 575
Track-clearer	A. J. Gove	San Francisco, Cal	Jan. 7, 1873	134, 660
Track-clearer	J. Johnson and J. C. Bolton	Brooklyn, N. Y	Apr. 21, 1863	38, 229
Track-clearer	J. H. Miller	Frederickton, New Brunswick.	May 13, 1873	138, 913
Track-clearer for street-cars	J. A. Morrison	Brady's Bend, Pa	Apr. 12, 1870	101, 757
Track clearer, Railway	M. J. Adams	Bedford, Pa	Feb. 9, 1864	41, 468
Track clearer, Railway	M. C. Boyer	Norristown, Pa	July 4, 1871	116, 673
Track clearer, Railway	S. G. Cabell	Quincy, Ill	July 28, 1868	80, 450
Track clearer, Railway	J. Callaghan	Saint Louis, Mo	July 28, 1868	80, 331
Track clearer, Railway	R. Dean	Boston, Mass	Feb. 17, 1863	37, 679
Track clearer, Railway	G. Fowler	Claverack, N. Y	Oct. 12, 1869	95, 787
Track clearer, Railway	M. J. Goodwin	Boston, Mass	Oct. 9, 1866	58, 634
Track clearer, Railway	S. Minkler	Chazy, N. Y	July 27, 1852	9, 153
Track clearer, Railway	P. Osgood	Waterville, Me	Feb. 23, 1858	19, 440
Track clearer, Railway	C. F. Riley	Philadelphia, Pa	July 7, 1868	79, 600
Track clearer, Railway	G. C. Sharp	New York, N. Y	Oct. 24, 1865	50, 634
Track clearer, Railway	R. A. Smith	Philadelphia, Pa	July 7, 1868	79, 606
Track clearer, Railway	R. R. Taylor	Reading, Pa	June 14, 1870	104, 375
Track-clearing car	A. Day	Detroit, Mich	Nov. 16, 1869	96, 784
Track-fastener	D. H. Hull	Plantsville, Conn	June 21, 1859	24, 462
Track for canal propulsion, Submerged	E. C. Harrington	Boston, Mass	May 24, 1864	42, 850
Track for conveying loads by gravity only, Adjustable.	A. W. Cramer	Bethany, Pa	Sept. 17, 1867	68, 959
Track-layer, Automatic	J. L. Nicolai	Chicago, Ill	Mar. 28, 1865	47, 033
Track-laying apparatus	P. Vitalé	Paris, France	Sept. 24, 1872	131, 581
Track-laying machine	J. R. Adams	San Francisco, Cal	Mar. 15, 1870	100, 834
Track-laying machine, Railway	W. D. Robertson	San Francisco, Cal	Sept. 22, 1868	82, 350
Track-laying vehicle	C. De Damseaux	New York, N. Y	Jan. 5, 1869	85, 569
Track-lifter	J. M. Batchelor	Foxcroft, Me	Aug. 30, 1870	106, 913
Track-lifter	C. De Bergne	Westminister, Great Britain.	Oct. 20, 1868	83, 138
Track-lifter	L. Grover	Homer, Mich	Dec. 17, 1872	133, 934
Track-lifter	G. J. Kinzel	Knoxville, Tenn	July 8, 1873	140, 713
Track-lifter	J. Morton	Cincinnati, Ohio	Jan. 2, 1872	122, 481
Track-lifter	T. Varin	Huntsville, Ala	Sept. 24, 1872	131, 724
Track lifter, Railway	A. H. Arnot	Morristown, Tenn	Feb. 11, 1873	135, 747
Track lifter, Railway	J. Morton	Winchester, Ind	Mar. 19, 1867	63, 078
Track lifter, Railway	J. Morton	Winchester, Ind	Dec. 24, 1867	72, 527
Track of wire or rope, Elevated	A. F. Havens	Brooklyn, N. Y	Feb. 27, 1872	123, 993
Track-rail for sliding doors	E. Parker	New Britain, Conn	Sept. 20, 1870	107, 530
Track, Railway	B. H. Latrobe	Baltimore, Md	Oct. 8, 1840	1, 808
Track, Railway-car	J. Kirkley and H. Gray	Chicago, Ill	Feb. 2, 1869	86, 416
Track raiser, Railway	P. Gillett	Hannibal, Mo	Feb. 23, 1864	41, 696
Track scraper, Railway	S. A. Otis	Boston, Mass	June 2, 1868	78, 537
Track-sprinkler, Horse-power	W. Brown	Oshkosh, Wis	Nov. 5, 1872	132, 797
Track tamper, Railway	P. Magee	New Orleans, La	Mar. 18, 1873	136, 845
Tracks, Device for preventing snow-drifts on railway.	L. D. Walrad	Sycamore, Ill	June 27, 1865	48, 464
Tracks, Foundation for railway	J. E. Halsey	New York, N. Y	Dec. 29, 1868	85, 304
Tracks, Gage for railway	W. Crooks	Saint Paul, Minn	Oct. 13, 1863	40, 247
Tracks, Machine for clearing snow from railway	R. Root and S. G. Holyoke	Galesburgh, Ill	Jan. 29, 1856	14, 169
Tracks, Mode of cleaning snow from railway	E. M. Luckett	Philadelphia, Pa	Jan. 28, 1862	34, 257
Traction-engine	D. H. Ball	Sinnamahoning, Pa	June 17, 1873	139, 997
Traction-engine	W. C. Bibb	Madison, Ga	May 28, 1872	127, 143
Traction-engine	J. H. Clapham	New York, N. Y	May 30, 1871	115, 280
Traction-engine	W. C. Douthett	Chicago, Ill	Sept. 13, 1870	107, 233
Traction-engine	G. W. Fitts	Oberlin, Ohio	Feb. 28, 1871	112, 135
Traction-engine	J. Greenslade	Steeple, England	Feb. 6, 1872	123, 395
Traction-engine	M. P. Hall	Hindsdale, N. Y	Aug. 23, 1870	106, 577
Traction-engine	T. F. Hall	Omaha, Nebr	June 28, 1870	104, 845
Traction-engine	M. A. Halstead	San Francisco, Cal	Sept. 19, 1871	119, 138
Traction-engine	W. W. Hanscom	San Francisco, Cal	Mar. 12, 1872	124, 574
Traction-engine	J. W. Hazen	West Hartford, Vt	Apr. 18, 1871	113, 767
Traction-engine	L. A. Herrmann	Paris, France	July 2, 1872	128, 543
Traction-engine	W. H. H. Heydrick	Chesnut Hill, Pa	July 16, 1872	129, 475
Traction-engine	W. Humberstone	Newton Brook, Canada	Sept. 24, 1872	131, 615
Traction engine	J. K. Lake	Chicago, Ill	Aug. 2, 1870	105, 956
Traction-engine	N. M. Mendenhall	Dublin, Ind	Nov. 11, 1873	144, 467
Traction-engine	C. C. Merriman	Brighton, N. Y	Sept. 21, 1869	95, 032
Traction-engine	O. A. Olmsted	Sebastopol, Cal	June 4, 1872	127, 507
Traction-engine	R. C. Parvin	Philadelphia, Pa	Oct. 10, 1871	119, 878
Traction-engine	R. C. Parvin	Philadelphia, Pa	Jan. 16, 1872	122, 848
Traction-engine	R. C. Parvin	Philadelphia, Pa	Jan. 16, 1872	122, 849
Traction-engine	L. Perkins	London, England	Sept. 23, 1873	143, 028
Traction-engine	D. C. Pierce	Portage, Mich	July 30, 1872	129, 984
Traction-engine	T. T. Prosser	Chicago, Ill	Jan. 10, 1871	110, 865
Traction-engine	J. B. Root	New York, N. Y	May 21, 1867	65, 012
Traction-engine	T. Scheffler and H. Morrison	Paterson, N. J	Jan. 7, 1868	73, 051
Traction-engine	J. H. Smith	Shell Mound, Miss	May 14, 1872	126, 842
Traction-engine	G. N. Tibbles	Hudson City, N. J	Nov. 9, 1869	96, 636
Traction-engine	G. N. Tibbles	Hudson City, N. J	July 16, 1872	129, 437
Traction-engine	G. N. Tibbles	Hudson, N. J	July 30, 1872	130, 085
Traction-engine for common roads	J. Frye	Brooklyn, N. Y	Sept. 5, 1865	49, 746
Traction-engine, Steam	I. F. Holloway	Saline Mines, Ill	May 29, 1860	28, 475
Traction-engine tire	O. Hyde	Oakland, Cal	Dec. 6, 1870	109, 907
Traction-engine wheel	A. G. Barrett	Barrett, Kans	Mar. 19, 1872	124, 778
Traction-engine wheel	W. Bray	Folkstone, England	Mar. 22, 1859	23, 289
Traction-engine wheel	C. W. Tremain	Chicago, Ill	May 2, 1871	114, 369
Traction-engine wheel	D. D. Williamson	New York, N. Y	Feb. 27, 1872	124, 186
Traction-engines, Elastic tire for	O. Hyde	Oakland, Cal	July 25, 1871	117, 422
Traction-engines, Elastic wheel for	C. W. Hermance	Schuylersville, N. Y	Sept. 12, 1871	118, 934
Traction or portable engine	D. W. Kellogg	Battle Creek, Mich	Jan. 21, 1873	135, 128
Traction-wheel	W. E. Bartlett	Edinburgh, North Britain.	May 6, 1873	138, 469
Traction-wheel	C. E. Brown	Florence, Mass	Aug. 27, 1872	130, 892
Traction-wheel	J. R. Cameron	Pittsburgh, Pa	May 12, 1863	38, 464

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Traction-wheel	G. W. Fitts	Oberlin, Ohio	Oct. 17, 1871	119, 922
Traction-wheel	J. G. Gallet	Saint Augustine, Ill	June 10, 1873	139, 711
Traction-wheel	O. Hyde	Oakland, Cal	July 18, 1871	117, 174
Traction-wheel	O. Hyde	Oakland, Cal	Apr. 29, 1873	138, 404
Traction-wheel	C. H. Perkins	Providence, R. I	May 6, 1873	138, 578
Traction-wheel	H. T. Stith	Peoria, Kans	May 6, 1873	138, 707
Traction-wheel	J. V. Strait	Litchfield, Ohio	Mar. 11, 1873	136, 677
Tracto-motive engine	N. W. Wheeler	Brooklyn, N. Y	Feb. 18, 1862	34, 471
T-rails, Block for repairing	S. Mason and E. M. Davis	Michigan City, Ind	May 18, 1858	20, 281
Train-boats, Coupling and steering	I. J. Wistar	Philadelphia, Pa	Dec. 24, 1872	134, 341
Train-signal, Railway	D. L. Schönberg	New York, N. Y	Dec. 12, 1871	121, 901
Tram-staff for facing millstones	T. Brown	Kenwood, N. Y	Mar. 1, 1859	23, 074
Tramway and pavement combined	B. C. Smith	Burlington, N. J	Dec. 27, 1870	110, 597
Tramway for turnpikes	J. M. Johnston	Mount Vernon, Mich	Apr. 2, 1872	125, 304
Tramway-plate	S. D. Tillman	Jersey City, N. J	Dec. 30, 1873	145, 033
Tramway-saddle	J. C. Robinson	Hamilton, Nev	Nov. 28, 1871	121, 297
Transfer-switch	H. Willard	Plainfield, Ind	June 12, 1866	55, 494
Transit-instrument	R. C. Matthewson	San Francisco, Cal	Oct. 26, 1858	21, 895
Transit-instrument	W. S. Trowbridge	Milwaukee, Wis	June 5, 1866	55, 396
Transit-instrument stand	J. and G. H. Bliss	Brooklyn, N. Y	May 24, 1870	103, 417
Transmission-wheels, Rubber fillings for the grooves of.	W. A. Roebling	Trenton, N. J	Mar. 19, 1872	124, 764
Transmitting power	T. J. Lowry	Conneautville, Pa	Apr. 16, 1861	32, 070
Transmitting power	O. Marland	Boston, Mass	Sept. 19, 1871	119, 164
Transmitting power	A. W. Morton	Morrisania, N. Y	May 3, 1870	102, 697
Transmitting power	J. Wolff	Burr Oak, Mich	Apr. 10, 1866	53, 914
Transmitting power and changing speed, Apparatus for.	S. Hiatt	Clayton, Ind	Feb. 7, 1871	111, 539
Transmitting power, Apparatus for	A. L. Freeman	South Boston, Mass	Oct. 5, 1869	95, 578
Transmitting power, Apparatus for	R. W. Norwood	Courtland, Ala	Oct. 11, 1870	108, 173
Transmitting power, Apparatus for	B. Williams	Jefferson, Tex	Feb. 8, 1870	99, 737
Transmitting power by means of a fluid passed through a pipe or tube, Apparatus for.	R. Spear	New Haven, Conn	Oct. 5, 1869	95, 614
Transmitting power, Device for	J. C. Cline	Philadelphia, Pa	Feb. 4, 1873	135, 466
Transmitting power, Mechanism for	F. P. Jaquith	Hoosick Falls, N. Y	June 13, 1871	115, 861
Transmitting power, Mechanism for	D. E. Myers	Logansport, Ind	Feb. 25, 1873	136, 334
Transmitting power to machinery, Apparatus for	W. H. Thorne	Philadelphia, Pa	Mar. 28, 1871	113, 113
Transom lifter and lock	J. F. Wollensak	Chicago, Ill	Mar. 11, 1873	136, 801
Transplanter	C. E. Brown	Amherst, Mass	Aug. 27, 1872	130, 893
Transplanter	H. C. Cook	Brenham, Tex	May 28, 1872	127, 150
Transplanter	C. R. Disbrow	Bath, N. Y	Oct. 8, 1867	69, 642
Transplanter	B. Shirley	Kelloggsville, N. Y	June 11, 1872	127, 713
Transplanter	J. P. Stanton and R. C. Pedrick	Pedricktown, N. J	Jan. 14, 1873	134, 775
Transplanter	C. L. Story	Calhoun, Ky	Sept. 3, 1872	131, 070
Transplanter	J. E. Waite	Hatfield, Mass	Nov. 7, 1871	120, 801
Transplanter for garden use	H. Carmichael	Rochester, N. Y	Nov. 19, 1867	71, 133
Transplanting and weeding machine	A. E. Lyman	Northampton, Mass	July 6, 1869	92, 198
Transplanting-device	J. W. Brook	Lynchburgh, Va	July 25, 1871	117, 378
Transplanting-implement	F. Milo	Kingston, Canada	Apr. 19, 1864	42, 391
Transplanting-implement	E. B. Roberts and W. Graham	Sturgis, Mich	May 17, 1870	103, 082
Transplanting-instrument	A. Davis	Lowell, Mass	Dec. 20, 1870	110, 211
Transplanting-machine	J. M. Gilbert	East Putney, Vt	Dec. 10, 1872	133, 849
Transplanting-tray	W. W. Smith	Montrose, Pa	Jan. 22, 1867	61, 479
Transport and conveyance, Means of	J. J. Reckers	Baltimore, Md	July 21, 1828	....
Transportation-case	E. Norton	Toledo, Ohio	Aug. 3, 1869	93, 218
Trap: *See* Air-trap. Animal-trap. Animal and bird trap. Animal and insect trap. Animal cage-trap. Ant-trap. Basin-trap. Bed-bug trap. Bird-trap. Burglar-trap. Drain-trap. Fish-trap. Fly-trap. Game-trap. Gopher-trap. Grease-trap. Hog-trap. Ice-lowering trap. Insect-trap. Mole-trap. Mouse-trap. Odor-trap. Pigeon-trap. Pipe-trap. Rat-trap. Roach-trap. Roach and bug trap. Sand-trap. Sewer-trap. Sewer-basin trap. Sewer gas-trap. Sewer-inlet trap. Sink-trap. Steam-trap. Steam-pipe trap. Steel-trap. Stench-trap. Tape-worm trap. Waste-trap. Waste-pipe trap. Water-trap. Water-closet trap.				
Trap	R. P. Buttles	Mansfield, Pa	Jan. 24, 1860	26, 883
Trap	D. Cole	Scott Township, Pa	Feb. 8, 1870	99, 537
Trap	J. H. Welty and G. Hollinger	Mount Carroll, Ill	June 11, 1872	127, 721
Trap and method of setting	T. A. Davis	New York, N. Y	June 5, 1849	6, 495
Trap-ball	C. F. Spencer	Cleveland, Ohio	May 23, 1871	115, 252
Trap-door	S. R. Bartlett	Detroit, Mich	Mar. 12, 1867	62, 809
Trap hook, Self-setting	D. McLean	Boston, Mass	July 14, 1857	17, 803
Trap-locking device	J. E. Corning	Rye, N. Y	Mar. 22, 1870	100, 986
Traveler's hook	W. R. Oatley	Rochester, N. Y	Nov. 12, 1867	70, 884
Traveling-bag	R. J. Butterfield and E. W. Hastings.	West Chelmsford and Boston, Mass.	Dec. 31, 1872	134, 357
Traveling-bag	T. R. Dunham	Newark, N. J	Apr. 24, 1860	28, 036
Traveling-bag	J. Lagowitz	Newark, N. J	May 5, 1868	77, 497
Traveling-bag	J. Lagowitz	Newark, N. J	Feb. 20, 1872	123, 830
Traveling-bag	V. Percheron	New York, N. Y	Jan. 23, 1866	52, 196
Traveling-bag	W. Roemer	Newark, N. J	July 31, 1866	56, 801
Traveling-bag	W. Roemer	Newark, N. J	Oct. 20, 1868	83, 212
Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Oct. 30, 1866	59, 271
Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Dec. 4, 1866	60, 255
Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Dec. 4, 1866	60, 256

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Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Mar. 12, 1867	62,778
Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Mar. 12, 1867	62,779
Traveling-bag	E. A. G. Roulstone	Roxbury, Mass	Mar. 12, 1867	62,892
Traveling-bag	R. Schmitt	Newark, N. J	Feb. 4, 1873	135,596
Traveling-bag	C. M. Schultz	East Cambridge, Mass	July 4, 1871	116,760
Traveling-bag	J. R. Smith	Chicago, Ill	Oct. 19, 1869	95,944
Traveling-bag	W. Wakenshaw	Newark, N. J	Mar. 3, 1868	75,083
Traveling-bag	Z. Walsh	Newark, N. J	Apr. 2, 1867	63,587
Traveling-bag	Z. Walsh	Newark, N. J	Dec. 31, 1867	72,944
Traveling-bag	C. A. Wellington	East Lexington, Mass	Apr. 21, 1868	76,962
Traveling-bag and valise	N. Groel	Newark, N. J	Nov. 12, 1867	70,832
Traveling-bag catch	H. C. Fenton and A. Bratt	Newark, N. J	July 9, 1872	128,868
Traveling-bag clasp	R. W. Chapman	Newark, N. J	Mar. 26, 1872	124,934
Traveling-bag, Extension	J. W. D. Patten	Washington, D. C	Apr. 12, 1870	101,910
Traveling-bag fastener	F. Coeller	New Haven, Conn	May 17, 1870	103,144
Traveling-bag fastening	C. and J. Walsh	Newark, N. J	Dec. 7, 1869	97,733
Traveling-bag frame	F. Fischbeck	Chicago, Ill	June 8, 1869	91,107
Traveling-bag frame	L. Frühinsfeld	Newark, N. J	Aug. 21, 1866	57,438
Traveling-bag frame	N. Groel	Newark, N. J	Aug. 7, 1866	56,930
Traveling-bag frame	G. Havell	Newark, N. J	Jan. 22, 1867	61,423
Traveling-bag frame	S. Lagowitz	Newark, N. J	Nov. 24, 1868	84,364
Traveling-bag, &c., frame	W. Roemer	Newark, N. J	Jan. 3, 1871	110,791
Traveling-bag frame	C. and Z. Walsh	Newark, N. J	Dec. 11, 1866	60,448
Traveling-bag frame	Z. Walsh	Newark, N. J	Jan. 26, 1864	41,414
Traveling-bag frames, Manufacture of	J. B. and C. F. Blakslee	Saint Petersburgh, Pa	Apr. 1, 1873	137,339
Traveling-bag, &c., handle	J. S. Topham	Washington, D. C	July 30, 1872	129,910
Traveling-bag-handle strap	A. Alexandre	New York, N. Y	Sept. 26, 1871	119,293
Traveling-bag-handle strap	A. Alexandre	New York, N. Y	May 7, 1872	126,432
Traveling-bag handles, Fastening for	M. Schwerin	Newark, N. J	May 28, 1872	127,273
Traveling-bag lock	S. Bourne, jr., and J. G. Cunningham.	New York, N. Y	May 1, 1860	28,057
Traveling-bag lock	H. Fautz	Newark, N. J	Nov. 19, 1867	70,981
Traveling-bag lock	J. B. Sargent	New Haven, Conn	May 31, 1870	103,781
Traveling-bag lock	C. H. Schubens	Newark, N. J	Dec. 31, 1867	72,914
Traveling-bag partitions, Mode of securing pockets to.	H. Braunhold	New York, N. Y	Aug. 8, 1871	117,858
Traveling-bag pocket	D. Read	New York, N. Y	Oct. 22, 1872	132,412
Traveling-bag protector or shield, Metallic	F. Fischbeck	Chicago, Ill	Feb. 9, 1869	86,742
Traveling-bags and mail-pouches, Frame for	S. D. Quimby	Winchester, Mass	May 13, 1856	14,900
Traveling-bags, Manufacture of	J. W. Lieb	Newark, N. J	Nov. 4, 1873	144,340
Traveling battery	C. Perley	New York, N. Y	Feb. 24, 1863	37,766
Traveling-casket	T. R. Timby	Medina, N. Y	Aug. 31, 1858	21,384
Traveling engine, Supplying steam to	E. Lamm	New Orleans, La	Apr. 9, 1872	125,577
Traveling engine, Supplying steam to	E. Lamm	New Orleans, La	July 30, 1872	129,969
Traversing-machine	V. Foland	Indianapolis, Ind	Aug. 2, 1870	105,930
Tray-bolt	G. Cooper	Jersey City, N. J	Oct. 4, 1859	25,631
Tray, Butler's	W. Hoffman	Benicia, Cal	Dec. 13, 1859	26,432
Tray, Child's table	G. G. Bonington	Brooklyn, N. Y	May 7, 1872	126,374
Tray, Child's table	W. M. Conger	Newark, N. J	Feb. 6, 1872	123,332
Tray, Child's table	A. Turner	Newark, N. J	May 11, 1869	90,036
Tray, Dough	J. G. Denius	Camden, Ohio	Apr. 9, 1867	63,617
Tray for drying fruit	G. W. Stevens	San Francisco, Cal	Apr. 1, 1873	137,502
Tray for gas-purifier	B. E. Chollar	Leavenworth, Kans	Dec. 24, 1867	72,455
Tray-holder	O. Fahnestock	Indianapolis, Ind	Jan. 24, 1871	111,186
Tray-holder	O. Fahnestock	Indianapolis, Ind	Mar. 19, 1872	124,730
Tray or show-board	D. H. Klotz	Philadelphia, Pa	Jan. 14, 1873	134,898
Tray, platter, &c., Coated sheet-iron	J. Armbruster	Philadelphia, Pa	July 18, 1871	117,139
Tray, Starch	J. A. Owens	Little Falls, N. Y	May 26, 1868	78,320
Tray, Sugar	T. W. Maples	Philadelphia, Pa	Oct. 15, 1872	132,165
Tray, Tea	H. B. Beach	West Meriden, Conn	May 9, 1871	114,636
Tray, Tea	S. N. Trump	Baltimore, Md	Oct. 6, 1868	82,894
Trays, Machine for making wooden	H. Barber	Greenfield, Mass	July 28, 1868	80,382
Trays, Machine for manufacture of wooden	C. H. Dana	West Lebanon, N. H	May 10, 1870	102,920
Trays, Machine for shaping wooden	H. and A. J. Blake	Rindge and Fitzwilliam, N. H.	Nov. 2, 1869	96,301
Trays, Machine for shaping wooden	A. Howard, jr	Readsborough, Vt	June 2, 1863	38,745
Trays, Machinery for making wooden	D. M. Cummings	Enfield, N. H	Oct. 10, 1871	119,828
Tread-power	J. H. Dull	Mansfield, Ohio	July 5, 1870	105,055
Tread-power, Application of brake to driving-wheels of.	J. Curran	Kirkwood, N. Y	Aug. 27, 1861	33,134
Tread-power machine	J. B. Pauley	Tiskilwa, Ill	Sept. 29, 1868	82,543
Tread-power, Mode of lubricating wheels in	S. D. Ely	Millstone, N. J	Mar. 15, 1870	100,875
Tread-power, Moving	L. Koch	New York, N. Y	Oct. 25, 1859	25,903
Tread-wheel	C. Watson	Addison Township, Ohio	Dec. 22, 1827	....
Tread-wheel for applying horse-power, &c	A. Coats	Truxton, N. Y	Jan. 23, 1833	....
Treadle	A. M. Allen	New York, N. Y	Dec. 27, 1870	110,533
Treadle	J. B. Bolinger	Detroit, Mich	Aug. 24, 1869	93,955
Treadle	J. B. Bolinger	Michigan City, Ind	Mar. 18, 1873	136,810
Treadle	W. S. Coon	Rochester, N. Y	Mar. 22, 1870	101,104
Treadle	W. Felzer	Frank Hill, Minn	Nov. 11, 1873	144,525
Treadle	J. G. Folsom and W. C. Anderson.	Winchendon, Mass., and Saint Louis, Mo.	Apr. 2, 1867	63,494
Treadle	A. Fontayne	Cincinnati, Ohio	Dec. 29, 1868	85,375
Treadle	L. Heins	Brunswick, Ga	Oct. 21, 1873	143,902
Treadle	G. B. Kirkham	New York, N. Y	Apr. 18, 1871	113,776
Treadle	G. B. Kirkham	New York, N. Y	Mar. 11, 1873	136,603
Treadle	C. P. Leavitt	New York, N. Y	May 16, 1871	114,880
Treadle	O. H. Needham	New York, N. Y	Mar. 22, 1870	101,152
Treadle	J. H. Osborn	Guelph, Canada	Mar. 25, 1873	137,090
Treadle	C. C. Parsons	New York, N. Y	Aug. 17, 1869	93,740
Treadle	G. K. Proctor	Salem, Mass	Mar. 7, 1871	112,488
Treadle	G. K. Proctor	Salem, Mass	Sept. 12, 1871	118,971
Treadle	G. K. Proctor and F. D. Hamilton.	Salem, Mass	May 9, 1871	114,509
Treadle	A. B. Shaw	Medford, Mass	Mar. 28, 1871	113,210
Treadle	A. B. Shaw	Medford, Mass	Oct. 31, 1871	120,461
Treadle	C. Stebbins	Pike, N. Y	Aug. 17, 1869	93,842

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Treadle	J. Tisdale, J. Putnam, and H. N. Allen.	Norwood, Mass	Oct. 7, 1873	143, 543
Treadle	A. P. Torrence	Columbus, Ga.	Nov. 20, 1866	59, 876
Treadle-bearing and oil-shield	N. D. Stoops	Philadelphia, Pa	May 9, 1871	114, 621
Treadle-brace	G. H. Hurd	Memphis, Tenn	Nov. 7, 1871	120, 648
Treadle, Compound	O. H. Needham	New York, N. Y	Sept. 20, 1870	107, 619
Treadle-connection for machinery	A. A. Raymond	Salem, Mass	Sept. 11, 1860	29, 994
Treadle for machinery	G. O. Conrad	Harrisonburgh, Va.	July 16, 1872	129, 107
Treadle for machinery	A. Hitchcock	New York, N. Y	July 7, 1868	79, 572
Treadle for machinery	J. H. Singer	New York, N. Y	Sept. 7, 1869	94, 518
Treadle for operating machinery	W. S. Hall	Quincy, Mass.	Feb. 9, 1869	86, 833
Treadle for operating machinery	J. J. Kimball	Naperville, Ill	Jan. 10, 1865	45, 837
Treadle for propelling machinery	W. C. Abbott	Niles, N. Y	Oct. 1, 1867	69, 382
Treadle-mechanism	B. B. Chandler, jr	Boston, Mass	Sept. 16, 1873	142, 770
Treadle-motion	A. M. Allen	New York, N. Y	Oct. 18, 1870	108, 427
Treadle-motion	A. L. Dewey	Westfield, Mass	Apr. 18, 1865	47, 282
Treadle-motion	E. A. Goodes	Philadelphia, Pa	Oct. 26, 1869	96, 221
Treadle-motion	C. M. Guess	New Orleans, La	Aug. 30, 1870	106, 813
Treadle-motion	A. W. Harris	Providence, R. I	Apr. 7, 1863	38, 107
Treadle-motion	E. W. Keyes	Charlestown, Mass	Mar. 14, 1871	112, 720
Treadle-motion	E. W. Keyes and C. K. Bradford.	Charlestown and Boston, Mass.	Oct. 24, 1871	120, 200
Treadle-motion	E. P. Ryder	Brooklyn, N. Y	Mar. 6, 1866	53, 046
Treadle-motion	G. B. Safford	Burlington, Vt	Aug. 30, 1870	106, 873
Treadle-movement	J. Evans	Rosenhayn, N. J	May 27, 1873	139, 305
Treadle-movement	O. B. Potter	New York, N. Y	June 14, 1870	104, 350
Treadle-power	W. Reed	Allentown, Pa	Aug. 22, 1871	118, 273
Treadle-spring, Auxiliary	H. Lull	Hoboken, N. J	May 23, 1871	115, 073
Treadle-stand	H. C. Spalding	Brooklyn, N. Y	Feb. 22, 1859	23, 048
Treadle, Universal-jointed	A. Nielson	New York, N. Y	Oct. 11, 1870	108, 172
Treadles, Anti-reversing attachment to	A. Warth	Stapleton, N. Y	May 8, 1866	54, 630
Treble-tree	W. W. Mathews	Yates City, Ill	Mar. 10, 1868	75, 440
Tree:				
See Axle-tree. Swingle-tree.				
Double-tree. Treble-tree.				
Gig-tree. Trestle-tree.				
Pad-tree. Triple-tree.				
Single-tree. Whiffletree.				
See, also, Equalizer. Evener.				
Tree and log cutting machine	W. Ackerman	Flint, Mich	Apr. 15, 1862	34, 933
Tree and plant protector	W. F. Eaton	Portland, Me.	Apr. 30, 1872	126, 193
Tree and plant protector	D. R. Prindle	East Bethany, N. Y	Oct. 4, 1870	107, 960
Tree and plant protector	J. Weed	Muscatine, Iowa	Oct. 21, 1862	36, 749
Tree and plant sprinkler	H. Tyler	Gaines, N. Y	Apr. 27, 1869	89, 362
Tree-box	J. Gibson, jr	Albany, N. Y	Sept. 12, 1871	118, 925
Tree-box	J. W. L. Letherbury	Sandoval, Ill	Sept. 15, 1868	82, 234
Tree-box	H. Merrick	Brooklyn, N. Y	Oct. 11, 1870	108, 280
Tree-box	E. O. Schwagerl	Saint Louis, Mo	May 30, 1871	115, 531
Tree-box	S. Scotton	Richmond, Ind	May 5, 1868	77, 662
Tree-box	S. Scotton	Richmond, Ind	May 25, 1869	90, 398
Tree-box, Portable	H. A. Graef	Brooklyn, N. Y	Mar. 19, 1867	63, 035
Tree-digger	J. H. Black	East Windsor, N. J	Mar. 26, 1867	63, 200
Tree-feeding tube	J. C. Fish	Barnstable, Mass	Jan. 21, 1868	73, 442
Tree-protector	A. S. Adams	Waynesborough, Pa	Nov. 8, 1870	109, 098
Tree-protector	B. L. Alley and T. W. Shapleigh.	Salem and Cambridgeport, Mass.	Dec. 6, 1870	109, 859
Tree-protector	C. Ayers	Farmington Centre, Wis	Feb. 11, 1873	135, 685
Tree-protector	F. Bailey	Westborough, Mass	Sept. 3, 1872	131, 046
Tree-protector	B. Beach	West Meriden, Conn	Apr. 10, 1866	53, 772
Tree-protector	S. Brunson	Benton Harbor, Mich	June 21, 1870	104, 418
Tree-protector	F. Clymer	Galion, Ohio	Nov. 27, 1866	59, 967
Tree-protector	J. Dennis, jr	Portsmouth, R. I	June 21, 1838	799
Tree-protector	F. L. Faries	Wilkesbarre, Pa	Feb. 2, 1869	86, 382
Tree-protector	J. Foster	Sandwich, Mass	Feb. 16, 1838	19, 357
Tree-protector	G. Frost	Cambridge, Mass	Apr. 24, 1866	54, 141
Tree-protector	T. Hilton	Providence, R. I	Feb. 7, 1865	46, 298
Tree-protector	G. H. Hume	Paola, Kans	Aug. 12, 1873	141, 716
Tree-protector	H. Knapp	Walworth, N. Y	Mar. 22, 1870	101, 135
Tree-protector	D. Knowlton	Liberty, Me	Apr. 10, 1866	53, 836
Tree-protector	D. P. Mathews	Winthrop, Mass	Sept. 11, 1866	57, 937
Tree-protector	W. and D. McCaine	Groton, Mass	June 19, 1866	55, 776
Tree-protector	D. Mendenhall	Fairfield, Iowa	Oct. 16, 1866	58, 866
Tree-protector	D. Mendenhall	Fairfield, Iowa	Oct. 29, 1867	70, 349
Tree-protector	B. Merritt, jr	Newton Corner, Mass	Nov. 15, 1864	45, 065
Tree-protector	B. Merritt, jr	Newton, Mass	Nov. 13, 1866	59, 623
Tree-protector	J. Neff	Dallastown, Pa	Dec. 16, 1873	145, 585
Tree-protector	H. L. Ordway	Ipswich, Mass	Aug. 25, 1863	39, 672
Tree-protector	C. Parks	Milan, Ohio	Jan. 17, 1871	110, 996
Tree-protector	J. L. Piper	Winthrop, Mass	Apr. 3, 1866	53, 672
Tree-protector	H. B. Record	Turner, Me	June 3, 1862	35, 471
Tree-protector	A. T. Ring	Newtonville, Mass	July 18, 1865	48, 838
Tree-protector	L. Sanford	New Haven, Conn	Aug. 15, 1865	49, 440
Tree-protector	A. Seymour	Hartford, Conn	Nov. 15, 1864	45, 087
Tree-protector	F. Shepherd	New Haven, Conn	Oct. 11, 1864	44, 667
Tree-protector	J. C. Starbuck	Cambridge, Mass	Aug. 15, 1865	49, 453
Tree-protector	W. W. Taylor	South Dartmouth, Mass	Aug. 21, 1860	29, 730
Tree-protector	W. J. Towne	Newton, Mass	Sept. 13, 1864	44, 238
Tree-protector	C. H. Trumbull	Marion, N. Y	Dec. 13, 1870	110, 091
Tree-protector	T. Tufts	Somerville, Mass	Apr. 24, 1866	54, 232
Tree-protector	C. H. Whitlock	Whiting, Vt	Sept. 6, 1864	44, 131
Tree, Revolving Christmas	F. A. Geisler	Bristol, R. I	May 25, 1869	90, 441
Tree-sawing machine	S. H. Hamilton	New York, N. Y	Dec. 7, 1837	502
Tree-tub	J. Boober	Dayton, Ohio	May 9, 1871	114, 638
Trees and shrubs, Propagating	S. Hutchinson	Bristol, N. H	May 25, 1869	90, 548
Trees, Apparatus for preventing the curculio from ascending fruit.	W. H. Noble	Bridgeport, Conn	Jan. 21, 1868	73, 458
Trees, Combined ligature, protector, and fertilizing-bag for fruit.	S. P. Gilbert	Racine, Wis	June 13, 1871	116, 001

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Invention.	Inventor.	Residence.	Date.	No.
Trees, &c., Compound for fruit	J. R. Westover	Town Hill, Pa	Mar. 5, 1872	124, 413
Trees, Compound for preserving fruit	L. C. Gifford	Monticello, Ill	May 16, 1871	114, 798
Trees, Composition for destroying worms in fruit	S. Kepner	Pottstown, Pa	Oct. 4, 1870	108, 030
Trees, Composition for invigorating fruit and forest.	W. Vermilya	Dayton, Ohio	May 7, 1867	64, 602
Trees, Composition for preserving fruit	L. Smith	Goreuch's Mills, Md	Dec. 13, 1864	45, 441
Trees, Composition for renovating and invigorating apple.	C. F. Smith	Hillsborough, N. H	Oct. 29, 1872	132, 543
Trees, Device for sustaining	W. H. Livingston	New York, N. Y	Nov. 6, 1860	30, 584
Trees, Extracting and transporting	J. Ryder	Sing Sing, N. Y	Dec. 22, 1868	85, 135
Trees from borers, Device for protecting	G. W. Dudderar	Unionville, Md	Jan. 15, 1867	61, 177
Trees from canker-worms, Mode of protecting	D. Newhall	Lynn, Mass	Oct. 31, 1840	1, 846
Trees from canker-worms, &c., Mode of protecting	A. T. Nute	Roxbury, Mass	Nov. 10, 1857	18, 598
Trees from canker-worms, &c., Mode of protecting	P. C. Rowe	Boston, Mass	Nov. 10, 1857	18, 604
Trees from curculio, Protecting fruit	R. J. Walker	Goshen, Ohio	July 19, 1870	105, 526
Trees from injury while plowing, Protecting	R. Alden	East Toledo, Ohio	Mar. 7, 1865	46, 616
Trees from insects, Apparatus for protecting	N. Potter, jr	South Dartmouth, Mass	July 10, 1860	29, 098
Trees from insects, Compound for protecting	W. W. Taylor	Dartmouth, Mass	July 27, 1858	21, 033
Trees, Instrument for pruning	D. P. Chamberlin	Hudson, Mich	Aug. 21, 1860	29, 669
Trees, Machine for felling	A. P. Torrence	Oxford, Ga	July 3, 1860	29, 819
Trees, Machine for girdling and felling	A. P. Torrence	Oxford, Ga	Dec. 6, 1859	26, 385
Trees, &c., Machine for tearing up	S. Gray	Lawrence County, N. Y	July 15, 1818	....
Trees, Method of destroying lice on	M. O. Sullivan	Thompson Station, Ill	July 24, 1866	56, 633
Trees, Preventing canker-worms in	J. Kendall	Leominster, Mass	Jan. 4, 1816	....
Trees, Preventing canker-worms from destroying fruit.	P. Adams	Newbury, Mass	June 19, 1812	....
Trees, &c., Preventing insects from injuring fruit.	C. Fisher	Leesville, Ohio	Sept. 12, 1865	49, 869
Trees, Process for treating fruit	I. Bolmer	Franklin, Ohio	Oct. 13, 1863	40, 235
Trees, Remedy for disease in	H. Funnell	Huntington, N. Y	Apr. 4, 1865	47, 099
Trees, Retarding blooming of fruit	C. Fisher	Leesburgh, Ohio	Apr. 5, 1864	42, 176
Trees, timber, &c., Mode of splitting stumps of	J. Norton	Rosherville, England	Feb. 18, 1862	34, 443
Trees to prevent the ravages of insects, Treating fruit.	S. J. Everett	Mahoney City, Pa	Jan. 24, 1871	111, 185
Trees, vines, &c., Composition to prevent the premature decay of.	B. Best	Dayton, Ohio	Mar. 5, 1861	31, 587
Treeing-stick	L. L. Pollard	Worcester, Mass	Apr. 12, 1859	23, 606
Treenail	J. Baird	New York, N. Y	Oct. 29, 1867	70, 151
Treenail, &c., for ships	T. Rowell	Hartford, Vt	Dec. 13, 1821	....
Treenail-machine	I. W. Hoagland	Jersey City, N. J	May 22, 1855	12, 909
Treenail-machine	J. Kirby	Cincinnati, Ohio	Aug. 21, 1849	6, 659
Treenail-machine	N. L. Tomlinson	New York, N. Y	June 2, 1868	78, 554
Treenail-machines, Device in	E. Webber	Gardiner, Me	Jan. 29, 1856	14, 173
Treenails, banisters, rake-handles, &c., Machine for turning.	J. E. Andrews	Boston, Mass	Aug. 30, 1838	903
Treenails, Machinery for dressing	J. Fitzgerald	New York, N. Y	Aug. 28, 1849	6, 670
Treenails, Machinery for turning	E. Webber and N. O. Mitchell	Gardiner, Me	Feb. 5, 1847	4, 953
Trellis, Flower	P. B. Sheldon	Bath, N. Y	Oct. 11, 1870	108, 195
Trellis, Grape	I. D. Custer	Davenport, Iowa	Aug. 22, 1871	118, 348
Trellis, Grape	B. F. Elliott	Cedar Rapids, Iowa	July 24, 1866	56, 541
Trellis, Grape	B. F. Elliott	Cedar Rapids, Iowa	Dec. 18, 1866	60, 623
Trellis, Grape	W. M. Heath	Wataga, Ill	Nov. 15, 1870	109, 207
Trellis, Grape	A. Rathbun	Smith's Mills, N. Y	Mar. 23, 1869	88, 074
Trellis, Grape	D. T. Rickey	Marshalltown, Iowa	Jan. 23, 1866	52, 205
Trellis, Grape	A. Scofield	Starkey, N. Y	Oct. 13, 1868	82, 996
Trellis, Grape and vine	T. G. Yeomans	Walworth, N. Y	Nov. 17, 1868	84, 154
Trellis, Hop	N. F. Guffin	Governor's Corners, N. Y.	May 28, 1867	65, 214
Trellis, Strawberry	W. W. Wilcox	Middletown, Conn	Aug. 27, 1867	68, 271
Trellis, Vine	C. Seyler	Cleveland, Ohio	June 2, 1868	78, 487
Trellis, Vine	L. H. Whitney	Vallejo, Cal	Sept. 3, 1867	68, 475
Trellises, Device for attaching vines to	E. F. Underhill	New York, N. Y	Dec. 1, 1868	84, 519
Tremolo	L. Louis	Boston, Mass	Aug. 11, 1868	80, 979
Tremolo-attachment	R. W. Carpenter	New York, N. Y	June 27, 1865	48, 366
Tremolo for wind-instruments	R. W. Pain	New York, N. Y	Mar. 2, 1869	87, 427
Tremolos, Operating fan	J. H. Dow	Birmingham, Conn	Apr. 19, 1870	102, 096
Trenches and laying pipes, Machine for cutting	E. Cornell	Ithaca, N. Y	Feb. 28, 1844	3, 456
Trenches, Extensible brace for supporting	S. G. McKiernan	Paterson, N. J	Dec. 2, 1873	145, 116
Trenches, Extensible brace for supporting	W. Reilly	Newark, N. J	Dec. 2, 1873	145, 126
Trenching and hoisting apparatus	A. G. Smith	Cleveland, Ohio	July 16, 1867	66, 745
Trestle	J. E. Gedney	Petaluma, Cal	Apr. 28, 1868	77, 273
Trestle	J. Goodher	Burlington, N. J	Apr. 27, 1869	89, 306
Trestle	M. M. Lucky	Indianapolis, Ind	July 29, 1873	141, 228
Trestle	W. Tussey	Philadelphia, Pa	June 4, 1872	127, 442
Trestle	J. Witmer	Niagara, N. Y	July 13, 1869	92, 501
Trestle and scaffold supporter	J. Reef, jr	Olney, Ill	July 30, 1867	67, 347
Trestle, Builders'	D. L. Smith	Vicksburgh, Miss	June 25, 1872	128, 332
Trestle, Extension	O. Sliker	Lincoln, Ill	June 29, 1869	91, 979
Trestle or horse, Extension	G. H. Pierce and M. T. Glimsetal.	Mineral Point, Wis	June 23, 1868	79, 079
Trestle, Self-adjusting	H. Davis	Abingdon, Ill	Jan. 29, 1867	61, 521
Trestle-tree, Ship's	H. Townsend	Philadelphia, Pa	Apr. 4, 1871	113, 471
Trestle-tree for vessels	H. Townsend, jr	Philadelphia, Pa	Feb. 15, 1870	99, 974
Trestle-tree for vessels, Construction and rigging of	J. M. Hudson	New York, N. Y	July 31, 1866	56, 754
Trick-lock, Double-bolt	L. M. Hartley	Kensington, Pa	Dec. 11, 1849	6, 936
Tricylindric machines by water-falls, Operating	E. Burgonzeo	New York	Nov. 2, 1831	....
Trigger for fire-arms, Hair	P. F. Charpie	Mount Vernon, Ohio	Oct. 13, 1857	18, 387
Trigger, Hair	F. Schenck	San Antonio, Tex	Aug. 24, 1869	94, 035
Trigger, Hair	F. Schenck	San Antonio, Tex	Aug. 24, 1869	94, 036
Trigonometer	W. Bolles	Griswold, Conn	July 17, 1824	....
Trigonometer for ascertaining the sides of angles	W. Chamberlin	....	June 28, 1809	....
Trigonometry, Apparatus for illustrating	E. A. Hickman	Independence, Mo	May 30, 1871	115, 318
Trigonometry, Apparatus for illustrating spherical	S. N. Maning	Kankakee, Ill	Oct. 27, 1868	83, 302

Trimmer:

See Billiard-cue trimmer. Bolt-trimmer. Bolt and rivet trimmer. Boot and shoe work trimmer. Brush-trimmer. Cage-trimmer. Cigar-trimmer. Cue-trimmer. Edge-trimmer. Hedge-trimmer.

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Lamp-trimmer. Sod-trimmer.				
Lamp-wick trimmer. Straw-braid trimmer.				
Leather-trimmer. Tooth-brush trimmer.				
Metal-trimmer. Tug-trimmer.				
Oil-cake trimmer. Wall-paper trimmer.				
Paper-trimmer. Welt-trimmer.				
Road-trimmer. Wick-trimmer.				
Trimming	O. M. Chamberlain	New York, N. Y	Apr. 1, 1873	137, 344
Trimming	W. Murray	New York, N. Y	Apr. 15, 1873	137, 857
Trimming	W. Murray	New York, N. Y	Apr. 15, 1873	137, 858
Trimming	W. Murray	New York, N. Y	Oct. 28, 1873	144, 031
Trimming	W. Murray	New York, N. Y	Oct. 28, 1873	144, 032
Trimming	W. Murray	New York, N. Y	Oct. 28, 1873	144, 033
Trimming	J. Thomas	Hoboken, N. J	June 24, 1873	140, 174
Trimming	W. Walker	Brooklyn, N. Y	Nov. 18, 1873	144, 807
Trimming, Center-point	A. Hecht	New York, N. Y	Mar. 21, 1871	112, 915
Trimming, Dress	G. A. Johnson	Oxford, Conn	Mar. 24, 1868	75, 921
Trimming, Embossed	W. Sidenberg	New York, N. Y	July 16, 1872	129, 604
Trimming, Fluted	L. H. Mandelbaum	New York, N. Y	Dec. 1, 1868	84, 641
Trimming for garments, Galloon	E. Bredt	New York, N. Y	Oct. 9, 1866	58, 584
Trimming for under-garments, Galloon	E. Bredt	New York, N. Y	Oct. 9, 1866	58, 583
Trimming for wearing-apparel	A. A. Rockwell	New York, N. Y	Apr. 17, 1866	54, 018
Trimming guard-knife	F. H. Lander and A. C. Hill	Lynn, Mass	Apr. 9, 1872	125, 578
Trimming-jack	G. J. Olendorf, E. R. Tripp, and S. Harper.	Middlefield and Cooperstown, N. Y.	Apr. 7, 1857	16, 991
Trimming, Plaited	F. A. Kursheedt	New York, N. Y	July 5, 1870	105, 095
Trimming, Plaited	A. Schultz	Hoboken, N. J	Jan. 9, 1872	122, 663
Trimming, Ruffled	E. C. Wooster	New York, N. Y	Dec. 29, 1868	85, 502
Trimming, Woven	C. Lambert	Paterson, N. J	Mar. 22, 1870	101, 026
Trimmings, Machine for making	E. J. Lawrent	New York, N. Y	Apr. 28, 1863	38, 312
Trimmings, Machine for maki g plaited and puffed	W. Murray	New York, N. Y	Dec. 24, 1872	134, 216
Trimmings, Machine for producing folded	C. O. Crosby and H. Kellogg	New Haven, Conn	Aug. 5, 1862	36, 074
Trimmings, Manufacture of dress	W. J. Cheyney and E. F. Dieterichs.	Wallingford and Philadelphia, Pa.	Oct. 1, 1867	69, 317
Tripod-head, Surveyor's	W. J. Young	Philadelphia, Pa	July 13, 1858	20, 915
Triturator	E. Brady	New York, N. Y	Feb. 28, 1871	112, 213
Trivet	J. Peckover	Cincinnati, Ohio	May 28, 1872	127, 266
Troche	S. E. Jonson, jr	Brooklyn, N. Y	Nov. 2, 1869	96, 324
Troche of buchu, Compound	H. J. Hamilton	Brooklyn, N. Y	June 7, 1870	103, 876
Trolling-hook	G. Sinclair	Chicago, Ill	Feb. 20, 1872	123, 844
Trolling-spoon	W. Harper and W. Smith	Montreal, Canada	Sept. 23, 1873	143, 146
Trolling-spoon	J. H. Mann	Syracuse, N. Y	Nov. 21, 1871	121, 182
Trotting-gear	H. Schmalhausen	Bridgeport, Ill	Sept. 16, 1873	142, 871
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Rain-trough.				
Eave-trough. Salt-trough.				
Feed-trough. Sheep-trough.				
Grindstone-trough. Wagon extension-trough.				
Gutter-trough.				
Trough, Invertible	F. J. Goldsmith	Concord, Ohio	Feb. 7, 1871	111, 529
Trowel	L. D. Phillips	Chicago, Ill	Nov. 4, 1856	16, 021
Trowel	F. Reed	Canton, Mass	June 21, 1870	104, 644
Trowel	S. F. Streeter	Bernardston, Mass	Mar. 18, 1873	136, 878
Trowel	A. Walker	Worcester, Mass	Mar. 29, 1870	101, 396
Trowel, Corner	S. F. Streeter	Bernardston, Mass	Nov. 8, 1870	109, 073
Trowel, Mason's	F. Bisbee	Scituate, Mass	Feb. 19, 1861	31, 436
Trowel, Plastering	S. Ault	Bridgtown, England	July 13, 1869	92, 506
Trowel, Plastering	J. C. Dietrich and C. I. Humphrey.	Rochester, N. Y	June 29, 1869	92, 022
Trowel, Plastering	J. Flint	Rochester, N. Y	Oct. 21, 1862	36, 757
Trowel, Plastering	P. J. Hogan	Cincinnati, Ohio	Apr. 6, 1869	88, 712
Trowel, Plastering	E. G. Howe	Millbury, Mass	Mar. 31, 18C3	38, 044
Trowel, Plastering	T. A. Madison	Terre Haute, Ind	Apr. 2, 1867	63, 542
Trowsers, Cutting	T. Clancy	Chicago, Ill	Oct. 22, 1861	33, 516
Truck	W. P. F. Beggs	Philadelphia, Pa	Dec. 3, 1867	71, 685
Truck	O. F. Burton	Jersey City, N. J	July 28, 1868	80, 388
Truck	J. Chisholm and L. C. Mayer	Toronto, Canada	Jan. 28, 1873	135, 205
Truck	A. E. Hovey	West Waterford, Vt	Feb. 26, 1867	62, 420
Truck	H. Pratt and T. T. Munhall	Fairbury, Ill	Dec. 30, 1873	145, 967
Truck	M. L. Senderling	Jersey City, N. J	Jan. 28, 1873	135, 247
Truck	A. Van Haagen and J. H. Cooper.	Philadelphia, Pa	Jan. 9, 1872	122, 686
Truck adapted to different gages of tracks, Railway.	C. D. Tisdale	East Boston, Mass	June 14, 1864	43, 163
Truck, Adjustable railway	A. V. Sandford	Union Centre, N. Y	Aug. 2, 1870	105, 984
Truck and axle, Car	G. B. Bryant	Pottsville, Pa	Oct. 31, 1871	120, 458
Truck and brake, Railway-car	E. G. Otis	Bergen, N. J	May 25, 1852	8, 973
Truck and car-brake, Safety	W. C. Smith	New Britain, Pa	Sept. 6, 1870	107, 115
Truck and engine, Locomotive	J. P. Woodbury	Boston, Mass	May 14, 1867	64, 821
Truck and hoist, Combined	H. Kruse	Philadelphia, Pa	June 11, 1872	127, 897
Truck and sack-holder, Hand	G. and J. Smoker	Smithville, Ohio	Apr. 28, 1868	77, 412
Truck and spring, Car	L. H. West	Cambridge, Mass	Mar. 26, 1867	63, 190
Truck and wagon reach	P. Hicks	Chicago, Ill	Oct. 27, 1868	83, 497
Truck, Baggage	W. H. Brown	Bangor, Me	Jan. 24. 1871	111, 104
Truck, Baggage	W. H. Brown	Bangor, Me	Dec. 19, 1871	121, 928
Truck, Barrel	V. Bell	Minneapolis, Minn	Jan. 28, 1873	135, 309
Truck, Barrel	E. Grosjean	Pittsburgh, Pa	Apr. 6, 1869	88, 564
Truck, Barrel	A. F. Morey	Greenbush, Ill	Mar. 21, 1868	75, 954
Truck bracket, Railway-car	T. F. Allen	Dyersville, Iowa	Mar. 27, 1860	27, 608
Truck, Brick	N. B. Heafer	Bloomington, Ill	Jan. 7, 1868	73, 097
Truck, Brick	J. M. Mayer	Rondout, N. Y	June 15, 1869	91, 358
Truck, Brick	R. A. Smith	Newburyport, Mass	Oct. 21, 1873	143, 858
Truck, Brick-off-bearing	S. A. Stoddard	Bangor, Me	July 16, 1872	129, 434
Truck, Brick-machine	F. L. Hall	Oneida, N. Y	Feb. 20, 1872	123, 777

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Truck, Brick-machine off-bearing	W. Olds	Albany, Ill	Nov. 15, 1870	109, 339
Truck, Car	C. F. Allen	Aurora, Ill	Apr. 24, 1866	54, 085
Truck, Car	C. F. Allen	Aurora, Ill	June 18, 1867	65, 788
Truck, Car	C. F. Allen	Paw Paw, Mich	May 12, 1868	77, 858
Truck, Car	J. Bayzore	Freeport, Ill	Mar. 17, 1868	75, 513
Truck, Car	L. Bissell	New York, N. Y	Mar. 12, 1867	62, 727
Truck, Car	A. Bridges	Newton, Mass	May 27, 1862	35, 410
Truck, Car	A. Bridges	Newton, Mass	Mar. 10, 1868	75, 357
Truck, Car	N. F. Bryant	Boston, Mass	Dec. 27, 1864	45, 583
Truck, Car	H. T. Carter	Saint Louis, Mo	Jan. 14, 1868	73, 295
Truck, Car	S. A. Chase	Boston, Mass	Nov. 12, 1867	70, 696
Truck, Car	W. Dawson	Pottsville, Pa	Apr. 24, 1866	54, 125
Truck, Car	J. and A. M. Dean	Lincolnville and Vinalhaven, Me.	July 16, 1872	129, 110
Truck, Car	J. Q. A. De Huff	Summitville, Iowa	May 14, 1867	64, 640
Truck, Car	F. D. Dellinger and S. H. Hunt	Waynesborough, Va	Aug. 29, 1871	118, 518
Truck, Car	J. H. Densmore	Boston, Mass	Aug. 11, 1868	80, 858
Truck, Car	L. I. Fleming	Mobile, Ala	Jan. 30, 1872	123, 163
Truck, Car	E. Frost	Georgetown, D. C	May 13, 1862	35, 228
Truck, Car	G. H. Griggs	Worcester, Mass	June 21, 1870	104, 580
Truck, Car	C. H. Hall	New York, N. Y	Aug. 15, 1865	49, 400
Truck, Car	D. J. Happersett	Coatesville, Pa	Oct. 16, 1866	58, 816
Truck, Car	J. P. Hart	Chicago, Ill	Mar. 12, 1867	62, 744
Truck, Car	B. Heiderich	Brady's Bend, Pa	Nov. 13, 1866	59, 601
Truck, Car	A. Higley	Cleveland, Ohio	Feb. 15, 1870	99, 774
Truck, Car	E. Hipkins	Burford Township, Canada	Feb. 21, 1871	111, 934
Truck, Car	J. Hoopes	Philadelphia, Pa	Apr. 22, 1862	35, 024
Truck, Car	J. S. Howard	Schenectady, N. Y	Oct. 23, 1866	59, 021
Truck, Car	G. G. Hunt	Bridgeport, Conn	Dec. 27, 1864	45, 609
Truck, Car	C. F. Jauriet	Aurora, Ill	Oct. 24, 1865	50, 594
Truck, Car	H. Kipple and J. D. Bullock	Philadelphia, Pa	Dec. 20, 1859	26, 502
Truck, Car	P. Lamb	Cincinnati, Ohio	Oct. 14, 1862	36, 657
Truck, Car	W. H. and G. H. Little	Peabody, Mass	July 18, 1871	117, 182
Truck, Car	T. Lyman	Sandusky, Ohio	May 29, 1866	55, 133
Truck, Car	S. W. Norton	Sacramento, Cal	Apr. 23, 1872	126, 981
Truck, Car	J. Nusbaum	Alliance, Ohio	June 5, 1866	55, 350
Truck, Car	J. Olney	Burnet, Tex	July 9, 1872	128, 898
Truck, Car	F. J. Palmer	Knoxville, Tenn	Nov. 29, 1859	26, 284
Truck, Car	J. W. Reynolds	Hyde Park, Pa	Jan. 22, 1867	61, 461
Truck, Car	W. B. Rogerson	Bloomingdale, N. J	Jan. 30, 1872	123, 126
Truck, Car	S. Skillman	Jersey City, N. J	June 23, 1868	79, 267
Truck, Car	S. G. Steves	Jamestown, N. Y	Apr. 30, 1867	64, 378
Truck, Car	E. Stiles	New York, N. Y	Apr. 14, 1868	76, 842
Truck, Car	E. Thurston and J. R. Ledyard	Covington, Ky	May 23, 1865	47, 880
Truck, Car	L. H. West	Cambridge, Mass	June 5, 1866	55, 403
Truck, Car	R. Winslow	Lockhaven, Pa	May 23, 1871	115, 261
Truck, Car	W. Youmans	Lansingburgh, N. Y	Nov. 5, 1867	70, 492
Truck, Carriage	A. Marshall	Methuen, Mass	Oct. 8, 1867	69, 686
Truck, Changeable-gage car	W. W. Whitaker	Gloversville, N. Y	Sept. 9, 1873	142, 751
Truck, Changeable-gage railway	J. McCauley	Elkton, Md	Apr. 1, 1873	137, 308
Truck, Changeable-gage railway-car	L. Davidson	Brantford, Canada	Sept. 14, 1869	94, 874
Truck, Dummy-locomotive	I. L. Hilt and A. V. W. Rausch	Frankford, Pa	June 21, 1864	43, 208
Truck, Dumping	F. H. Abeel	New York, N. Y	July 22, 1873	141, 098
Truck, Dumping	I. I. Tatom	West Point, Ga	Dec. 24, 1872	134, 327
Truck, Elevating	D. Wagner and W. K. Bushnell.	Titusville, Pa	May 9, 1871	114, 730
Truck for carrying logs	C. Taylor	Handsborough, Miss	May 4, 1869	89, 703
Truck for carrying safes, &c	F. Luehmann and C. Roehl	Chicago, Ill	Aug. 12, 1873	141, 653
Truck for changing gage, Car	H. T. Carter	Portland, Me	June 23, 1868	79, 104
Truck for fire-ladders	G. B. Mickle and J. M. Carville.	New York, N. Y	Apr. 10, 1860	27, 820
Truck for mole-plow	A. L. O. Wall, G. Roberts, and M. S. Carter.	Decatur, Ill	Mar. 20, 1860	27, 604
Truck for moving barrels, &c., Hand	T. W. Kennedy	Avon, Ill	Dec. 24, 1867	72, 503
Truck for moving buildings	J. Barlow	Van Meter, Iowa	Apr. 12, 1870	101, 702
Truck for moving buildings	J. S. Millikan	Thorntown, Ind	Mar. 9, 1869	87, 697
Truck for moving buildings	T. J. Reamy	Tarborough, N. C	Jan. 14, 1873	134, 930
Truck for moving buildings	W. E. Walker	Albion, Iowa	Jan. 14, 1873	134, 950
Truck for moving houses	J. S. Millikan	Thorntown, Ind	June 16, 1868	78, 883
Truck for moving mounted car-axles	C. F. Scoville	Chicago, Ill	July 25, 1871	117, 337
Truck for moving pianos	J. Hoyt	Davenport, Iowa	May 16, 1869	87, 935
Truck for pulling stones	G. L. Sheldon	New Marlborough, Mass	Sept. 8, 1863	39, 838
Truck for pulling stones	G. L. Sheldon	Hartsville, Mass	June 20, 1865	48, 315
Truck for raising stone, Double-cylinder	S. Frieze	Waterloo, Md	Aug. 23, 1834	
Truck for sacking grain and moving the same, Hand.	W. Brocklesby, jr	Caledonia, Ohio	Apr. 13, 1869	88, 841
Truck for street-cars	J. Ashenfelder	Philadelphia, Pa	Aug. 24, 1869	93, 945
Truck for transporting casks	M. L. Senderling	Jersey City, N. J	Dec. 27, 1864	45, 643
Truck for transporting railway-rails, car-axles, &c.	C. A. Ball	Ridgewood, N. J	Sept. 16, 1873	142, 759
Truck frame, Car	D. B. Rogers	Pittsburgh, Pa	May 23, 1865	47, 863
Truck frame, Railway	C. Davenport	Cambridgeport, Mass	Aug. 10, 1844	3, 697
Truck, Freight-elevating	W. F. Morrow	Shippensburgh, Pa	July 30, 1872	130, 062
Truck, Freight-elevating	W. F. Morrow	Newville, Pa	Dec. 10, 1872	133, 877
Truck, Hand	N. Adams	Altoona, Pa	Dec. 9, 1873	145, 268
Truck, Hand	Z. Butt	Lincolnton, N. C	May 19, 1857	17, 314
Truck, Hand	J. J. Collingbourne	New York, N. Y	Feb. 18, 1873	135, 889
Truck, Hand	S. R. Dummer	New York, N. Y	Aug. 28, 1866	57, 487
Truck, Hand	J. Garsed	Frankford, Pa	Apr. 21, 1868	76, 907
Truck, Hand	L. Gilson	Boston, Mass	July 19, 1870	105, 564
Truck, Hand	L. Gilson	Boston, Mass	Jan. 7, 1873	134, 537
Truck, Hand	P. Hutchins	Norwich, Mass	Jan. 16, 1855	12, 251
Truck, Hand	H. C. Ingraham	Tecumseh, Mich	Mar. 16, 1869	87, 939
Truck, Hand	T. F. Kiff	Fairbury, Ill	June 27, 1871	116, 325
Truck, Hand	H. S. La Tourette	New Orleans, La	Mar. 25, 1873	137, 066
Truck, Hand	W. May	Binghamton N. Y	Feb. 4, 1868	74, 107
Truck, Hand	W. C. Rentgen	Keokuk, Iowa	Mar. 19, 1861	31, 741
Truck, Hand	T. A. Slack	Peoria, Ill	Dec. 3, 1867	71, 800
Truck, Hand	B. W. Tuthill	Oregon City, Oreg	Sept. 7, 1869	94, 673

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Invention.	Inventor.	Residence.	Date.	No.
Truck, Hand	J. Underkofler	Philadelphia, Pa	Apr. 24, 1860	28, 024
Truck, Hand	J. T. Whipple	Chicago, Ill	Oct. 29, 1867	70, 303
Truck, Hook and ladder	J. Schmidlapp	New York, N. Y	Dec. 14, 1869	97, 969
Truck, House-moving	W. Millikan	Thorntown, Ind	Jan. 19, 1869	85, 951
Truck-irons, Apparatus for bending and punching	P. L. Weimer	Lebanon, Pa	Oct. 31, 1875	50, 753
Truck, Locomotive	L. Bissell	New York, N. Y	Aug. 4, 1857	17, 913
Truck, Locomotive	J. D. Butler	Brooklyn, N. Y	May 3, 1864	42, 556
Truck, Locomotive	J. Cochrane	Baltimore, Md	Feb. 6, 1855	12, 358
Truck, Locomotive	W. S. Hudson	Paterson, N. J	May 10, 1864	42, 662
Truck, Locomotive	W. S. Hudson	Paterson, N. J	May 7, 1867	64, 533
Truck, Locomotive	D. R. Pratt	Worcester, Mass	Oct. 16, 1860	30, 421
Truck, Locomotive	A. F. Smith	Norwich, Conn	Feb. 11, 1862	34, 377
Truck, Locomotive	J. E. and W. P. Tynan	Paterson, N. J	July 16, 1867	66, 914
Truck, Locomotive	J. L. White	Corning, N. Y	Jan. 6, 1852	8, 643
Truck, Locomotive-car	R. H. Long	Philadelphia, Pa	Aug. 2, 1864	43, 739
Truck, Locomotive-car	J. P. Woodbury	Boston, Mass	Apr. 17, 1866	54, 051
Truck Locomotive-engine	L. Bissell	New York, N. Y	Nov. 2, 1858	21, 936
Truck, Locomotive-engine	C. H. Lathrop	Jersey City, N. J	Oct. 10, 1871	119, 857
Truck, Piano	C. A. French	Davenport, Iowa	Sept. 19, 1871	119, 025
Truck, Piano	C. A. French	Davenport, Iowa	Sept. 2, 1873	142, 386
Truck, Piano	F. B. McGregor	Pontiac, Mich	Dec. 23, 1873	145, 887
Truck, Pneumatic-car	A. E. Beach	Stratford, Conn	May 7, 1867	64, 401
Truck, Railway	J. W. Bower	Greencastle, Ind	Feb. 11, 1873	135, 762
Truck, Railway	J. G. Day	Brooklyn, N. Y	Jan. 30, 1849	6, 064
Truck, Railway	H. B. Fernald	Dedham, Mass	Oct. 1, 1867	69, 330
Truck, Railway	J. Ingersoll	Grafton, Ohio	Feb. 12, 1850	7, 086
Truck, Railway	R. B. Jewell	Dunkirk, N. Y	July 16, 1872	129, 139
Truck, Railway	D. McFarland	Worcester, Mass	May 5, 1868	77, 505
Truck, Railway	J. W. Moyer	Utica, N. Y	Dec. 25, 1849	6, 975
Truck, Railway	W. P. Parrott	Boston, Mass	June 23, 1868	79, 252
Truck, Railway	F. M. Ray	New York, N. Y	Mar. 21, 1845	3, 962
Truck, Railway	J. F. Rogers	Troy, N. Y	Sept. 5, 1846	4, 716
Truck, Railway	J. F. Rogers	Troy, N. Y	Nov. 27, 1849	6, 901
Truck, Railway	W. S. Shotwell	Paterson, N. J	Mar. 10, 1868	75, 476
Truck, Railway	E. Stanley	Bennington, N. Y	Aug. 24, 1852	9, 224
Truck, Railway	H. Strait	Cincinnati, Ohio	May 22, 1866	54, 975
Truck, Railway-car	T. F. Allen	Dyersville, Iowa	Mar. 29, 1859	23, 336
Truck, Railway-car	C. R. Anderson	Saint Louis, Mo	June 2, 1863	38, 719
Truck, Railway-car	L. D. Boyce and G. H. Jones	Rochester, N. Y	Jan. 24, 1871	111, 172
Truck, Railway-car	G. E. Brown and W. Bell	South River and Perth Amboy, N. J.	Nov. 14, 1871	120, 935
Truck, Railway-car	C. S. Buck	Bridgeport, Conn	Mar. 21, 1871	112, 897
Truck, Railway-car	J. S. Camacho	Havana, Cuba	July 2, 1872	128, 533
Truck, Railway-car	J. Clark	London, England	Aug. 29, 1871	118, 515
Truck, Railway-car	J. Darling	Whistler, Ala	Nov. 11, 1873	144, 389
Truck, Railway-car	G. F. Decker	Scranton, Pa	May 31, 1859	24, 201
Truck, Railway-car	P. S. Devlan	Jersey City, N. J	May 25, 1869	90, 432
Truck, Railway-car	C. R. Disbrow	Bath, N. Y	June 29, 1852	9, 068
Truck, Railway-car	G. Dixon	Toronto, Canada	Aug. 19, 1873	141, 859
Truck, Railway-car	D. H. Dotterer	Philadelphia, Pa	Aug. 22, 1865	49, 510
Truck, Railway-car	S. B. Driggs	New Brunswick, N. J	Oct. 29, 1872	132, 643
Truck, Railway-car	I. Dripps	Fort Wayne, Ind	Jan. 11, 1870	98, 675
Truck, Railway-car	P. G. Gardiner	New York, N. Y	Dec. 21, 1869	98, 049
Truck, Railway-car	P. G. Gardiner	New York, N. Y	Jan. 14, 1873	134, 743
Truck, Railway-car	J. L. Gill, jr	Columbus, Ohio	Jan. 23, 1866	52, 158
Truck, Railway-car	C. Graham	Kingston, Pa	Jan. 31, 1871	111, 340
Truck, Railway-car	F. S. Harrington	Boston, Mass	Apr. 18, 1871	113, 878
Truck, Railway-car	G. Herrick	Waverly, N. Y	Dec. 28, 1869	98, 378
Truck, Railway-car	B. Hinkley	Troy, N. Y	Dec. 2, 1851	8, 560
Truck, Railway-car	G. H. Jones	Grand Rapids, Mich	July 6, 1869	92, 314
Truck, Railway-car	E. M. Judd	New Britain, Conn	Dec. 9, 1862	37, 099
Truck, Railway-car	I. Knight	Baltimore, Md	June 12, 1849	6, 524
Truck, Railway-car	M. H. Kollock	Philadelphia, Pa	Feb. 25, 1873	136, 248
Truck, Railway-car	J. P. Laird	Altoona, Pa	Nov. 21, 1865	51, 063
Truck, Railway-car	J. M. McGehn	Milton, Fla	June 29, 1869	91, 956
Truck, Railway-car	S. Merrick	New Brighton, Pa	June 23, 1863	38, 973
Truck, Railway-car	J. R. Mestier	Galveston, Tex	Sept. 12, 1871	118, 961
Truck, Railway-car	J. R. and D. W. Perry	Wilkesbarre, Pa	May 5, 1868	77, 520
Truck, Railway-car	P. Prettyman	Paradise Spring Farm, Oreg.	Sept. 21, 1869	95, 043
Truck, Railway-car	T. E. Roberts	Allamance, N. C	Aug. 16, 1859	25, 139
Truck, Railway-car	D. B. Rogers	Pittsburgh, Pa	Feb. 5, 1867	61, 973
Truck, Railway-car	A. F. Smith	Norwich, Conn	Dec. 15, 1863	40, 957
Truck, Railway-car	W. M. Smith	Augusta, Ga	July 6, 1869	92, 219
Truck, Railway-car	A. Snyder	Hawley, Pa	July 18, 1854	11, 337
Truck, Railway-car	H. Thielsen	Burlington, Iowa	June 1, 1869	90, 795
Truck, Railway-car	C. D. Tisdale	East Boston, Mass	Dec. 8, 1863	40, 889
Truck, Railway-car	A. Welch	Lambertsville, N. J	July 27, 1869	93, 146
Truck, Railway-car	J. G. Wetmore	Winsted, Conn	Oct. 17, 1871	120, 013
Truck, Railway-car	T. L. Wilson	Darlington, England	Feb. 16, 1869	87, 086
Truck, Railway-car	W. Youmans	Waterford, N. Y	Aug. 27, 1861	33, 167
Truck, Railway-car	W. Youmans	Lansingburgh, N. Y	Feb. 4, 1873	135, 614
Truck, Railway car and engine	G. F. Morse	Portland, Me	May 9, 1871	114, 587
Truck, Railway-car safety	B. P. Lamason	Milton, Pa	Feb. 11, 1873	135, 716
Truck, Railway shifting	P. H. McWilliams	Detroit, Mich	Mar. 21, 1871	112, 826
Truck regulator, Car	F. Andriessen	Allegheny City, Pa	Jan. 28, 1862	34, 234
Truck, Safety	S. Y. Bradstreet	Monticello, Iowa	Apr. 28, 1868	77, 248
Truck, Safety car	E. Stiles	Springfield, Mass	Aug. 21, 1866	57, 404
Truck, Safety railway	C. K. Morris and H. W. Franklin	Bridgeport, Conn	Jan. 4, 1870	98, 613
Truck, Scroll	A. F. Cushman	Hartford, Conn	Oct. 31, 1865	50, 961
Truck, Self-adjusting car	E. Hipkins	Burford Township, Canada	Feb. 21, 1871	111, 933
Truck, Sewer-cleaning	W. S. McHarg and A. B. Hill	New Haven, Conn	June 17, 1873	140, 059
Truck spring, Railway	J. F. Talson	Jersey City, N. J	Mar. 18, 1842	2, 491
Truck standard, Car	W. T. Altfather	Johnstown, Pa	Nov. 6, 1866	59, 337
Truck, Stone	T. V. Cook	Lanesborough, Pa	Dec. 31, 1867	72, 806
Truck, Stone	G. A. Davidson	Malden, N. Y	June 11, 1872	127, 744
Truck, Stone	W. Evans	Ontario, Ohio	Nov. 15, 1870	109, 308
Truck, Stone	J. and G. Wright	Morrisania, N. Y	July 5, 1870	105, 024

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Invention.	Inventor.	Residence.	Date.	No.
Truck, Store	A. Douglas	English Neighborhood, N. J.	July 15, 1862	35, 908
Truck, Store	A. V. Smith	San Francisco, Cal	Jan. 14, 1868	73, 397
Truck, Store	A. V. Smith	San Francisco, Cal	Apr. 25, 1871	114, 213
Truck, Street-car	J. Berry	San Francisco, Cal	May 24, 1870	103, 285
Truck, Street-railway-car	J. R., D. W., and J. Perry	Wilkesbarre, Pa	June 28, 1870	104, 762
Truck, Wagon-loading	J. W. Harmount	Chicago, Ill	Jan. 23, 1872	123, 015
Truck, Warehouse	J. S. Cochran	New York, N. Y	Apr. 4, 1871	113, 263
Truck-wheels, Mode of removing	T. D. Simpson	Norwich, Conn	Sept. 30, 1845	4, 213
Truck with adjustable axle, Car	A. C. Ketchum	New York, N. Y	May 2, 1854	10, 861
Trucks and railway-cars, Lifting-apparatus for locomotive.	G. T. Nutter	Jersey City, N. J	May 2, 1871	114, 328
Trucks, Apparatus for changing car	S. L. Fremont	Wilmington, N. C	May 4, 1869	89, 758
Trucks, Apparatus for feeding cattle on railway	W. J. Bonser	London, England	June 14, 1870	104, 105
Trucks, Applying brake to hand	C. L. Daboll	New London, Conn	Aug. 10, 1858	21, 120
Trucks, Arrangement of self-dumping	Z. Butt	Lincolnton, N. C	Oct. 13, 1857	18, 383
Trucks, Changeable gage for car	G. F. Morse	Portland, Me	May 30, 1871	115, 343
Trucks, Connecting and disconnecting differently-gaged car.	C. D. Tisdale	Boston, Mass	Nov. 5, 1872	132, 878
Trucks, Connection of car	W. Pettit	Philadelphia, Pa	June 23, 1863	38, 980
Trucks, Construction of car	C. D. Tisdale	East Boston, Mass	Oct. 11, 1864	44, 694
Trucks, Device for bending iron bars for	R. B. Weaver	Steubenville, Ohio	May 31, 1864	42, 978
Trucks, Equalizing-bar for railway-car	A. Overbagh	Scranton, Pa	June 28, 1870	104, 876
Trucks, Friction-roller for railway-car	J. Pencille	Lockport, N. Y	Oct. 4, 1870	107, 955
Trucks, Hoisting-device for	N. Albertson	Plainfield, Ind	Dec. 3, 1867	71, 674
Trucks, Key-bolt connection for car	J. J. Sherman	Albany, N. Y	Aug. 1, 1865	49, 163
Trucks, King-bolt for railway-car	J. M. Bucklin	Saint Louis, Mo	Dec. 28, 1869	98, 344
Trucks, Lateral-motion center-pin for railway	R. B. Jewell	Dunkirk, N. Y	Sept. 19, 1871	119, 150
Trucks, Locomotive-link for	T. J. Rowley and W. Poland	Chillicothe, Ohio	Dec. 17, 1867	72, 231
Trucks, Mode of applying the bolster in railway-car	M. L. Harrison	Burlington, Iowa	Nov. 19, 1861	33, 739
Trucks, Mode of connecting cars to	A. Bridges	Newton, Mass	June 2, 1863	38, 726
Trucks, Mode of connecting cars to	A. Bridges	Newton, Mass	Sept. 20, 1864	44, 278
Trucks, Mode of connecting railway-car	T. F. Allen	Dyersville, Iowa	Feb. 16, 1858	19, 331
Trucks, Regulating motion of railway-car	C. Schouberszky	St. Petersburg, Russia	Feb. 7, 1865	46, 316
Trucks, Safety-attachment for car	G. C. Offen	Portland, Me	Dec. 2, 1873	145, 122
Trucks, Safety-attachment for railway	A. Strauss	New York, N. Y	Dec. 27, 1870	110, 602
Trucks, Safety-attachment for railway-car	H. Holcroft and C. S. Smith	Chester Valley, Pa	Oct. 27, 1863	40, 410
Trucks, Safety-shoe for railway-car	J. S. Crary	Salem, N. Y	Aug. 9, 1870	106, 2[illegible]8
Trucks, Spring for car	C. Ohlemacher	Aurora, Ill	July 29, 1862	36, 018
Trucks, Spring for railway-car	W. M. Taylor	Newburgh, Ohio	Nov. 15, 1870	109, 358
Trucks, Steering-apparatus for hook and ladder	J. Schmidlapp	New York, N. Y	Apr. 9, 1872	125, 488
Trucks, Supplementary wheel for car	S. Spellman	Brooklyn, N. Y	May 13, 1873	138, 949
Trucks, Support for locomotives upon car	A. S. Sweet, jr	Detroit, Mich	Oct. 13, 1863	40, 290
Trucks, Swinging bolster for railway-car	M. C. Andrews	Lawrence, Mass	June 5, 1860	28, 545
Trucks, Switching car	J. E. Tynan	Paterson, N. J	June 28, 1864	43, 353
Trucks, Table for changing gage of railway-car	G. F. Morse	Portland, Me	Apr. 12, 1870	101, 758
Trucks to locomotives, Mode of connecting	W. S. Hudson	Paterson, N. J	Apr. 5, 1864	42, 193
Trucks with car bodies, Connecting	T. P. How	Buffalo, N. Y	Mar. 11, 1851	7, 969
Trucks with car-bodies, Connecting	G. Vanderhoof	Paterson, N. J	Feb. 12, 1850	7, 094
Trundling-hoop	J. G. De Coursey	Philadelphia, Pa	Nov. 19, 1867	70, 974
Trundling-hoop stick	A. Doisy	Cincinnati, Ohio	Dec. 17, 1867	72, 174
Trunk	M. H. Bliss	Dalton, Mass	Apr. 22, 1873	138, 000
Trunk	T. Bond	East Brookfield, Mass	Feb. 1, 1870	99, 284
Trunk	S. Bourne, jr	New York, N. Y	Aug. 7, 1860	29, 458
Trunk	J. H. Burnett, jr	Newark, N. J	Mar. 10, 1860	75, 358
Trunk	L. Cantel	New York, N. Y	May 12, 1863	38, 465
Trunk	L. Cantel	New York, N. Y	Jan. 15, 1867	61, 157
Trunk	E. P. Carter	Arcade, N. Y	June 4, 1867	65, 344
Trunk	E. S. Clapp	Montague, Mass	Nov. 8, 1864	44, 936
Trunk	D. J. Clark	Evansville, Ind	July 23, 1872	129, 787
Trunk	H. Clifton	Buffalo, N. Y	Mar. 8, 1859	23, 156
Trunk	F. Crane	Bloomfield, N. J	July 30, 1872	130, 023
Trunk	G. Crouch	New York, N. Y	Sept. 29, 1868	82, 496
Trunk	F. K. Daggett	Boston, Mass	Dec. 27, 1870	110, 552
Trunk	H. Doerr	Milwaukee, Wis	Mar. 29, 1870	101, 237
Trunk	H. Dowens	New York, N. Y	Nov. 5, 1872	132, 754
Trunk	J. S. Eaton	Roxbury, Mass	Jan. 7, 1868	72, 988
Trunk	H. S. Farley	Sing Sing, N. Y	Sept. 26, 1871	119, 341
Trunk	M. Fitzgibbons	New York, N. Y	Jan. 19, 1869	85, 919
Trunk	C. D. Flynt	Philadelphia, Pa	May 18, 1869	90, 088
Trunk	N. Groel	Newark, N. J	Sept. 26, 1871	119, 348
Trunk	T. Hanvey	Elma, N. Y	Aug. 1, 1871	117, 625
Trunk	H. Hickman	Omaha, Nebr	June 22, 1869	91, 630
Trunk	C. Horton	Somerville, Mass	Mar. 31, 1868	76, 193
Trunk	J. A. and H. A. House	Bridgeport, Conn	Dec. 31, 1867	72, 853
Trunk	L. Jackson	Newark, N. J	July 17, 1866	56, 499
Trunk	G. B. Jenkinson	Newark, N. J	May 20, 1873	139, 158
Trunk	C. W. Kinne	Cortland, N. Y	Feb. 13, 1872	123, 708
Trunk	J. G. Lane	Saint Louis, Mo	Dec. 27, 1870	110, 575
Trunk	H. T. Lee	Jersey City, N. J	May 10, 1864	42, 670
Trunk	H. L. Lowman	Birmingham, Conn	Dec. 9, 1873	145, 435
Trunk	M. Ludlum	Fair Haven, Conn	July 5, 1859	24, 648
Trunk	W. Mayberry	Camden, N. J	July 16, 1872	129, 242
Trunk	C. Mayer	New York, N. Y	Oct. 20, 1863	40, 348
Trunk	W. S. Mayo	Poughkeepsie, N. Y	Apr. 26, 1870	102, 291
Trunk	W. S. Mayo	Poughkeepsie, N. Y	Apr. 26, 1870	102, 292
Trunk	R. McMurray	Washington, D. C	Mar. 26, 1867	63, 167
Trunk	J. Parker	Saint Louis, Mo	Sept. 6, 1859	25, 347
Trunk	I. W. Parmenter	New York, N. Y	July 29, 1862	36, 021
Trunk	T. B. Peddie	Newark, N. J	Dec. 21, 1869	98, 1[illegible]4
Trunk	I. L. Plumer	Chelsea, Mass	Jan. 16, 1866	52, 074
Trunk	E. B. Quick	Brooklyn, N. Y	Oct. 23, 1866	59, 136
Trunk	C. R. Rand	Dubuque, Iowa	Apr. 27, 1869	89, 503
Trunk	S. S. Ritter	Philadelphia, Pa	Nov. 19, 1867	71, 219
Trunk	C. A. Rose	Columbus, Ga	May 21, 1867	64, 907
Trunk	E. A. G. Roulstone	Roxbury, Mass	Mar. 13, 1860	27, 476
Trunk	E. A. G. Roulstone	Roxbury, Mass	Oct. 30, 1866	59, 272
Trunk	E. A. G. Roulstone	Roxbury, Mass	Nov. 19, 1867	71, 223

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Trunk	E. A. G. Roulstone	Boston, Mass	June 27, 1871	116, 492
Trunk	A. V. Ryder	New York, N. Y	Sept. 18, 1866	58, 141
Trunk	A. V. Ryder	New York, N. Y	Oct. 1, 1867	69, 488
Trunk	E. Semple	Chicago, Ill	Feb. 18, 1868	74, 723
Trunk	T. Smith	Brooklyn, N. Y	Dec. 17, 1867	72, 237
Trunk	J. Stanton	Buffalo, N. Y	May 2, 1871	114, 485
Trunk	N. Stewart	Detroit, Mich	June 13, 1871	115, 905
Trunk	S. F. Summers	Saint Louis, Mo	Sept. 30, 1856	15, 826
Trunk	C. A. Taylor	Chicago, Ill	Apr. 21, 1868	77, 127
Trunk	C. A. Taylor	Chicago, Ill	Apr. 13, 1869	88, 992
Trunk	C. A. Taylor	Chicago, Ill	July 9, 1872	128, 925
Trunk	S. Ullmann	Norfolk, Va	Jan. 26, 1869	86, 260
Trunk	S. W. Valentine	Bristol, Conn	Dec. 4, 1866	60, 288
Trunk	R. Weaver	Washington, D. C	Apr. 28, 1868	77, 423
Trunk	J. H. Whitfield	Buffalo, N. Y	Sept. 19, 1865	50, 059
Trunk	L. H. Wolff	Detroit, Mich	July 17, 1866	56, 482
Trunk	J. Young	Buffalo, N. Y	Apr. 4, 1871	113, 715
Trunk address-plate	J. E. Kirk	Marlborough, Mass	Oct. 29, 1872	132, 587
Trunk, Alarm	C. W. Taylor	Pittsburgh, Pa	Mar. 19, 1861	31, 754
Trunk and box roller	W. T. Mersereau	Newark, N. J	Aug. 4, 1863	39, 414
Trunk and bureau	A. V. Ryder	New York, N. Y	Mar. 6, 1866	53, 045
Trunk and hat-box, Hand	Q. A. Scott	Pittsburgh, Pa	July 1, 1873	140, 548
Trunk and other handles	J. Churchill	Bristol, Conn	Aug. 17, 1869	93, 678
Trunk and piano cover brace	J. Roch	Rochester, N. Y	Sept. 7, 1869	94, 692
Trunk and settee	B. Morris	New Richmond, Ohio	Jan. 16, 1835	....
Trunk and strap fastener	J. Fairman	New York, N. Y	June 3, 1873	139, 460
Trunk and valise	M. Steiner	New York, N. Y	Dec. 20, 1837	520
Trunk and wardrobe, Combined	J. A. Payne	New Orleans, La	May 27, 1873	139, 420
Trunk, Army	B. Andrews	Philadelphia, Pa	Nov. 5, 1861	33, 628
Trunk, Army	J. W. Hardie	New York, N. Y	Nov. 5, 1861	33, 644
Trunk, &c., bolt	H. Simons	Philadelphia, Pa	Jan. 5, 1869	85, 617
Trunk brace and hinge	J. J. Cowell	Chicago, Ill	July 31, 1866	56, 720
Trunk, Bureau	A. L. Mora	New York, N. Y	July 21, 1868	80, 200
Trunk, Bureau traveling	H. Mackinnon	Cleveland, Ohio	Apr. 4, 1871	113, 538
Trunk, Camp	L. H. Miller	Baltimore, Md	Oct. 1, 1861	33, 398
Trunk card plate	J. Dudley	Fall River, Mass	May 18, 1858	20, 259
Trunk-caster frame	G. B. Jenkinson	Newark, N. J	Aug. 4, 1868	80, 548
Trunk-catch	H. C. Faber	Utica, N. Y	May 27, 1873	139, 306
Trunk-check	P. J. Steer	Washington, D. C	Aug. 13, 1867	67, 834
Trunk-clamp	W. S. Jessup	Newark, N. J	May 4, 1869	89, 773
Trunk-clamp	A. J. Sessions	Bristol, Conn	Oct. 11, 1870	108, 299
Trunk clamp, Traveling	J. W. Thorne	Brooklyn, N. Y	Oct 15, 1867	69, 949
Trunk, &c., clasp	T. R. Dunham	Newark, N. J	Feb. 1, 1870	99, 416
Trunk-clasp	L. Ransom	Lansingburgh, N. Y	Oct. 13, 1868	82, 988
Trunk convertible into a bedstead	W. B. Strong	New York, N. Y	June 11, 1861	32, 536
Trunk-corner	E. A. G. Roulstone	Roxbury, Mass	Mar. 3, 1868	75, 200
Trunk-engine	T. Northey	Saint Mayhew Parish, Great Britain.	Jan. 6, 1863	37, 302
Trunk-engine	J. B. Root	New York, N. Y	Aug. 7, 1866	56, 993
Trunk-engine	J. B. Root	New York, N. Y	Aug. 14, 1866	57, 190
Trunk, Extension	G. Engelsman	New York, N. Y	Oct. 28, 1873	144, 022
Trunk, Extension	J. Rice	Middletown, Ind	Oct. 11, 1870	108, 187
Trunk-fastener	B. Andrews	Philadelphia, Pa	May 21, 1872	127, 010
Trunk-fastener	J. Arnold	Newark, N. J	July 1, 1873	140, 338
Trunk-fastener	D. W. Brockway	Dover, Me	Apr. 25, 1871	113, 974
Trunk-fastening	L. Ransom	Lansingburgh, N. Y	Apr. 25, 1871	114, 195
Trunk, Fire and water proof traveling	C. F. Miller	Lancaster, Pa	June 20, 1838	798
Trunk, Folding	O. K. Bernbaum	Brooklyn, N. Y	Dec. 10, 1867	71, 956
Trunk-frame, Metallic	L. Cantel	New York, N. Y	Dec. 20, 1853	10, 334
Trunk frame, Traveling	J. Hibson	New York, N. Y	Apr. 4, 1846	4, 438
Trunk-guard	F. Peterson	Rockford, Ill	Apr. 16, 1872	125, 756
Trunk-handle	E. A. Andrews	New Britain, Conn	Mar. 18, 1851	7, 981
Trunk-handle	G. B. Jenkinson	Newark, N. J	Oct. 20, 1868	83, 285
Trunk-handle cap	W. S. Jessup	Newark, N. J	July 5, 1870	105, 085
Trunk-handles, Mode of constructing	S. Lagowitz	Newark, N. J	Apr. 13, 1858	19, 934
Trunk, Hard-rubber	W. C. Spellman	Hartford, Conn	July 18, 1871	117, 216
Trunk-hasp	S. T. Barton and J. W. Affron	New Orleans, La	Mar. 31, 1870	101, 212
Trunk-hasp	L. Hillebrand	Philadelphia, Pa	Sept. 21, 1869	95, 111
Trunk-hasp	C. Walsh	Newark, N. J	Dec. 7, 1869	97, 572
Trunk-hasp	C. Walsh	Newark, N. J	Jan. 18, 1870	99, 036
Trunk, Leather	R. C. Martin	Philadelphia, Pa	Aug. 28, 1824	....
Trunk-lid guide	L. Hillebrand and D. Wolf	Philadelphia, Pa	Oct. 17, 1871	120, 067
Trunk-lid support	G. H. Johnson and F. Bottner	Bridgeport, Conn	Dec. 12, 1871	121, 786
Trunk-lid support	A. V. Romadka	Milwaukee, Wis	Aug. 5, 1873	141, 591
Trunk-lid supporter	P. Cohen	Chicago, Ill	Aug. 25, 1868	81, 477
Trunk-lid supporter	C. D. Rutherford	Brooklyn, N. Y	Apr. 2, 1872	125, 334
Trunk-lid supporter	J. Stott	Norwich, Conn	May 27, 1873	139, 435
Trunk-lid supporter	S. Wehrly	San Francisco, Cal	May 12, 1868	77, 787
Trunk-lids in place, Plate for holding	J. W. Shubert and N. Douglas	New Haven, Conn	Dec. 7, 1869	97, 711
Trunk-lids, Stay-brace for	S. H. Amidon	Miller's Falls, Mass	Mar. 26, 1872	124, 999
Trunk-lids, Stay for	D. C. O'Connor	New York, N. Y	Feb. 22, 1870	100, 060
Trunk-lock	H. Ahrend	Brooklyn, N. Y	June 1, 1869	90, 804
Trunk-lock	S. Bourne, jr	New York, N. Y	May 1, 1860	28, 056
Trunk-lock	T. S. Brown	Philadelphia, Pa	May 22, 1866	54, 849
Trunk-lock	E. L. Gaylord	Terrysville, Conn	May 24, 1859	24, 113
Trunk-lock	E. L. Gaylord	Terrysville, Conn	Jan. 29, 1861	31, 233
Trunk-lock	E. L. Gaylord	Terrysville, Conn	Feb. 8, 1870	99, 553
Trunk-lock	S. Gaylord	Chicopee, Mass	July 9, 1867	66, 483
Trunk-lock	C. Gschwind and C. Reichardt	Union Hill, N. J	Mar. 26, 1867	63, 242
Trunk-lock	W. J. Hare	New York, N. Y	Mar. 19, 1867	63, 041
Trunk-lock	L. Hillebrand	Philadelphia, Pa	Mar. 16, 1869	87, 931
Trunk-lock	J. G. Kast	New York, N. Y	Oct. 2, 1866	58, 548
Trunk-lock	J. Morgan	New York, N. Y	Oct. 11, 1870	108, 166
Trunk-lock	N. Nard	Havre de Grace, Md	Sept. 24, 1867	69, 115
Trunk-lock	J. Nock	Philadelphia, Pa	Oct. 10, 1838	976
Trunk-lock	J. Nock	Washington, D. C	May 28, 1867	65, 260
Trunk-lock	J. Nock	Washington, D. C	May 28, 1867	65, 261
Trunk-lock	J. Nock	Washington, D. C	Feb. 9, 1869	86, 778

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Invention.	Inventor.	Residence.	Date.	No.
Trunk-lock	J. H. Oliver	Baltimore, Md	Aug. 8, 1871	117, 806
Trunk-lock	T. L. Rivers	Newark, N. J.	June 24, 1873	140, 308
Trunk-lock	E. A. G. Roulstone	Roxbury, Mass	Jan. 22, 1867	61, 361
Trunk-lock	G. Ruppel	Harlem, N. Y	Jan. 28, 1868	73, 841
Trunk-lock	A. W. Scharit and L. Oppenheimer.	Saint Louis, Mo., and Washington, D. C.	Apr. 17, 1866	54, 024
Trunk-lock	J. Stanton	Buffalo, N. Y	Apr. 25, 1871	114, 217
Trunk-lock	J. Stanton	New York, N. Y	Jan. 16, 1872	122, 865
Trunk-lock	J. Terry, jr	Terryville, Conn	Sept. 6, 1870	107, 123
Trunk-lock	L. Uitting	Philadelphia, Pa	May 14, 1867	64, 813
Trunk-lock	Z. Walsh	Newark, N. J	May 4, 1869	89, 837
Trunk-lock hasp	E. L. Gaylord	Bridgeport, Conn	Aug. 6, 1872	130, 210
Trunk-lock hasp	C. Liebrich	Philadelphia, Pa	May 2, 1854	10, 862
Trunk-lock hasp	C. Liebrich	Philadelphia, Pa	Sept. 6, 1864	44, 101
Trunk-lock hasp	A. V. Ryder	New York, N. Y	Feb. 1, 1870	99, 484
Trunk-lock hasp	N. P. Ryder	Boston, Mass	Nov. 10, 1868	83, 883
Trunk-lock hasp	L. Witting	Philadelphia, Pa	Feb. 26, 1867	62, 453
Trunk-lock hasp	L. Witting	Philadelphia, Pa	Oct. 27, 1868	83, 570
Trunk-lock or catch	A. V. Romadka	Milwaukee, Wis	Dec. 23, 1873	145, 817
Trunk-lock, Permutation	E. Basch	Chicago, Ill	Sept. 10, 1867	68, 685
Trunk-lock plate	C. Liebrich	Philadelphia, Pa	Mar. 2, 1852	8, 775
Trunk locking and strapping device	J. K. Mayo	Brooklyn, N. Y	May 21, 1872	126, 892
Trunk-molding	E. A. G. Roulstone	Roxbury, Mass	Nov. 6, 1866	59, 458
Trunk-nails, Machine for covering the heads of	J. P. Blake	Waterbury, Conn	Jan. 19, 1858	19, 123
Trunk-nails, Machine for polishing the heads of	C. and Z. Walsh	Newark, N. J	Oct. 13, 1857	18, 428
Trunk-nails, Machine for putting head-fillings on	Z. Walsh	Newark, N. J	June 27, 1865	48, 465
Trunk, piano, &c., lock	C. N. Cutter	Worcester, Mass	Oct. 20, 1868	83, 137
Trunk-protector	R. M. Wade	Wadesville, Va	July 6, 1858	20, 832
Trunk-roller	J. Schmadel and J. A. Lieb	Newark, N. J	June 13, 1865	48, 214
Trunk-rollers, Manufacture of	H. Gray	Bristol, Conn	Aug. 13, 1867	67, 645
Trunk-stay	J. M. Dailey	New York, N. Y	Apr. 4, 1865	47, 092
Trunk-stay	L. Hillebrand	Philadelphia, Pa	May 17, 1870	103, 181
Trunk-stay	C. Kellermann and P. W. Stauff	Chicago, Ill	Dec. 7, 1869	97, 649
Trunk-stay	E. Semple	Chicago, Ill	Feb. 22, 1870	100, 077
Trunk-stay brace	J. Roch	Rochester, N. Y	Mar. 1, 1870	100, 451
Trunk-stays, Device for drawing in	J. Holt	Albany, N. Y	Mar. 25, 1862	34, 755
Trunk tie and clasp	A. D. Smith	Grafton, Ohio	Nov. 16, 1869	96, 943
Trunk, Traveler's	J. N. Wunderlich	Philadelphia, Pa	Feb. 25, 1868	74, 783
Trunk, Traveling	J. W. Beackley	Philadelphia, Pa	May 26, 1843	3, 099
Trunk, Traveling	G. De Bretton	New Orleans, La	Sept. 1, 1868	81, 756
Trunk, Traveling	S. Easter	Charlestown, Mass	Mar. 6, 1866	52, 979
Trunk, Traveling	H. H. Evarts	Chicago, Ill	Feb. 14, 1871	111, 830
Trunk, Traveling	J. Fitzgibbon	Philadelphia, Pa	Oct. 11, 1841	2, 319
Trunk, Traveling	T. Hunt	New York, N. Y	Oct. 26, 1869	96, 236
Trunk, Traveling	J. C. Locke	Rochester, N. Y	Mar. 21, 1871	112, 937
Trunk, Traveling	H. Loewenberg	New York, N. Y	Jan. 6, 1857	16, 336
Trunk, Traveling	A. McDonald	Charlestown, Mass	June 19, 1866	55, 689
Trunk, Traveling	S. W. Phelps	Cincinnati, Ohio	Nov. 25, 1856	16, 125
Trunk, Traveling	L. Ransom	Lansingburgh, N. Y	Aug. 20, 1867	67, 905
Trunk, Traveling	W. Sweetzer	Portsmouth, N. H	July 1, 1836	....
Trunk-tray bolt	R. McMurray	Washington, D. C	Sept. 14, 1869	94, 762
Trunk, valise, &c	W. Brown	Brooklyn, N. Y	July 1, 1836	....
Trunk, valise, &c	J. W. Noble	Pittsfield, Mass	Jan. 15, 1836	....
Trunk, Wardrobe	C. Demmert	Georgetown, D. C	Sept. 10, 1867	68, 771
Trunk, Wardrobe	W. J. McCraken	Rochester, N. Y	May 13, 1856	14, 879
Trunk, Wooden	D. J. Clark, W. F. Doggett, and S. M. Burr.	Columbus, Ohio	Dec. 7, 1869	97, 603
Trunk, Wooden	J. Lagowitz	Newark, N. J	Aug. 24, 1869	94, 009
Trunks, boxes, &c., Fastening for	W. S. Paddock	Albany, N. Y	Oct. 2, 1866	58, 467
Trunks, Buckle and loop for	J. S. Mitchell and D. E. Benedict	Newark, N. J	May 7, 1872	126, 564
Trunks, Card-holder for	W. L. Paine	Boston, Mass	Nov. 12, 1867	70, 887
Trunks, chests, &c., Lock for	H. C. Jones	Newark, N. J	Dec. 15, 1838	1, 036
Trunks, Construction of	H. H. Evarts	Chicago, Ill	Sept. 10, 1872	131, 258
Trunks, Cover for traveling	E. Foster	Hartford, Conn	Apr. 12, 1859	23, 562
Trunks, Device for holding clothes in	L. Fleischman	Rochester, N. Y	Jan. 27, 1863	37, 499
Trunks, Elastic shield for	J. A. and H. A. House	Bridgeport, Conn	Feb. 6, 1866	52, 414
Trunks for rendering them water-proof, Manufacture of.	P. Getz	Lancaster, Pa	Nov. 7, 1840	1, 849
Trunks, Roller-cleat for	J. A. Lieb and J. Schmadel	Newark, N. J	Apr. 4, 1865	47, 114
Trunks, &c., Strap-fastening for	W. Grinsted	Washington, D. C	Sept. 9, 1873	142, 565
Trunks, valises, boxes, &c., Manufacture of India-rubber.	J. H. Cheever	New York, N. Y	Mar. 2, 1869	87, 467
Truss	A. F. Ahrens	Philadelphia, Pa	Nov. 28, 1846	4, 867
Truss	H. R. Allen	Indianapolis, Ind	Oct. 18, 1870	108, 428
Truss	S. Ayers	New York, N. Y	May 19, 1868	77, 947
Truss	C. A. Baker	Auburn, N. Y	Nov. 12, 1867	70, 683
Truss	S. W. Baker	Austin, Tex	Sept. 27, 1870	107, 648
Truss	H. R. Ball	New York, N. Y	June 4, 1867	65, 329
Truss	E. P. Banning	Pittsburgh, Pa	Apr. 6, 1843	3, 026
Truss	E. P. Banning	New York, N. Y	Nov. 1, 1864	44, 913
Truss	E. P. Banning, jr	New York, N. Y	Mar. 12, 1872	124, 475
Truss	E. P. Banning, jr	New York, N. Y	Apr. 9, 1872	125, 431
Truss	J. D. Barnes	Washington, D. C	July 9, 1872	128, 779
Truss	A. G. Bartlett	Oxford, Ohio	June 26, 1847	5, 176
Truss	J. T. Bartlett and E. E. Butman	Boston, Mass	Jan. 13, 1863	37, 381
Truss	E. A. Bennett	New York, N. Y	Apr. 30, 1844	3, 571
Truss	C. W. Betzel	Philadelphia, Pa	May. 9, 1865	47, 612
Truss	J. R. Blake	Dyer Station, Tenn	Jan. 26, 1869	86, 204
Truss	J. R. Blake and J. L. Jarrell	Dyer Station, Tenn	Dec. 24, 1867	72, 445
Truss	J. Burnham	Batavia, Ill	Oct. 6, 1868	82, 689
Truss	J. Burnham	Batavia, Ill	July 6, 1869	92, 158
Truss	F. M. Butler	New York, N. Y	Mar. 30, 1852	8, 837
Truss	E. Capin	Batavia, Ill	Feb. 12, 1867	62, 000
Truss	C. H. Carr	Hartwick, N. Y	Aug. 27, 1872	130, 791
Truss	J. Cerneau	New York	Aug. 17, 1809	
Truss	R. H. Champlin	Colchester, Conn	Sept. 17, 1867	68, 842
Truss	J. Cooke and J. Strickler	Strasburgh, Va	Mar. 21, 1846	4, 429
Truss	J. Coop	Pittsburgh, Pa	May. 1, 1866	54, 299

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Truss	C. Cutter	Springfield, Mass	Dec. 16, 1844	3, 856
Truss	H. Dalton	New York, N. Y	July 3, 1860	28, 972
Truss	E. C. Darling	New Orleans, La	Nov. 6, 1844	3, 812
Truss	L. P. Dayton	North Buffalo, N. Y	Mar. 30, 1869	88, 372
Truss	R. E. Downie	Delaware, Wis	Nov. 21, 1865	51, 108
Truss	J. C. Earle	Baltimore, Md	Mar. 19, 1831	....
Truss	C. H. Eggleston	Marshall, Mich	Feb. 11, 1873	135, 638
Truss	W. A. Elvins	Philadelphia, Pa	July 16, 1872	129, 117
Truss	M. Faloon	Bloomington, Ill	June 16, 1868	78, 945
Truss	T. M. Fell	Glastonbury, Conn	Aug. 23, 1870	106, 570
Truss	A. Folleau	San Francisco, Cal	Jan. 24, 1871	111, 115
Truss	H. Fuller	Cattaraugus, N. Y	Aug. 9, 1870	106, 148
Truss	J. Geiss	Belleville, Ill	Oct. 11, 1870	108, 252
Truss	E. Gerdom and J. Damm	Albany, N. Y	May 7, 1861	32, 246
Truss	E. M. Gibbs	Norwich, N. Y	May 28, 1825	....
Truss	R. Glover	New York	May 3, 1833	....
Truss	J. Glydon	New York, N. Y	Mar. 31, 1868	76, 184
Truss	J. Goodier	Philadelphia, Pa	Oct. 11, 1870	108, 253
Truss	S. Green	New York, N. Y	Feb. 25, 1868	74, 818
Truss	G. W. Gregory	Syracuse, N. Y	May 6, 1873	138, 640
Truss	J. F. Groves	Whitefield County, Ga	Sept. 2, 1873	142, 337
Truss	L. A. Hall	Newark, N. J	May 8, 1849	6, 425
Truss	H. Halverson	Leicester, Mass	Feb. 27, 1847	4, 987
Truss	D. B. W. Hard	Bethlehem, Conn	May 16, 1845	4, 052
Truss	E. B. Harding	Northampton, Mass	Dec. 29, 1868	85, 305
Truss	E. B. Harding	Northampton, Mass	July 5, 1870	104, 952
Truss	J. Harrison	Frederick, Md	Mar. 12, 1867	62, 743
Truss	E. W. Higbee	Northampton, Mass	July 29, 1873	141, 220
Truss	A. Hinoult	Montgomery, N. Y	Mar. 7, 1871	112, 457
Truss	T. L. Hough	Philadelphia, Pa	July 24, 1866	56, 562
Truss	T. L. Hough	Philadelphia, Pa	Sept. 4, 1866	57, 722
Truss	H. Howe	Council Bluffs, Iowa	May 17, 1870	103, 047
Truss	H. Howe	Council Bluffs, Iowa	Mar. 14, 1871	112, 709
Truss	N. W. Hubbard	Fulton City, Ill	June 26, 1866	55, 868
Truss	A. G. Hull	New York	Feb. 27, 1823	....
Truss	A. G. Hull	New York	July 17, 1830	....
Truss	A. G. Hull	New York	Aug. 17, 1831	....
Truss	H. G. Jamieson	Baltimore, Md	Aug. 29, 1833	....
Truss	C. A. Jefferies and E. F. Olds	Dexter, Mich	Feb. 25, 1868	74, 828
Truss	N. Jones	Syracuse, N. Y	Sept. 26, 1871	119, 233
Truss	N. Jones	Syracuse, N. Y	June 11, 1872	127, 889
Truss	N. Jones	Syracuse, N. Y	June 11, 1872	127, 890
Truss	J. A. W. Justi	Savannah, Ga	Jan. 1, 1867	60, 904
Truss	J. Knight	Baltimore, Md	Dec. 14, 1830	....
Truss	C. D. Lakey	Loudonville, Ohio	Apr. 21, 1863	38, 230
Truss	E. Landis	Lancaster, Pa	Oct. 22, 1842	2, 829
Truss	S. Marsh	Canajoharie, N. Y	Mar. 29, 1830	....
Truss	S. N. Marsh	New York, N. Y	Sept. 12, 1854	11, 670
Truss	G. Mayer	Sullivan, Ill	Nov. 2, 1869	96, 456
Truss	J. L. McAlemy	Memphis, Tenn	May 11, 1869	89, 875
Truss	J. McChesney	New York	Dec. 21, 1833	....
Truss	C. Morrill	New York, N. Y	Dec. 13, 1870	110, 063
Truss	J. Morris	Derby, Conn	Nov. 19, 1833	....
Truss	P. Müller	Middle Lancaster, Pa	May 10, 1870	102, 852
Truss	L. Munson	Saybrook, Ohio	Dec. 27, 1864	45, 622
Truss	F. W. Newbert	Pittsburgh, Pa	Sept. 17, 1867	69, 015
Truss	F. H. Newman	Huntsville, Ala	Feb. 25, 1836	....
Truss	J. W. Newson	New York, N. Y	June 20, 1836	....
Truss	J. North	Middletown, Conn	July 5, 1853	9, 832
Truss	A. W. Patterson	Pittsburgh, Pa	Feb. 5, 1847	4, 952
Truss	D. Pomeroy	Green Point, N. Y	July 16, 1872	129, 424
Truss	D. Pomeroy	Green Point, N. Y	Apr. 1, 1873	137, 387
Truss	D. and W. Pomeroy	New York and Brooklyn, N. Y.	Feb. 8, 1870	99, 703
Truss	D. and W Pomeroy	New York, N. Y	June 17, 1873	139, 917
Truss	W. Pomeroy	New York, N. Y	Mar. 19, 1867	63, 091
Truss	W. Pomeroy	Brooklyn, N. Y	Sept. 17, 1867	69, 020
Truss	W. Pomeroy	New York, N. Y	May 23, 1871	115, 098
Truss	C. C. Reinhardt and V. Carter	Baltimore, Md	Sept. 24, 1844	3, 760
Truss	G. W. Riddell	Knightstown, Ind	July 11, 1842	2, 713
Truss	J. W. Riggs	Plainfield, N. J	Nov. 24, 1857	18, 708
Truss	S. S. Ritter	Philadelphia, Pa	Aug. 15, 1865	49, 437
Truss	S. S. Ritter	Philadelphia, Pa	Oct. 31, 1871	120, 537
Truss	L. Roberts	West Haverford, Pa	Aug. 20, 1867	67, 911
Truss	J. L. Rowe	New York, N. Y	Sept. 17, 1867	69, 028
Truss	J. L. Rowe	New York, N. Y	Dec. 3, 1872	133, 667
Truss	D. Sabins	Lancaster, Pa	Mar. 20, 1844	3, 498
Truss	W. Sanborn	Chelsea, Mass	Dec. 8, 1868	84, 769
Truss	H. Sargent	Boston, Mass	June 5, 1866	55, 369
Truss	W. Schnebly	Hackensack, N. J	Mar. 2, 1869	87, 370
Truss	A. T. C. Schoevers	Hague, Holland	June 24, 1873	140, 168
Truss	J. Scott	Ocala, Fla	Jan. 9, 1866	51, 974
Truss	I. B. Seeley	Philadelphia, Pa	Nov. 5, 1867	70, 629
Truss	J. A. Sherman	New York, N. Y	Jan. 16, 1872	122, 859
Truss	J. A. Sherman	New York, N. Y	June 17, 1873	139, 926
Truss	J. A. Sherman	New York, N. Y	June 19, 1866	55, 724
Truss	J. A. Sherman	New York, N. Y	Apr. 2, 1867	63, 565
Truss	J. A. Sherman	New York, N. Y	Mar. 3, 1868	75, 061
Truss	J. A. Sherman	New York, N. Y	Feb. 4, 1868	74, 158
Truss	B. Sherwood	New York, N. Y	Sept. 13, 1864	44, 226
Truss	J. M. Sinton	Hackettstown, N. J	June 27, 1839	1, 204
Truss	A. Smith	New York, N. Y	May 1, 1849	6, 405
Truss	W. J. Smith	Trevillian's, Va	May 24, 1870	103, 516
Truss	W. Spillmann	New Orleans, La	Sept. 7, 1869	94, 522
Truss	T. Stagner	Madison County, Ky	Apr. 5, 1834	....
Truss	W. R. Stephenson	West Greenville, Pa	Dec. 8, 1863	40, 861
Truss	B. W. Stratton	Philadelphia, Pa	Mar. 21, 1846	4, 431
Truss	B. Tarr	Norwich, N. Y	Mar. 9, 1822	....

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Truss	G. W. Taylor and A. E. Wright	Philadelphia, Pa	Dec. 27, 1864	45, 653
Truss	C. W. Thompson	Batavia, Ill	July 31, 1866	56, 831
Truss	O. O. Thwing	Martinsville, Ind	Nov. 30, 1869	97, 460
Truss	C. C. E. Van Alstine	New Haven, Conn	Jan. 31, 1871	111, 495
Truss	L. B. White	Moscow, N. Y	Jan. 17, 1854	10, 437
Truss	L. B. White	Moscow, N. Y	Mar. 27, 1866	53, 513
Truss	J. V. Wilson	New Haven, Conn	May 26, 1843	3, 103
Truss	J. W. Wood	Mount Sterling, Ky	Apr. 17, 1849	6, 348
Truss and abdominal supporter	J. Lecocq	New York, N. Y	Jan. 21, 1868	73, 614
Truss and supporter	G. W. Antisdale	Chagrin Falls, Ohio	Mar. 3, 1868	75, 108
Truss and supporter	D. J. Cooper	New Orleans, La	Oct. 5, 1869	95, 432
Truss and supporter	S. Dike	New York, N. Y	Oct. 29, 1867	70, 324
Truss and supporter	N. Jones	New York, N. Y	Dec. 20, 1870	110, 370
Truss, Belt	J. C. Rainbow	New Brighton, Pa	July 31, 1860	29, 403
Truss, Belt	H. Reynolds	Buffalo, N. Y	Jan. 25, 1859	22, 747
Truss, Brace	H H. Roedel	Lebanon, Pa	Nov. 25, 1873	145, 014
Truss-bridge	G. P. Herthel, jr	Saint Louis, Mo	Jan. 26, 1869	86, 227
Truss-bridge	H. J. Hunter and J. Rice	Sciota, Ohio	July 22, 1873	141, 056
Truss, Common convex	P. Hittle	Philadelphia, Pa	May 2, 1835	....
Truss, Conical spiral-spring	J. R. Hovey	Springfield, N. Y	Mar. 31, 1825	....
Truss, Construction of hernial	L. B. White	Moscow, N. Y	Aug. 21, 1860	29, 737
Truss, Double-spring	D. Weaver	Baltimore, Md	Nov. 19, 1833	....
Truss, Double-spring angular	T. Hart	New York	Aug. 30, 1811	....
Truss, Drawer	Z. Taylor	New York, N. Y	Jan. 21, 1868	73, 671
Truss, Elastic	S. Stone	....	May 6, 1800	....
Truss, Elastic	G. Twitchell	Leominster, Mass	Dec. 20, 1830	....
Truss for cure of relaxation of the vagina, &c	A. G. Hull	New York	Dec. 9, 1835	....
Truss for iron bridges	G. W. Thayer	Springfield, Mass	Apr. 11, 1854	10, 765
Truss for inguinal hernia	S. and H. H. Jordan	Roxbury, Mass	Nov. 29, 1864	45, 250
Truss for prolapsus uteri	G. Bright	Bellbrook, Ohio	Dec. 17, 1840	1, 907
Truss for prolapsus uteri	A. Poteet	Danville, Ind	June 29, 1839	1, 209
Truss for prolapsus uteri	W. Reynolds	Camden, S. C	Dec. 14, 1839	1, 430
Truss for prolapsus uteri and procidentia	A. G. Hull	New York	May 7, 1834	....
Truss for relieving piles	H. M. Smith	Richmond, Va	Oct. 18, 1859	25, 851
Truss for ruptures	J. Blagge	Portland, Me	Dec. 15, 1825	....
Truss for ruptures	A. Blanchard	Pembroke, N. H	May 17, 1817	....
Truss for ruptures	A. G. Hull	Utica, N. Y	July 17, 1817	....
Truss for ruptures	C. Stockman	Albany, N. Y	Nov. 7, 1825	....
Truss for ruptures, Accommodating bolted	J. Beath	Boston, Mass	Feb. 7, 1807	....
Truss for ruptures, Construction of	A. G. Hull	New York	Aug. 19, 1824	....
Truss for ruptures, Corset	I. Oberhausser	Charleston, S. C	Jan. 20, 1838	581
Truss for ruptures, Spiral-spring	J. Far	Manlius, N. Y	Feb. 7, 1824	....
Truss for uterine support	E. P. Banning	New York, N. Y	July 19, 1864	43, 560
Truss for vessels	C. Furbish	Bucksport, Me	Dec. 28, 1869	98, 242
Truss for vessels	J. T. Quimby	Belfast, Me	Jan. 30, 1832	....
Truss-frames, Shoe for	R. Comins	Troy, N. Y	Feb. 10, 1857	16, 579
Truss, Galvanic	M. Schuppert	New Orleans, La	Jan. 23, 1872	122, 917
Truss-girders, Metallic shoe for the braces of	T. B. White	New Brighton, Pa	Apr. 20, 1858	20, 011
Truss, Gum-elastic-pad	J. J. Heintzelman	Philadelphia, Pa	July 20, 1831	....
Truss, Hernia	W. Adair	Pleasant Hill, Ky	Feb. 17, 1836	....
Truss, Hernia	W. R. Battle	Powelton, Ga	Jan. 22, 1850	7, 032
Truss, Hernia	A. F. H. Braun	San Francisco, Cal	Dec. 31, 1867	72, 789
Truss, Hernia	S. A. Brown	Petersburgh, Va	May 25, 1838	745
Truss, Hernia	D. J. Cooper	New Orleans, La	Oct. 5, 1869	95, 433
Truss, Hernia	W. B. Dey	Hope, N. J	July 9, 1839	1, 226
Truss, Hernia	J. J. Heintzelman	Philadelphia, Pa	June 6, 1835	....
Truss, Hernia	A. G. Hull	New York	Oct. 28, 1829	....
Truss, Hernia, &c	T. Lawrence	Winchester, Ky	Aug. 4, 1834	....
Truss, Hernia	A. I. Lounsberry	Somerville, Tenn	Aug. 17, 1852	9, 198
Truss, Hernia, &c	J. L. Price	Nicholasville, Ky	Oct. 31, 1834	....
Truss, Hernia	B. M. Smith	Lumpkin County, Ga	Apr. 14, 1835	....
Truss, Hernia	D. C. Smith	Adrian, Mich	Nov. 10, 1863	40, 578
Truss, Hernia	I. Thompson	Brattleborough, Vt	July 1, 1836	....
Truss for hernia, Gum-elastic	R. Semple	Vidalia, La	Nov. 14, 1835	....
Truss for hernia, Gum-elastic	V. Wilkinson	New York	Nov. 14, 1835	....
Truss, Hernial	W. M. Bonwill	Camden, Del	Jan. 23, 1855	12, 266
Truss, Hernial	J. Broiles	Madison County, Ala	Mar. 18, 1856	14, 440
Truss, Hernial	H. Chase	Philadelphia, Pa	June 10, 1837	222
Truss, Hernial	J. Danforth	Middletown, Conn	Apr. 12, 1859	23, 555
Truss, Hernial	M. R. Fletcher	Boston, Mass	Feb. 26, 1840	1, 501
Truss, Hernial	A. O. Forsberg	Cincinnati, Ohio	May 8, 1866	54, 521
Truss, Hernial	E. B. Graham	Middletown, N. Y	Aug. 14, 1855	13, 430
Truss, Hernial	A. I. Hardin	Shelby, N. C	Mar. 17, 1857	16, 835
Truss, Hernial	J. Hungerford	Dover, N. Y	Dec. 26, 1837	533
Truss, Hernial	E. Jaquith	Brattleborough, Vt	Mar. 11, 1837	143
Truss, Hernial	R. Langworthy	Brooklyn, N. Y	Mar. 31, 1863	38, 050
Truss, Hernial	F. G. Mitchell	New York, N. Y	Sept. 11, 1855	13, 548
Truss, Hernial	S. S. Ritter	Philadelphia, Pa	Jan. 27, 1857	16, 497
Truss, Hernial	S. S. Ritter	Philadelphia, Pa	May 10, 1859	23, 947
Truss, Hernial	R. Salisbury	Providence, R. I	Nov. 4, 1837	451
Truss, Hernial	R. S. Schevenell	Athens, Ga	Dec. 27, 1859	26, 623
Truss, Hernial spring	D. L. D. Sheldon	San Francisco, Cal	July 31, 1860	29, 410
Truss-hoop	E. C. Ryding	Tully, N. Y	Aug. 22, 1871	118, 281
Truss, Lady's	D. B. W. Hard	Bethlehem, Conn	Mar. 21, 1846	4, 432
Truss-making hoop	T. and S. Burgess	Livonia, N. Y	Jan. 21, 1835	....
Truss-pad	S. Andrews	Perth Amboy, N. J	Mar. 1, 1864	41, 749
Truss-pad	A. Bridges	Jersey City, N. J	Jan. 26, 1864	41, 362
Truss-pad	J. O. Bryan	Owego, N. Y	Dec. 24, 1861	33, 9[illegible]0
Truss-pad	F. M. Butler	New York, N. Y	July 22, 1850	7, 517
Truss-pad	C. Campbell	Saint Louis, Mo	Sept. 21, 1858	21, 548
Truss-pad	H. J. Childs	New York, N. Y	Aug. 25, 1868	39, 631
Truss-pad	W. F. Daily	Baltimore, Md	Apr. 13, 1858	19, 914
Truss-pad	T. S. Ferriss	Nashville, Tenn	Sept. 3, 1867	68, 428
Truss-pad	O. Hurlbut	Buffalo, N. Y	Aug. 8, 1846	4, 685
Truss-pad	W. J. Johnsop	New Orleans, La	Oct. 8, 1867	69, 676
Truss-pad	N. Jones	Syracuse, N. Y	Mar. 11, 1873	136, 735
Truss-pad	W. K. Leach	Boston, Mass	Apr. 12, 1864	42, 298
Truss-pad	T. J. Lindley	Medora, Ind	July 14, 1868	79, 991

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Invention.	Inventor.	Residence.	Date.	No.
Truss-pad	J. B. Marsh	Brooklyn, N. Y	Sept. 26, 1871	119,379
Truss-pad	L. B. McLain, sr	New Lisbon, Ohio	Oct. 12, 1858	21,767
Truss-pad	E. C. Penfield	Philadelphia, Pa	Apr. 13, 1869	88,979
Truss-pad	H. H. Reynolds	Buffalo, N. Y	June 1, 1858	20,444
Truss-pad	J. A. Schneider	Cleveland, Ohio	Jan. 14, 1862	34,167
Truss-pad	J. A. Schneider	Cleveland, Ohio	July 22, 1862	35,956
Truss-pad	S. I. Sherman	New York, N. Y	Dec. 23, 1856	16,292
Truss-pad	F. A. Stohlmann	Brooklyn, N. Y	Mar. 10, 1868	75,484
Truss-pad	T. S. Wheeler	Boston, Mass	Oct. 23, 1866	59,108
Truss-pad, Double	W. R. Goulding	New York, N. Y	July 5, 1845	4,095
Truss-pad, Glass or earthen	C. C. Reinhardt	Baltimore, Md	Oct. 7, 1856	15,858
Truss-pad, Hernial	L. E. Hicks	Boston, Mass	May 29, 1855	12,986
Truss-pads, Manufacture of	S. S. Ritter	Philadelphia, Pa	Aug. 16, 1870	106,508
Truss-rocker beam	W. B. Snow and W. A. Elmendorf.	Chicago, Ill	May 25, 1869	90,403
Truss-shears, Cast-iron	E. Baldwin	New York	July 31, 1822	....
Truss, Spiral	P. A. De Savignhac	New York	July 13, 1809	....
Truss, Spiral-spring	B. Farr	Norwich, N. Y	Feb. 21, 1826	....
Truss, Spiral-spring	J. J. Heintzelman	Philadelphia, Pa	Feb. 16, 1830	....
Truss-spring	J. H. Parker	Trenton, N. Y	Jan. 9, 1866	52,002
Truss-spring	W. Pomeroy	New York, N. Y	Sept. 24, 1872	131,560
Truss-spring	H. Reid	Augusta, Ga	Oct. 31, 1835	....
Truss-spring	J. W. Riggs	New York, N. Y	Jan. 18, 1859	22,674
Truss-spring	J. W. Riggs	Brooklyn, N. Y	Mar. 4, 1873	136,387
Truss-springs, Device for	G. A. Colton and A. D. Angell	Adrian and Cold Water, Mich.	Oct. 29, 1867	70,169
Truss-supporter	D. S. Leavitt	Grand Rapids, Mich	May 4, 1869	89,668
Truss-supporter	J. McFadden	Cadiz, Ohio	May 19, 1868	77,999
Truss, Surgeon's	W. B. Dodson	Louisville, Ky	June 17, 1840	1,641
Truss, Surgeon's	E. Thomas	New Athens, Ohio	Mar. 12, 1840	1,511
Truss to be used in varicocele	A. G. Hull	New York	July 5, 1833	....
Truss with appendage for cure of hernia	J. W. Hood	Clark County, Ky	Apr. 2, 1835	....
Trusses, Mode of constructing railway-car	J. F. Keeler	Pittsburgh, Pa	Jan. 10, 1865	45,834
Trusses, Mode of fastening	R. McGee	Martinsville, Ind	Mar. 2, 1869	87,424
Trusses, Pad for pile	J. L. Rowe	New York, N. Y	Oct. 28, 1873	144,145
Trussing-machine	J. Solter	Baltimore, Md	Aug. 20, 1872	130,669
Try-square and bevel	I. J. Robinson	Saint Johnsbury, Vt	June 14, 1870	104,206

Tub:
See Ash-tub.
Bath-tub.
Butter-tub.
Coal-tub.
Coal-handling tub.
Condensing-tub.
Distilling-tub.
Dumping-tub.
Folding-tub.
Garbage-tub.
Mashing-tub.
Press-tub.
Tree-tub.
Wash-tub.
Washing-tub.

Invention.	Inventor.	Residence.	Date.	No.
Tub	E. Caswell	Lyons, N. Y	July 20, 1869	92,701
Tub, &c	E. A. Firby	East Norwalk, Ohio	July 18, 1871	117,163
Tub and pail machine	R. H. Peck and E. M. Gifford	Wolcott, Vt	June 25, 1861	32,644
Tub for washing and other purposes	J. Danner	Canton, Ohio	Jan. 31, 1865	46,085
Tub-mill	C. M'Lean and S. Loomis	Hartford, Conn	Sept. 25, 1805	....
Tub, pail, &c	P. H. Niles	Boston, Mass	May 23, 1871	115,088
Tub-washer frame	R. R. Platt	Plainwell, Mich	Oct. 22, 1872	132,411
Tub-wheels, Applying water to	D. B. Napier	Liberty, Ky	May 22, 1837	204
Tubs and barrels, Press or cover for	H. L. Chase	Bath, Me	June 4, 1867	65,346
Tubs, buckets, &c., Foot for	J. W. Kendall	Philadelphia, Pa	Nov. 26, 1867	71,311
Tubs, Machine for cutting wood for sides of	J. Baily	Philadelphia, Pa	Apr. 7, 1827	....
Tubs. Manufacturing	P. Phillips	Busti, N. Y	May 20, 1830	....

Tube:
See Atomizing-tube.
Bitters and sauce bottle tube.
Blower-tube.
Boiler-tube.
Cement or earthen tube.
Condensing-tube.
Cop-tube.
Copper tube.
Drain-tube.
Drawer-tube.
Drinking-tube.
Drive-well tube.
Drop-tube.
Elastic tube.
Esophagus-tube.
Filtering-tube.
Furnace-blower tube.
Gas-tube.
Grain-drill tube.
India-rubber tube.
Indicating-tube.
Inhaling-tube.
Iron tube.
Joint-tube.
Lamp-wick tube.
Lap-welded tube.
Lead tube.
Metal tube.
Metallic tube.
Office-tube.
Oil-can tube.
Oiler-tube.
Paper tube.
Pie-tube.
Radiator-tube.
Roving-tube.
Rubber tube.
Seamless tube.
Sheet-metal tube.
Smoking-tube.
Soda-water draught-tube.
Sound-conveying tube.
Speaking-tube.
Spinning-frame tube.
Steam-boiler tube.
Steam-generator tube.
Subaqueous tube.
Taper tube.
Tapering tube.
Threaded tube.
Trachea-tube.
Well-tube.
Wrought-metal tube.

Invention.	Inventor.	Residence.	Date.	No.
Tube	D. A. Ritchie	Charlestown, Mass	Feb. 27, 1872	124,011
Tube and skelp bending machine	G. Matheson	Boston, Mass	Nov. 21, 1871	121,057
Tube and rod clamp or cutter	J. W. Mahlon	Brooklyn, N. Y	Nov. 29, 1870	109,747
Tube-bending device, Sheet-metal	H. W. Doe	Springfield, Ohio	Sept. 12, 1871	118,847
Tube-bending machine	J. Sweeney	Saint Louis, Mo	May 1, 1866	54,440
Tube-bending machine	M. G. Wilder	West Meriden, Conn	June 29, 1869	92,134
Tube-boring machine	A. Wyckoff	Elmira, N. Y	Nov. 28, 1865	51,252
Tube-cleaner	P. Farley	Philadelphia, Pa	July 11, 1871	116,823
Tube cleaning and polishing machine	H. S. Smith and W. Hughes	Bloomington, Ill	Mar. 1, 1870	100,460
Tube-cutter	J. De Galleford	Cohoes, N. Y	Apr. 14, 1868	76,729
Tube-cutter	D. E. Eaton	Boston, Mass	Jan. 31, 1871	111,442

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Invention.	Inventor.	Residence.	Date.	No.
Tube-cutter	H. Getty	Brooklyn, N. Y	Aug. 6, 1867	67, 520
Tube-cutter	J. V. Jepson	Brooklyn, N. Y	Dec. 31, 1872	134, 477
Tube-cutter	E. Manuel	Milwaukee, Wis	Feb. 4, 1873	135, 484
Tube-cutter	T. Nelson	Philadelphia, Pa	Oct. 26, 1869	96, 261
Tube-cutter	J. Peace	Camden, N. J	Dec. 28, 1869	98, 294
Tube-cutter, Ratchet	A. Crowfoot	Chicago, Ill	Sept. 22, 1863	40, 02[illegible]
Tube-cutting machine	S. Halliwell	New Haven, Conn	Nov. 16, 1869	96, 912
Tube-cutting machine	N. Thomas	Chicago, Ill	Nov. 5, 1867	70, 652
Tube-cutting tool	J. V. Jepson	Brooklyn, N. Y	Dec. 11, 1866	60, 380
Tube-expander	C. H. Clark	Laramie, Wyo	Sept. 19, 1871	119, 121
Tube-expander	C. W. Deane	Philadelphia, Pa	May 27, 1873	139, 374
Tube-expander	J. H. Knickerbocker	Philadelphia, Pa	Sept. 5, 1865	49, 765
Tube-expander	E. J. Moore	East Boston, Mass	Sept. 17, 1867	69, 014
Tube-extractor	I. S. Peters	Marshall, Mich	Jan. 24, 1871	111, 146
Tube-grapple	S. R. Mix and M. D. Wilder	La Porte, Ind	Mar. 16, 1869	87, 865
Tube-heating furnace	P. Reilly	Reading, Pa	Oct. 26, 1869	96, 267
Tube-holder	T. Arnold	Petroleum Centre, Pa	Jan. 31, 1871	111, 418
Tube-hole cutter	W. H. Henshall	Philadelphia, Pa	July 30, 1867	67, 194
Tube-hole cutter	C. H. Lavis	Philadelphia, Pa	Feb. 11, 1868	74, 385
Tube-joint, Flexible	N. R. Bates	Titusville, Pa	Jan. 11, 1870	98, 833
Tube-joints, Making	S. I. Hays	Chicago, Ill	May 29, 1860	28, 479
Tube-making machine	D. M. Somers	Brooklyn, N. Y	Aug. 20, 1872	130, 758
Tube-punching die and punch	J. Gibbs	Brooklyn, E. D., N. Y	Feb. 1, 1870	99, 309
Tube-rolling machine	J. H. Sellers	Wilmington, Del	Nov. 16, 1869	96, 975
Tube-sheet cutter	D. E. Rice and W. Evered	Detroit, Mich	May 30, 1865	47, 983
Tube-sheet cutter	T. L. Webster	Brooklyn, N. Y	Oct. 16, 1866	58, 924
Tube-sheets for boilers, Manufacturing	W. S. Hudson	Paterson, N. J	July 2, 1861	32, 694
Tube-skelp-bending machine	S. P. M. Tasker	Philadelphia, Pa	Aug. 9, 1870	106, 295
Tube-skelp-bending machine	S. P. M. Tasker	Philadelphia, Pa	Jan. 17, 1871	111, 017
Tube-skelps, Apparatus for drawing	S. P. M. Tasker and R. Briggs	Philadelphia, Pa	July 20, 1869	92, 761
Tube-skelps, Die for bending	J. McCulley	Philadelphia, Pa	Jan. 9, 1849	6, 017
Tube-skelps, Machine for slitting and bending	S. P. M. Tasker	Philadelphia, Pa	Jan. 17, 1871	111, 016
Tube-skelps, Machine for slitting, beveling, and bending metal.	S. P. M. Tasker	Philadelphia, Pa	Jan. 17, 1871	111, 014
Tube-skelps, Machine for slitting, beveling, and bending metal.	S. P. M. Tasker	Philadelphia, Pa	Jan. 17, 1871	111, 015
Tube-sockets, Machine for bending	W. L. Newsham	Philadelphia, Pa	Apr. 15, 1873	137, 792
Tube-stopper	W. Brown	Hoboken, N. J	Feb. 22, 1870	100, 115
Tube-thimble	C. W. Copeland	New York, N. Y	Aug. 7, 1866	56, 905
Tube-threads, Die for cutting	W. T. Cole	New York, N. Y	Aug. 20, 1867	67, 958
Tube-welding, Blast-device for facilitating	J. Doyle	New York, N. Y	May 21, 1872	126, 880
Tube-welding machine	W. C. Allison	Philadelphia, Pa	Jan. 31, 1871	111, 299
Tube-welding machine	J. Sadler	New York, N. Y	Jan. 21, 1873	135, 160
Tube-welding mandrel	H. K. Flagler	Boston, Mass	Sept. 9, 1873	142, 622
Tubes and hollow cylinders, Machine for facing the ends of.	N. P. Stevens	Hopkinton, N. H	Jan. 23, 1872	122, 921
Tubes, Connecting	J. Nason	New York, N. Y	Dec. 9, 1856	16, 213
Tubes, Device for cutting off	W. H. Downing	Shamburgh, Pa	Mar. 5, 1872	124, 198
Tubes, Device for cutting off	W. H. Downing	Shamburgh, Pa	Apr. 30, 1872	126, 137
Tubes, Die for forming	J. Kintz	Meriden, Conn	Mar. 11, 1873	136, 654
Tubes, flues, &c., Apparatus for cleaning	C. Lungley	Greenwich, England	May 9, 1871	114, 695
Tubes in tube-sheets, Method of expanding	R. Blackwood	Philadelphia, Pa	Apr. 5, 1864	42, 159
Tubes in tube-sheets, Method of securing	J. H. Knickerbocker	Philadelphia, Pa	June 24, 1862	35, 691
Tubes, &c., Machine for chucking and revolving	J. B. Root	New York, N. Y	Aug. 5, 1873	141, 593
Tubes, Machine for polishing inner surface of	L. Egleston	Seneca Falls, N. Y	Nov. 26, 1867	71, 471
Tubes, Machine for rolling conical and other	C. Kewin	San Francisco, Cal	Apr. 19, 1870	102, 130
Tubes, pipes, &c., Apparatus for the manufacture of	B. Rhodes	Old Ford Road Row, Middlesex, England	Jan. 6, 1863	37, 377
Tubes to tube-sheets, Uniting	B. F. Sturtevant	Jamaica Plain, Mass	Feb. 22, 1870	100, 243
Tubing, Apparatus for making	J. Cassidy	East Boston, Mass	June 14, 1870	104, 111
Tubing-clamp	W. H. Downing	Pioneer, Pa	Aug. 23, 1870	106, 563
Tubing-clamp	H. Kewley	Perry, Ohio	July 23, 1867	67, 059
Tubing-fabric	T. R. White and W. G. Bedford	Philadelphia, Pa	Aug. 14, 1866	57, 233
Tubing, Machine for bending	W. T. Farre	Montreal, Canada	Dec. 3, 1872	133, 636
Tubing, Machine for bending	W. T. Farre	Montreal, Canada	Nov. 11, 1873	144, 449
Tubing, Machine for extending	H. A. Shipman and A. B. Hendrix.	Ansonia, Conn	Feb. 19, 1867	62, 293
Tubing, Machine for forming sheet-metal	M. M. Camp	New Haven, Conn	Feb. 1, 1870	99, 402
Tubing, Machine for making seamless	J. McCloskey	New York, N. Y	Mar. 16, 1869	87, 862
Tubing, Machine for making metallic	J. Huggins	Birmingham, England	Dec. 9, 1873	145, 421
Tubing, Machine for welding	J. E. Tencate	Pittsburgh, Pa	Nov. 10, 1868	84, 019
Tubing, Machine for making India-rubber flanged	T. J. Mayall	Boston, Mass	Apr. 9, 1872	125, 599
Tubing, Manufacture of	J. B. Forsyth	Boston, Mass	June 11, 1872	127, 755
Tubing, Metallic	C. G. Smith	Chelsea, Mass	Sept. 27, 1870	107, 731
Tubing, Mode of manufacturing water-proof	W. H. Bates and H. Faulkner	Leicester, England	July 16, 1872	129, 266
Tubing, Mode of reducing the diameter of	E. Wheeler	Philadelphia, Pa	July 25, 1871	117, 494
Tubing or hose, Flexible	T. L. Reed	Providence, R. I	May 24, 1870	103, 369
Tubing-pipes and sheeting, Composition metal for	W. A. Shaw	New York, N. Y	Dec. 14, 1869	97, 972
Tubing, Vulcanized-rubber	T. J. Mayall	Boston, Mass	Apr. 9, 1872	125, 596
Tubular axle	T. C. Rice	Worcester, Mass	June 23, 1868	79, 258
Tubular bodies, Method of manufacturing	J. Montgomery	Croton, N. Y	Nov. 26, 1867	71, 508
Tubular boilers, Ferrule for	D. Matthew	Prairie du Chien, Wis	June 11, 1867	65, 759
Tubular boilers for generating steam, Constructing	C. W. Bentley	Baltimore, Md	Sept. 1, 1843	3, 244
Tubular fabrics, Machine for drying	O. C. Sweet	Albany, N. Y	June 30, 1868	79, 412
Tubular fabrics with rubber, Covering	W. H. Bates and H. Faulkner	Leicester, England	June 11, 1872	127, 733
Tubular heater	C. J. Shepard	Brooklyn, N. Y	Dec. 10, 1867	72, 095
Tuck and plait folder	R. Brady	New York, N. Y	Sept. 4, 1860	29, 856
Tuck-creaser	S. P. Babcock	Adrian, Mich	July 23, 1872	129, 778
Tuck-creaser	S. P. Babcock	Adrian, Mich	Jan. 21, 1873	134, 966
Tuck-creaser	W. Carpenter	Lawrence, Kans	Jan. 21, 1873	135, 078
Tuck-creaser	H. W. Fuller	Brooklyn, N. Y	Aug. 13, 1872	130, 365
Tuck-marker	F. L. Tileston	San Francisco, Cal	July 22, 1873	141, 095
Tucking-attachment	T. M. Farrand	Boston, Mass	July 2, 1872	128, 476
Tucking-gage	G. C. Munson	New York, N. Y	Jan. 22, 1861	31, 185
Tufted fabrics, Preparing and felting	R. Eickemeyer	Yonkers, N. Y	Mar. 16, 1869	87, 764
Tufted work, Manufacture of	E. Kellermann	Moosup, Conn	Feb. 14, 1860	27, 133
Tug and chain carrier	J. N. Guger	Peoria, Ill	Mar. 3, 1868	75, 157
Tug, Canal	S. R. Kirby	New York, N. Y	Oct. 19, 1869	96, 013

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Invention.	Inventor.	Residence.	Date.	No.
Tug-clip	J. B. Welpton	Tabor, Iowa	Apr. 2, 1872	125, 237
Tug-fastening	J. Turley	Mitchell, Ind	Jan. 28, 1873	135, 299
Tug-holder	T. J. Bottomley	Burlington, Wis	Aug. 6, 1867	67, 489
Tug-hook	J. Eck	Medora, Ind	June 8, 1869	90, 938
Tug-strap	M. Cadwell	Lansing, Mich	Jan. 21, 1873	134, 975
Tug-trimmer	A. V. Hill	Limestone, N. Y	July 9, 1867	66, 589
Tumbler and dish drainer	P. W. Necfus	New York, N. Y	May 30, 1871	115, 344
Tumbler-cleaner	T. S. Harris	Boston, Mass	Feb. 28, 1860	27, 286
Tumbler for polishing forks, &c	H. Bump and A. H. Ritchie	Wallingford, Vt., and New York, N. Y.	July 16, 1872	129, 522
Tumbler-holder	C. Reistle	Brooklyn, N. Y	Apr. 28, 1868	77, 215
Tumbler-lock, Combination revolving	L. Yale	Newport, N. Y	Feb. 13, 1849	6, 111
Tumbler-locks, Means of changing the combination in revolving.	L. Lillie	Troy, N. Y	Nov. 13, 1849	6, 872
Tumbler, pitcher, &c	G. G. Percival	Brooklyn, N. Y	July 25, 1865	48, 996
Tumbler, Skeleton	W. W. B ach	New York, N. Y	Aug. 21, 1866	57, 278
Tumbler-stand	J. C. Wharton	Nashville, Tenn	Sept. 29, 1868	82, 572
Tumbler-washer	A. Hallowell	Lowell, Mass	Feb. 13, 1866	52, 565
Tumbler-washer	A. Hallowell	Lowell, Mass	Dec. 20, 1870	110, 231
Tumbler-washer	J. Matthews, jr	New York, N. Y	Aug. 31, 1869	94, 424
Tumbler-washer	J. P. Milburn	Washington, D. C	Mar. 10, 1868	75, 443
Tumbler-washer	E. W. Russell	Baltimore, Md	Dec. 31, 1867	72, 911
Tumbler-washer	M. Scrannage	Boston, Mass	Oct. 13, 1868	82, 997
Tumbler-washer	J. Solter	Baltimore, Md	Sept. 4, 1866	57, 786
Tumbler-washer	D. M. Somers	New York, N. Y	Sept. 29, 1868	82, 650
Tumbler washer and cooler	D. M. Somers	Washington, D. C	May 22, 1866	54, 973
Tumbler-washing apparatus	B. Hart	Washington, D. C	July 25, 1865	48, 934
Tumblers, Apparatus for finishing	D. C. Ripley	Pittsburgh, Pa	Apr. 2, 1872	125, 145
Tumbling-rod cover	J. Heuermann	Davenport, Iowa	Sept. 14, 1869	94, 741
Tuning-fork	J. C. Jinkins	Beallsville, Ohio	Aug. 22, 1854	11, 566
Tuning-instrument for pianos, organs, &c	L. V. Hall	Mount Morris, N. Y	Nov. 7, 1865	50, 818
Tuning instrument, Monochord	E. D. Bootman	Eameston, N. Y	Sept. 22, 1863	40, 012
Tuning key, Piano	A. H. Affleck	Marshallville, Ga	July 1, 1873	140, 450
Tuning key, Piano-forte	A. Bassford	New York, N. Y	Oct. 31, 1854	11, 852
Tuning key, Piano-forte	N. B. Sherwood	New York, N. Y	Nov. 3, 1868	83, 734
Tuning key, Piano-forte	J. C. Smith	Boston, Mass	Nov. 14, 1838	1, 007
Tuning metallic reeds	J. S. Ives	New York, N. Y	May 9, 1846	4, 449
Tuning-peg for guitars, &c	J. Ashborn	Wolcottville, Conn	Sept. 21, 1852	9, 268
Tuning piano-fortes	J. J. Wise	Baltimore, Md	Nov. 19, 1833	......
Tuning pianos	J. B. Norris	Berryville, Pa	July 3, 1860	28, 998
Tuning-pin for piano-fortes	J. S. Ives	Bristol, Conn	Jan. 6, 1844	3, 403
Tuning pin, Piano	J. M. Branig	New York, N. Y	June 21, 1870	104, 417
Tuning pin, Piano	A. J. Faas, jr	Philadelphia, Pa	Aug. 22, 1871	118, 354
Tunnel	J. Dixon	New York, N. Y	Aug. 20, 1867	67, 849
Tunnel	R. Foley	New York, N. Y	July 23, 1867	67, 035
Tunnel	S. J. S ely	New York, N. Y	Dec. 20, 1864	45, 527
Tunnel, Subaqueous	H. Anderson	San Francisco, Cal	Sept. 17, 1872	131, 322
Tunnel, Subaqueous	H. M. Hamilton	Bloomfield, N. J	Sept. 17, 1872	131, 437
Tunnel, Submarine	J. R. Miller	Jersey City, N. J	Aug. 2, 1853	9, 899
Tunnel, Submarine	C. Spear	New York, N. Y	Mar. 22, 1870	101, 174
Tunnel, Tubular submarine	A. Folsom	Boston, Mass	Jan. 3, 1860	26, 665
Tunnels and dams, Construction of	L. Dodge	Chicago, Ill	May 17, 1870	103, 028
Tunnels and sewers, Construction of	G. Knoll	San Francisco, Cal	Oct. 28, 1873	144, 112
Tunnels, Constructing submarine	J. G. Foster	Boston, Mass	Feb. 27, 1872	124, 045
Tunnels, Drying	F. H. Smith	Baltimore, Md	Feb. 26, 1861	31, 566
Tunnels, Machine for excavating	C. Wilson	Springfield, Mass	June 23, 1857	17, 650
Tunnels, &c., Metallic arch for	J. Groves	Ellicott City, Md	July 1, 1873	140, 498
Tunnels, Ventilating	H. B. Willson	New York, N. Y	Dec. 10, 1867	72, 142
Tunneling and quarrying machine	I. Merrill	Shelburne Falls, Mass	Apr. 22, 1856	14, 755
Tunneling-machine	C., J. P., and L. Griscom and J. Fritz.	Port Carbon and Mahanoy Top, Pa.	Aug. 15, 1871	118, 010
Tunneling-machine	A. W. Von Schmidt	San Francisco, Cal	May 21, 1872	127, 125
Tunneling rivers	J. B. Bucklin and J. Jacobs	West Troy, N. Y	June 11, 1836	......
Tunneling rivers	W. Sykes	Sheffield, England	Feb. 1, 1870	99, 493
Turbine	U. A. Boyden	Boston, Mass	Sept. 20, 1853	10, 025
Turbine	U. A. Boyden	Boston, Mass	Sept. 20, 1853	10, 026
Turbine	J. J. Faulkner	McMinnville, Tenn	Apr. 9, 1872	125, 558
Turbine motor-gate	J. T. Fanning	Norwich, Conn	Feb. 6, 1872	123, 388
Turbine water-wheel	E. F. Crocker	Niles, Mich	Mar. 15, 1870	100, 732
Turbine wheel	V. M. Baker	Preston, Minn	May 25, 1869	90, 419
Turbine wheel	D. B. Flint	Orange, Mass	Apr. 29, 1873	138, 239
Turbine wheel	M. Rapp	Rapp's Mill, Va	June 14, 1870	104, 199
Turbine wheel, Fourneyron	S. K. Baldwin	Gilford, N. H	Nov. 25, 1856	16, 110
Turbine-wheel gates, Mode of operating	L. M. Wright	Niagara Falls, N. Y	May 5, 1857	17, 246
Turbine wheels, Construction of guides or chutes for.	J. Bastion	Theresa, N. Y	May 6, 1856	14, 793
Turbine wheels, Hanging	A. Warren and E. Damon, jr	Boston, Mass	June 5, 1860	28, 622
Turbine wheels, Manufacturing	C. H. Bigelow	Lawrence, Mass	May 30, 1854	10, 981
Turbine wheels, Metallic case for	A. Myers	Salem, Oreg	Apr. 1, 1873	137, 471
Turbine wheels, Method of operating the issue-apertures and of suspending.	B. Holly	Seneca Falls, N. Y	July 3, 1855	13, 172
Turbine wheels, Molding	J. Cairnes	Philadelphia, Pa	Jan. 1, 1867	60, 686
Turf-cutting machine	R. H. Emerson	Fond du Lac, Wis	Aug. 14, 1866	57, 105
Turf or sod cutting machine	W. Gilbert	Catskill, N. Y	Feb. 11, 1868	74, 341
Turn-pipe, Hydraulic	S. Adams	Michigan Bluff, Cal	Feb. 7, 1871	111, 600
Turn-table	A. P. Boller	Orange, N. J	Apr. 15, 1873	137, 887
Turn-table	W. H. Burch	Port Gibson, Miss	June 17, 1873	139, 941
Turn-table	W. S. Coulter	Ashley, Pa	Dec. 26, 1871	122, 229
Turn-table	G. Dryden	Worcester, Mass	Aug. 29, 1848	5, 742
Turn-table	L. W. Emmart and E. D. Griffith.	Washington, D. C	Oct. 5, 1869	95, 446
Turn-table	J. Enright	Cleveland, Ohio	Jan. 21, 1873	135, 101
Turn-table	C. A. Greenleaf	Indianapolis, Ind	Feb. 8, 1870	99, 667
Turn-table	F. Hanson	Hollis, Me	Aug. 28, 1866	57, 501
Turn-table	F. Hanson	Buxton, Me	May 14, 1867	64, 665
Turn-table	J. B. Kelly	Kendallville, Ind	July 24, 1866	56, 571
Turn-table	C. Macdonald and C. O. H. Fritzsche.	Hoboken and Paterson, N. J.	June 3, 1873	139, 512

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Invention.	Inventor.	Residence.	Date.	No.
Turn-table	J. L. Piper	Pittsburgh, Pa	Nov. 30, 1869	97, 440
Turn-table	J. C. Robie	Binghamton, N. Y	Aug. 15, 1854	11, 532
Turn-table	A. and H. F. Snyder	Freeport and Williamsport, Pa.	Nov. 26, 1872	133, 388
Turn-table	J. K. Thompson	Chicago, Ill	June 2, 1868	78, 553
Turn-table	C. P. Tibbetts	New Orleans, La	Sept. 3, 1872	131, 071
Turn-table	G. Walters	Phœnixville, Pa	Apr. 18, 1871	113, 953
Turn-table	W. Wharton, jr	Philadelphia, Pa	Jan. 28, 1873	135, 304
Turn-table and railway-track for changing gage of cars.	W. K. Muir	Hamilton, Canada	Oct. 24, 1871	120, 161
Turn-table for bridges	C. Sellers	Philadelphia, Pa	May 14, 1867	64, 713
Turn-table for changing car-trucks	J. S. Newberry, E. C. Dean, and J. McMillan.	Detroit, Mich	May 21, 1872	127, 095
Turn-table for railways, Cast-iron	A. J. Wight and W. L. Meeker	Newark, N. J	June 14, 1870	104, 388
Turn-table for transmitting freight	G. French	Alexandria, Va	Oct. 3, 1871	119, 595
Turn-table, Portable	J. Robinson	Sharptown, Pa	Nov. 8, 1859	26, 053
Turn-table, Railway	J. H. Dennis	Louisville, Ky	Jan. 14, 1862	34, 135
Turn-table, Railway	C. H. Fisher	Albany, N. Y	Oct. 3, 1871	119, 593
Turn-table, Railway	J. I. Kinsey	South Easton, Pa	Nov. 28, 1865	51, 192
Turn-tacle, Railway	L. E. Lee and C. Mudge	New Orleans, La	May 7, 1867	64, 545
Turn-table, Railway	G. B. Massey	Mobile, Ala	Aug. 21, 1866	57, 353
Turn-table, Railway	A. and J. H. Putnam	Wellsville, Ohio	June 21, 1859	24, 522
Turn-table, Railway	W. H. Ward	Auburn, N. Y	Feb. 2, 1858	19, 268
Turn-table, Suspension	J. C. Bonnell	Fort Madison, Iowa	July 30, 1867	67, 257
Turn-tables, Lubricating-pivot for	J. W. Murphy	Philadelphia, Pa	Apr. 4, 1871	113, 685
Turn-up seat for churches, &c	J. P. Tibbits	New York, N. Y	Dec. 27, 1870	110, 512
Turning	A. S. Macomber	Bennington, Vt	Jan. 2, 1849	6, 000
Turning and boring machine, Hand	J. F. Finger	Wilmington, N. C	Mar. 28, 1871	113, 038
Turning and boring mechanism	C. Van Hagen	Philadelphia, Pa	Oct. 11, 1870	108, 306
Turning and boring mill	G. A. Gray, jr	Cincinnati, Ohio	Apr. 4, 1871	113, 651
Turning and planing tool	C. W. Burdic	Norwich, Conn	Nov. 27, 1866	59, 958
Turning and planing tool	J. P. Smith	Glasgow, Scotland	Oct. 27, 1868	83, 560
Turning and polishing machine	R. M. Clapp	Vergennes, Vt	Oct. 10, 1871	119, 695
Turning and polishing machine	B. I. Tayman	Philadelphia, Pa	June 1, 1852	8, 990
Turning and sliding table for railways	W. Sellers	Philadelphia, Pa	Mar. 23, 1858	19, 718
Turning-apparatus	C. W. Case	Syracuse, N. Y	Mar. 21, 1848	5, 481
Turning, boring, and slotting machine, Metal	A. Brown	Rochester, N. Y	Mar. 13, 1855	12, 503
Turning, boring, &c., Machine for	M. and T. R. Way	Paintersville, Ohio	Mar. 11, 1851	7, 977
Turning, Cutting-tool for,	A. S. Libby	Manchester, N. H	Mar. 1, 1864	41, 818
Turning cylinders of wood, Machine for	I. S. Waite	Hubbardston, Mass	Nov. 1, 1853	10, 193
Turning-device	W. H. McMillan and D. Morris	Philadelphia, Pa	July 26, 1870	105, 824
Turning edges of plates or metal sheets	J. F. Morgan	Boston, Mass	Apr. 7, 1863	38, 115
Turning ellipsoidal forms, Method of	G. W. Walton and H. Edgarton	Wilmington, Del	July 29, 1856	15, 445
Turning-engine	J. S. Brown	Pawtucket, Mass	July 6, 1852	9, 092
Turning-gage	C. R. Hurlbut	Waukau, Wis	Sept. 9, 1851	8, 355
Turning gage, Conical	M. Bowker	Fitchburgh, Mass	Aug. 1, 1865	49, 073
Turning handles, poles, &c., Machine for	S. Cortill	Philadelphia, Pa	June 7, 1841	2, 118
Turning hollow-ware, Machine for	L. P. Rood	Deposit, N. Y	Aug. 2, 1859	24, 956
Turning irregular forms, Machine for	P. S. Beers	Hamden, Conn	Feb. 18, 1851	7, 937
Turning irregular forms, Machine for	S. Beers	Naugatuck, Conn	Dec. 3, 1850	7, 806
Turning irregular forms, Machine for	W. I. Casselman	Vernon, N. Y	Jan. 9, 1855	12, 192
Turning irregular forms, Machine for	C. B. Conant	Springfield, Mass	Sept. 29, 1863	40, 140
Turning irregular forms, Machine for	A. D. Crane	Newark, N. J	Aug. 15, 1854	11, 518
Turning irregular forms, Machine for	J. Creager	Cincinnati, Ohio	Mar. 12, 1861	31, 656
Turning irregular forms, Machine for	J. Eveland	Elizabeth City, N. J	July 22, 1862	35, 927
Turning irregular forms, Machine for	H. Flint and G. P. Smith	Danbury, Conn	July 28, 1868	80, 467
Turning irregular forms, Machine for	N. J. Glover	Waveland, Ind	May 25, 1858	20, 344
Turning irregular forms, Machine for	A. B. Hendryx and F. Farrel	Seymour and Ansonia, Conn.	Aug. 5, 1862	36, 093
Turning irregular forms, Machine for	D. H. Krauser	Pottsville, Pa	Mar. 8, 1859	23, 175
Turning irregular forms, Machine for	L. B. Miller	Newark, N. J	Dec. 27, 1859	26, 567
Turning irregular forms, Machine for	Z. F. Nance	Richmond, Va	Dec. 14, 1858	22, 302
Turning irregular forms, Machine for	J. Russell	Philadelphia, Pa	Jan. 1, 1851	7, 879
Turning irregular forms, Machine for	R. Ward	Naugatuck, Conn	June 28, 1853	9, 822
Turning irregular forms, Machine for	R. Ward and J. B. and H. C. Hubbell.	Naugatuck, Conn	Feb. 22, 1853	9, 597
Turning irregular forms, Machinery for	J. M. Eddy	Boston, Mass	Feb. 20, 1849	6, 134
Turning irregular forms, Machinery for	A. Lane	Killingsworth, Conn	Feb. 25, 1851	7, 956
Turning irregular forms, Machinery for	E. Tucker	Bucyrus, Ohio	Oct. 24, 1844	3, 805
Turning irregular shapes, Machinery for	T. Clark	New Haven, Conn	Jan. 19, 1847	4, 932
Turning irregular shapes, Machinery for	A. Goodman	Dana, Mass	Dec. 19, 1848	5, 980
Turning-machine	A. S. Hosley	New York, N. Y	Dec. 27, 1864	45, 606
Turning-machine	G. Rugg	Potsdam, N. Y	Nov. 13, 1860	30, 646
Turning-machine	E. Webber	Gardiner, Me	July 8, 1856	15, 310
Turning machine, Wood	G. Pickering	Janesville, Wis	Oct. 31, 1871	120, 532
Turning-machinery	J. Clark, jr	Mile End, Glasgow, North Britain.	July 30, 1840	1, 705
Turning or cutting irregular forms, Machine for	T. Blanchard	Boston, Mass	Mar. 21, 1843	3, 008
Turning or cutting irregular forms, Machine for	N. Gear	Zanesville, Ohio	Nov. 8, 1853	10, 204
Turning ornamental forms, Method of	P. C. Cambridge, jr	North Enfield, N. H	July 15, 1856	15, 327
Turning ovals, Apparatus for	M. T. Boult	Battle Creek, Mich	Feb. 4, 1873	135, 515
Turning ovals, Machine for	I. S. Barber	New York, N. Y	Sept. 4, 1860	29, 852
Turning prismatic forms, Machine for	M. Roberts	Belfast, Me	Dec. 19, 1854	12, 115
Turning prisms, &c	A. Sherwood and A. Babbett	Auburn, N. Y	Jan. 13, 1852	8, 663
Turning spheres or balls, Device for	D. E. True	Leominster, Mass	Aug. 16, 1864	43, 886
Turning spiral forms, Machine for	J. C. Hintz	Cincinnati, Ohio	Nov. 10, 1857	18, 588
Turning tapering forms, Machine for	W. Wadleigh and N. F. Morrill	Sanbornton Bridge, N. H	July 30, 1861	32, 931
Turning tapering forms, Method of	H. E. Salisbury	Platea, Pa	June 24, 1856	15, 196
Turning tapering twists on wood, Machine for	R. K. Huntoon	Concord, N. H	Dec. 21, 1858	22, 400
Turning-tool	J. W. Ellis	Camden, N. J	Oct. 21, 1873	143, 893
Turning-tool	J. P. Whipple	Woonsocket, R. I	Aug. 24, 1869	94, 159
Turning-tool	W. H. Whitlock	Rising Sun, Ind	Oct. 27, 1868	83, 573
Turning tool, Hand	A. B. Simonds	Youngstown, Ohio	Feb. 11, 1868	74, 437
Turning tool, Oval	J. L. Warren	Detroit, Mich	Mar. 29, 1870	101, 329
Turning wood, &c., Machine for	J. D. Willoughby	Gettysburgh, Pa	Mar. 15, 1845	3, 950
Turning wood, Machinery for	M. W. St. John	Plainfield, N. Y	May 13, 1845	4, 049
Turning wood tapering	W. Avery	Salisbury, N. Y	June 5, 1844	3, 618
Turning wooden-ware, Machine for	J. C. Bryant and A. W. Turner	Gardner, Mass	Nov. 30, 1869	97, 350

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Turnkey	M. Jinks	Wayland, N. Y	Dec. 13, 1853	10,312
Turnpike-gate	J. Brainard	Canaan, N. Y	Apr. 16, 1810	....
Turpentine and other products from resinous woods, Extracting.	D. Hull	Newburgh, N. Y	June 27, 1865	48,406
Turpentine and resin, Apparatus for manufacturing.	H. Napier	Brooklyn, N. Y	Apr. 9, 1861	31,991
Turpentine, Apparatus for melting and straining crude.	J. E. Winants	Brooklyn, N. Y	Dec. 17, 1867	72,254
Turpentine-box	W. B. Hamilton	New Orleans, La	May 30, 1871	115,313
Turpentine, &c., by steam, Extracting spirits of	H. Kelly	Brooklyn, N. Y	May 17, 1816	....
Turpentine, Double-operating turpentine-share used in the procuring of.	G. R. Talley	Westbrook, N. C	Apr. 1, 1845	3,982
Turpentine for distillation, Preparing	A. C. Blount	Mount Pleasant, Ala	May 8, 1855	12,812
Turpentine from pine trees, Extracting	J. C. Shuler	Cain Hoy, S. C	Mar. 15, 1870	100,936
Turpentine from pine wood, Extracting spirits of	J. D. Stanley	Wilmington, N. C	Jan. 5, 1869	85,705
Turpentine from sawdust, Production of	S. L. Cole	Brooklyn, N. Y	Dec. 2, 1873	145,151
Turpentine from trees, Extracting	B. I. Hazard	Georgetown, S. C	Feb. 14, 1871	111,743
Turpentine from trees, Obtaining	R. J. Steele, jr	Rockingham, N. C	Feb. 23, 1869	87,219
Turpentine from wood, Method of extracting	J. A. Pastorelli	Marseilles, France	Apr. 17, 1866	54,081
Turpentine, Gathering	A. Pudigon	Charleston, S. C	Apr. 28, 1868	77,31[illegible]
Turpentine-hack	N. B. Clarkson	Gourdin's Depot, S. C	July 30, 1872	129,933
Turpentine, Manufacture of	A. H. Emery	New York, N. Y	Aug. 8, 1865	49,249
Turpentine, Manufacture of spirits of	J. Johnson	Saco, Me	Sept. 26, 1865	50,132
Turpentine, oil, resin, &c., from pine wood, Obtaining spirits of.	A. H. Emery	New York, N. Y	Jan. 31, 1865	46,092
Turpentine spirits, Extracting	J. Jennings	New York, N. Y	July 23, 1836	....
Turpentine-tool	J. C. Cobb	Shoe Heel, N. C	May 27, 1873	139,369
Turret and pilot house for ships of war and other war structures.	J. B. Eads	Saint Louis, Mo	Jan. 12, 1864	41,207
Turret for vessels	J. Linnemann	Copenhagen, Denmark	July 27, 1869	92,978
Turret for war-vessels	J. B. Eads	Saint Louis, Mo	Apr. 29, 1862	35,088
Turret, Monitor	M. H. Collins	Chelsea, Mass	Nov. 3, 1863	40,535
Turret, War	G. Snedecor	New York, N. Y	Nov. 24, 1863	40,713
Turrets by hydraulic pressure, Means of raising monitor.	S. Wilmarth	Boston, Mass	Dec. 5, 1865	51,378
Tuyere	A. T. Atherton	Lowell, Mass	June 5, 1866	55,222
Tuyere	W. W. Ball	Grand View, Ill	Aug. 23, 1864	43,892
Tuyere	W. W. Ball	Charlestown, Ill	Aug. 6, 1867	67,399
Tuyere	W. T. Barnes	Buffalo, N. Y	July 25, 1848	5,682
Tuyere	M. W. Barrett	Mishawaka, Ind	July 19, 1864	43,619
Tuyere	J. W. Barron	Hillsborough, Ill	Sept. 7, 1869	94,543
Tuyere	J. Bayliss	New York, N. Y	Aug. 7, 1866	56,879
Tuyere	T. Birch	Erie, Pa	Jan. 2, 1872	122,430
Tuyere	S. L. Bond	Greenwood, S. C	July 26, 1859	24,852
Tuyere	R. Brewer	Plymouth, Ohio	Nov. 21, 1842	2,857
Tuyere	T. E. C. Brinly	Louisville, Ky	Dec. 11, 1866	60,333
Tuyere	L. D. Brown	Lee, Mass	June 14, 1843	3,132
Tuyere	W. P. Cain	Moravia, Iowa	Dec. 26, 1865	51,692
Tuyere	J. Cappon	Rochester, N. Y	June 27, 1871	116,264
Tuyere	T. S. Clark	Chicago, Ill	Aug. 8, 1871	117,744
Tuyere	L. E. Clow	Montpelier, Vt	Sept. 23, 1843	3,277
Tuyere	J. W. Crannell	Yorkville, Mich	Oct. 22, 1867	69,973
Tuyere	G. W. Dean	Glenn's Falls, N. Y	May 17, 1859	24,012
Tuyere	H. Dean	Clyde, Ohio	July 9, 1867	66,470
Tuyere	F. A. Deutenberg	Pittsburgh, Pa	Sept. 4, 1866	57,684
Tuyere	L. A. Dole	Salem, Ohio	Sept. 18, 1866	58,077
Tuyere	L. Donnell	Columbus, Ohio	Apr. 28, 1868	77,178
Tuyere	J. Dorwart	Morgantown, Pa	Jan. 14, 1851	7,900
Tuyere	C. H. Edwards	Vergennes, Vt	Dec. 4, 1860	30,805
Tuyere	S. Epley	McGrawsville, Ind	Oct. 26, 1869	96,214
Tuyere	G. W. Finch	Gibralter, Wis	Apr. 27, 1858	20,053
Tuyere	B. Fish	Mechanicsburgh, Pa	Sept. 25, 1866	58,238
Tuyere	B. Fish	Mechanicsburgh, Pa	Mar. 3, 1868	75,007
Tuyere	F. Fisher	Gloucester, Mass	Oct. 15, 1867	69,906
Tuyere	C. C. Forncrook	Hermitage, N. Y	Dec. 10, 1867	71,866
Tuyere	J. H. Gartside	Pittsburgh, Pa	Oct. 1, 1872	131,750
Tuyere	T. Gilson	Port Washington, Wis	Aug. 20, 1872	130,633
Tuyere	R. A. Goodrich	Milford, N. Y	Feb. 24, 1843	2,975
Tuyere	G. W. Grannis	Collins, N. Y	June 16, 1846	4,581
Tuyere	S. C. Gray	Lewisville, Ind	Aug. 2, 1864	43,683
Tuyere	J. F. Harly	Kipton Station, Ohio	Dec. 7, 1869	97,507
Tuyere	J. R. Harrington	Brooklyn, N. Y	Feb. 21, 1865	46,526
Tuyere	G. Harsch	Chicago, Ill	Apr. 29, 1873	138,248
Tuyere	A. H. Hart	Chagrin Falls, Ohio	Mar. 21, 1848	5,479
Tuyere	A. Herbig	Corry, Pa	Nov. 17, 1868	84,059
Tuyere	J. B. Himbery	Frederick City, Md	Dec. 10, 1867	72,039
Tuyere	J. O. Jones	Brooklyn, E. D., N. Y	Jan. 18, 1870	98,976
Tuyere	J. Kay	New Haven, Conn	June 8, 1869	91,137
Tuyere	R. D. Kincaid	Pittsburgh, Pa	Mar. 27, 1866	53,535
Tuyere	E. Koons	Funkstown, Md	Feb. 6, 1866	52,508
Tuyere	E. Koons	Funkstown, Md	Jan. 1, 1867	60,746
Tuyere	J. Kriegbaum	Milton, Ohio	May 8, 1866	54,562
Tuyere	H. Laird	Mechanicsburgh, Pa	Feb. 25, 1868	74,918
Tuyere	D. S. Loy	Graceham, Md	July 25, 1865	48,963
Tuyere	D. S. Loy	Graceham, Md	Mar. 20, 1866	53,313
Tuyere	D. S. Loy	Graceham, Md	Mar. 5, 1867	62,547
Tuyere	J. F. Maguire	East Boston, Mass	July 24, 1866	56,582
Tuyere	A. G. Mann	Worcester, Mass	Mar. 22, 1870	101,143
Tuyere	Z. H. Mann	Lowell, Mass	Dec. 15, 1843	3,374
Tuyere	J. P. Markham	Penfield, Mich	Aug. 16, 1859	25,129
Tuyere	D. J. Martin	Covington, Ohio	Mar. 20, 1866	53,315
Tuyere	M. McKay	Lyons, N. Y	Nov. 14, 1846	4,854
Tuyere	D. C. McMillen	Persia, N. Y	Nov. 14, 1846	4,855
Tuyere	M. Mead	Bedford, Mich	June 12, 1860	28,680
Tuyere	G. D. Miller	New Berlin, Pa	Jan. 3, 1854	10,367
Tuyere	L. C. Miner	Saugerties, N. Y	July 31, 1847	5,209
Tuyere	W. H. Myers	Baltimore, Md	June 2, 1868	78,471
Tuyere	O. G. Newton	Edinburgh, Mo	Oct. 27, 1868	83,530

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Tuyere	S. R. Niles	Rawsonville, Mich	Nov. 1, 1864	44, 881
Tuyere	A. Ordway	Stratham, N. H	May 15, 1860	28, 296
Tuyere	S. Parsons	Saint Francisville, Mo	Dec. 26, 1871	122, 190
Tuyere	J. Patterson	New York, N. Y	July 3, 1866	56, 090
Tuyere	J. Pawling	Morgantown, Pa	Jan. 22, 1850	7, 038
Tuyere	J. J. Pierce	Emmett, Mich	Mar. 9, 1869	87, 702
Tuyere	M. Powe	Mount Bethel, Pa	Feb. 26, 1867	62, 441
Tuyere	J. B. Raines and W. S. Owens	Oskaloosa, Iowa	Sept. 24, 1867	69, 247
Tuyere	J. Rogers	Detroit, Mich	Sept. 27, 1870	107, 725
Tuyere	J. W. Rogers	Decatur, Ill	Mar. 17, 1868	75, 703
Tuyere	J. Shugart	Elizabethtown, Pa	Mar. 31, 1836	......
Tuyere	F. Sinnott and J. McIntyre	Brooklyn and New York, N. Y.	Sept. 18, 1866	58, 145
Tuyere	W. L. Starlin	Benwood, W. Va	Jan. 26, 1869	86, 327
Tuyere	P. Sweeny	New York, N. Y	June 29, 1869	91, 882
Tuyere	P. Sweeny	New York, N. Y	Feb. 28, 1871	112, 192
Tuyere	B. K. Taylor	Harrisburgh, Pa	Aug. 24, 1869	94, 147
Tuyere	J. Theat	Detroit, Mich	Oct. 2, 1866	58, 509
Tuyere	C. H. Thompson	Orange, Mass	Feb. 7, 1860	27, 089
Tuyere	S. P. Tolman and N. F. Blodgett	North Orange, Mass	July 17, 1860	29, 114
Tuyere	E. Trasy	Vermontville, Mich	Mar. 21, 1871	112, 866
Tuyere	A. Warren	Saint Louis, Mo	Apr. 16, 1872	125, 863
Tuyere	P. L. Weimer	Lebanon, Pa	June 28, 1870	104, 804
Tuyere	P. L. Weimer	Lebanon, Pa	Aug. 8, 1871	117, 947
Tuyere	J. Weller	Washington Court-House, Ohio.	May 29, 1866	55, 186
Tuyere	W. Werts	Camden, N. J	Feb. 27, 1872	124, 100
Tuyere	J. M. White	Springfield, Ohio	Apr. 24, 1866	54, 265
Tuyere	L. Wilkinson	New Haven, Conn	May 22, 1866	54, 988
Tuyere	J. C. Wilson	Coalburgh, W. Va	Apr. 6, 1869	88, 687
Tuyere	J. Wood, jr	Conshohocken, Pa	May 9, 1871	114, 739
Tuyere	J. R. Woodworth	Nunda, N. Y	Aug. 13, 1867	67, 695
Tuyere	A. M. Worthing	Reno, Nev	Nov. 21, 1871	121, 072
Tuyere	E. Youngs	New York, N. Y	Aug. 9, 1870	106, 245
Tuyere, Adjustable	B. G. Noble	New York, N. Y	July 25, 1865	48, 974
Tuyere, Adjustable	P. Sweeny	New York, N. Y	Oct. 11, 1870	108, 205
Tuyere, Angular rotating	S. H. Camp	Hartford, Conn	Aug. 21, 1849	6, 662
Tuyere-arch for blast-furnaces	J. Horton	Rochester, N. Y	June 22, 1869	91, 636
Tuyere, Blacksmith's	J. Bauer	Brooklyn, E. D., N. Y	July 18, 1871	117, 145
Tuyere, Blacksmith's	H. S. Berry	Rutland, Vt	Nov. 9, 1858	22, 012
Tuyere, Blacksmith's	B. E. Dixon	Marshall, Mich	Nov. 23, 1858	22, 111
Tuyere, Blacksmith's	E. Kaighn	Kaighn's Point, N. J	Apr. 2, 1841	2, 030
Tuyere Blacksmith's	W. Sharp	Millport, N. Y	Jan. 12, 1864	41, 240
Tuyere, Blacksmith's	R. C. Stiles and J. S. Graves	East Bloomfield, N. Y	Dec. 14, 1841	2, 386
Tuyere, Conical-valve	R. D. Porter	Harper's Ferry, Va	Mar. 27, 1849	6, 217
Tuyere for Bessemer converter	C. H. Baker	Philadelphia, Pa	July 16, 1872	129, 512
Tuyere for blast-furnaces	W. M. Everitt	Malden, N. Y	Aug. 9, 1864	43, 764
Tuyere for blast-furnaces	J. Fry	Salisbury, Conn	Mar. 21, 1871	112, 914
Tuyere for blast-furnaces	B. H. Hibler	McKeesport, Pa	Aug. 13, 1867	67, 651
Tuyere for cupola-furnaces	F. Lawrence	Philadelphia, Pa	Apr. 25, 1871	114, 158
Tuyere for furnaces	J. Bayliss	New York, N. Y	Sept. 17, 1867	68, 939
Tuyere, Forge	R. Platt	Florence, Ind	July 25, 1865	48, 998
Tuyere-forge fire, Double	G. Thomas and W. W. McLanahan.	Milesburgh, Pa	July 12, 1870	105, 385
Tuyere Forge, &c., water	J. Frearson	Birmingham, England	May 21, 1872	127, 042
Tuyere-iron	L. M. Bailey	Landgrove, Vt	Jan. 21, 1868	73, 490
Tuyere-iron	J. Brown	Portland, Mich	Jan. 21, 1868	73, 574
Tuyere-iron	R. W. Clark	Pittsburgh, Pa	Jan. 14, 1868	73, 298
Tuyere-iron	C. F. Espick	Plymouth, Ind	Aug. 11, 1868	80, 933
Tuyere-iron	J. Nelson	Oswego, N. Y	Nov. 21, 1871	121, 189
Tuyere-iron, Blacksmith's	J. Shugert	Elizabeth, Pa	May 9, 1839	1, 149
Tuyere iron, Water	G. Davis	Sandy Spring, Md	May 26, 1818	......
Tuyere-molding machine	S. English	Troy, N. Y	Feb. 21, 1871	111, 922
Tuyere of blast-furnace	T. W. McCune	Pittsburgh, Pa	May 10, 1870	102, 844
Tuyere, Rotary blacksmith's	E. Harris	Springfield, Mass	Jan. 9, 1849	6, 027
Tuyere-tester	R. A. Fisher	Eureka, Nev	Oct. 1, 1872	131, 866
Tuyere, Water	E. Davidson	Boston, Mass	Oct. 12, 1869	95, 661
Tuyere, Water	S. Williamson	Cincinnati, Ohio	Aug. 22, 1871	118, 331
Tuyere water-box	G. M. Robinson	New Wilmington, Pa	July 3, 1866	56, 098
Tuyeres, Casting	W. M. Johnston	Pittsburgh, Pa	Apr. 13, 1869	88, 788
Tuyeres, Casting	W. P. Lewis	Pittsburgh, Pa	June 11, 1867	65, 581
Tuyeres, Compound for	J. E. Atwood	Pittsburgh, Pa	May 13, 1873	138, 781
Tuyeres, Device for discharging ashes from	J. A. Maynard	Boston, Mass	May 21, 1850	7, 382
Tuyeres for Bessemer converters, Apparatus for making.	A. I. Haws and J. A. Vaughan	Johnstown, Pa., and Cuyahoga Falls, Ohio.	Jan. 14, 1873	134, 885
Tuyeres, Flask for casting	B. C. Painter	Mechanicsburgh, Pa	Nov. 12, 1867	70, 740
Tuyeres, Machine for pressing	L. M. Hart	Philadelphia, Pa	Apr. 30, 1867	64, 313
Tuyeres, Manufacture of Bessemer-steel-converter	J. E. Atwood	Pittsburgh, Pa	Nov. 18, 1873	144, 726
Tuyeres, Tight-joint for	W. Graham	Carlisle, Pa	Aug. 5, 1851	8, 268
Tuyeres, Water-pipe of	P. Sweeney	Buffalo, N. Y	July 20, 1852	9, 143
Tweezers, watch-key, &c., Combined	D. A. Jones	Springfield, Mass	May 5, 1868	77, 621
Twin-boat	C. Harris	Norfolk, Va	May 27, 1834	......
Twine and cord, Manufacture of	J. Sloat	Sloatsburgh, N. Y	Nov. 9, 1839	1, 405
Twine and cord, Mode of forming balls of	H. B. Lawton	Cropseyville, N. Y	Jan. 17, 1871	110, 980
Twine and small cord, Machinery for making various kinds of.	H. McCubben	Petersburgh, Va	Aug. 17, 1843	3, 220
Twine and small cordage, Machine for making	G. A. Taylor, L. and H. L. Crandall, and J. Larkin.	Hopkinton, R. I	Dec. 4, 1866	60, 280
Twine and small cordage, Seine	A. Pond	Petersburgh, Va	May 20, 1830	......
Twine and thread cutter	S. W. Adams	Providence, R. I	Aug. 2, 1870	105, 878
Twine and thread cutting machine	C. Higby	New Brighton, Pa	June 11, 1872	127, 879
Twine-box	W. R. Bennett and C. Storer	Boston, Mass	July 20, 1858	20, 931
Twine-box	H. Smith and J. Emery	Buffalo, N. Y	Sept. 15, 1868	82, 167
Twine, Cotton seine	T. Rice	Petersburgh, Va	Oct. 1, 1830	......
Twine-cutter	J. Adt	New Haven, Conn	June 27, 1871	116, 391
Twine-cutter	S. E. Blake	Worcester, Mass	Sept. 27, 1864	44, 389
Twine-cutter	J. M. Clark	Chester, Conn	Mar. 5, 1867	62, 528
Twine-cutter	C. C. Lewis	Gainesville, Ala	Nov. 7, 1871	120, 652

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Twine-cutter	S. F. McGown	New York, N. Y	Mar. 16, 1869	87, 954
Twine-cutter	F. J. Seymour	Wolcottville, Conn	May 27, 1873	139, 427
Twine-cutter	G. C. Taft	Worcester, Mass	Feb. 1, 1870	99, 494
Twine-cutter, Ring	L. P. Laffray	Amsterdam, N. Y	June 25, 1872	128, 316
Twine-cutting ring	T. L. Bishop and G. L. Hall	Boston, Mass	Dec. 27, 1864	45, 576
Twine-holder	J. Adt	New Haven, Conn	Dec. 20, 1870	110, 326
Twine-holder	J. Adt	New Haven, Conn	July 11, 1871	116, 911
Twine-holder	T. W. Brown	Boston, Mass	Feb. 14, 1860	27, 101
Twine-holder	A. J. Goodrich	Wolcottville, Conn	July 20, 1869	92, 819
Twine-holder	E. M. Judd	Wolcottville, Conn	Sept. 21, 1869	95, 118
Twine-holder	E. M. Judd	New Haven, Conn	Mar. 7, 1871	112, 465
Twine-holder	J. M. Keep	New York, N. Y	May 31, 1870	103, 752
Twine-holder	J. B. Sergent and P. Bradford	New Haven, Conn	Mar. 7, 1871	112, 501
Twine-holder	T. J. Seymour	Wolcottville, Conn	Apr. 16, 1867	63, 950
Twine-holder	R. L. Smith	Wolcottville, Conn	Dec. 3, 1867	71, 655
Twine-holder	R. L. Smith	Wolcottville, Conn	Jan. 5, 1869	85, 618
Twine-holder	J. S. Smith	Middletown, Conn	June 21, 1870	104, 505
Twine-holder	R. L. Webb	New Britain, Conn	Dec. 6, 1870	109, 979
Twine-holder	D. Webber	Houlton, Me	Sept. 30, 1873	143, 268
Twine holder and cutter	T. Garrick	Providence, R. I	Dec. 17, 1867	72, 186
Twine-holder stand	J. S. Smith	Middletown, Conn	Sept. 20, 1870	107, 556
Twine-keeper	J. Stephenson	Canandaigua, N. Y	May 30, 1865	47, 998
Twine machine, Cotton	A. Pond	Petersburgh, Va	Apr. 21, 1829	......
Twine, Machine for laying and twisting cotton seine.	J. Clarkson	Baltimore, Md	Aug. 16, 1826	......
Twine-making machine	J. McIntire	Hopewell Cotton-Works, Pa.	June 22, 1869	91, 653
Twine, Manufacture of	T. G. Boone	Brooklyn, N. Y	Apr. 10, 1849	6, 295
Twine-reel	S. E. Davis	Waterbury, Conn	Oct. 13, 1857	18, 391
Twine-stand	N. C. Bryam	Boston, Mass	Mar. 27, 1847	5, 038
Twist and cord, Machinery for making covered	J. Turner and I. E. Palmer	Norwich and Montville, Conn.	Apr. 14, 1863	38, 190
Twist-drill	B. Arnold	East Greenwich, R. I	Aug. 22, 1871	118, 178
Twist-drill	S. Scholfield	Providence, R. I	Dec. 14, 1869	97, 818
Twist-drill grinding rest	S. A. Morse	Newark, N. J	July 5, 1870	104, 982
Twist-drill-milling machine	S. W. Card	Mansfield, Mass	Aug. 12, 1873	141, 760
Twist-drill-milling machine	L. B. Miller	Jersey City, N. J	Oct. 1, 1867	69, 466
Twist-drills, Machine for making	A. R. Arnold	Newark, N. J	Aug. 30, 1864	44, 037
Twist-drills, Machine for slotting the shanks of	B. Arnold	East Greenwich, R. I	Aug. 22, 1871	118, 179
Twist-drills, Merchantable bar for	J. W. Ells	Pittsburgh, Pa	July 16, 1872	129, 543
Twister, Self-supplying	W. Hunt	New York	June 11, 1829	......
Twist-drills, Tool for cutting	W. Frost	Newark, N. J	July 3, 1866	56, 033
Twisting and doubling machine, Stop-mechanism for.	J. A. H. Carroll	Baltimore, Md	June 10, 1873	139, 768
Twisting and spooling machine	G. B. Hayes	Buffalo, N. Y	Oct. 15, 1872	132, 155
Twisting-machine-stopping mechanism	A. J. Milstead	Woodberry, Md	July 22, 1873	141, 158
Two-beam engines with parallel shafts, Arrangement of.	T. Doyle	New York, N. Y	Nov. 6, 1855	13, 748
Two-horse engine, Portable	B. F. Joslin	Schenectady, N. Y	Aug. 21, 1824	......
Tympan-sheets, Gage-pin for	R. W. King	Boston, Mass	July 19, 1870	105, 518
Type	W. Shaw	Hollister, Cal	July 1, 1873	140, 436
Type	E. R. Whitney	Magog, Canada	June 3, 1873	139, 640
Type and apparatus for printing, Flexible	H. Tubesing	Pittsburgh, Pa	Apr. 11, 1865	47, 262
Type, Apparatus for casting	A. C. Converse	Boston, Mass	Mar. 18, 1873	136, 815
Type, Applying ink to	J. Prince	Philadelphia, Pa	Nov. 19, 1833	......
Type-blocks, Device for forming letters on	D. A. Draper	Cambridge, Mass	May 7, 1867	64, 410
Type-blocks, Die for forming letters, &c., on the edges of.	T. S. Hudson	East Cambridge, Mass	Apr. 7, 1868	76, 460
Type-blocks, Process of manufacturing	D. A. Draper	Cambridge, Mass	Mar. 14, 1871	112, 562
Type-breaker	C. Baer	New York, N. Y	Feb. 16, 1869	86, 968
Type by the electrotyping process, Preparing matrices for.	T. W. Starr	Philadelphia, Pa	Aug. 4, 1845	4, 130
Type-cabinet	C. Bassett	Kewanee, Ill	June 7, 1870	103, 829
Type-case	C. Aldrich	Marshalltown, Iowa	Nov. 19, 1867	70, 936
Type-case	L. H. Miller	Ottawa, Ohio	Dec. 18, 1866	60, 534
Type-case	T. N. Rooker	New York, N. Y	Jan. 1, 1861	31, 037
Type-case	B. O. Woods	Boston, Mass	Apr. 6, 1869	88, 762
Type-case bottom	W. M. Randall and G. C. Howard.	Belleville, Ohio	Oct. 14, 1862	36, 670
Type-case, Printer's	C. L. Alexander	Washington, D. C	Apr. 30, 1867	64, 269
Type-case, Printer's	J. Bell	New York, N. Y	Jan. 8, 1850	6, 994
Tyye-case, Printer's	W. A. Hunter	Bryan, Ohio	June 29, 1858	20, 714
Type-case, Printer's	T. N. Rooker	New York, N. Y	Apr. 5, 1859	23, 500
Type-caster, Mechanical	J. Sturdevant and E. Starr	Boston	Oct. 23, 1827	......
Type-caster, Vertical	M. D. Mann and S. Sturdevant	New York	Jan. 7, 1831	......
Type, Casting	J. Bachelder and S. D. Dyer	Boston and Chelsea, Mass	July 24, 1849	6, 604
Type, Casting	W. P. Barr	New York, N. Y	Sept. 4, 1847	5, 278
Type, Casting	W. P. Barr	New York, N. Y	Aug. 10, 1852	9, 177
Type, Casting	G. Bruce	New York, N. Y	Nov. 14, 1854	11, 955
Type, Casting	J. Stewart	New York	Mar. 21, 1843	3, 013
Type, Casting and setting	W. R. Collier	Boston, Mass	Feb. 9, 1830	......
Type, Casting embossed	I. C. Bryant	Philadelphia, Pa	Oct. 9, 1860	30, 293
Type-casting machine	D. Bruce	Williamsburgh, L. I., N. Y	Nov. 6, 1843	3, 324
Type-casting machine	D. Bruce	Williamsburgh, N. Y	June 7, 1845	4, 072
Type-casting machine	D. Bruce	Brooklyn, N. Y	Nov. 10, 1868	83, 828
Type-casting machine	J. M. Conner	New York, N. Y	July 16, 1872	129, 106
Type-casting machine	J. M. Conner	Greenville, N. J	Oct. 28, 1873	144, 066
Type-casting machine	W. W. Dunn	San Francisco, Cal	Jan. 24, 1871	111, 111
Type-casting machine	C. Muller	New York, N. Y	Jan. 3, 1854	10, 373
Type-casting machine	J. A. T. Orevend	San Francisco, Cal	Feb. 18, 1873	136, 091
Type-casting machine	W. Spang	Philadelphia, Pa	Dec. 20, 1870	110, 303
Type-casting macnine	J. I. Sturgis	New York, N. Y	Mar. 27, 1849	6, 243
Type casting machine	J. J. Sturgis	New York, N. Y	Sept. 9, 1851	8, 349
Type-casting machine	J. J. Sturgis	New York, N. Y	June 14, 1853	9, 787
Type-casting machine	W. Wing	Hartford, Conn	Aug. 28, 1805	......
Type, Casting movable	G. Webster	New York	Feb. 28, 1816	......
Type composing and casting machine, Combined	C. S. Westcott	Elizabeth, N. J	June 6, 1871	115, 796
Type composing and distributing machine	I. Delcambre	Paris, France	Dec. 14, 1869	97, 891

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Type composing and distributing machine	W. H. Houston	Belfast, Me	Mar. 31, 1857	16, 947
Type composing and distributing machine	J. J. Koenig	Chicago, Ill	July 15, 1856	53, 340
Type composing and setting machine	W. S. Loughborough	Rochester, N. Y	Oct. 23, 1855	13, 710
Type-composing machine	C. Kastenbein	London, England	June 24, 1873	140, 279
Type-composing machine	W. H. Mitchel	Brooklyn, N. Y	Mar. 3, 1857	16, 743
Type-composing machinery	W. H. Mitchel	Brooklyn, N. Y	May 16, 1854	10, 929
Type, Construction and manufacture of printing	T. S. Hudson	East Cambridge, Mass	June 5, 1866	55, 299
Type Cutting and casting music	G. B. Lothian	New York	Aug. 11, 1830	....
Type-cutting machine	J. J. C. Smith	Philadelphia, Pa	Feb. 5, 1861	31, 333
Type distributing and composing machine	W. H. Mitchel	Brooklyn, N. Y	Aug. 30, 1853	9, 974
Type distributing and setting-up machine	F. Rosenborg	Kingston, England	Sept. 9, 1843	3, 257
Type-distributing machine	V. Beaumont	New York, N. Y	Mar. 21, 1854	10, 656
Type-distributing machine	O. L. Brown	Boston, Mass	Mar. 1, 1870	100, 366
Type-distributing machine	M. Gally	Rochester, N. Y	Apr. 29, 1873	138, 241
Type-distributing machine	C. Kastenbein	London, England	June 24, 1873	140, 278
Type-distributing machine	W. H. Mitchel	Brooklyn, N. Y	Sept. 22, 1857	18, 264
Type-distributing machine	J. T. Slingerland	New York, N. Y	June 6, 1871	115, 777
Type-distributing machine	D. B. Thompson	Brooklyn, N. Y	Apr. 19, 1870	102, 183
Type-distributing machine	D. B. Thompson	Brooklyn, N. Y	Jan. 16, 1872	122, 744
Type-distributing machine	C. S. Westcott and A. K. Rider	Elizabeth, N. J., and New York, N. Y.	June 14, 1870	104, 236
Type-dressing machine	P. Welch	New York, N. Y	Dec. 11, 1866	60, 450
Type, Elastic	H. J. Davies	New York, N. Y	May 16, 1871	114, 773
Type, engraved blocks, &c., Treating forms of	J. A. Adams	Brooklyn, N. Y	Aug. 29, 1871	118, 420
Type, engraved plate, &c., Preparing the face of metallic.	L. V. Newton	New York, N. Y	Aug. 20, 1850	7, 581
Type for printing, Casting	G. Schaub	Hamburgh	Mar. 30, 1858	19, 797
Type for printing on irregular forms, Elastic	J. Herriet	New York, N. Y	Aug. 2, 1853	9, 911
Type for printing wall-paper, oil-cloth, &c., Composition for making.	R. A. Adams	New York, N. Y	Oct. 5, 1869	95, 405
Type for type-setting machines, Apparatus for arranging.	D. B. Ray	New York, N. Y	Sept. 9, 1873	142, 652
Type-galley, Method of locking	S. W. Brown	Syracuse, N. Y	Mar. 12, 1861	31, 688
Type-holder	W. McNaughton	Chicago, Ill	Feb. 7, 1871	111, 663
Type in form, Mode of securing	S. Anderson and T. J. Folan	Stapleton, N. Y	Nov. 9, 1869	96, 534
Type in rows, Device for arranging	J. M. Harper	Philadelphia, Pa	Dec. 3, 1867	71, 610
Type-inking machine	F. J. Austin	New York	Feb. 20, 1841	1, 967
Type-inking machine	S. Fairlamb and J. L. Gilpin	New York	Mar. 27, 1835	....
Type-machine	D. Bruce	Brooklyn, N. Y	July 28, 1868	80, 448
Type, Machine for casting printing	D. Bruce, jr	Bordentown, N. J	Mar. 17, 1838	632
Type, Machine for casting printing	G. F. Peterson	New York	Oct. 13, 1828	....
Type, Machine for cutting printer's	J. J. C. Smith	Philadelphia, Pa	July 26, 1864	43, 649
Type, Machine for making printer's	S. S. Weed	Stoneham, Mass	Sept. 25, 1855	13, 609
Type, Machinery for making	J. C. Petyt	Paris, France	Apr. 3, 1847	5, 049
Type, Making and using	L. Blake	Boston, Mass	Mar. 12, 1830	....
Type, Making printer's	J. J. C. Smith	Philadelphia, Pa	July 26, 1864	43, 648
Type, Making printer's	J. J. C. Smith	Philadelphia, Pa	Dec. 6, 1864	45, 353
Type, Manufacture of printing	J. Silversmith	Chicago, Ill	Nov. 11, 1873	144, 571
Type, Manufacturing pointed	T. Miner and J. G. Moody	New York, N. Y	Jan. 9, 1872	122, 531
Type, Manufacturing wooden	J. McCreary	Chesterville, Ohio	Dec. 7, 1852	9, 454
Type, Metal	G. and C. R. Scott	Montreal, Canada	Oct. 15, 1872	132, 184
Type-metal with brass, Mode of coating	J. Corduan	Brooklyn, N. Y	July 17, 1860	29, 144
Type-mold	G. B. Lothian	New York	Dec. 18, 1816	....
Type, Mold for casting printing	A. Binny	Philadelphia, Pa	May 17, 1814	....
Type, Mold for casting printing	R. W. and D. Davis	New York, N. Y	Sept. 22, 1863	40, 076
Type-mold, Machine for making	M. Nelson	New York, N. Y	May 21, 1867	65, 000
Type mold, Printer's	A. Binny	Philadelphia, Pa	Jan. 29, 1811	....
Type-molder	H. W. Day	Boston, Mass	Oct. 10, 1848	5, 846
Type, Nickel-faced	L. L. Smith	Brooklyn, N. Y	Sept. 21, 1869	95, 053
Type on printing-wheels, Method of casting	D. H. Chamberlain	West Roxbury, Mass	Apr. 9, 1867	63, 611
Type on rotary beds, Mode of securing	R. M. Hoe	New York, N. Y	Aug. 5, 1856	15, 501
Type, Ornamenting gildings, &c., with	F. Bailey	Philadelphia, Pa	Oct. 9, 1816	....
Type, Ornamental scroll	H. Stephenson, W. Thompson, and W. G. Blake.	Sheffield, England	Apr. 5, 1870	101, 535
Type-planer	W. S. Wright	Chicago, Ill	Oct. 4, 1870	107, 992
Type, Printing	D. W. Bruce	New York, N. Y	May 27, 1873	139, 365
Type, Printing	R. S. Merrill	Cambridge, Mass	Nov. 30, 1869	97, 426
Type, Process of casting printer's	W. M. Johnson	New York, N. Y	Aug. 21, 1828	....
Type, &c., Punch for	F. Baily		Jan. 29, 1791	....
Type, Roller for distributing ink on printer's	H. Maxwell	Lancaster, Pa	Dec. 26, 1817	....
Type, Rubber	O. Churchill	New York, N. Y	Oct. 15, 1872	132, 253
Type-rubber	S. Sturdevant	New York	Jan. 7, 1831	....
Type-rubbing apparatus	W. Moore	Brooklyn, N. Y	Sept. 15, 1863	39, 946
Type-rubbing machine	J. L. Duncan	New York, N. Y	Jan. 25, 1848	5, 420
Type-rubbing machine	D. Moore	New York, N. Y	Mar. 21, 1854	10, 659
Type-rubbing machine	D. Moore	Brooklyn, N. Y	Dec. 11, 1855	13, 935
Type-scouring machine	J. G. Pavyer	Saint Louis, Mo	June 26, 1860	28, 899
Type, Script-printing	H. J. Hewitt	Brooklyn, N. Y	Oct. 3, 1865	50, 245
Type, Scroll-corner	H. Stephenson, W. Thompson, and W. G. Blake.	Sheffield, England	Dec. 3, 1872	133, 678
Type-separator	E. Van Gieson	Newark, N. J	Nov. 20, 1866	59, 786
Type setter and distributor	J. B. Gilmer	Charlottesville, Va	Nov. 15, 1859	26, 149
Type-setting	D. B. Dorsey and E. Mathers	Fairmount, Va	Oct. 2, 1860	30, 211
Type-setting	H. Harger	Delhi, Iowa	June 26, 1860	28, 857
Type setting and distributing machine	T. Alden	New York, N. Y	Sept. 15, 1857	18, 175
Type setting and distributing machine	H. W. Alden and W. Mackey	New York, N. Y	Jan. 23, 1866	52, 254
Type setting and distributing machine	W. H. Houston	New York, N. Y	Mar. 17, 1868	75, 681
Type setting and distributing machine	F. M. Neff and J. E. Scruggs	Monroe, Iowa	Apr. 18, 1871	113, 912
Type setting and distributing machine	D. B. Ray	New York, N. Y	Oct. 31, 1871	120, 398
Type setting and distributing machine	J. T. Slingerland	New York, N. Y	Dec. 22, 1868	85, 251
Type setting and distributing machine	M. Umstadter	Norfolk, Va	June 29, 1869	91, 988
Type-setting, Cylindrical	R. Hemming	Boston, Mass	Dec. 16, 1845	4, 315
Type-setting machine	C. Baer	New York, N. Y	Aug. 7, 1866	57, 034
Type-setting machine	W. H. Baldwin	New York, N. Y	Feb. 18, 1873	136, 018
Type setting machine	O. L. Brown	Boston, Mass	Nov. 25, 1862	36, 991
Type-setting machine	O. L. Brown	Boston, Mass	Apr. 30, 1872	126, 262
Type-setting machine	A. Corey	Philadelphia, Pa	Aug. 13, 1872	130, 485
Type-setting machine	A. Corey	Philadelphia, Pa	Sept. 3, 1872	130, 982

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Type-setting machine	A. Corey and J. M. Harper	Philadelphia, Pa	Apr. 30, 1867	64, 200
Type-setting machine	M. De La Peña	New York, N. Y	Nov. 8, 1870	108, 980
Type-setting machine	J. M. Farnham	Hartford, Conn	May 21, 1872	126, 944
Type-setting machine	C. W. Felt	Salem, Mass	May 29, 1860	28, 463
Type-setting machine	C. W. Felt	Salem, Mass	June 23, 1863	38, 955
Type-setting machine	F. G. Foster	Eagle Rock, N. C	Nov. 24, 1868	84, 273
Type-setting machine	C. T. Moore	White Sulphur Springs, W. Va.	Apr. 1, 1873	137, 466
Type-setting machine	S. H. Orwig	Philadelphia, Pa	May 13, 1873	138, 992
Type-setting machine	T. G. Plunket	New York, N. Y	May 16, 1871	114, 850
Type-setting machine	D. B. Ray	Circleville, Ohio	Jan. 28, 1862	34, 265
Type-setting machine	W. S. Shipley	Jersey City, N. J	Dec. 13, 1870	110, 077
Type-setting machine	J. T. Slingerland	New York, N. Y	July 26, 1870	105, 855
Type-setting machine	J. Thorne	New York, N. Y	Oct. 12, 1869	95, 853
Type-setting machine	J. H. Young and A. Delcambre	England and France	June 22, 1841	2, 139
Type-smoothing machine	D. Bruce, jr	Bordentown, N. J	Mar. 10, 1838	631
Type-smoothing machine	D. Bruce, jr	Williamsburgh, N. Y	Mar. 28, 1848	5, 483
Type, Smoothing or rubbing printer's	A. Binny	Philadelphia, Pa	Feb. 4, 1811	......
Type, Spaces for setting	E. C. Harmon	Troy, N. Y	Nov. 23, 1852	9, 418
Type to cylindrical surfaces, Attaching movable	J. H. Foster	Pittsburgh, Pa	July 22, 1862	35, 929
Type-wheels, Die for raising letters on	N. L. Chamberlain	Boston, Mass	July 9, 1867	66, 562
Type-wheels, Method of manufacturing	B. B. Hill	Springfield, Mass	Sept. 28, 1869	95, 344
Type-writing machine	E. Cadmus	Washington, D. C	June 11, 1872	127, 739
Type-writing machine	T. A. Edison	Newark, N. J	Dec. 10, 1872	133, 841
Type-writing machine	J. Galloway	New York, N. Y	Nov. 11, 1873	144, 450
Type-writing machine	B. Halstead	Cincinnati, Ohio	Mar. 12, 1872	124, 437
Type-writing machine	H. R. M. J. Hansen	Copenhagen, Denmark	Apr. 23, 1872	125, 952
Type-writing machine	J. R. Pember	Randolph, Vt	June 17, 1873	139, 914
Type-writing machine	C. L. Sholes, C. Glidden, and S. W. Soulé,	Milwaukee, Wis	June 23, 1868	79, 265
Type-writing machine	C. L. Sholes, C. Glidden, and S. W. Soulé.	Milwaukee, Wis	July 14, 1868	79, 868
Type-writing machine	C. A. Washburn	San Francisco, Cal	Nov. 8, 1870	109, 161
Types or letters, Inking forms of	S. Fairland	New York	Oct. 25, 1830	......
Typograph	R. S. Thomas	Wilmington, N. C	May 30, 1854	10, 995
Typographer, Mechanical	H. Harger	Delhi, Iowa	Dec. 28, 1858	22, 423
Typographer, Mechanical	C. F. Johnson, jr	Owego, N. Y	Mar. 16, 1869	87, 941
Typographer, Mechanical	J. Pratt	Greenville, Ala	Aug. 11, 1868	81, 000
Typographer, Mechanical	C. L. Sholes	Milwaukee, Wis	Aug. 29, 1871	118, 491
Typographic machine	T. Hall	Bergen, N. J	June 18, 1867	65, 807
Typographical-printing plate	J. L. Ringwalt	Philadelphia, Pa	July 1, 1873	140, 542
Typography	P. Flamm	Phlin, France	Nov. 6, 1866	59, 522
Typography	J. Villet-collignon and L. George.	Paris, France	June 12, 1860	28, 702
U.				
Ultramarine, Furnace for the manufacture of	H. A. Ludwig	New York, N. Y	Dec. 14, 1869	97, 940
Ultramarine, Manufacture of	H. A. Ludwig	New York, N. Y	Dec. 14, 1869	97, 941
Umbilical supporter combined with corset	M. P. Dibble	New York	May 20, 1842	2, 630
Umbrella	D. Adams	Boston, Mass	Mar. 8, 1870	100, 582
Umbrella	C. Becker	New York, N. Y	Feb. 15, 1870	99, 816
Umbrella	J. B. Blair	Philadelphia, Pa	May 13, 1873	138, 729
Umbrella	C. Boernicke	Baltimore, Md	Aug. 31, 1858	21, 313
Umbrella	J. E. Boyce and R. Harrington	Birmingham, England	Apr. 14, 1868	76, 705
Umbrella	J. Brown	New York, N. Y	Aug. 6, 1867	67, 405
Umbrella	C. O. Buell	Stamford, Conn	July 30, 1867	67, 162
Umbrella	A. B. Caldwell	Syracuse, N. Y	Feb. 22, 1870	100, 012
Umbrella	G. F. Child	Columbus, Ohio	Mar. 26, 1872	124, 935
Umbrella	E. E. Clarke	New Haven, Conn	Sept. 27, 1864	44, 482
Umbrella	M. Clyde	Bradley Post-Office, Pa	Nov. 16, 1869	96, 777
Umbrella	J. H. Dally	Brooklyn, N. Y	Nov. 5, 1872	132, 810
Umbrella	W. Damerel	Brooklyn, N. Y	Sept. 19, 1865	49, 986
Umbrella	W. Damerel	Brooklyn, N. Y	Sept. 18, 1866	58, 227
Umbrella	W. Damerel	Brooklyn, N. Y	May 19, 1868	77, 963
Umbrella	A. G. Davis	Watertown, Conn	Aug. 18, 1868	81, 259
Umbrella	W. A. Drown	Philadelphia, Pa	June 6, 1871	115, 720
Umbrella	J. H. Dugan and G. Moncrief	Stoneham, Mass	Oct. 28, 1873	144, 621
Umbrella	W. Duryea	New York, N. Y	May 22, 1855	12, 903
Umbrella	J. S. Fee	Felicity, Ohio	June 20, 1865	48, 267
Umbrella	D. P. Felts	New York, N. Y	Nov. 10, 1863	40, 558
Umbrella	S. Fox	Deepcar, near Sheffield, England.	Aug. 23, 1870	106, 681
Umbrella	W. Gamble	Washington, D. C	July 3, 1824	......
Umbrella	S. F. Gates	Boston, Mass	May 28, 1867	65, 206
Umbrella	G. G. Griswold	New York, N. Y	May 19, 1868	77, 975
Umbrella	G. G. Griswold	Brooklyn, N. Y	July 4, 1871	116, 586
Umbrella	G. G. Griswold	New York, N. Y	Dec. 23, 1873	145, 733
Umbrella	G. Hamilton	New York, N. Y	Sept. 8, 1863	39, 809
Umbrella	A. A. Hardy	Pittsburgh, Pa	Aug. 21, 1866	57, 318
Umbrella	M. and L. Hirsh	Philadelphia, Pa	Jan. 31, 1871	111, 453
Umbrella	H. Hotchkiss	Plainfield, N. J	Oct. 24, 1865	50, 587
Umbrella	W. Hugo	Celle, Hanover	Nov. 13, 1866	59, 735
Umbrella	J. Jacob	New York, N. Y	Oct. 29, 1867	70, 229
Umbrella	F. Johnson and W. Hatchman	London, England	Oct. 11, 1870	108, 151
Umbrella	D. Kelly	Slatersville, R. I	Aug. 14, 1866	57, 151
Umbrella	R. P. Knapp	New York, N. Y	May 16, 1871	114, 828
Umbrella	H. Kurth	Brooklyn, N. Y	Apr. 20, 1858	19, 998
Umbrella	W. Lang	Brooklyn, N. Y	Mar. 31, 1868	76, 085
Umbrella	W. Latting	New York, N. Y	Nov. 21, 1843	3, 346
Umbrella	G. B. Lego	New Haven, Conn	July 17, 1866	56, 501
Umbrella	C. C. Lusby	Philadelphia, Pa	July 22, 1873	141, 151
Umbrella	J. McAuliffe	New York, N. Y	May 11, 1869	89, 874
Umbrella	J. McAuliffe	New York, N. Y	Aug. 19, 1873	141, 941
Umbrella	T. McCreary	Matteawan, N. Y	Aug. 24, 1869	94, 017
Umbrella	C. M. Minor and H. S. Frost	Bridgeport and Watertown, Conn.	Mar. 17, 1868	75, 692
Umbrella	W. P. Newhall	New York, N. Y	Apr. 28, 1863	38, 325

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Umbrella	F. V. Noette	Brooklyn, N. Y	Aug. 9, 1864	43, 788
Umbrella	J. H. Parsons	Quincy, Mich	Dec. 19, 1865	51, 616
Umbrella	G. L. Peabody	New York, N. Y	Sept. 12, 1865	49, 912
Umbrella	T. B. Penicks and J. Heffly	Philadelphia, Pa., and Washington, D. C.	June 28, 1870	104, 877
Umbrella	G. W. Pierce	Boston, Mass	June 16, 1868	78, 893
Umbrella	H. L. Power	London, England	Nov. 25, 1873	144, 865
Umbrella	G. W. Pressey	Hammonton, N. J	Dec. 9, 1873	145, 310
Umbrella	T. H. Ray	North Adams, Mass	Dec. 23, 1862	37, 243
Umbrella	H. T. Robbins	Boston, Mass	July 9, 1867	66, 632
Umbrella	H. T. Robbins	Boston, Mass	Aug. 31, 1869	93, 240
Umbrella	H. T. Robbins	Boston, Mass	Feb. 15, 1870	99, 950
Umbrella	L. Roth	Newark, N. J	July 7, 1868	79, 780
Umbrella	L. Sawyer	Springfield, Vt	Dec. 23, 1873	145, 904
Umbrella	J. P. Schenkl	Boston, Mass	Aug. 21, 1860	29, 721
Umbrella	N. Schner	Hagerstown, Md	Aug. 2, 1870	106, 062
Umbrella	E. F. Schreiner	Saint Louis, Mo	Feb. 25, 1868	74, 944
Umbrella	L. R. Selden	Haddam, Conn	Apr. 5, 1859	23, 503
Umbrella	J. Shepard	New Britain, Conn	Oct. 10, 1871	119, 888
Umbrella	C. B. Spencer	Hastings, Minn	Nov. 25, 1873	144, 876
Umbrella	N. Starr	Homer, N. Y	Jan. 31, 1871	111, 487
Umbrella	H. Steele	Jersey City, N. J	Oct. 19, 1858	21, 855
Umbrella	M. Stephens	Philadelphia, Pa	Nov. 29, 1870	109, 775
Umbrella	G. Styles	New York, N. Y	Apr. 3, 1866	53, 702
Umbrella	I. V. Tibbets	New York, N. Y	May 18, 1852	8, 961
Umbrella	W. F. Turner	Philadelphia, Pa	Oct. 29, 1867	70, 378
Umbrella	W. F. Turner	Philadelphia, Pa	Aug. 4, 1868	80, 785
Umbrella	G. S. Ward	Newark, N. J	Apr. 21, 1842	2, 573
Umbrella	W. Watson	Fayetteville, N. C	July 11, 1871	116, 899
Umbrella	E. Wight	Philadelphia, Pa	Apr. 30, 1872	126, 365
Umbrella	R. C. Williams	Frankfort, Ky	Oct. 4, 1870	108, 077
Umbrella	J. Willis	Stockbridge Works, near Sheffield, England.	Feb. 28, 1871	112, 307
Umbrella	W. W. Winter and T. Mueller	Philadelphia, Pa	Mar. 31, 1868	76, 120
Umbrella	G. L. Witsil	Philadelphia, Pa	Nov. 24, 1868	84, 457
Umbrella	S. W. Young	Providence, R. I	May 3, 1870	102, 746
Umbrella and cane	A. Smith	Perrysburgh, Ohio	Dec. 7, 1869	97, 559
Umbrella and cane, Combined	P. T. Brownell	Elmira, N. Y	Apr. 10, 1866	53, 778
Umbrella and cane, Combined	T. R. L. Chevers	Hoboken, N. J	May 27, 1873	139, 295
Umbrella and cane handle	L. Chapman	New York, N. Y	May 25, 1869	90, 498
Umbrella and head-rest, Combined	C. G. Page	Washington, D. C	June 8, 1858	20, 507
Umbrella and parasol	T. G. Bancroft	Worcester, Mass	Oct. 15, 1861	33, 472
Umbrella and parasol	S. Canfield	Derby, Conn	Aug. 25, 1857	18, 036
Umbrella and parasol	S. Fox	Sheffield, England	May 17, 1853	9, 725
Umbrella and parasol	G. H. Gossip	Haggerstone, England	Jan. 2, 1872	122, 453
Umbrella and parasol	J. A. Simpson	Liverpool, England	June 9, 1868	78, 839
Umbrella and parasol	W. Sleeper	Philadelphia, Pa	Nov. 22, 1826	....
Umbrella and parasol	J. Willis	London, England	June 16, 1857	17, 600
Umbrella and parasol frame	F. Reichhold	New York, N. Y	Nov. 9, 1858	22, 033
Umbrella and parasol, Locking	G. F. Southwick	Somerset, Mass	Oct. 17, 1848	5, 861
Umbrella and parasol tip	R. A. Stratton	Philadelphia, Pa	Aug. 19, 1862	36, 261
Umbrella, Cane	H. Crosby, jr	Waterbury, Conn	Oct. 27, 1857	18, 500
Umbrella, Cane	I. Hammond	Philadelphia, Pa	May 9, 1848	5, 553
Umbrella, Cane	S. Wright	Philadelphia, Pa	Apr. 11, 1848	5, 500
Umbrella, cane, and seat, Combined	G. Sweeny	New York, N. Y	Nov. 16, 1869	96, 848
Umbrella-case	S. H. Pearce	Boston, Mass	Jan. 14, 1868	73, 378
Umbrella-connections, Machine for making	E. Wight	Philadelphia, Pa	Oct. 25, 1870	108, 742
Umbrella-connections, Roll for rolling	E. Wight	Philadelphia, Pa	May 2, 1871	114, 377
Umbrella-cover	J. C. Clime	Philadelphia, Pa	Mar. 30, 1869	88, 449
Umbrella-cover	D. W. Odiorne	Elizabeth, N. J	Sept. 30, 1873	143, 297
Umbrella-covers, Hemming and cording	S. C. Blodget	Philadelphia, Pa	Jan. 3, 1854	10, 386
Umbrella drip-attachment	T. Fowler	Tottensville, N. Y	Dec. 27, 1870	110, 452
Umbrella drip-catch	H. Keenan	Worcester, Mass	Nov. 1, 1870	108, 798
Umbrella, Extension	W. H. Sutherland	Seven Mile, Ohio	July 2, 1867	66, 263
Umbrella-fastening	C. De Saxe	New York, N. Y	Feb. 15, 1859	22, 943
Umbrella-fastening	T. R. Timby	Saratoga Springs, N. Y	May 18, 1869	90, 134
Umbrella, Folding	S. B. Bushfield	Parkersburgh, W. Va	Sept. 21, 1869	95, 080
Umbrella, Folding	H. Richardson, S. Morris, jr., and B. C. Perry.	Litchfield, Conn	Aug. 22, 1854	11, 561
Umbrella, Folding	L. K. Selden	Haddam, Conn	Jan. 6, 1857	16, 340
Umbrella, Folding	A. B. Shaw	Holderness, N. H	Nov. 5, 1867	70, 631
Umbrella, Folding	A. B. Shaw	Holderness, N. H	Nov. 5, 1867	70, 632
Umbrella, Folding	F. E. Walcott and C. H. Berry	Natick, Mass	Oct. 1, 1872	131, 916
Umbrella-frame	J. Bloom	Philadelphia, Pa	Jan. 18, 1859	22, 686
Umbrella-frame	H. E. Donor	New York, N. Y	Mar. 1, 1870	100, 271
Umbrella-frame	A. Herzberg	Philadelphia, Pa	Oct. 22, 1872	132, 363
Umbrella-frame	A. S. Hubbell	Providence, R. I	Sept. 13, 1870	107, 374
Umbrella-frame	H. T. Robbins	Boston, Mass	July 13, 1869	92, 472
Umbrella-frame	R. E. Rogers	Philadelphia, Pa	Oct. 11, 1859	25, 763
Umbrella-frame, Tipping	J. M. Doubleday	Mont Clair, N. J	Mar. 24, 1868	75, 875
Umbrella-handle	A. Oberndorf, jr	Baltimore, Md	Mar. 25, 1873	137, 233
Umbrella-handle, Folding	L. Gehlen	New York, N. Y	Mar. 8, 1870	100, 522
Umbrella-handles from plastic material, Mode of forming.	L. Chapman	New York, N. Y	Sept. 6, 1870	107, 000
Umbrella-holder	A. Clarke	Sheboygan Falls, Wis	Dec. 27, 1870	110, 434
Umbrella-holder	J. A. Minor	Middletown, Conn	Oct. 3, 1865	50, 261
Umbrella-holder for carriages, Adjustable	W. C. Doolittle	Marion, Conn	Jan. 2, 1872	122, 370
Umbrella-holder for vehicles	H. W. Pettibone	Attica, N. Y	Apr. 16, 1872	125, 690
Umbrella-hook	W. H. Richardson	Philadelphia, Pa	Feb. 23, 1864	41, 720
Umbrella hooks or handles, Machine for turning	H. Winter	Honesdale, Pa	July 14, 1863	39, 252
Umbrella, India-rubber-covered	J. H. Walker	Bergen, N. J	Dec. 18, 1866	60, 597
Umbrella-lock	H. Clark	Baltimore, Md	Nov. 22, 1870	109, 336
Umbrella-lock	H. Plumb	Frankford, Pa	Jan. 11, 1870	98, 797
Umbrella-lock	S. Wales	New York, N. Y	Nov. 26, 1872	133, 392
Umbrella-locking device	H. T. Robbins	Boston, Mass	Dec. 22, 1868	85, 132
Umbrella notches, Manufacture of	A. and I. Herzberg	Philadelphia, Pa	July 15, 1873	140, 920
Umbrella-rib	H. S. Frost	Watertown, Conn	June 7, 1870	103, 864
Umbrella-ribs, Apparatus for tempering	A. S. Black	New York, N. Y	July 14, 1863	39, [illegible]0

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Umbrella-ribs, Machine for affixing middle-bits to.	A. Wilson	Birmingham, England	Sept. 23, 1873	143, 210
Umbrella-ribs, Machine for bending	F. Lehr	Hoboken, N. J	Jan. 18, 1859	22, 659
Umbrella-ribs, Machine for flattening and punching	J. Fox	Minersville, Pa	Aug. 14, 1866	57, 251
Umbrella-ribs, Manufacture of	C. C. Reed	Philadelphia, Pa	Mar. 11, 1856	14, 431
Umbrella-ribs, steel strips, &c., Apparatus for tempering.	A. Wilson	Birmingham, England	Feb. 25, 1873	136, 197
Umbrella-ribs, Tempering	T. W. Ball	Morrisania, N. Y	May 28, 1867	65, 043
Umbrella-rings, Manufacture of	J. Ball	Elmira, N. Y	Jan. 4, 1859	22, 478
Umbrella-runner	J. Barnhurst	Francisville, Pa	June 25, 1839	1, 193
Umbrella-runner	A. G. Davis	Watertown, Conn	Mar. 10, 1868	75, 381
Umbrella-runner	H. Kurth	Brooklyn, N. Y	Nov. 5, 1867	70, 579
Umbrella-runner	H. T. Robbins	Boston, Mass	June 22, 1869	91, 565
Umbrella-runner	O. M. Smith	Philadelphia, Pa	Mar. 31, 1868	76, 259
Umbrella-runner	O. M. Smith	Philadelphia, Pa	Jan. 1, 1869	90, 883
Umbrella-runner	S. Wales	New York, N. Y	Feb. 11, 1873	135, 677
Umbrella-runner fastening	W. Money	Paterson, N. J	Oct. 22, 1867	70, 241
Umbrella runner or notch	O. M. Smith	Philadelphia, Pa	July 4, 1871	116, 767
Umbrella-runner stop	J. Wright	Philadelphia, Pa	Oct. 27, 1868	83, 581
Umbrella-runners, Machine for cutting nicks in	O. M. Smith	Philadelphia, Pa	Mar. 25, 1873	137, 256
Umbrella safety-attachment	J. A. Lieb and E. W. Crane	Newark, N. J	Feb. 18, 1868	74, 555
Umbrella-staff collars, Punch and die for finishing.	R. Marshall	Philadelphia, Pa	May 7, 1872	126, 470
Umbrella-stand for church-pews	E. Snedeker	Brooklyn, N. Y	Dec. 10, 1872	133, 809
Umbrella-stand lock	A. M. Foote	New York, N. Y	Feb. 7, 1860	27, 043
Umbrella-sticks, &c., Machinery for turning	S. West and H. Plumb	Honesdale, Pa	Feb. 12, 1850	7, 095
Umbrella-sticks, Mode of preparing wood for	J. Ball	Elmira, N. Y	Sept. 4, 1860	29, 851
Umbrella-sticks, &c., of rattan, Preparation of	J. Kleemann	Meissen, Germany	Nov. 27, 1855	13, 850
Umbrella-stretchers, Manufacture of	J. Shepard	New Britain, Conn	May 20, 1873	139, 088
Umbrella-supporter	G. S. Cooper	Baraboo, Wis	May 13, 1873	138, 861
Umbrella-supporter	W. A. Drown, jr	Philadelphia, Pa	Dec. 9, 1873	145, 408
Umbrella-supporter	H. S. Heermance	Claverack, N. Y	Apr. 2, 1867	63, 517
Umbrella-tip retainer	C. C. Lusby and W. W. Winter	Philadelphia, Pa	May 27, 1873	139, 405
Umbrella-tips, Machine for drilling and countersinking.	J. W. Lyon	Brooklyn, N. Y	July 10, 1866	56, 239
Umbrella, Walking-cane	E. Wright	Philadelphia, Pa	May 6, 1873	138, 726
Umbrella, Water-proof	E. L. Simpson	Roxbury, Mass	Nov. 19, 1834	......
Umbrellas and parasols, Joints for ribs of	R. A. Stratton	Philadelphia, Pa	Aug. 19, 1862	36, 260
Umbrellas and parasols, Mode of constructing	E. Hale	Newburgh, N. Y	Dec. 28, 1839	1, 449
Umbrellas, Device for opening and closing	E. P. Jones	Shell Mound, Miss	Feb. 20, 1872	123, 912
Umbrellas, &c., Inserting glass in	E. A. Pond and M. S. Richardson	Rutland, Vt	Oct. 17, 1865	50, 492
Umbrellas, Joint for frames of folding	A. S. Hubbell	Norwich, Conn	Jan. 10, 1871	110, 918
Umbrellas, Lock-clasp for	A. H. Whitney	Portland, Me	Aug. 27, 1867	68, 138
Umbrellas, Machine for nicking rib-collars for	R. Marshall	Philadelphia, Pa	Aug. 20, 1872	130, 648
Umbrellas, Manufacture of	J. McAuliffe	New York, N. Y	Apr. 23, 1872	125, 974
Umbrellas, Manufacture of runners and top-notches for.	T. Cox and W. Holland	Birmingham, England	Jan. 28, 1873	135, 321
Umbrellas, Method of preparing rattan for	J. W. Martin	Philadelphia, Pa	Nov. 11, 1856	16, 063
Umbrellas, Mode of fixing the colors of cotton	N. Cook	New York, N. Y	Dec. 13, 1853	10, 308
Umbrellas on vehicles, Apparatus for holding and adjusting.	G. F. Child	Dayton, Ohio	June 20, 1871	116, 157
Under-ground pipes, Process for manufacturing	A. H. Perkins	Chicago, Ill	Jan. 31, 1865	46, 134
Under-ground receptacle for waste matter	G. Herdtfelder	New York, N. Y	Feb. 19, 1861	31, 514
Union-coupling	W. B. Snow	Brooklyn, N. Y	May 20, 1873	139, 203
Union-lock	W. Pye	New York	Apr. 28, 1818	......
Universal boiler	A. Glendening	Butler County, Pa	Sept. 25, 1823	......
Universal coupling	C. Haskins	Penn Yan, N. Y	Oct. 8, 1867	69, 662
Universal coupling	H. S. Leland	Canton, Ohio	Apr. 22, 1873	138, 031
Universal-geared joint	G. F. Green	Kalamazoo, Mich	Jan. 18, 1870	98, 864
Universal globe-joint	J. Bruno, jr	Lansing, Mich	Jan. 12, 1869	85, 787
Universal joint	J. Baylor	Canton, Ill	July 19, 1859	24, 786
Universal joint	J. J. Butts and A. S. Stone	Plain View, Minn	Mar. 10, 1868	75, 361
Universal joint	A. Duvall	Baltimore, Md	Nov. 24, 1868	84, 417
Universal joint	R. T. Smith	Nashua, N. H	June 25, 1867	66, 052
Universal joint	S. N. Taylor	Horicon, Wis	Jan. 29, 1867	61, 581
Universal joint	J. Troxel	Nankin, Ohio	Apr. 8, 1873	137, 578
Universal joint	A. Zwiebel	Burlington, Wis	Sept. 3, 1867	68, 542
Universal joint	A. Zwiebel	Burlington, Wis	Feb. 8, 1870	99, 742
Universal-joint coupling	C. E. Roper and H. Fisher	Canton, Ohio	Jan. 23, 1872	123, 049
Universal-joint coupling	W. Smead	Rochester, N. Y	June 23, 1868	79, 153
Universal-joint coupling	H. B. Whitehead	Holly Springs, Miss	Jan. 21, 1873	135, 054
Universal-joint coupling for connecting shafts	M. Clemens	Boston, Mass	Apr. 23, 1872	125, 880
Universal-joint coupling for connecting shafts	M. Clemens	Boston, Mass	Apr. 23, 1872	125, 881
Universal joint for connecting shafts, &c	J. Hinkley	Huron, Ohio	Jan. 29, 1856	14, 159
Universal joint for shafting	C. Roberts	Three Rivers, Mich	Jan. 18, 1870	98, 885
Universal mill for paint, grain, &c	J. Bogardus	New York	Jan. 18, 1832	......
Upholsterer's springs, Cap for	A. Tower	New York, N. Y	June 11, 1867	65, 617
Upholstering-spring	W. H. Mallory	Bridgeport, Conn	Aug. 15, 1865	49, 476
Upholstering-spring	H. C. Velie	Poughkeepsie, N. Y	Dec. 13, 1870	110, 174
Upholstery, chair, and car-seat spring	E. W. Tucker	Lowell, Mich	Sept. 7, 1869	94, 670
Upholstery, Elastic batting or wadding for	I. Lindsley and J. Mackintosh	Pawtucket, R. I	Mar. 12, 1872	124, 598
Upholstery, Mode of securing springs in	W. Wright	New York, N. Y	Dec. 16, 1856	16, 254
Upholstery-nail	B. S. Pardee and T. Rawling	Mount Carmel and New Haven, Conn.	Oct. 4, 1859	25, 670
Upholstery-spring	J. F. Duffy	Chicago, Ill	Dec. 26, 1871	122, 111
Upholstery-spring	C. E. Patric	Springfield, Ohio	Aug. 1, 1871	117, 674
Upholstery-spring	L. Patric	Springfield, Ohio	Nov. 19, 1872	133, 115
Upholstery-springs, Attachment for	W. H. Goodale	Colton, N. Y	Apr. 24, 1866	54, 143
Upholstery-springs, Machine for making	J. Harrison, jr	New York, N. Y	June 28, 1859	24, 557
Upholstery-springs, Machine for making	C. A. Young	Providence, R. I	May 21, 1861	32, 395
Upholstery-springs, Machine for making	C. A. and S. W. Young	Providence, R. I	May 31, 1859	24, 259
Upper-jaw bit	F. B. Carleton	Jeffersonville, Vt	Oct. 30, 1866	59, 178
Upright drill	P. Blaisdell	Worcester, Mass	July 16, 1867	66, 672
Upset, punch, and shears	J. B. Rose and J. B. Brown	New London, Wis	Sept. 21, 1869	95, 143
Upset, punch, and shears	J. B. Rose and J. B. Brown	New London, Wis	Sept. 21, 1869	95, 144
Upset, punch, shears, and saw-gumming device	S. D. Hicks	New London, Wis	Nov. 9, 1869	96, 699
Upsetting, cutting, and punching iron, Machine for	J. J. Rose	Elmwood, Ill	Aug. 1, 1865	49, 158
Upsetting-machine	E. R. Carter and C. D. W. Gibson.	Medina and Bay City, Mich	May 4, 1869	89, 631
Upsetting-machine	H. Culver	Dansville, N. Y	Dec. 22, 1868	85, 215

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Upsetting-machine	J. F. Sargent	Tunbridge, Vt	Apr. 14, 1868	76, 822
Upsetting machine, Iron	M. L. Munger and C. D. W. Gibson.	Grand Blanc, Mich	Jan. 24, 1871	111, 136
Upsetting metal rods, Die for	M. Seward	New Haven, Conn	May 7, 1872	126, 495
Upsetting-press	D. A. Boland	Pittsburgh, Pa	Oct. 17, 1865	50, 448
Upsetting-press	A. Kloman	Pittsburgh, Pa	June 19, 1866	55, 674
Upsetting, punching, and cutting metal, Compound machine for.	W. Hunt	Oskaloosa, Iowa	Sept. 20, 1870	104, 500
Upsetting rods, Machine for	G. G. Burgess	Rawsonville, Ohio	May 28, 1872	127, 146
Urinal	W. S. Carr	New York, N. Y	Dec. 6, 1864	45, 315
Urinal	J. C. Garnsey	New York, N. Y	Dec. 9, 1873	145, 344
Urinal	S. Males	Cincinnati, Ohio	Jan. 28, 1868	73, 907
Urinal	S. Males	Cincinnati, Ohio	Sept. 6, 1870	107, 188
Urinal	A. Rankin	New York, N. Y	Mar. 27, 1866	53, 488
Urinal	A. W. Robinson	Providence, R. I	Dec. 24, 1872	134, 315
Urinal-attachment to beds	D. Price	Lockport, N. Y	Aug. 2, 1870	105, 979
Urinal, Earth	J. G. White	Cambridge, Mass	June 7, 1870	104, 089
Urinal for medical purpose, Bed	J. R. Knight and J. P. Coburn	Greenfield, Mass	Mar. 25, 1873	137, 214
Urinal for railway-cars	J. L. Howard	Hartford, Conn	Sept. 19, 1871	119, 147
Urinal pan and pipe	M. L. Lawrence	Pittsburgh, Pa	June 4, 1872	127, 614
Urinal, Public	W. M. Kepler	Cincinnati, Ohio	Dec. 14, 1869	97, 930
Urinal, Public	S. Males	Cincinnati, Ohio	Apr. 26, 1870	102, 416
Urinal, Seated	D. Gibbons	Rochester, N. Y	Nov. 14, 1871	120, 960
Urinal, Street	M. Bacharach	New York, N. Y	Jan. 18, 1870	98, 905
Urine, Apparatus for relief of involuntary discharge of.	J. S. Van Rensselaer	Albany, N. Y	Mar. 17, 1868	75, 658
Urn and spice stand, Revolving	W. J. Evans	New York, N. Y	Nov. 21, 1871	121, 091
Urn, Ice and water	E. A. Parker	West Meriden, Conn	Mar. 26, 1872	124, 972
Urn-stand	C. E. Goodhue	Malden, Mass	Sept. 21, 1869	95, 104
Urn stand, Revolving	W. J. Evans	New York, N. Y	May 30, 1871	115, 289
Urn, Table	E. Kaufman	Philadelphia, Pa	Nov. 5, 1867	70, 441
Useful and ornamental articles, Composition for forming.	D. E. Somes	Washington, D. C.	Oct. 23, 1866	59, 154
Uterine-abdominal supporter	W. Crocker	Meadville, Pa	Mar. 24, 1868	75, 737
Uterine and abdominal supporter	J. S. Havens, T. M. Johnson, and C. W. Howe.	Buffalo, N. Y	Aug. 28, 1866	57, 505
Uterine and prolapsus-ani supporter	A. M. Dye	Elkhart City, Ill	May 9, 1871	114, 538
Uterine diseases, &c., Making local applications in	J. R. Hamilton	Portland, Oreg	Mar. 3, 1868	75, 158
Uterine electrode and abdominal supporter	A. J. Steele	New York, N. Y	Jan. 7, 1868	73, 207
Uterine injections, Instrument for	D. Gale	Boston, Mass	Oct. 16, 1844	3, 800
Uterine supporter	W. Alley	Columbus, Ga	June 3, 1856	14, 993
Uterine supporter	A. D. Angell	Cold Water, Mich	July 13, 1869	92, 417
Uterine supporter	L. A. Babcock	Freeport, Ill	Feb. 20, 1872	123, 856
Uterine supporter	E. P. Banning, jr	New York, N. Y	Mar. 12, 1872	124, 474
Uterine supporter	R. D. Bogert	Nanuet, N. Y	Feb. 9, 1869	86, 725
Uterine supporter	J. T. Boyd	Indianapolis, Ind	Nov. 10, 1868	83, 826
Uterine supporter	A. C. Byam	Hopkinton, Iowa	Oct. 14, 1873	143, 615
Uterine supporter	F. Carter	Washington, Va	Jan. 1, 1847	4, 915
Uterine supporter	H. N. Caner	Freeport, Ill	Apr. 8, 1873	137, 531
Uterine supporter	S. P. Cole	Janesville, Wis	June 2, 1868	78, 431
Uterine supporter	E. Colvin	North Granville, N. Y	Aug. 4, 1845	4, 134
Uterine supporter	W. E. Cooke	Philadelphia, Pa	June 30, 1857	17, 670
Uterine supporter	A. Dickson	Meadville, Pa	July 21, 1868	80, 153
Uterine supporter	G. Dirksen	Freeport, Ill	Nov. 12, 1872	133, 018
Uterine supporter	G. Dirksen	Freeport, Ill	Feb. 18, 1873	136, 046
Uterine supporter	D. Dodge	Rockford, Ill	May 14, 1867	64, 644
Uterine supporter	D. M. Drake and S. L. Hockert	Pittsburgh, Pa	Feb. 16, 1864	41, 607
Uterine supporter	R. Faulkner	Erie, Pa	Nov. 22, 1870	109, 401
Uterine supporter	E. J. Fraser	Erie, Pa	May 4, 1869	89, 647
Uterine supporter	S. L. Hockert	Pittsburgh, Pa	Aug. 15, 1865	49, 406
Uterine supporter	G. Kleinwort	Albion, Ill	Oct. 16, 1860	30, 410
Uterine supporter	J. Lee	Stevens Point, Wis	Dec. 20, 1864	45, 506
Uterine supporter	A. Lowe	Nashville, Tenn	Dec. 19, 1871	122, 040
Uterine supporter	L. D. McIntosh	Waseca, Minn	Aug. 22, 1871	118, 378
Uterine supporter	A. H. McNair	Philadelphia, Pa	July 28, 1843	3, 204
Uterine supporter	F. Meriwether	Tamola, Miss	Dec. 10, 1867	71, 895
Uterine supporter	J. A. Morrell	Chicago, Ill	Mar. 17, 1868	75, 694
Uterine supporter	W. Provines	Columbia, Mo	Oct. 14, 1856	15, 897
Uterine supporter	J. S. Rankin	Pittsburgh, Pa	June 15, 1869	91, 265
Uterine supporter	F. Reichenbach	Rochester, N. Y	Jan. 16, 1866	52, 076
Uterine supporter	A. C. Rohleder	New York, N. Y	Nov. 26, 1867	71, 414
Uterine supporter	H. A. Rosenthal	New York, N. Y	May 29, 1855	12, 965
Uterine supporter	J. Schofield	Philadelphia, Pa	Oct. 10, 1848	5, 844
Uterine supporter	J. S. Shannon	Lena, Ill	Nov. 7, 1871	120, 674
Uterine supporter	B. F. Stephenson	Springfield, Ill	June 21, 1870	104, 657
Uterine supporter	W. S. Van Cleve	Centralia, Ill	Aug. 15, 1871	118, 073
Uterine supporter, Self-adjusting	D. Smith	Biddeford, Me	Oct. 29, 1861	33, 609
Uterine supporters, Director for	W. G. Grant	Wakeman, Ohio	Jan. 22, 1867	61, 417
Utero-vaginal bather	C. Brailly	New York, N. Y	May 9, 1848	5, 555
Utero-vaginal supporter	R. Caulkins	Sandusky City, Ohio	Jan. 29, 1850	7, 050
Uterus, Sound for the	B. S. Benson	Baltimore, Md	Jan. 27, 1863	37, 486
V.				
Vaccinating-instrument	J. F. Fozer	Rochester, N. Y	Aug. 13, 1850	7, 560
Vaccinating-instrument	J. W. W. Gordon	Catonsville, Md	Jan. 27, 1857	16, 478
Vaccinating-instrument	H. Mellish	Walpole, N. H	Dec. 24, 1850	7, 858
Vaccinating-instrument, Automatic	C. H. Eccleston	Oxford, N. Y	Jan. 4, 1870	98, 478
Vaccination	J. Smith	Baltimore, Md	July 10, 1822	....
Vaccinator	H. Minton	Brooklyn, N. Y	June 12, 1866	55, 521
Vaccinator	A. Whittemore	Cambridgeport, Mass	Feb. 27, 1866	52, 921
Vaccinator	J. Zeribes	Boston, Mass	Sept. 24, 1872	131, 729
Vaccinator, Spring	W. Haslett	Baltimore, Md	Apr. 17, 1817	....
Vaccine matter, Box for	E. Cutter	Woburn, Mass	Dec. 31, 1872	134, 467
Vaccine virus, &c., Cover and guard for	N. H. Shipley	Frederick County, Md	Nov. 19, 1872	133, 124
Vacuo, Apparatus for treating disease in	R. S. Gee	Delavan, Wis	Feb. 20, 1872	123, 887
Vacuum-apperatus	T. Fravel	Westville, Ind	Aug. 25, 1868	81, 488
Vacuum-apparatus for treating diseases	T. Fravel	Westville, Ind	May 4, 1869	89, 648

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Vacuum-apparatus for treating diseases	A. F. Jones	Lexington, Ky	Sept. 13, 1864	44, 198
Vacuum-apparatus for treating diseases	S. Pasco	Delevan, Wis	Jan. 2, 1872	122, 486
Vacuum-chamber, Medical	G. Hadfield	Cincinnati, Ohio	Nov. 6, 1866	59, 388
Vacuum-cup attachment	W. Amer	Janesville, Wis	June 20, 1871	116, 004
Vacuum-cup, breast-pump, &c., Coupling for	M. Mattson	New York, N. Y	Oct. 8, 1867	69, 570
Vacuum-engine	H. W. Adams	Philadelphia, Pa	Apr. 25, 1871	114, 083
Vacuum-engine	C. F. Leopold	Philadelphia, Pa	Apr. 16, 1872	125, 818
Vacuum-engine	I. Newton and N. W. Wheeler	New York and Brooklyn, N. Y.	Mar. 15, 1864	41, 964
Vacuum-engine, Pneumatic	J. S. Morton	Philadelphia, Pa	Apr. 26, 1870	102, 300
Vacuum-engine, Pneumatic	J. S. Morton and J. H. Laning	Philadelphia, Pa	Apr. 26, 1870	102, 301
Vacuum-evaporator, Mode of constructing	D. Bruce	Rossville, N. Y	June 26, 1866	55, 812
Vacuum, Mode of treating diseases of	J. G. Hadfield	Cincinnati, Ohio	Dec. 29, 1868	85, 303
Vacuum-pan	A. P. Brown	Upperville, Va	Apr. 29, 1873	138, 375
Vacuum-pan	J. O. Donner	Jersey City, N. J	Nov. 16, 1869	96, 900
Vacuum-pan	C. Wahl	Chicago, Ill	May 8, 1866	54, 629
Vacuum-pan apparatus	F. O. Matthiessen	Jersey City, N. J	Apr. 21, 1868	77, 065
Vacuum-pan for boiling sugar, &c	F. O. Matthiessen	Jersey City, N. J	July 2, 1867	66, 370
Vacuum-pan for condensing milk and other substances.	G. R. Percy	New York, N. Y	Jan. 23, 1866	52, 197
Vacuum-pan for evaporating	J. A. Southmayd	Jersey City, N. J	Mar. 11, 1862	34, 651
Vacuum-pan for the manufacture of sugar	S. Dod	Havana, Cuba	Dec. 31, 1872	134, 365
Vacuum-pan for the manufacture of sugar, &c	J. B. Root	New York, N. Y	Nov. 4, 1873	144, 358
Vacuum-pan, Sugar	J. M. Miller	New York, N. Y	Oct. 21, 1851	8, 450
Vacuum-pans, Screwing tube in	B. H. Bartol	Philadelphia, Pa	Nov. 24, 1857	18, 669
Vacuum-tank	J. P. Walter	Brooklyn, N. Y	May 6, 1862	35, 189
Vacuum-ventilator	J. W. Foard	San Francisco, Cal	Dec. 11, 1866	60, 352
Vacuum-vessel for condensing milk, &c., Method of preparing.	J. R. Pond	New Hartford, Conn	May 22, 1866	54, 950
Vaginal-irrigator	M. Mattson	New York, N. Y	Aug. 27, 1867	68, 096
Valise and seat, Combined	S. B. Holden	Woburn, Mass	Jan. 31, 1865	46, 187
Valise for artillery harness	W. H. Wilkinson	Springfield, Mass	May 23, 1865	47, 889
Valise-lock	T. James	New York, N. Y	July 9, 1867	66, 497
Valise, &c., lock	R. Schmitt	Newark, N. J	Apr. 2, 1872	125, 223
Valise, Lunch	S. Feust	New York, N. Y	Apr. 19, 1870	102, 103
Valise, Saddle	R. McMurray and J. S. Topham	Washington, D. C	Mar. 28, 1865	47, 028
Valise, Traveling	F. Lamoureux	Binghamton, N. Y	Sept. 12, 1865	49, 896
Valises, &c., Device for connecting frames of	C. Votti	Newark, N. J	Nov. 25, 1873	144, 878
Valve	D. D. Allen	South Adams, Mass	July 25, 1865	48, 883
Valve	H. Belfield	Philadelphia, Pa	July 5, 1870	105, 027
Valve	W. Bramwell	New York, N. Y	June 14, 1859	24, 369
Valve	J. Briggs	Roxbury, Mass	July 23, 1867	67, 018
Valve	R. B. Chapman and E. F. Spaulding.	Waltham and Cambridgeport, Mass.	Apr. 30, 1872	126, 182
Valve	N. Cope and W. Hodgson	Cincinnati, Ohio	Mar. 19, 1861	31, 701
Valve	G. R. Crane	Painesville, Ohio	Dec. 23, 1873	145, 789
Valve	T. Evans	Watkins, N. Y	Mar. 26, 1861	31, 794
Valve	B. Fitts	Worcester, Mass	Dec. 30, 1873	146, 057
Valve	A. Good, jr., and S. Strouse	Titusville, Pa	July 28, 1868	80, 474
Valve	J. and C. B. Hardick	Brooklyn, N. Y	Dec. 4, 1860	30, 815
Valve	J. Johnson	Brooklyn, N. Y	Feb. 21, 1871	112, 047
Valve	J. Lewis	Manchester, England	May 9, 1871	114, 572
Valve	A. Marriott	Saint Louis, Mo	Nov. 25, 1873	144, 996
Valve	E. McSteen	Pittsburgh, Pa	July 4, 1871	116, 619
Valve	D. Minthorn	Beverly, Mass	May 28, 1861	32, 430
Valve	C. F. Murdock	Detroit, Mich	Nov. 18, 1873	144, 692
Valve	G. Murray, jr	Cambridgeport, Mass	Jan. 31, 1871	111, 373
Valve	J. A. Nichols	Pittsburgh, Pa	Dec. 30, 1873	145, 964
Valve	J. Peabody	Dixmont Centre, Me	June 12, 1866	55, 531
Valve	S. J. Peet	Boston, Mass	Nov. 7, 1871	120, 664
Valve	A. Snyder	Pittsburgh, Pa	June 7, 1870	103, 937
Valve	L. Thomas	Allegheny, Pa	June 25, 1861	32, 658
Valve	J. Warren	Weston, Mass	Aug. 1, 1871	117, 704
Valve	J. West	Bethlehem, Pa	Nov. 22, 1870	109, 476
Valve	J. Wilcox	Thompsonville, Conn	Mar. 19, 1867	63, 126
Valve-actuating mechanism for engines	F. Chase	Boston, Mass	Nov. 25, 1873	144, 631
Valve, Alarm or reversed safety	W. S. Gillett	Lower Three Runs, S. C	Nov. 16, 1825	....
Valve, Alarm safety	F. Steele	Brooklyn, N. Y	Oct. 21, 1873	143, 858
Valve and cam of steam-engine boilers	J. Kirkpatrick	Baltimore, Md	May 29, 1835	....
Valve and cock	I. Dreyfus	New York, N. Y	Feb. 7, 1871	111, 621
Valve and cut-off, Rotary	W. S. Bartle	Newark, N. J	Aug. 19, 1873	141, 982
Valve and cut-off, Rotary	J. W. Strange	Bangor, Me	May 20, 1873	139, 033
Valve and cut-off, Rotary steam	H. Wright	Warren, Ohio	Oct. 24, 1871	120, 360
Valve and cut-off, Steam	R. T. P. Allen	Kentucky Military Institute, Ky.	Aug. 27, 1872	130, 888
Valve and exhaust-passage, Steam-engine	C. W. Copeland	New York, N. Y	Feb. 12, 1856	14, 225
Valve and faucet, Self-closing	D. Wellington	Boston, Mass	Apr. 2, 1872	125, 363
Valve and gearing for pumping-engines, Oscillating	C. A. Wilson	Newport, Ky	July 24, 1855	13, 328
Valve and governor, Steam	R. Sanderson	Cleveland, Ohio	May 16, 1871	114, 865
Valve and air-chest for double-cylinder pumps	H. Parmelee	Danville, Pa	Aug. 22, 1848	5, 728
Valve and opening, Steam-engine	F. Rochow	New York, N. Y	June 15, 1869	91, 368
Valve and piston lubricator, Steam	A. N. Allen and R. H. Dewey	Pittsfield, Mass	Oct. 31, 1871	120, 476
Valve and piston, Pump	J. Clark	Portsmouth, Va	Oct. 11, 1841	2, 317
Valve and port, Steam-engine	J. Cooke	Paterson, N. J	May 7, 1872	126, 379
Valve and port, Steam-engine	G. Westinghouse, jr	Pittsburgh, Pa	June 6, 1871	115, 668
Valve and pressure-gauge, Safety	J. H. Winn	Portage, Wis	Aug. 31, 1858	21, 390
Valve and seat for pumps, Detachable foot	J. W. Williams	Syracuse, N. Y	July 27, 1869	93, 029
Valve and steam-chest for engines	P. N. Woods	Fairfield, Iowa	Apr. 25, 1871	114, 078
Valve and steam-passage	G. Verry	Norwich, Conn	June 2, 1868	78, 556
Valve and steam-passages in cylindrical steam-chests, Piston.	J. Marks	Boston, Mass	Jan. 24, 1854	10, 454
Valve and strainer, Check	J. Large	Jefferson Township, Pa	Dec. 17, 1872	134, 077
Valve and trap, Combined globe	H. J. McMahon	Philadelphia, Pa	Mar. 11, 1873	136, 746
Valve and valve-box for pumps	D. L. Farnam	New York, N. Y	Apr. 3, 1847	5, 047
Valve and valve-gear	W. Z. Hatcher	Plymouth, Pa	Apr. 4, 1871	113, 428
Valve and valve-motion for steam-engines	J. G. West, jr	Norristown, Pa	Oct. 22, 1861	33, 561
Valve and valve-seat for steam-engines	S. D. Wilson	Reading, Pa	Jan. 10, 1854	10, 417
Valve and variable cut-off, Rotary	R. T. P. Allen	Farmdale, Ky	Mar. 25, 1873	137, 163

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Valve, Anti-friction balanced	W. Siefert	New York, N. Y	Mar. 28, 1871	113, 102
Valve, Anti-friction steam-engine	K. H. Loomis	New York, N. Y	Oct. 6, 1868	82, 728
Valve apparatus, Stop and waste	J. H. Lewis	Binghamton, N. Y	June 4, 1872	127, 616
Valve apparatus, Water-closet	J. Gilfillan	Charlestown, Mass	July 2, 1867	66, 233
Valve-arrangement	L. Eikenberry	Philadelphia, Pa	Apr. 16, 1861	32, 055
Valve-arrangement	P. Macy	Rochester, N. Y	Aug. 4, 1868	80, 644
Valve-arrangement for hose	R. A. Parrish, jr	Philadelphia, Pa	Oct. 18, 1864	44, 743
Valve-arrangement for organs, &c	M. Baumgarten	New Haven, Conn	June 12, 1866	55, 573
Valve-arrangement for steam-engines	G. B. McDonald	Louisville, Ky	June 30, 1863	39, 100
Valve-arrangement for steam-engines	N. S. C. Perkins	Norwalk, Ohio	Jan. 12, 1858	19, 098
Valve-arrangement for steam-engines	H. Clayton	Tamaqua, Pa	Apr. 5, 1859	23, 448
Valve arrangement, Safety	W. S. Huntington	Andrusville, N. Y	Feb. 9, 1864	41, 580
Valve arrangement, Throttle	J. E. Anderson	New York, N. Y	Oct. 4, 1853	10, 083
Valve, Artesian-well	J. Fleming	Shamburgh, Pa	Aug. 12, 1873	141, 708
Valve attachment, Safety	W. Camerer	Reading, Pa	Mar. 1, 1864	41, 756
Valve at the end of tubes	J. R. Hamilton	Dexter, Me	Nov. 11, 1868	83, 848
Valve, Automatic	F. H. Bartholomew	New York, N. Y	May 25, 1869	90, 483
Valve, Automatic double-puppet	J. E. Prunty	Baltimore, Md	Dec. 19, 1871	122, 059
Valve, Automatic governor	J. B. Potter	Conneautville, Pa	Sept. 26, 1871	119, 405
Valve, Automatic hydraulic	H. P. Yeomans	New York, N. Y	Nov. 19, 1872	133, 284
Valve, Automatic regulating	B. Holly	Lockport, N. Y	Sept. 14, 1869	94, 748
Valve, Automatic regulating	G. L. Kitson	Philadelphia, Pa	May 20, 1873	139, 163
Valve, Automatic regulating	G. L. Kitson	Philadelphia, Pa	Aug. 19, 1873	142, 027
Valve, Automatic relief	A. F. Allen	Providence, R. I	Nov. 14, 1871	120, 925
Valve, Automatic relief	A. F. Allen	Providence, R. I	Apr. 18, 1871	113, 829
Valve, Automatic relief	A. M. Black	Providence, R. I	Apr. 12, 1870	101, 814
Valve, Automatic relief	J. Garland	Providence, R. I	Nov. 14, 1871	120, 958
Valve, Automatic relief	J. E. Prunty	Baltimore, Md	Apr. 30, 1872	126, 330
Valve, Automatic steam	G. W. and E. Hopkins	Brooklyn, N. Y	Aug. 28, 1866	57, 509
Valve, Automatic thermo-olaio pneumatic	E. Parker and W. Reynolds	East Hartford, Conn	Apr. 8, 1856	14, 617
Valve, Automatic water	J. Guild	Buffalo, N. Y	May 16, 1871	114, 804
Valve, Balance	N. H. Bundy	New York, N. Y	Apr. 8, 1873	137, 654
Valve, Balance	F. P. Cady	Cleveland, Ohio	May 20, 1873	138, 992
Valve, Balance	D. Collins	Girard, Ala	Sept. 7, 1869	94, 566
Valve, Balance	T. Critchlow	Baldwin, Pa	Oct. 22, 1872	132, 446
Valve, Balance	W. R. Dunlap	Cincinnati, Ohio	Oct. 29, 1872	132, 526
Valve, Balance	H. Fitzsimmons	Houston, Tex	Mar. 18, 1873	136, 985
Valve, Balance	J. W. Gardner, T. W. Ransom, and E. Martin.	Cleveland, Ohio	Dec. 3, 1872	133, 525
Valve, Balance	A. N. Hadley	Richmond, Ind	Apr. 29, 1873	138, 397
Valve, Balance	C. S. Harris	Holyoke, Mass	June 26, 1855	13, 128
Valve, Balance	K. H. Loomis	New York, N. Y	Apr. 25, 1871	114, 162
Valve, Balance	E. B. Requa	Jersey City, N. J	Mar. 17, 1868	75, 646
Valve, Balance	F. B. Stevens	New York, N. Y	Mar. 25, 1851	8, 004
Valve, Balance	J. H. Stombs	Rock Island, Ill	Sept. 17, 1872	131, 415
Valve, Balance	J. H. Stombs	Winona, Minn	Sept. 23, 1873	143, 193
Valve, Balance	A. Wanich	Philadelphia, Pa	Apr. 4, 1871	113, 600
Valve, Balance	C. P. Welsh and R. J. Orr	Mahanoy City, Pa	Dec. 2, 1873	145, 261
Valve, Balance puppet	R. C. Bristol	Chicago, Ill	Oct. 17, 1865	50, 443
Valve, Balance slide	A. G. Barrett	Barrett, Kans	Apr. 4, 1871	113, 616
Valve, Balance slide	T. Beesley	Muscatine, Iowa	Jan. 14, 1873	134, 838
Valve, Balance slide	A. Buchanan	New York, N. Y	Nov. 1, 1864	44, 849
Valve, Balance slide	H. F. Calvin	Providence, R. I	Dec. 24, 1872	134, 254
Valve, Balance slide	A. S. Cameron	New York, N. Y	July 25, 1865	48, [illegible]01
Valve, Balance slide	J. Christiansen	Plattsmouth, Nebr	Jan. 2, 1872	122, 438
Valve, Balance slide	O. Collier and W. H. Masterman	Sacramento, Cal	Sept. 20, 1870	107, 453
Valve, Balance slide	H. Davies	Portsmouth, Ohio	Mar. 15, 1864	41, 909
Valve, Balance slide	W. Dillon	Wheeling, W. Va	June 28, 1870	104, 715
Valve, Balance slide	D. Dorman	Wheatland Furnace, Pa	Nov. 9, 1869	96, 560
Valve, Balance slide	C. E. Emery	Brooklyn, N. Y	Apr. 18, 1865	47, 284
Valve, Balance slide	J. Evered	Muskegon, Mich	Nov. 4, 1873	144, 268
Valve, Balance slide	R. Faries	Indianapolis, Ind	Apr. 19, 1864	42, 359
Valve, Balance slide	J. Fitzgerald	Brooklyn, N. Y	Mar. 8, 1870	100, 612
Valve, Balance slide	I. W. Forbes	La Porte, Ind	Jan. 11, 1870	98, 755
Valve, Balance slide	A. O. Frick	Waynesborough, Pa	Apr. 29, 1873	138, 325
Valve, Balance slide	V. D. Green	Watertown, Wis	Jan. 30, 1866	52, 286
Valve, Balance slide	O. H. Gronberg	Ferrysburgh, Mich	Oct. 28, 1873	144, 090
Valve, Balance slide	J. R. Grout	Detroit, Mich	May 1, 1866	54, 331
Valve, Balance slide	T. J. Hamer and M. Walls	Sunbury, Pa	Oct. 25, 1870	108, 704
Valve, Balance slide	H. Hendrickson	Red Bank, N. J	Dec. 24, 1872	134, 203
Valve, Balance slide	T. M. Herriott and S. Myers	South Pittsburgh, Pa	Nov. 24, 1868	84, 278
Valve, Balance slide	T. H. Hollis	Mount Vernon, Ind	Jan. 30, 1872	123, 260
Valve, Balance slide	C. H. Hutchinson	Concord, N. H	Oct. 10, 1871	119, 769
Valve, Balance slide	C. H. Hutchinson	Concord, N. H	May 7, 1872	126, 459
Valve, Balance slide	C. H. Hutchinson	Concord, N. H	Nov. 11, 1873	144, 458
Valve, Balance slide	H. Kessler	San Francisco, Cal	Nov. 12, 1872	133, 038
Valve, Balance slide	J. Lockhead	San Francisco, Cal	Nov. 20, 1866	59, 848
Valve, Balance slide	I. V. Lynn and G. T. Snowden	Pittsburgh, Pa	Jan. 22, 1867	61, 441
Valve, Balance slide	G. R. Moore	Philadelphia, Pa	Feb. 22, 1870	100, 056
Valve, Balance slide	G. F. Morse	Portland, Me	Oct. 4, 1870	107, 945
Valve, Balance slide	J. Nesbitt	Concord, N. H	Dec. 27, 1870	110, 490
Valve, Balance slide	D. Pyke	Philadelphia, Pa	Apr. 2, 1867	63, 560
Valve, Balance slide	J. Rankin	Detroit, Mich	Apr. 25, 1865	47, 453
Valve, Balance slide	S. Reid	Chicago, Ill	Aug. 12, 1873	141, 728
Valve, Balance slide	F. H. Richards	Lansingburgh, N. Y	Feb. 13, 1866	52, 609
Valve, Balance slide	G. Richardson	Springfield, Mass	Oct. 28, 1862	36, 857
Valve, Balance slide	A. K. Rider	New York, N. Y	Nov. 8, 1870	109, 053
Valve, Balance slide	J. Rigby and J. Holt	Marquette, Mich	Oct. 10, 1871	119, 789
Valve, Balance slide	W. B. Robinson	Detroit, Mich	Apr. 7, 1868	76, 528
Valve, Balance slide	J. Rowbotham	Philadelphia, Pa	Dec. 5, 1865	51, 393
Valve, Balance slide	A. Steber	Utica, N. Y	July 27, 1869	93, 133
Valve, Balance slide	J. Sloan	Pittsburgh, Pa	Jan. 31, 1860	27, 011
Valve, Balance slide	W. M. Stevenson	Sharon, Pa	Oct. 20, 1868	83, 336
Valve, Balance slide	W. M. Stevenson	Sharon, Pa	Nov. 2, 1869	96, 499
Valve, Balance slide	A. Stirling	Troy, N. Y	May 7, 1872	126, 589
Valve, Balance slide	R. Tremain	Syracuse, N. Y	May 7, 1872	126, 427
Valve, Balance slide	A. C. Vanbebber, A. Sallee, and J. B. Britton.	Fulton, Ill	Apr. 3, 1866	53, 708

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Invention.	Inventor.	Residence.	Date.	No.
Valve, Balance slide	J. H. Wait	Portsmouth, Ohio	Oct. 9, 1866	58,699
Valve, Balance slide	G. Westinghouse, jr	Pittsburgh, Pa	Sept. 17, 1872	131,380
Valve, Balance steam	R. P. Baillie	Detroit, Mich	Oct. 25, 1864	44,777
Valve, Balance steam	J. Trent	Millerton, N. Y	Oct. 23, 1866	59,096
Valve, Balanced cylindrical slide	J. G. Millholland	Harrisburgh, Pa	July 13, 1869	92,630
Valve, Balanced feed-water	G. E. Chenoweth	Baltimore, Md	Jan. 14, 1868	73,232
Valve, Balanced plug	S. Maltby and B. Pickering	Dayton and Milton, Ohio	Dec. 5, 1865	51,329
Valve, Ball	W. Mendham	Philadelphia, Pa	Sept. 30, 1873	143,294
Valve, Boiler-feeder	R. Gornall	Baltimore, Md	Dec. 17, 1867	72,287
Valve, Boiler safety	E. Andrews	Pottsville, Pa	Oct. 20, 1868	83,125
Valve, Boiler safety	C. L. Frink	Rockville, Conn	June 19, 1866	55,639
Valve, Boiler safety	R. P. Staats	New York, N. Y	May 28, 1872	127,198
Valve boring and tapping machine	J. Gunn	Webster, Mass	Oct. 22, 1872	132,396
Valve, Bottle	W. P. Miller	San Francisco, Cal	Sept. 11, 1866	57,948
Valve-bucket	A. A. Moulton	Providence, R. I	Mar. 26, 1872	124,909
Valve, Butterfly	N. Cope and W. Hodgson	Cincinnati, Ohio	May 10, 1859	23,902
Valve, Canal-lock	G. Heath	Little Falls, N. Y	Apr. 4, 1871	113,661
Valve-case fastening, Safety	G. B. Sisson	Buffalo, N. Y	June 24, 1873	140,223
Valve, Chain-pump	O. O. Witherell	Lewiston, Me	Oct. 13, 1868	83,117
Valve chamber and seat, Casting	J. K. Burke	Rochester, N. Y	Oct. 4, 1870	107,867
Valve, Check	D. A. Green	New York, N. Y	June 7, 1870	103,872
Valve, Check	J. C. Hoadley	Lawrence, Mass	Jan. 7, 1873	134,548
Valve, Check	J. H. Naylor	Buffalo, N. Y	Aug. 5, 1873	141,454
Valve, Check	L. E. O'Brien	Latrobe, Pa	July 19, 1870	105,591
Valve, Check	J. R. Sees	New York, N. Y	Apr. 26, 1864	42,541
Valve, Check	P. White	Saint Louis, Mo	May 5, 1868	77,690
Valve, Check	J. Wilson	Chester, Pa	June 30, 1868	79,527
Valve, Cheese-vat-heater	H. A. Roe	Madison, Ohio	May 27, 1862	35,396
Valve-chest for hydraulic mining	M. A. Winham	San Juan, Cal	Jan. 3, 1860	26,740
Valve-chest for steam-engines	T. S. Davis	Jersey City, N. J	July 7, 1863	39,125
Valve, Chimney-draught-regulating	J. Baker	Lancaster, Pa	Oct. 28, 1831	....
Valve, Chimney smoke and safety	J. G. Schreiner	Philadelphia, Pa	July 31, 1827	....
Valve cock, &c., Stop	H. C. Montgomery	Boston, Mass	Mar. 18, 1873	136,851
Valve, Combined indicator and safety	J. Smith	Old Ford, England	Oct. 14, 1873	143,644
Valve, Combined influx and vent	J. H. G. Hawes	Newark, N. J	June 16, 1868	78,873
Valve, Combined pressure and vacuum	J. Porteus	Cincinnati, Ohio	June 13, 1871	115,982
Valve, Combined stop and check	A. A. Dame	Titusville, Pa	June 17, 1873	139,878
Valve, Combined stop and check	O. E. McMurray	Lansingburgh, N. Y	Jan. 28, 1873	135,352
Valve, Compound steam-engine	H. Fairgrieve	Hamilton, Canada	Oct. 29, 1872	132,648
Valve, Compound steam-engine	H. Fairgrieve	Hamilton, Canada	Oct. 29, 1872	132,649
Valve, Compound steam-engine	H. Fairgrieve	Hamilton, Canada	Oct. 29, 1872	132,650
Valve, Compression	E. Bourne	Pittsburgh, Pa	Apr. 9, 1872	125,532
Valve, Compression	E. Bourne	Pittsburgh, Pa	July 30, 1872	129,923
Valve, Condenser	C. Hughes	Colen, Cuba	Nov. 30, 1869	97,406
Valve, Condenser	G. H. Reynolds	New York, N. Y	Feb. 28, 1871	112,183
Valve, Cone	G. Shield	Cincinnati, Ohio	Oct. 10, 1865	50,394
Valve, Conical-seat steam	S. Barber	New York, N. Y	Apr. 20, 1844	3,552
Valve-connection for steam-engines	B. L. Phillips	Providence, R. I	June 16, 1857	17,583
Valve connection, Governor	J. F. Allen	Harlem, N. Y	Feb. 21, 1871	111,897
Valve coupling, Union	S. O. Blanding	Smithfield, R. I	Aug. 4, 1868	80,704
Valve, Cylindrical steam	W. H. Akins	Dryden, N. Y	Aug. 16, 1864	43,824
Valve-device, Fluid-brake	G. Westinghouse, jr	Pittsburgh, Pa	Aug. 12, 1873	141,685
Valve-device for steam and air brakes	G. Westinghouse, jr	Pittsburgh, Pa	May 13, 1873	138,827
Valve-device for steam and other enginery	E. H. Hewins	Boston, Mass	Oct. 5, 1869	95,476
Valve-device for steam-power-air-brake coupling	G. Westinghouse, jr	Pittsburgh, Pa	July 4, 1871	116,655
Valve device, Safety	W. H. Stanton	Dunmore, Pa	May 14, 1867	64,720
Valve device, Steam	W. H. Hull	Warren, Ohio	Aug. 3, 1869	93,204
Valve device, Steam	J. E. Outridge	Newport, England	Aug. 3, 1869	93,221
Valve device, Steam-engine	W. Baxter	Newark, N. J	Oct. 27, 1868	83,444
Valve device, Steam-engine	J. L. Dickinson	Dubuque, Iowa	Nov. 13, 1866	59,565
Valve, Differential safety	J. McClintic	Philadelphia, Pa	May 4, 1852	8,923
Valve, Double-acting pump	J. C. King	Belvidere, N. J	June 17, 1856	15,134
Valve, Double-acting supply	P. Harvey	Chicago, Ill	July 2, 1872	128,484
Valve, Drilling, pumping, &c., machine	J. North	New York, N. Y	July 16, 1872	129,048
Valve, Duplex safety	T. Harang	Banana Grove Plantation, La.	Jan. 28, 1873	135,220
Valve, Electro-magnetic	G. M. Sternberg	New York, N. Y	Oct. 3, 1871	119,541
Valve inclosed in steam-cylinders, Piston	I. L. Bennett	Westerlo, N. Y	Feb. 6, 1849	6,096
Valve, Engine	W. C. Selden	Brooklyn, N. Y	Dec. 20, 1870	110,294
Valve, Engine slide	J. H. Connell	Elizabeth, N. J	July 16, 1872	129,270
Valve-equilibrium for Cornish engines	H. P. M. Birkinbine	Philadelphia, Pa	Nov. 15, 1853	10,224
Valve, Exhaust	W. A. Carns	Malden, Mass	Dec. 13, 1870	110,008
Valve, Exhaust	R. W. Hamilton	Hartford, Conn	July 4, 1871	116,707
Valve expansion-gear, Puppet	T. McLaughlin	New York, N. Y	Jan. 29, 1850	7,056
Valve, Face-plate	S. Costill	Philadelphia, Pa	Apr. 13, 1832	....
Valve, Flexible lip-formed	E. Field	Middlesex County, England.	May 21, 1872	127,038
Valve, Float	J. H. Guild	Rupert, Vt	May 14, 1867	64,663
Valve for air-brake cylinders	N. Thomas	Chicago, Ill	Mar. 18, 1873	137,037
Valve for air-brake cylinders, Relief	T. W. Welsh	Pittsburgh, Pa	Apr. 9, 1872	125,639
Valve for air-brakes, Exhaust	W. Riley	Terre Haute, Ind	Dec. 24, 1872	134,220
Valve for blowing engines	L. Taws	Philadelphia, Pa	Mar. 9, 1869	87,728
Valve for bored or driven wells, Adjustable	M. T. and M. C. Chapman	Aurora, Ill	Mar. 4, 1873	136,412
Valve for bottom of vessels	L. S. and Z. H. Chase	New Bedford, Mass	Mar. 23, 1869	88,008
Valve for canal-gates, Lock	W. W. Jerome and L. K. Cole	Rochester and Syracuse, N. Y.	May 9, 1865	47,643
Valve for closets, &c., Hopper	L. Wolff	Chicago, Ill	Oct. 1, 1872	131,921
Valve for delivery of liquids, Ventilating	W. S. Mead and H. W. Dopp	Buffalo, N. Y	Feb. 21, 1860	27,230
Valve for direct-acting engines	G. F. Blake	Boston, Mass	Nov. 28, 1871	121,320
Valve for direct-acting engines	G. F. Blake	Boston, Mass	Feb. 20, 1872	123,764
Valve for direct-acting engines	G. F. Blake	Boston, Mass	Feb. 20, 1872	123,765
Valve for direct-acting engines	H. A. Jamieson	Brooklyn, N. Y	Nov. 11, 1873	144,545
Valve for discharging condensed water, Float	C. C. Walworth	Boston, Mass	Jan. 10, 1854	10,416
Valve for draining land, Tidal	E. T. Bainbridge	Louisville, Ky	Aug. 25, 1863	39,624
Valve for dry gas-meters	H. Howson	Philadelphia, Pa	May 17, 1859	24,080
Valve for dry gas-meters	C. C. Lloyd	Philadelphia, Pa	June 22, 1858	20,680
Valve for engines, Wing gudgeon	T. Holloway	Philadelphia, Pa	Jan. 20, 1832	....
Valve for exhaust steam, Slide	H. Bates	New London, Conn	Nov. 14, 1854	11,925

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Invention.	Inventor.	Residence.	Date.	No.
Valve for faucets, Stop	W. Krull	New York, N. Y	Sept. 12, 1865	49, 894
Valve for fire-engines, Circulating	C. A. Hague	Hudson, N. Y	June 24, 1873	140, 194
Valve for fire-engines, Relief	A. F. Allen	Providence, R. I	May 21, 1872	127, 009
Valve for fire-engines, Relief	A. Mayer	Detroit, Mich	Oct. 21, 1873	143, 920
Valve for fire-engines, Relief	A. Mayer	Detroit, Mich	Dec. 31, 1872	134, 435
Valve for fluid meters and motors, Piston	A. K. Rider	New York, N. Y	Aug. 22, 1871	118, 392
Valve for hydraulic cranes, Balanced	J. A. Vaughn	Cuyahoga Falls, Ohio	Sept. 30, 1873	143, 266
Valve for hydraulic engines	G. B. McClench	Hallowell, Me	Feb. 4, 1862	34, 310
Valve for hydraulic mains	H. P. M. Birkinbine	Philadelphia, Pa	Dec. 31, 1872	134, 348
Valve for hydraulic presses	J. B. Fenby	Birmingham, England	July 27, 1869	93, 073
Valve for hydraulic rams	T. Hanson	New York, N. Y	Mar. 20, 1855	12, 549
Valve for hydraulic rams, Puppet	J. C. Strode	West Chester, Pa	Aug. 29, 1854	11, 621
Valve for ice-machine	F. Windhausen	Brunswick, Germany	Apr. 2, 1872	125, 371
Valve for injecting air, Ball	J. B. Bennet	Brooklyn, N. Y	Aug. 2, 1870	105, 890
Valve for liquid-meters, Check	E. S. Hutchinson	Baltimore, Md	Aug. 27, 1867	68, 080
Valve for locomotive and other engines, Throttle	H. Watkeys	Syracuse, N. Y	June 10, 1873	139, 694
Valve for locomotive-engines, Safety	H. Waterman	Hudson, N. Y	Nov. 15, 1853	10, 243
Valve for locomotive-engines, Throttle	G. Richards	Boston, Mass	May 19, 1868	78, 012
Valve for locomotives, Relief	G. W. Richardson	Troy, N. Y	Mar. 11, 1873	136, 618
Valve for locomotive sand-boxes	W. A. Foster	Fitchburgh, Mass	June 25, 1872	128, 382
Valve for oscillating engines	W. M. Smith	Georgetown, D. C	Nov. 25, 1851	8, 551
Valve for oscillating engines	L. W. Langdon	Northampton, Mass	Dec. 4, 1860	30, 826
Valve for petroleum-packages, Stop	A. Warth	Stapleton, N. Y	Apr. 19, 1870	102, 187
Valve for pneumatic railways	S. Clegg and J. Samuda	England	Dec. 31, 1840	1, 922
Valve for radiator and other steam-heating apparatus, Air.	A. B. Ensign	New York, N. Y	Oct. 8, 1872	132, 064
Valve for regulating the pressure of steam in steam-boilers, Safety.	J. Hadley	Bennington, N. Y	Mar. 10, 1838	630
Valve for relieving steam-cylinders of water	C. W. Kimball and W. J. Norcott.	Springfield, Mass	July 17, 1866	56, 500
Valve for retarding and arresting the flow of gas	N. S. Manross	Bristol, Conn	Oct. 4, 1859	25, 658
Valve for separating slate from coal	S. E. Griscom	Mahanoy Plane, Pa	Oct. 10, 1871	119, 757
Valve for steam air-brake cylinders, Relief	G. Westinghouse, jr	Pittsburgh, Pa	Mar. 5, 1872	124, 403
Valve for steam and air brakes, Coupling	J. W. Gardner and T. W. Ransom.	Cleveland, Ohio	June 25, 1872	128, 220
Valve for steam and air engines, Oscillating	I. W. Forbes	La Porte, Ind	May 30, 1871	115, 296
Valve for steam and other engінery	G. Baker	Rochester, N. Y	Jan. 26, 1869	86, 268
Valve for steam and other enginery	P. H. Kendricken	Boston, Mass	Dec. 29, 1868	85, 389
Valve for steam and other enginery	G. Murray	Cambridgeport, Mass	Dec. 24, 1867	72, 529
Valve for steam and other enginery	G. Sickels	Boston, Mass	Sept. 21, 1869	95, 155
Valve for steam and other enginery, Check	J. Hayden, jr	Haydenville, Mass	Oct. 27, 1868	83, 380
Valve for steam and other enginery, Globe	E. H. Ashcroft	Boston, Mass	Nov. 10, 1868	83, 902
Valve for steam and other enginery, Globe	R. Mears	Dayton, Ohio	Feb. 2, 1869	86, 432
Valve for steam and other enginery, Globe	B. F. Radford and D. Sawyer	Hyde Park and Boston, Mass.	Feb. 2, 1869	86, 447
Valve for steam and other enginery, Piston	R. Crewzbaur	Brooklyn, N. Y	Mar. 30, 1869	88, 371
Valve for steam and other enginery, Rotary	R. D. Gray	La Fayette, Ind	Mar. 3, 1868	75, 153
Valve for steam and other enginery, Stop	J. H. Davis	Allegheny City, Pa	Dec. 29, 1868	85, 288
Valve for steam and other enginery, Stop	H. G. Ludlow	Troy, N. Y	Dec. 22, 1868	85, 263
Valve for steam and other enginery, Stop	S. J. Peet	New York, N. Y	Feb. 15, 1870	99, 943
Valve for steam and other enginery, Stop	S. J. Peet	New York, N. Y	Feb. 15, 1870	99, 944
Valve for steam and other enginery, Stop	R. Pilling	Waterford, N. Y	Apr. 20, 1869	89, 071
Valve for steam and other enginery, Stop	B. F. Wilson	Geddes, N. Y	Apr. 13, 1869	88, 933
Valve for steam and other enginery, Stop	B. F. Wilson	Syracuse, N. Y	Apr. 13, 1869	88, 934
Valve for steam and other pumps	L. J. Knowles	Worcester, Mass	July 26, 1870	105, 813
Valve for steam and vacuum pumps	A. J. Simmons	Indianapolis, Ind	Aug. 5, 1873	141, 599
Valve for steam-apparatus, Air	J. M. Stiven	New York, N. Y	Aug. 5, 1862	36, 127
Valve for steam or air engines, Oscillating	I. W. Forbes	La Porte, Ind	May 30, 1871	115, 297
Valve for steam-radiators	F. Presser	Philadelphia, Pa	Sept. 12, 1865	49, 918
Valve for steam-radiators, Air	G. W. Blake	New York, N. Y	Sept. 13, 1864	44, 155
Valve for steam-radiators, Automatic	J. P. Wood	Philadelphia, Pa	Apr. 11, 1865	47, 240
Valve for steam riveting-machines, Slide	C. Sellers	Philadelphia, Pa	Mar. 7, 1871	112, 385
Valve for submarine ordnance	J. F. Clew	New York, N. Y	Jan. 31, 1865	46, 080
Valve for supplying the boilers of steam-engines, Revolving.	E. Young	Tate Township, Ohio	Oct. 10, 1829	....
Valve for steamboat-engines	A. M. Haley	Sioux City, Iowa	Oct. 24, 1871	120, 269
Valve for steam fiber-guns	R. W. Russell	New York, N. Y	Mar. 30, 1869	88, 517
Valve for steam fire-engines, Automatic relief	A. Mayer	Detroit, Mich	Feb. 4, 1873	135, 437
Valve for steam fire-engines, &c., Circulation	R. Pallett	New York, N. Y	May 21, 1872	126, 982
Valve for steam fire-engines, Relief	W. Jeffers	Pawtucket, R. I	Nov. 18, 1873	144, 765
Valve for steam-gun for separating and disintegrating fibers.	H. Allen	New York, N. Y	Mar. 2, 1869	87, 387
Valve for steam-heaters, Air	J. H. Blessing	Albany, N. Y	June 25, 1872	128, 206
Valve for steam-heaters, Self-regulating air	M. P. Breckenridge	Meriden, Conn	Dec. 8, 1868	84, 674
Valve for the hulls of vessels	J. H. Fairbanks and F. Roads	McKeesport, Pa	Aug. 14, 1866	57, 108
Valve for type-casting machines	E. Pelouze, jr	Philadelphia, Pa	July 22, 1856	15, 386
Valve for ventilation, Self-regulating	J. Clark	Cambridge Township, Pa	Sept. 11, 1855	13, 542
Valve for waste-pipes of sinks	J. Chilcott	Brooklyn, N. Y	Oct. 21, 1873	143, 883
Valve for water and gas mains, &c., Stop	C. W. Isbell	New York, N. Y	Sept. 9, 1873	142, 700
Valve for water-cylinders, Relief	T. H. Bailey	Troy, N. Y	Feb. 9, 1864	41, 471
Valve for water-engines	A. Coates and G. W. Lascell	Syracuse, N. Y	Feb. 21, 1871	111, 908
Valve for water-heating apparatus, Vacuum	J. E. Boyle	Brooklyn, N. Y	May 1, 1860	28, 058
Valve for water-raising apparatus	H. H. Craigie	New York, N. Y	Apr. 30, 1872	126, 269
Valve for water-rams	H. P. M. Birkinbine	Philadelphia, Pa	Aug. 15, 1848	5, 716
Valve for wooden pumps, Clack	A. Breed	La Harpe, Ill	Mar. 25, 1873	137, 126
Valve for gas-apparatus	A. Hendrickx	New York, N. Y	July 27, 1858	21, 001
Valve for gas-engines	W. H. Lauback	Philadelphia, Pa	Apr. 28, 1868	77, 387
Valve for gas-generators	J. H. Beacher	Philadelphia, Pa	Aug. 20, 1867	67, 840
Valve for gas-meters	R. M. Potter	New York, N. Y	Dec. 7, 1858	22, 267
Valve for gas-works, Center	R. Briggs and P. Muntzinger	Philadelphia, Pa	June 8, 1869	90, 918
Valve for gas-works, Shut-off	P. Munzinger	Philadelphia, Pa	Nov. 12, 1872	132, 917
Valve, forcing-pump, and wheel for locomotive engines, Steam.	S. H. Long	Philadelphia, Pa	Dec. 31, 1833	....
Valve, Gas-regulating	C. M. Cresson	Philadelphia, Pa	Dec. 13, 1864	45, 390
Valve, Gas-regulator	J. C. Sarsfield	New York, N. Y	Feb. 18, 1873	136, 007
Valve-gear	A. M. Allen	New York, N. Y	June 8, 1869	91, 060
Valve-gear	J. F. Allen	New York, N. Y	Jan. 7, 1868	73, 069
Valve-gear	E. M. Bates	East Rochester, Ohio	Apr. 23, 1867	63, 984

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Invention.	Inventor.	Residence.	Date.	No.
Valve-gear	W. P. Corey	Amsterdam, N. Y	Nov. 6, 1866	59,504
Valve-gear	T. E. Evans, W. R. Thomas, and J. Hunt.	Catasauqua, Pa	Dec. 21, 1869	98,156
Valve-gear	T. E. Evans, W. R. Thomas, and J. Hunt.	Catasauqua, Pa	Oct. 3, 1871	119,590
Valve-gear	W. R. Reece	Tremont, Pa	Jan. 10, 1871	110,935
Valve-gear	E. T. Robinson	Nashua, N. H	June 30, 1868	79,396
Valve-gear	A. Seely and J. M. Cabbell	Alton, Ill., and Keokuk, Iowa.	Apr. 17, 1866	54,026
Valve-gear	H. W. Warner	Greenfield, Mass	June 6, 1865	48,120
Valve-gear	G. B. Whiting	Washington, D. C	Jan. 2, 1866	51,886
Valve-gear	F. R. Wilson	New York, N. Y	July 30, 1867	67,392
Valve-gear	A. A. Wood	New York, N. Y	Mar. 1, 1859	23,137
Valve-gear and connection for steam and other engines.	R. M. Fryer	Nashville, Tenn	Feb. 11, 1873	135,795
Valve gear, Direct-acting-engine	A. S. Cameron	New York, N. Y	Feb. 21, 1871	112,015
Valve gear, Direct-acting-engine	M. S. Richardson and E. A. Pond.	Rutland, Vt	Jan. 22, 1867	61,462
Valve gear, Direct-acting-engine	J. B. Root	New York, N. Y	July 13, 1869	92,648
Valve gear, Direct-acting-steam-engine	W. H. Guild and W. F. Garrison.	Williamsburgh, N. Y	Dec. 12, 1865	51,454
Valve gear, Direct-acting-steam-engine	J. Tesseyman and E. I. Howard	Dayton, Ohio	May 27, 1873	139,439
Valve gear, Direct-action-steam-engine	J. P. Ross	Lewisburgh, Pa	Mar. 10, 1857	16,809
Valve-gear, Electro-magnetic	E. A. Wood	Utica, N. Y	Apr. 21, 1868	76,965
Valve gear, Engine	L. Atwood	New York, N. Y	July 18, 1871	117,141
Valve gear, Engine	R. M. Fryer	Nashville, Tenn	Feb. 11, 1873	135,796
Valve-gear for actuating steam and other enginery.	I. N. Forrester	Bridgeport, Conn	July 20, 1869	92,813
Valve-gear for steam-engines, Constructing links for.	J. A. Wildman	Chicago, Ill.	Apr. 2, 1872	125,154
Valve-gear for steam-heating apparatus	H. Howard	Springfield, Mass	June 2, 1868	78,454
Valve gear, Locomotive	A. Onslow	Jersey City, N. J	May 31, 1870	103,647
Valve gear, Locomotive-engine	J. Freeland	Allegheny, Pa	Nov. 21, 1854	11,963
Valve gear, Locomotive-engine	C. J. C. Petersen	Davenport, Iowa	Nov. 30, 1858	22,198
Valve gear, Oscillating-engine	H. T. Carter	Portland, Me	July 25, 1865	48,904
Valve gear, Oscillating-engine	H. T. Carter	Portland, Me	Feb. 20, 1866	52,677
Valve gear, Oscillating-engine	H. T. Carter	Portland, Me	Apr. 3, 1866	53,570
Valve gear, Oscillating-engine	M. D. Du Bois	Newburgh, N. Y	May 22, 1855	12,904
Valve gear, Oscillating-engine	J. H. Murrill	Baltimore, Md	Mar. 12, 1867	62,874
Valve gear, Oscillating-engine	C. H. and D. B. Overton	Dover, N. J	Sept. 22, 1868	82,342
Valve gear, Oscillating-engine	W. Stephens	Pittston, Pa	Apr. 1, 1856	14,580
Valve gear, Oscillating-engine slide	W. Stephens	Old Forge, Pa	Dec. 14, 1858	22,333
Valve gear, Oscillating-steam-engine	J. C. Pennington	Paterson, N. J	Sept. 15, 1857	18,211
Valve gear, Oscillating-steam-engine	N. W. Wheeler	New York, N. Y	Sept. 22, 1857	18,258
Valve gear, Oscillating-steam-engine	H. Winter	New York, N. Y	Jan. 25, 1859	22,763
Valve gear, Pumping-engine	H. See	Pottsville, Pa	Aug. 1, 1871	117,570
Valve gear, Steam-engine	J. F. Allen	New York, N. Y	Apr. 29, 1862	35,071
Valve gear, Steam-engine	J. F. Allen	New York, N. Y	Oct. 21, 1862	36,695
Valve gear, Steam-engine	J. S. Barden	Providence, R. I	Oct. 10, 1865	50,413
Valve gear, Steam-engine	L. D. Bartlett	Fitchburgh, Mass	July 2, 1867	66,204
Valve gear, Steam-engine	A. S. Beebe	Fall River, Mass	Dec. 9, 1856	16,171
Valve gear, Steam-engine	H. and F. J. L. Blandy	Zanesville, Ohio	July 12, 1864	43,471
Valve gear, Steam-engine	J. W. Bowers	Cincinnati, Ohio	Aug. 9, 1864	43,757
Valve gear, Steam-engine	R. Bowers	Chillicothe, Ohio	Apr. 13, 1869	88,771
Valve gear, Steam-engine	E. Brown	Philadelphia, Pa	Sept. 6, 1864	44,071
Valve gear, Steam-engine	A. S. Cameron	New York, N. Y	Oct. 3, 1865	50,218
Valve gear, Steam-engine	A. S. Cameron	New York, N. Y	Mar. 21, 1871	112,899
Valve gear, Steam-engine	T. Carpenter	Providence, R. I	Dec. 15, 1863	40,905
Valve gear, Steam-engine	H. T. Carter	Portland, Me	Apr. 12, 1864	42,272
Valve gear, Steam-engine	J. Crampton	New York, N. Y	Dec. 1, 1868	84,615
Valve gear, Steam-engine	W. Dennison	Washington, D. C	Sept. 18, 1866	58,074
Valve gear, Steam-engine	E. N. Dickerson	New York, N. Y	July 21, 1863	39,278
Valve gear, Steam-engine	E. N. Dickerson	New York, N. Y	Mar. 10, 1868	75,387
Valve gear, Steam-engine	T. Dyson and G. Smith	New York, N. Y	Nov. 23, 1869	97,064
Valve gear, Steam-engine	J. Ferguson	Bridgewater, Mass	Aug. 24, 1858	21,295
Valve gear, Steam-engine	J. R. Fish	Fort Wayne, Ind	Sept. 10, 1867	68,724
Valve gear, Steam-engine	I. W. Forbes	La Porte, Ind	Jan. 11, 1870	98,754
Valve gear, Steam-engine	I. W. Forbes	La Porte, Ind	May 30, 1871	115,300
Valve gear, Steam-engine	C. E. Gage	Winona, Minn	Apr. 25, 1865	47,492
Valve gear, Steam-engine	W. R. Greenleaf	Silver Creek, N. Y	Jan. 6, 1863	37,342
Valve gear, Steam-engine	J. J. Gwynn	Plainfield, N. J	Nov. 20, 1860	30,676
Valve gear, Steam-engine	J. W. Hackworth	Darlington, England	Jan. 21, 1873	135,036
Valve gear, Steam-engine	A. Hartupee	Pittsburgh, Pa	July 2, 1861	32,690
Valve gear, Steam-engine	T. Hawkins	Mobile, Ala	May 3, 1859	23,839
Valve gear, Steam-engine	A. Heupel, J. Reinhardt, and S. G. Votteler.	Philadelphia, Pa	Jan. 19, 1869	86,070
Valve gear, Steam-engine	R. Heys	Philadelphia, Pa	June 14, 1864	43,114
Valve gear, Steam-engine	T. Hill	Vallejo, Cal	Oct. 11, 1870	108,137
Valve gear, Steam-engine	C. L. Inslee and W. H. Inslee	New York, N. Y., and Newark, N. J.	Aug. 31, 1869	94,316
Valve gear, Steam-engine	I. R. Jacob	Elizabethtown, Ky	Dec. 11, 1860	30,923
Valve gear, Steam-engine	S. S. Jamison, jr.	Saltsburgh, Pa	Apr. 14, 1868	76,769
Valve gear, Steam-engine	P. Kenney	Providence, R. I	Aug. 14, 1860	29,604
Valve gear, Steam-engine	J. King	Hoboken, N. J	Jan. 24, 1860	26,908
Valve gear, Steam-engine	P. Louis	New York, N. Y	Nov. 29, 1859	26,275
Valve gear, Steam-engine	P. Louis	New York, N. Y	Aug. 28, 1860	29,844
Valve gear, Steam-engine	J. C. Macdonald	Saint Louis, Mo	Dec. 26, 1871	122,269
Valve gear, Steam-engine	J. W. Maloy	Boston, Mass	June 27, 1865	48,418
Valve gear, Steam-engine	S. Maltby	Dayton, Ohio	June 30, 1857	17,689
Valve gear, Steam-engine	G. B. Milner	Houston, Tex	July 30, 1850	7,529
Valve gear, Steam-engine	E. Moran	New York, N. Y	Nov. 30, 1858	22,191
Valve gear, Steam-engine	C. C. P. Peabody	Calais, Me	Jan. 29, 1867	61,682
Valve gear, Steam-engine	R. L. Reaney and J. S. Cornell	Jersey City, N. J., and Brooklyn, N. Y.	Mar. 10, 1868	75,459
Valve gear, Steam-engine	H. Reid	Saint Louis, Mo	Dec. 8, 1868	84,761
Valve gear, Steam-engine	A. K. Rider	Nazareth, Pa	July 2, 1867	66,392
Valve gear, Steam-engine	J. R. Robinson	Boston, Mass	June 11, 1861	32,534
Valve gear, Steam-engine	C. Rogers	Allegheny, Pa	June 24, 1873	140,309
Valve gear, Steam-engine	J. B. Root	New York, N. Y	May 24, 1864	42,878

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Valve gear, Steam-engine	J. P. Ross	Lewisburgh, Pa	Sept. 24, 1861	33, 368
Valve gear, Steam-engine	C. E. Rymes	Somerville, Mass	July 27, 1869	93, 125
Valve gear, Steam-engine	A. Seely	Alton, Ill	June 9, 1868	78, 764
Valve gear, Steam-engine	W. G. Snook	Corning, N. Y	Jan. 5, 1864	41, 128
Valve gear, Steam-engine	E. Sprague	Allegheny City, Pa	June 19, 1866	55, 731
Valve gear, Steam-engine	W. H. Stanton and A. D. Spencer.	Dunmore, Pa	Nov. 14, 1865	50, 966
Valve gear, Steam-engine	D. G. Starkey	New York, N. Y	June 14, 1870	104, 224
Valve gear, Steam-engine	D. Stoddard	San Francisco, Cal	Nov. 29, 1859	26, 301
Valve gear, Steam-engine	F. Stratner	Wilmington, Del	Jan. 29, 1867	61, 640
Valve gear, Steam-engine	S. Swartz	Buffalo, N. Y	June 16, 1857	17, 585
Valve gear, Steam-engine	J. N. Tifft and W. Love	Buffalo, N. Y	Apr. 16, 1872	125, 769
Valve gear, Steam-engine	H. Uhry	New York, N. Y	Sept. 10, 1867	68, 672
Valve gear, Steam-engine	E. Ware	South Boston, Mass	Apr. 12, 1859	23, 629
Valve gear, Steam-engine	N. W. Wheeler	Brooklyn, N. Y	Feb. 6, 1866	52, 475
Valve gear, Steam-engine	N. W. Wheeler	Brooklyn, N. Y	Dec. 10, 1867	72, 139
Valve gear, Steam-engine	J. Wheelock	Worcester, Mass	Oct. 28, 1873	144, 174
Valve gear, Steam-engine	J. L. Whetstone	Cincinnati, Ohio	Dec. 14, 1858	22, 321
Valve gear, Steam-engine	F. R. Wilson	Philadelphia, Pa	Sept. 15, 1868	82, 190
Valve gear, Steam-engine	F. R. Wilson	Philadelphia, Pa	Sept. 29, 1868	82, 575
Valve gear, Steam-engine	H. Winter	New York, N. Y	May 27, 1856	14, 978
Valve gear, Steam-engine	D. V. Wood and S. W. Robinson	Ann Arbor, Mich	Mar. 31, 1868	76, 131
Valve gear, Steam-engine	A. H. Woodruff	Lansing, Iowa	Dec. 27, 1864	45, 663
Valve gear, Steam-engine	T. Wosser	San Francisco, Cal	Mar. 16, 1869	87, 813
Valve gear, Steam-engine eduction	A. Crosby	Fredonia, N. Y	Mar. 13, 1860	27, 432
Valve gear, Steam-engine induction	A. Crosby	Fredonia, N. Y	Mar. 13, 1860	27, 431
Valve gear, Steam-engine slide	E. Ware	South Boston, Mass	Dec. 14, 1858	22, 318
Valve gear, Steam-hammer	H. Hamilton	Newburgh, N. Y	Mar. 27, 1866	53, 442
Valve gear, Steam-hammer	W. and C. Sellers	Philadelphia, Pa	Oct. 29, 1867	70, 369
Valve gear, Steam-hammer	J. F. Turner	Bridgewater, Mass	July 19, 1864	43, 612
Valve gear, Steam-hammer	J. Watt	Buffalo, N. Y	Oct. 10, 1865	50, 407
Valve gear, Steam-hammer	J. Watt	Buffalo, N. Y	Jan. 23, 1866	52, 232
Valve gear, Steam-hammer	C. W. and J. P. Willard	Dorchester, Mass	Aug. 12, 1856	15, 539
Valve gear, Steam-hammer	C. W. Willard	Chicago, Ill	Aug. 15, 1865	49, 462
Valve gearing, Steam-hammer	R. Morrison	Newcastle-upon-Tyne, Great Britain.	Jan. 20, 1863	37, 457
Valve gear, Steam-pump	G. Doyle	Worcester, Mass	Jan. 15, 1867	61, 175
Valve gear, Steam-pump, engine, &c	J. C. King	New York, N. Y	Sept. 20, 1870	107, 504
Valve gear, Throttle	N. King	Etna, Pa	July 2, 1867	66, 360
Talve gear, Throttle	S. Moore	Providence, R. I	July 27, 1869	92, 990
Valve gear, Throttle	C. E. Stewart	Aspinwall, Colombia	June 13, 1871	115, 904
Valve-gear, Variable	G. M. Bird	Dedham, Mass	Jan. 25, 1870	99, 052
Valve-gear, Variable	G. and E. Dodds	Allegheny City, Pa	Dec. 6, 1864	45, 322
Valve gear, Variable cut-off	W. Harsen	Green Point, N. Y	Mar. 8, 1870	100, 619
Valve gear, Water-meter, &c	J. H. Rhodes	Brooklyn, N. Y	Apr. 23, 1867	64, 144
Valve gearing	J. Sangster and V. H. Becker	Buffalo, N. Y	Nov. 19, 1872	133, 121
Valve gearing, Steam-engine	J. F. Allen	New York, N. Y	June 29, 1858	20, 768
Valve gearing, Steam-engine	W. B. Doddridge	Hebron, Ind	Nov. 8, 1870	108, 982
Valve gearing, Steam-engine	J. W. Hackworth	Darlington, England	Dec. 3, 1872	133, 529
Valve gearing, Steam-engine	H. Uhry and H. A. Luttgens	Paterson, N. J	Mar. 20, 1855	12, 564
Valve gearing, Steam-engine	H. B. Verry	New York, N. Y	Mar. 2, 1869	87, 448
Valve gearing, Steam-engine	A. Whittemore	Cambridgeport, Mass	Apr. 20, 1869	89, 103
Valve, Globe	J. W. Baldwin	Laconia, N. H	Feb. 15, 1870	99, 812
Valve, Globe	T. and J. Barter	Brooklyn, N. Y	Feb. 5, 1867	61, 794
Valve, Globe	A. P. Brown	New York, N. Y	June 17, 1873	140, 006
Valve, Globe	I. W. Brown	Jefferson City, Mo	Apr. 19, 1870	102, 085
Valve, Globe	H. Burt	Newark, N. J	Aug. 31, 1869	94, 394
Valve, Globe	W. Chesley	Cincinnati, Ohio	Oct. 3, 1865	50, 219
Valve, Globe	W. Chesley	Cincinnati, Ohio	Oct. 16, 1866	58, 774
Valve, Globe	W. Chesley	Cincinnati, Ohio	Sept. 15, 1868	82, 206
Valve, Globe	M. R. Colvin	Worcester, Mass	Sept. 14, 1869	94, 715
Valve, Globe	W. S. Cooper	Philadelphia, Pa	Feb. 25, 1868	74, 803
Valve, Globe	W. S. Cooper	Philadelphia, Pa	Mar. 31, 1868	76, 164
Valve, Globe	F. Douglass	Norwich, Conn	Mar. 17, 1868	75, 670
Valve, Globe	C. L. Frink	Rockville, Conn	Jan. 22, 1867	61, 414
Valve, Globe	E. J. Gould	Milwaukee, Wis	Jan. 11, 1870	98, 688
Valve, Globe	G. D. Hadley	Cincinnati, Ohio	Sept. 8, 1868	81, 893
Valve, Globe	H. H. Hendrick	Dayton, Ohio	Feb. 9, 1869	86, 749
Valve, Globe	J. Johnson	Brooklyn, N. Y	Mar. 5, 1872	124, 211
Valve, Globe	N. King	Etna, Pa	June 7, 1870	104, 037
Valve, Globe	W. Kirkup	Cincinnati, Ohio	Oct. 22, 1872	132, 471
Valve, Globe	D. Lee	Boston, Mass	July 16, 1867	66, 857
Valve, Globe	L. Leigh	Bridgeport, Conn	Dec. 31, 1867	72, 868
Valve, Globe	H. Levasseur	Brooklyn, N. Y	Dec. 21, 1869	98, 171
Valve, Globe	F. O. Matthiessen	Jersey City, N. J	July 20, 1869	92, 857
Valve, Globe	M. Murphy	Charlotte, N. C	May 16, 1871	114, 844
Valve, Globe	R. G. Packard	Brooklyn, N. Y	July 7, 1868	79, 679
Valve, Globe	J. Powell	Cincinnati, Ohio	Feb. 5, 1867	61, 758
Valve, Globe	J. Powell	Cincinnati, Ohio	May 12, 1868	77, 913
Valve, Globe	G. W. Reisinger	Harrisburgh, Pa	Jan. 4, 1870	98, 631
Valve, Globe	T. A. Searlo	Providence, R. I	Apr. 17, 1866	54, 025
Valve, Globe	E. Thayer	Worcester, Mass	Feb. 20, 1872	123, 848
Valve, Globe	J. B. T. Van Patten	Sing Sing, N. Y	May 26, 1868	78, 342
Valve, Globe	S. H. Whitaker	Cincinnati, Ohio	Mar. 3, 1868	75, 094
Valve, Globe and check	G. W. Shields	Louisville, Ky	Aug. 22, 1871	118, 287
Valve, Globe steam	J. O. Attick	Dayton, Ohio	Sept. 18, 1866	58, 042
Valve, Globe steam	E. A. Rock	Ludlow, Vt	Feb. 4, 1868	74, 144
Valve, Governor	O. L. Brown	Manitowoc, Wis	July 11, 1865	48, 652
Valve, Governor	B. Fitts	Worcester, Mass	Aug. 9, 1859	25, 005
Valve, Governor	R. W. Gardner and J. Robertson	Quincy, Ill	Nov. 21, 1865	51, 037
Valve, Governor	J. and A. Judson	Rochester, N. Y	Nov. 5, 1850	7, 755
Valve, Governor	T. S. La France	Elmira, N. Y	July 21, 1863	31, 292
Valve, Governor	C. W. Le Count	Norwalk, Conn	Aug. 15, 1865	49, 422
Valve, Governor	G. E. Noyes	Washington, D. C	July 19, 1864	43, 598
Valve, Governor	J. Reichman and H. Kriete	Chicago, Ill	Feb. 25, 1862	34, 523
Valve, Governor	W. Smith	Philadelphia, Pa	Apr. 19, 1870	102, 174
Valve, Governor	G. H. Timmerman	Saint Louis, Mo	May 1, 1860	28, 116
Valve, Governor	T. Warren	Flint, Mich	Dec. 28, 1869	98, 322

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Valve, Governor	H. B. Weaver	Hartford, Conn	Sept. 23, 1873	143, 045
Valve, Gridiron slide	W. W. Hubbard	Boston, Mass	Jan. 22, 1850	7, 037
Valve-guide	R. J. Gould	Newark, N. J	Sept. 2, 1873	142, 458
Valve, Hose-nozzle	J. M. De Bolle	Philadelphia, Pa	Feb. 17, 1863	37, 680
Valve, Hose-pipe	A. F. Allen	Providence, R. I	Aug. 8, 1871	117, 853
Valve, Hose-pipe	J. M. De Bolle	Philadelphia, Pa	May 28, 1861	32, 444
Valve, House-boiler	J. H. Rhodes	Brooklyn, N. Y	May 10, 1870	102, 970
Valve, Hydrant	J. Cochrane	New York, N. Y	Dec. 13, 1853	10, 306
Valve, Hydrant	A. Fuller	Brooklyn, N. Y	July 9, 1867	66, 580
Valve, Hydrant	J. W. Guernsey	Tioga, Pa	Feb. 24, 1863	37, 786
Valve, Hydrant	H. H. C. Kelsey	New York, N. Y	Dec. 15, 1843	3, 378
Valve, Hydrant, &c	M. C. Meigs	Washington, D. C	May 22, 1860	28, 391
Valve, Hydrant waste	R. Lawson	Saint Louis, Mo	Nov. 11, 1856	16, 061
Valve, Hydraulic	T. Critchlow	Baldwin, Pa	Mar. 4, 1873	136, 489
Valve, Hydraulic	A. R. Ketcham	Buffalo, N. Y	Dec. 22, 1857	18, 912
Valve, Hydraulic	C. and G. M. Woodward	New York, N. Y	Feb. 16, 1858	19, 398
Valve, Hydraulic stop	C. S. Bailey	Mobile, Ala	Nov. 22, 1870	109, 371
Valve, Inclined sliding	E. H. Tracy	New York, N. Y	Nov. 28, 1854	12, 007
Valve-indicator	J. C. Chapman	Waltham, Mass	Dec. 5, 1871	121, 587
Valve indicator, Check	J. G. Blackburn	New York, N. Y	Aug. 27, 1872	130, 838
Valve in reciprocating steam-engines, Supplemental	C. A. Spring	Kensington, Pa	Mar. 1, 1853	9, 602
Valve in steam-apparatus for dressing stone	L. Pochet	Vendome, Loir-et-Cher, France.	Sept. 13, 1870	107, 406
Valve in water-backs for ranges, Safety	T. S. Speakman	Philadelphia, Pa	Oct. 2, 1866	58, 496
Valve, Laterally-sliding throttle	W. Glass	Brooklyn, N. Y	Nov. 8, 1870	109, 001
Valve lever for locomotives, Throttle	J. Mills	Newfield, N. J	Mar. 12, 1872	124, 606
Valve lever, Throttle	E. Doe	Newbury, Vt	Sept. 11, 1866	57, 879
Valve, Life-boat	L. Raymond	New York, N. Y	Oct. 13, 1863	40, 279
Valve link-block, Slide	E. Marsland	Sing Sing, N. Y	Apr. 23, 1872	125, 970
Valve, Liquid sealed	L. Winterbauer	New York, N. Y	May 27, 1873	139, 347
Valve, Lock-gate	W. Butler	Little Falls, N. Y	Mar. 11, 1856	14, 387
Valve, Lock-gate	D. C. Cumings	Fulton, N. Y	Jan. 15, 1856	14, 092
Valve, Lock-up safety	A. S. Cameron	Troy, N. Y	May 15, 1866	54, 682
Valve, Lock-up safety	D. G. Coppin and G. H. Clemens	Cincinnati, Ohio	Feb. 26, 1867	62, 476
Valve, Lock-up safety	D. G. Coppin and G. H. Clemens	Cincinnati, Ohio	Feb. 26, 1867	62, 477
Valve, Lock-up safety	C. M. Farrar	Buffalo, N. Y	Nov. 20, 1866	59, 764
Valve, Lock-up safety	W. Moses	Buffalo, N. Y	Jan. 18, 1870	98, 991
Valve, Lock-up safety	R. G. Packard and M. Hastings	Brooklyn, N. Y	Apr. 21, 1868	77, 084
Valve, Lock-up safety	R. Robinson	New York, N. Y	Feb. 5, 1867	61, 872
Valve-lubricator	J. Cochrane	New York, N. Y	Feb. 25, 1873	136, 136
Valve lubricator, Slide	S. H. Badger	Erie, Pa	Oct. 22, 1867	69, 957
Valve mechanism, Slide	E. E. Gilbert	Montreal, Canada	Oct. 21, 1873	143, 819
Valve, Metallurgic gas-furnace	H. Frank	Pittsburgh, Pa	Dec. 31, 1872	134, 372
Valve-motion	S. Ingersoll	Brooklyn, N. Y	May 30, 1871	115, 478
Valve-motion, Duplex eccentric	J. I. G. Collins	Chester, Pa	Feb. 24, 1852	8, 752
Valve-motion, cut-off, and steam-stop for rotary engines.	H. G. Thompson	New York, N. Y	Dec. 18, 1849	6, 962
Valve-motion for gates and hydrants	P. Ball	Worcester, Mass	Oct. 28, 1873	144, 048
Valve-motion for locomotive-engines	C. Cook	Nashville, N. H	Mar. 7, 1854	10, 591
Valve-motion for oscillating engines	H. O. Perry	Buffalo, N. Y	Mar. 25, 1856	14, 516
Valve-motion for oscillating engines	W. Stephens	Pittston, Pa	Oct. 11, 1853	10, 121
Valve-motion for oscillating steam-engines	G. D. West	Brandywine Hundred, Del	Apr. 5, 1859	23, 519
Valve-motion for steam-engines	J. Butler	Dunmore, Pa	Dec. 16, 1856	16, 227
Valve-motion for steam-engines	J. H. Dialogue	Camden, N. J	Jan. 1, 1861	31, 010
Valve-motion for steam-engines	H. Reid	Saint Louis, Mo	Oct. 13, 1868	83, 095
Valve-motion for steam-engines	E. S. Renwick	New York, N. Y	Aug. 19, 1856	15, 576
Valve motion for steam-engines, Slide	M. V. B. Darling	Providence, R. I	July 11, 1854	11, 246
Valve-motion for steam-pumps, &c	J. Clayton	Brooklyn, N. Y	July 16, 1872	129, 269
Valve-movement	F. Glasson and W. Gilfillan	New York, N. Y., and Paterson, N. J.	Oct. 10, 1871	119, 755
Valve-movement for reciprocating engines	H. C. Sergeant	New York, N. Y	Sept. 30, 1873	143, 261
Valve-movement for steam-engines, Gearing for	W. S. Bacon	Sulphur Springs, Ohio	Oct. 15, 1872	132, 130
Valve of combined high and low pressure engines, Slide.	T. L. Jones	Natchez, Miss	Apr. 14, 1868	76, 776
Valve, Oil-pump	T. Draper	Petrolia, Canada	July 11, 1873	116, 820
Valve, Oil-pump	H. Mullingar	Pittsburgh, Pa	Jan. 10, 1871	110, 930
Valve, Oil-still safety	S. Andrews	Cleveland, Ohio	Oct. 15, 1867	69, 745
Valve, Oil-tank	D. Fisher and W. Cumming	Oil City, Pa	Mar. 28, 1870	113, 153
Valve or cut-off for cupola and other furnaces	W. H. Ward	Auburn, N. Y	June 10, 1873	139, 693
Valve or cut-off for liquid-cans, Self-acting	H. S. Snow	West Meriden, Conn	Dec. 13, 1870	110, 166
Valve or damper in chimney-flues	N. Smith	Hartford, Conn	Jan. 25, 1841	1, 949
Valve or vent, Barrel safety	B. F. Evans	Newburyport, Mass	Dec. 6, 1870	109, 813
Valve, Oscillating	J. W. Carhart	Cohoes, N. Y	Nov. 29, 1864	45, 225
Valve, Oscillating	G. Davis	Syracuse, N. Y	Jan. 17, 1865	45, 910
Valve, Oscillating balance steam	J. C. Bromley	Rock Island, Ill	Feb. 7, 1871	111, 513
Valve, Oscillating steam	I. W. Forbes	La Porte, Ind	Jan. 11, 1870	98, 753
Valve, Oscillating steam	H. P. Jones	Davenport, Iowa	Aug. 13, 1872	130, 506
Valve-packing tool	J. E. Hooper	Boston, Mass	Aug. 15, 1871	118, 131
Valve, Pipe-organ	W. Schulke	Hamilton, Ohio	Dec. 9, 1873	145, 453
Valve, Piston	G. H. Gibbs	Nunda, N. Y	June 3, 1873	139, 463
Valve, Piston	M. P. Mack	Canandaigua, N. Y	Mar. 20, 1866	53, 314
Valve, Piston	A. F. Reeder	Normal, Ill	Dec. 7, 1869	97, 695
Valve, Piston	M. C. Stebbins	Springfield, Mass	Nov. 3, 1868	83, 739
Valve, Piston safety	J. C. Douglas	New York	Jan. 30, 1832	......
Valve, Piston steam	R. C. Gray and W. B. Brittingham.	La Fayette, Ind	Jan. 19, 1869	86, 067
Valve, Pressure and vacuum	W. Hardy and J. Parkinson	Philadelphia, Pa	Sept. 14, 1858	21, 535
Valve, Pressure-regulating	W. Craig and H. C. Brevoort	Newark, N. J., and Kings County, N. Y.	Sept. 16, 1873	142, 773
Valve, Pressure safety	H. A. Goll	Chicago, Ill	Dec. 17, 1867	72, 189
Valve-protector	J. E. Watts	Lawrence, Mass	Nov. 9, 1869	96, 747
Valve, Pump	W. Barnes	Maquoketa, Iowa	July 29, 1873	141, 309
Valve, Pump	J. R. Bassett	Cincinnati, Ohio	June 22, 1852	9, 046
Valve, Pump	J. R. Bassett	Cincinnati, Ohio	Dec. 13, 1853	10, 318
Valve, Pump	H. P. M. Birkinbine	Philadelphia, Pa	Mar. 27, 1866	53, 396
Valve, Pump	J. H. Brown	Pitt's Grove, N. J	Apr. 29, 1869	89, 020
Valve, Pump	H. C. Bulkley and A. Shepard	New Britain, Conn	Apr. 20, 1869	89, 023
Valve, Pump	H. G. Cady	Saint Louis, Mo	Oct. 15, 1867	69, 763
Valve, Pump	A. S. Cameron	New York, N. Y	Jan. 15, 1867	61, 155

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Invention.	Inventor.	Residence.	Date.	No.
Valve, Pump	A. S. Cameron	New York, N. Y	Apr. 4, 1871	113, 397
Valve, Pump	C. A. Clark	Pulaski, Iowa	Apr. 16, 1861	32, 048
Valve, Pump	D. W. Clark	Tidioute, Pa	Oct. 11, 1870	108, 237
Valve, Pump	J. Clayton	Brooklyn, N. Y	Aug. 24, 1869	94, 078
Valve, Pump	N. T. Coffin	Knightstown, Ind	Aug. 2, 1870	105, 913
Valve, Pump	J. C. and I. Couldrey	New York, N. Y., and Liverpool, England.	Jan. 26, 1869	86, 216
Valve, Pump	J. E. Cronk	Poughkeepsie, N. Y	Oct. 8, 1867	69, 635
Valve, Pump	N. Dodge	New York, N. Y	May 10, 1853	9, 706
Valve, Pump	J. W. Douglas	Middletown, Conn	May 3, 1870	102, 664
Valve, Pump	R. J. Gould and M. E. Campfield.	Newark, N. J	Nov. 25, 1873	144, 844
Valve, Pump	G. Hammer	Cincinnati, Ohio	Feb. 20, 1855	12, 413
Valve, Pump	A. M. Kansen	Stockton, Cal	Mar. 27, 1866	53, 532
Valve, Pump	C. B. and J. Hardick	Brooklyn, N. Y	Aug. 18, 1863	39, 568
Valve, Pump	C. B. and J. Hardick	Brooklyn, N. Y	Dec. 19, 1865	51, 653
Valve, Pump	H. Heckman	Newburgh, Pa	July 17, 1837	280
Valve, Pump	W. D. Hooker	San Francisco, Cal	Jan. 15, 1867	61, 199
Valve, Pump	J. W. Hopkins	Brooklyn, N. Y	Oct. 27, 1863	40, 447
Valve, Pump	W. Jeffers	Pawtucket, R. I	Apr. 17, 1860	27, 909
Valve, Pump	T. Ling	Hartford, Conn	Nov. 2, 1869	96, 329
Valve, Pump	C. L. Merrill	Watertown, N. Y	Feb. 14, 1871	111, 763
Valve, Pump	D. Metz	Mahanoy, Pa	Aug. 1, 1871	117, 661
Valve, Pump	D. Metz	Pottsville, Pa	Feb. 20, 1872	123, 922
Valve, Pump	L. A. Miles	Hopkinsville, Ohio	May 23, 1854	10, 951
Valve, Pump	J. A. Nichols	Paterson, N. J	Oct. 20, 1868	83, 302
Valve, Pump	J. Norman	Charleston, W. Va	Dec. 10, 1872	133, 880
Valve, Pump	W. Painter	Baltimore, Md	Aug. 5, 1873	141, 587
Valve, Pump	W. H. Pollard	Seneca Falls, N. Y	Jan. 7, 1868	73, 038
Valve, Pump	A. K. Rider	Elizabeth City, N. J	Apr. 27, 1869	89, 344
Valve, Pump	W. Sewell and A. S. Cameron	New York, N. Y	May 10, 1864	42, 693
Valve, Pump	N. Stedman	Aurora, Ind	Feb. 9, 1864	41, 543
Valve, Pump	H. Tyler	Gaines, N. Y	Mar. 19, 1867	63, 118
Valve, Pump	G. M. Weinman	Columbus, Ohio	Aug. 30, 1870	106, 974
Valve, Pump	J. S. Whipple	Chicago, Ill	Sept. 27, 1870	107, 841
Valve, Pump ball	J. R. Bassett	Cincinnati, Ohio	Feb. 14, 1854	10, 537
Valve, Pump check	W. R. Malone	Mason, W. Va	Sept. 1, 1868	81, 804
Valve, Pump drain	C. G. Puckett	Cerro Gordo, Ind	Sept. 2, 1862	36, 365
Valve, Pump escape	E. A. Floyd	Macomb, Ill	July 4, 1865	48, 543
Valve, Pump lateral-waste	A. Nudd	Waupun, Wis	Feb. 17, 1863	37, 701
Valve, Pump waste	G. E. Brettell	Rochester, N. Y	May 12, 1868	77, 865
Valve, Puppet	O. Adams	San Francisco, Cal	Aug. 6, 1872	130, 099
Valve, Puppet	R. P. Bradley	Cuyahoga Falls, Ohio	Oct. 28, 1856	15, 960
Valve, Puppet	R. Berryman	Hartford, Conn	Apr. 9, 1872	125, 525
Valve, Railway-tank	C. W. Chappell	Watertown, Wis	Aug. 13, 1872	130, 411
Valve, Railway-tank	M. Cowing	New York, N. Y	Apr. 12, 1870	101, 827
Valve, Railway-tank	M. N. Lynn	New Albany, Ind	June 4, 1872	127, 622
Valve, Raising puppet	W. Duff and T. Murphy	Baltimore, Md	Feb. 17, 1836	....
Valve, Regenerative-furnace	H. Frank	Pittsburgh, Pa	Dec. 31, 1872	134, 370
Valve, Regenerative-furnace	H. Frank	Pittsburgh, Pa	Dec. 31, 1872	134, 371
Valve-register	J. W. Starr	Camden, N. J	Aug. 5, 1873	141, 521
Valve, Regulating and safety	B. Holly	Lockport, N. Y	Apr. 4, 1871	113, 517
Valve-regulator	F. H. Bartholomew	New York, N. Y	Feb. 4, 1862	34, 288
Valve-regulator	W. S. Gale	New York, N. Y	July 6, 1858	20, 845
Valve regulator, Safety	P. Riordan	Washington, D. C	Jan. 31, 1865	46, 142
Valve regulator, Steam-engine	F. E. Sickles	New York	May 20, 1842	2, 631
Valve, Relieving	W. Lanphier	Alexandria, D. C	Sept. 2, 1826	....
Valve-rod connection	J. Robertson	Quincy, Ill	Apr. 7, 1868	76, 526
Valve rod, Injector and ejector	W. B. Mack	Boston, Mass	June 25, 1872	128, 232
Valve, Rotary	A. Lawrence	Lowell, Mass	May 7, 1872	126, 402
Valve, Rotary	T. Richards	Plattsburgh, N. Y	Feb. 23, 1858	19, 443
Valve, Rotary	J. B. Root	New York, N. Y	May 21, 1867	65, 013
Valve, Rotary	D. Sexton	San Gabriel, Cal	Sept. 25, 1866	58, 307
Valve, Rotary	D. Snowhill and J. D. Brown	Spotswood, N. J	Dec. 5, 1871	121, 677
Valve, Rotary	G. Westinghouse, jr	Pittsburgh, Pa	Oct. 8, 1872	131, 985
Valve, Rotary	E. D. Wood	Utica, N. Y	Apr. 14, 1868	76, 682
Valve, Rotary	W. E. Worthen	New York, N. Y	July 24, 1866	56, 657
Valve, Rotary balance	J. C. Wilson	Oshkosh, Wis	Aug. 20, 1872	130, 683
Valve, Rotary-engine	W. Fitzgerald	Boston, Mass	Feb. 1, 1870	99, 423
Valve, Rotary-engine	J. P. Ross	Lewisburgh, Pa	July 31, 1849	6, 616
Valve, Rotary steam	R. A. Filkins	North Adams, Mass	Dec. 3, 1867	71, 730
Valve, Rotary steam	H. Haupt	Cambridge, Mass	Aug. 23, 1864	43, 910
Valve, Rotary steam	G. Leckenby	Weston, Mo	June 28, 1870	104, 746
Valve, Rotary steam	H. Lombard	San Francisco, Cal	Nov. 9, 1869	96, 601
Valve, Rotary steam	J. L. Mackey	Seymour, Ind	Dec. 18, 1866	60, 638
Valve, Rotary steam	J. F. Tallant	Burlington, Iowa	Nov. 14, 1871	121, 018
Valve, Rotary-steam-engine	J. W. Webb	Aurora, N. Y	Jan. 18, 1853	9, 550
Valve, Rotating oscillating steam	C. F. Hadley	Chicopee, Mass	Mar. 23, 1869	88, 162
Valve, Safety	A. C. Ancona	Evansville, Ind	Nov. 22, 1870	109, 483
Valve, Safety	H. Anderson	Chicago, Ill	Feb. 18, 1868	74, 480
Valve, Safety	J. Armstrong	Brookfield, Mo	Dec. 13, 1870	109, 996
Valve, Safety	H. Ashfield	Chicago, Ill	Dec. 7, 1869	97, 472
Valve, Safety	J. Atkins	Mokena, Ill	Feb. 18, 1868	74, 656
Valve, Safety	E. S. Bennett	New York, N. Y	Jan. 26, 1869	86, 126
Valve, Safety	S. Boden	Louisville, Ky	May 18, 1869	90, 226
Valve, Safety	W. Burnett	San Francisco, Cal	Oct. 23, 1866	59, 121
Valve, Safety	C. Burley	Cincinnati, Ohio	June 15, 1869	91, 413
Valve, Safety	W. Cameron	Reading, Pa	Jan. 16, 1872	122, 756
Valve, Safety	H. P. Case and R. P. Baillie	Detroit, Mich	Jan. 16, 1872	122, 704
Valve, Safety	J. R. Cazier	North East, Pa	Mar. 19, 1872	124, 792
Valve, Safety	D. H. Chamberlain	West Roxbury, Mass	Dec. 24, 1872	134, 126
Valve, Safety	W. Churchill	Saint Louis, Mo	June 24, 1873	140, 115
Valve, Safety	D. G. Coppin and G. H. Clemens.	Cincinnati, Ohio	Oct. 23, 1866	58, 987
Valve, Safety	R. Cornelius	Philadelphia, Pa	June 17, 1856	15, 120
Valve, Safety	G. W. Cushing	Chicago, Ill	Feb. 15, 1870	99, 762
Valve, Safety	H. Davies	Newport, Ky	Feb. 11, 1873	135, 698
Valve, Safety	W. Dawson	Scranton, Pa	Dec. 7, 1869	97, 485

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Invention.	Inventor.	Residence.	Date.	No.
Valve, Safety	S. B. Dougherty	Bordentown, N. J	Mar. 10, 1868	75,392
Valve, Safety	S. B. Dougherty	South Bergen, N. J	June 22, 1869	91,725
Valve, Safety	J. B. Edson	Brooklyn, N. Y	Aug. 8, 1871	117,872
Valve, Safety	J. H. Fitzsimmons	Susquehanna Depot, Pa	Jan. 22, 1867	61,330
Valve, Safety	H. A. Goll	Chicago, Ill	Oct. 18, 1870	108,345
Valve, Safety	A. Guthrie	Chicago, Ill	Oct. 12, 1852	9,321
Valve, Safety	F. Harden	Conshohocken, Pa	May 26, 1868	78,280
Valve, Safety	G. E. Hayes	Buffalo, N. Y	June 16, 1863	38,899
Valve, Safety	J. Hoffman	Belvidere, N. J	Oct. 21, 1873	143,825
Valve, Safety	H. S. Jewell and F. Steele	Brooklyn, N. Y	Jan. 30, 1872	123,176
Valve, Safety	H. S. Jewell and F. Steele	Brooklyn, N. Y	Apr. 30, 1872	126,304
Valve, Safety	J. Jordan and A. Paul	Liverpool, England	Dec. 23, 1873	145,876
Valve, Safety	T. S. La France	Elmira, N. Y	Jan. 11, 1870	98,697
Valve, Safety	J. Linnard	Philadelphia, Pa	May 18, 1869	90,278
Valve, Safety	A. Low	Albany, N. Y	Mar. 29, 1866	55,127
Valve, Safety	W. H. Low	Albany, N. Y	Mar. 9, 1858	19,570
Valve, Safety	J. D. Lynde	Philadelphia, Pa	May 18, 1869	90,279
Valve, Safety	J. D. Lynde	Philadelphia, Pa	May 17, 1870	103,062
Valve, Safety	W. R. Malone	Mason City, W. Va	Oct. 20, 1868	83,295
Valve, Safety	S. C. Marsh	Newark, N. J	Mar. 14, 1871	112,611
Valve, Safety	A. F. W. Neynaber	Philadelphia, Pa	June 20, 1871	116,084
Valve, Safety	H. J. Paine	Providence, R. I	Apr. 19, 1870	102,147
Valve, Safety	A. Pollock	New York, N. Y	May 15, 1866	54,768
Valve, Safety	G. J. Rains	Aiken, S. C	Mar. 18, 1873	136,938
Valve, Safety	T. D. Rand	Philadelphia, Pa	Mar. 26, 1872	125,081
Valve, Safety	W. R. Reece	Tremont, Pa	Sept. 20, 1870	107,540
Valve, Safety	T. Rowe	New York, N. Y	June 1, 1869	90,874
Valve, Safety	M. and E. Scrannage, jr	Boston, Mass	Apr. 4, 1871	113,455
Valve, Safety	M. Smart and T. W. Gaynor	New York, N. Y	July 30, 1872	129,991
Valve, Safety	J. Y. Smith	Alexandria, Va	May 23, 1865	47,869
Valve, Safety	H. F. Snyder	Williamsport, Pa	Dec. 13, 1870	110,082
Valve, Safety	J. R. Swann	Edinburgh, Scotland	Feb. 19, 1867	62,163
Valve, Safety	G. Swenson	Hackensack, N. J	May 20, 1873	139,209
Valve, Safety	H. Taylor and J. M. Coale	Baltimore, Md	Nov. 16, 1869	96,999
Valve, Safety	E. C. Fernald	Flatbush, N. Y	Apr. 8, 1873	137,540
Valve, Safety	N. Thomas	Chicago, Ill	Sept. 13, 1870	107,308
Valve, Safety	J. Zundorff	New York, N. Y	Mar. 5, 1867	62,722
Valve, Safety and vacuum	G. Hibberd	Wheeling, W. Va	Oct. 31, 1871	120,519
Valve, Screw	P. Corrigan	New York, N. Y	Aug. 12, 1873	141,697
Valve, Screw puppet or throttle	E. A. H. Young	New Castle, Del	Jan. 19, 1833	......
Valve-seat	A. M. Cheeseman	Trenton, N. J	Sept. 29, 1868	82,506
Valve-seat	D. Wiehl	Cincinnati, Ohio	Jan. 30, 1872	123,317
Valve-seat, &c., for water-mains	T. R. Scowden	Cincinnati, Ohio	May 1, 1849	6,414
Valve-seat, Non-corrosive	E. H. Ashcroft	Boston, Mass	Sept. 1, 1868	81,576
Valve-seats, Device for grinding flat face of	S. J. Peet and D. Sawyer	Boston, Mass	Feb. 21, 1871	111,966
Valve-seats, Machine for grinding	W. H. Anderson	Brooklyn, N. Y	Nov. 2, 1869	96,378
Valve, Self-acting equalizing	J. J. Steiger	Peoria, Ill	Apr. 19, 1870	102,176
Valve, Self-acting water	J. N. Deck	Buffalo, N. Y	Feb. 20, 1872	123,771
Valve, Self-adjusting	F. S. Barnard	Zanesville, Ohio	Oct. 23, 1849	6,820
Valve, Self-balance steam	J. Kirkpatrick	Baltimore, Md	July 10, 1834	......
Valve, Self-facing check	C. Rue and J. H. Knight	Doylestown, Pa	Apr. 30, 1873	126,235
Valve, Self-regulating pressure	A. Campbell	Brooklyn, N. Y	Aug. 16, 1864	43,833
Valve, Semi-rotary	J. F. Holloway	Cleveland, Ohio	Dec. 13, 1870	110,011
Valve-shield	A. Jimason	Parkesburgh, Pa	Sept. 30, 1851	8,402
Valve, Slide	T. Adams and G. J. Parson	London, England	Sept. 17, 1867	68,932
Valve, Slide	G. B. Brayton	Boston, Mass	Oct. 4, 1870	107,863
Valve, Slide	C. H. Brightly	Philadelphia, Pa	Mar. 28, 1865	46,991
Valve, Slide	R. C. Bristol	Chicago, Ill	Nov. 13, 1860	30,611
Valve, Slide	J. L. Brown	Brookville, Pa	Apr. 29, 1873	138,376
Valve, Slide	A. Buchanan	New York, N. Y	Sept. 27, 1864	44,394
Valve, Slide	A. Buchanan	New York, N. Y	Oct. 10, 1865	50,331
Valve, Slide	J. M. Coale	Baltimore, Md	June 6, 1871	115,706
Valve, Slide	J. M. Coale	Baltimore, Md	June 18, 1872	128,117
Valve, Slide	J. B. Cochran	Brooklyn, N. Y	May 30, 1865	47,932
Valve, Slide	I. Craft	Cincinnati, Ohio	Dec. 14, 1869	97,887
Valve, Slide	J. B. Dougherty	Rochester, N. Y	July 17, 1866	56,384
Valve, Slide	J. B. Dougherty	Rochester, N. Y	July 17, 1866	56,385
Valve, Slide	F. Glasson and W. Gilfillan	New York, N. Y., and Paterson, N. J.	July 23, 1872	129,726
Valve, Slide	A. Hemmingway	New York, N. Y	Mar. 8, 1870	100,625
Valve, Slide	A. J. Homan	Yonkers, N. Y	Apr. 24, 1866	54,163
Valve, Slide	J. G. Ives	Springfield, Ill	June 6, 1865	48,070
Valve, Slide	H. A. Jamieson	Williamsburgh, N. Y	Oct. 29, 1872	132,665
Valve, Slide	J. J. Lahaye and S. T. Reeves	Reading, Pa	Jan. 1, 1867	60,748
Valve, Slide	J. Larkin	Detroit, Mich	Apr. 26, 1870	102,410
Valve, Slide	T. Mahoney	Knoxville, Tenn	Dec. 4, 1860	30,827
Valve, Slide	I. Martin and D. B. Perrow	Lone Jack, Mo	June 13, 1871	115,878
Valve, Slide	A. McCausland, jr	Philadelphia, Pa	Feb. 10, 1836	......
Valve, Slide	H. H. Meyer	Denver, Col	June 18, 1872	128,161
Valve, Slide	H. H. Meyer	Denver, Col	Oct. 22, 1872	132,480
Valve, Slide	J. Millholland	Reading, Pa	Sept. 25, 1860	30,150
Valve, Slide	A. S. Nelson	Conneautville, Pa	Nov. 4, 1873	144,282
Valve, Slide	J. Randall	Elmira, N. Y	Sept. 25, 1860	30,184
Valve, Slide	A. K. Rider	New York, N. Y	May 2, 1871	114,344
Valve, Slide	A. K. Rider	New York, N. Y	June 20, 1871	116,099
Valve, Slide	W. B. Robinson	Detroit, Mich	Dec. 4, 1866	60,252
Valve, Slide	J. Smart	Stratford, England	Dec. 20, 1870	110,300
Valve, Slide	H. Spengler	Philadelphia, Pa	Oct. 31, 1865	50,746
Valve, Slide	W. Stephens	Pittston, Pa	Nov. 4, 1873	144,295
Valve, Slide	W. J. Stevens	New York, N. Y	Nov. 27, 1866	60,081
Valve, Slide	N. Sutton	New York, N. Y	Feb. 14, 1860	27,163
Valve, Slide	S. D. White	Centralia, Ill	Oct. 17, 1865	50,527
Valve, Slide	W. Wilson	Galesburgh, Ill	Apr. 21, 1868	77,152
Valve, Slide	J. A. Woodbury	Boston, Mass	July 4, 1865	48,611
Valve, Slide	J. C. Woodhead	Pittsburgh, Pa	Feb. 21, 1871	112,002
Valve, Slide	A. H. Woodruff	Lansing, Iowa	July 31, 1866	56,841
Valve, Stand-pipe balanced	J. N. Poage	Cincinnati, Ohio	Aug. 12, 1873	141,815
Valve, Stand-pipe check	G. W. Hallenbeck, jr	New York, N. Y	Sept. 10, 1872	131,216

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Valve, Sliding stop	H. G. Ludlow, 3d	Waterford, N. Y	Sept. 17, 1861	33, 309
Valve, Sliding stop	H. G. Ludlow, 2d	Troy, N. Y	Jan. 10, 1871	110, 926
Valve, Sliding stop	H. G. Ludlow	Troy, N. Y	Sept. 26, 1871	119, 378
Valve, Slowly-closing	J. Keane	New York, N. Y	Apr. 20, 1869	89, 151
Valve stand and stem, Throttle	J. M. Compant and E. Krauskoff	Fredericksburgh, Tex	Apr. 2, 1872	125, 174
Valve, Steam	L. Bennett	Pittsburgh, Pa	June 5, 1860	28, 552
Valve, Steam	L. B. Brooks	New York, N. Y	Nov. 22, 1859	26, 160
Valve, Steam	M. Burnett and H. Comstock	Boston, Mass	May 22, 1866	54, 851
Valve, Steam	A. S. Cameron	New York, N. Y	Mar. 14, 1871	112, 684
Valve, Steam	R. Carkhuff and B. Chalfant	Lewisburgh, Pa	Nov. 8, 1859	26, 012
Valve, Steam	R. B. Chapman and E. F. Spaulding.	Cambridgeport, Mass	Jan. 9, 1872	122, 566
Valve, Steam	C. W. Corr	Carlinville, Ill	Dec. 20, 1859	26, 480
Valve, Steam	M. Cridge	Pittsburgh, Pa	Jan. 3, 1860	26, 654
Valve, Steam	T. B. Dexter	Lynn, Mass	Apr. 24, 1866	54, 129
Valve, Steam	O. P. and H. D. Dunbar	Norwalk, Ohio, and Hartland, Vt.	Nov. 17, 1868	84, 175
Valve, Steam	H. H. Evarts	Chicago, Ill	Apr. 26, 1859	23, 807
Valve, Steam	G. S. Faulkner	Stafford, Conn	Jan. 27, 1863	37, 545
Valve, Steam	W. F. Gould	Davenport, Iowa	Nov. 28, 1871	121, 358
Valve, Steam	H. Goulding	San Francisco, Cal	June 1, 1858	20, 423
Valve, Steam	H. Goulding	San Francisco, Cal	Jan. 18, 1859	22, 641
Valve, Steam	G. G. Hunt	Bridgeport, Conn	Dec. 11, 1866	60, 378
Valve, Steam	J. Johnson	New York, N. Y	Aug. 15, 1865	49, 414
Valve, Steam	H. P. Jones	Davenport, Iowa	Sept. 9, 1873	142, 702
Valve, Steam	J. F. Letellier	Grand Rapids, Mich	Oct. 23, 1860	30, 485
Valve, Steam	T. H. Lidford	North Adams, Mass	June 18, 1867	65, 921
Valve, Steam	W. S. Mackintosh and S. Wadsworth.	Pittsburgh, Pa	Aug. 17, 1858	21, 235
Valve, Steam	W. R. Michener	Marlborough, Ohio	Jan. 12, 1858	19, 096
Valve, Steam	F. L. Pease	Buffalo, N. Y	Nov. 17, 1868	84, 211
Valve, Steam	M. C. Rerdell	Clinton, Ark	Sept. 12, 1871	118, 817
Valve, Steam	G. Rieseck	Pittsburgh, Pa	Aug. 10, 1858	21, 151
Valve, Steam	R. Ross	Philadelphia, Pa	Aug. 22, 1854	11, 591
Valve, Steam	C. A. Schultz	New York, N. Y	Apr. 19, 1859	23, 714
Valve, Steam	J. H. Scott	Millport, N. Y	Mar. 5, 1861	31, 629
Valve, Steam	T. Scott	San Francisco, Cal	Apr. 27, 1858	20, 094
Valve, Steam	W. J. Stevens	New York, N. Y	Aug. 10, 1858	21, 155
Valve, Steam	R. Stewart	Elmira, N. Y	Sept. 14, 1858	21, 524
Valve, Steam	W. A. Sweet	Syracuse, N. Y	Sept. 28, 1869	95, 285
Valve, Steam	S. Talbott	Richmond, Va	Feb. 28, 1845	3, 931
Valve, Steam	J. Tremper	Philadelphia, Pa	Feb. 13, 1855	12, 399
Valve, Steam	C. B. Turner	Grand Rapids, Mich	Oct. 8, 1872	132, 120
Valve, Steam	J. B. Wood	Lansingburgh, N. Y	Aug. 21, 1866	57, 424
Valve, Steam	J. E. Wootten	Philadelphia, Pa	Jan. 11, 1859	22, 599
Valve, Steam	J. Zundorff	New York, N. Y	Mar. 5, 1867	62, 721
Valve, Steam and air	T. H. Dodge	Worcester, Mass	Jan. 2, 1872	122, 446
Valve, Steam and cut-off	E. E. Groom	New York, N. Y	Feb. 20, 1866	52, 707
Valve, Steam and other	E. F. Spaulding	Cambridgeport, Mass	May 27, 1873	139, 339
Valve, Steam and water check	E. H. Ashcroft	Lynn, Mass	Nov. 3, 1868	83, 588
Valve, Steam balanced slide	J. D. Stewart	La Porte, Ind	June 1, 1869	90, 887
Valve, Steam-boiler	D. B. Lee	Philadelphia, Pa	Jan. 23, 1834	....
Valve, Steam-boiler alarm	S. Dustin	Detroit, Mich	May 8, 1860	28, 165
Valve, Steam-boiler combined pressure and vacuum	D. R. Prindle	East Bethany, N. Y	July 3, 1860	29, 004
Valve, Steam-boiler float	J. Peters	Haverstraw, N. Y	Dec. 19, 1871	122, 053
Valve, Steam-boiler hydrostatic safety	T. Ewbank	New York	Aug. 27, 1831	....
Valve, Steam-boiler lock safety	H. G. Ashton	East Cambridge, Mass	Feb. 13, 1872	123, 546
Valve, Steam-boiler-regulator piston	W. S. Gale	New York, N. Y	Apr. 8, 1856	14, 605
Valve, Steam-boiler safety	J. R. Cozier	North East, Pa	July 9, 1872	128, 851
Valve, Steam-boiler safety	W. Duff	Baltimore, Md	July 28, 1843	3, 2.2
Valve, Steam-boiler safety	H. S. Jewell and F. Steel	Brooklyn, N. Y	July 16, 1872	129, 138
Valve, Steam-boiler safety	Z. H. Mann	Cincinnati, Ohio	Sept. 13, 1853	10, 012
Valve, Steam-boiler safety	W. P. McConnell	Washington, D. C	May 19, 1843	3, 098
Valve, Steam-boiler safety	A. Patterson	Rush, Pa	Mar. 21, 1845	3, 960
Valve, Steam-boiler safety	A. J. Prescott	Catawissa, Pa	Dec. 5, 1871	121, 650
Valve, Steam-boiler safety	S. Raub, jr	Wilkesbarre, Pa	Nov. 8, 1836	....
Valve, Steam-boiler safety	H. W. Shepard	Madison, Ind	Dec. 16, 1873	145, 534
Valve, Steam-boiler safety	W. M. Storm	New York, N. Y	May 1, 1860	28, 111
Valve, Steam-engine	E. R. Arnold	Providence, R. I	July 5, 1864	43, 381
Valve, Steam-engine	L. Atwood	Norwich, Conn	Nov. 10, 1868	83, 903
Valve, Steam-engine	R. Bailey	Troy, N. Y	Jan. 25, 1859	22, 692
Valve, Steam-engine	J. Baird	New York, N. Y	Mar. 3, 1863	37, 802
Valve, Steam-engine	J. Baird	New York, N. Y	June 2, 1863	38, 722
Valve, Steam-engine	M. W. Baldwin	Philadelphia, Pa	Apr. 27, 1852	8, 900
Valve, Steam-engine	L. D. Bartlett	Fitchburgh, Mass	Jan. 15, 1867	61, 141
Valve, Steam-engine	J. D. Beers	Philadelphia, Pa	Apr. 3, 1847	5, 051
Valve, Steam-engine	G. F. Blake	Medford, Mass	Apr. 12, 1864	42, 347
Valve, Steam-engine	G. F. Blake	Boston, Mass	Feb. 13, 1872	123, 669
Valve, Steam-engine	C. Bradley	Manchester, Va	Jan. 6, 1857	16, 351
Valve, Steam-engine	A. Buchanan	Jersey City, N. J	Sept. 30, 1862	36, 556
Valve, Steam-engine	A. Buchanan	New York, N. Y	Nov. 18, 1862	36, 941
Valve, Steam-engine	H. L. Butler	Pittsburgh, Pa	Oct. 17, 1871	120, 033
Valve, Steam-engine	C. A. Candé	Indianapolis, Ind	July 16, 1872	129, 532
Valve, Steam-engine	J. W. Carhart	Cohoes, N. Y	July 25, 1865	48, 962
Valve, Steam-engine	A. Carr	Paterson, N. J	Oct. 21, 1873	143, 807
Valve, Steam-engine	C. E. Case	Xenia, Ohio	Apr. 23, 1867	64, 072
Valve, Steam-engine	T. Clark	Cohoes, N. Y	Sept. 12, 1865	49, 858
Valve, Steam-engine	F. W. Clough	Springfield, Mass	Mar. 1, 1864	41, 758
Valve, Steam-engine	J. Colbath	Worcester, Mass	Oct. 15, 1867	69, 772
Valve, Steam-engine	W. S. Cooper	Philadelphia, Pa	Sept. 11, 1866	58, 039
Valve, Steam-engine	A. Crosby	Fredonia, N. Y	Aug. 30, 1859	25, 248
Valve, Steam-engine	F. W. Davidson	Cleveland, Ohio	Apr. 2, 1867	63, 368
Valve, Steam-engine	C. Dawson	Lanesborough, Pa	Apr. 27, 1869	89, 471
Valve, Steam-engine	C. P. Deane	Springfield, Mass	Jan. 10, 1871	110, 835
Valve, Steam-engine	O. T. Earle	Springfield, Mass	Jan. 10, 1865	45, 820
Valve, Steam-engine	G. L. Enggren	Brooklyn, N. Y	June 2, 1868	78, 518
Valve, Steam-engine	R. P. Estep	Cincinnati, Ohio	Oct. 16, 1866	58, 796
Valve, Steam-engine	A. W. Fox	Union, N. Y	Oct. 22, 1872	132, 360

Index of patents issued from the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Valve, Steam-engine	D. R. Fraser	Chicago, Ill	Apr. 15, 1862	34,997
Valve, Steam-engine	J. Gallatin, jr	New York, N. Y	Feb. 13, 1866	52,556
Valve, Steam-engine	T. Goodrum	Providence, R. I	Apr. 3, 1855	12,634
Valve, Steam-engine	G. L. Grant	Rockville, Conn	Sept. 10, 1867	68,733
Valve, Steam-engine	S. Groom	Troy, N. Y	July 5, 1864	43,402
Valve, Steam-engine	J. and C. B. Hardick	Brooklyn, N. Y	Sept. 9, 1862	36,407
Valve, Steam-engine	J. S. Harley and X. Fendrick	Baltimore, Md., and Georgetown, D. C.	Mar. 7, 1871	112,451
Valve, Steam-engine	A. W. Harris	Providence, R. I	Mar. 19, 1872	124,817
Valve, Steam-engine	W. M. Henderson	Baltimore, Md	Dec. 5, 1865	51,314
Valve, Steam-engine	W. D. Hooker	San Francisco, Cal	Aug. 4, 1868	80,738
Valve, Steam-engine	G. W. and E. Hopkins	Brooklyn, N. Y	Sept. 10, 1867	68,745
Valve, Steam-engine	J. W. Hopkins	Brooklyn, N. Y	Oct. 27, 1863	40,445
Valve, Steam-engine	J. W. Hopkins	Brooklyn, N. Y	Sept. 14, 1869	94,750
Valve, Steam-engine	J. W. Hopkins	New York, N. Y	Jan. 30, 1872	123,174
Valve, Steam-engine	J. S. Howell	Portsmouth, N. H	June 2, 1863	38,746
Valve, Steam-engine	W. H. Howland	San Francisco, Cal	June 29, 1869	92,052
Valve, Steam-engine	H. I. Hoyt	Norwalk, Conn	Sept. 16, 1873	142,788
Valve, Steam-engine	A. Hutton	Saint Louis, Mo	Nov. 19, 1867	71,016
Valve, Steam-engine	A. Jamison	Taylorstown, Pa	Aug. 7, 1866	56,946
Valve, Steam-engine	J. Jobin	Saint Mandi, near Paris, France.	Oct. 5, 1858	21,682
Valve, Steam-engine	W. A. L. Kirk	Hamilton, Ohio	Aug. 28, 1866	57,518
Valve, Steam-engine	R. R. Lee and G. H. Wren	Mahanoy City, Pa	Nov. 17, 1868	84,064
Valve, Steam-engine	R. C. M. Lovell	Covington, Ky	July 30, 1867	67,324
Valve, Steam-engine	J. McConnell	Iowa City, Iowa	Sept. 24, 1867	69,232
Valve, Steam-engine	J. D. Moon and J. T. Foster	Jersey City, N. J	Aug. 31, 1869	93,231
Valve, Steam-engine	A. R. Morrill	Northfield, Vt	Nov. 30, 1858	22,192
Valve, Steam-engine	J. F. Morse	Oshkosh, Wis	Dec. 31, 1867	72,750
Valve, Steam-engine	A. Morton	South New Market, N. H	Apr. 4, 1865	47,122
Valve, Steam-engine	J. J. Nuller	Chicago, Ill	Aug. 23, 1864	43,949
Valve, Steam-engine	W. Ord	Brooklyn, Ohio	Feb. 18, 1868	74,583
Valve, Steam-engine	C. R. and N. P. Otis	Yonkers, N. Y	Sept. 10, 1867	68,783
Valve, Steam-engine	S. J. Peet	New York, N. Y	Jan. 1, 1867	60,932
Valve, Steam-engine	W. G. Pike	Philadelphia, Pa	Jan. 14, 1868	73,381
Valve, Steam-engine	E. Post	Boston, Mass	Sept. 21, 1869	94,973
Valve, Steam-engine	J. H. and A. E. Redstone	Indianapolis, Ind	May 6, 1862	35,174
Valve, Steam-engine	J. A. Reed	New York, N. Y	May 15, 1855	12,873
Valve, Steam-engine	J. Reichmann	Dubuque, Iowa	Feb. 18, 1868	74,593
Valve, Steam-engine	E. Reynolds	Boston, Mass	Aug. 6, 1867	67,583
Valve, Steam-engine	A. K. Rider	Nazareth, Pa	June 2, 1868	78,483
Valve, Steam-engine	E. Rogers	New York, N. Y	Oct. 10, 1865	50,389
Valve, Steam-engine	C. Rumley	Rochester, N. Y	Nov. 7, 1854	11,908
Valve, Steam-engine	W. H. Sangster and J. C. Ware	Titusville, Pa	Aug. 21, 1866	57,386
Valve, Steam-engine	W. C. Selden	Brooklyn, N. Y	Aug. 2, 1870	105,986
Valve, Steam-engine	P. Shearer	Reading, Pa	Feb. 10, 1863	37,644
Valve, Steam-engine	W. Shepherd, jr	Brooklyn, N. Y	May 3, 1859	23,885
Valve, Steam-engine	J. Shoemaker	Oakland, Pa	Nov. 26, 1867	71,542
Valve, Steam-engine	C. B. Smith	Newark, N. J	Dec. 12, 1871	121,905
Valve, Steam-engine	W. Smith	Philadelphia, Pa	Feb. 5, 1861	31,335
Valve, Steam-engine	F. B. Stevens	New York, N. Y	Nov. 3, 1863	40,509
Valve, Steam-engine	N. P. Stevens	Hopkinton, N. H	Apr. 18, 1871	113,810
Valve, Steam-engine	N. P. Stevens	Hopkinton, N. H	June 27, 1871	116,370
Valve, Steam-engine	T. B. Stillman	New York	Oct. 30, 1834	....
Valve, Steam-engine	D. Teeter	Hagerstown, Ind	Feb. 3, 1863	37,596
Valve, Steam-engine	J. E. Thorpe	Providence, R. I	Mar. 28, 1865	47,072
Valve, Steam-engine	G. C. Timpe	New Orleans, La	Nov. 5, 1872	132,781
Valve, Steam-engine	D. B. Travis	La Crosse, Wis	June 14, 1864	43,142
Valve, Steam-engine	C. W. Tremain	Memphis, Tenn	Sept. 19, 1865	50,053
Valve, Steam-engine	G. W. Van Deren	Big Flats, N. Y	Oct. 9, 1860	30,365
Valve, Steam-engine	I. Van Doren	Somerville, N. J	Mar. 9, 1858	19,594
Valve, Steam-engine	J. Watson	Toledo, Ohio	Mar. 26, 1872	125,105
Valve, Steam-engine	P. L. Weimer	Lebanon, Pa	Apr. 3, 1860	27,752
Valve, Steam-engine	S. H. Whitmore	Decatur, Ill	Apr. 18, 1871	113,956
Valve, Steam-engine	H. D. Wickes	Flint, Mich	Dec. 14, 1858	22,322
Valve, Steam-engine	J. A. Woodbury	Boston, Mass	Mar. 26, 1867	63,351
Valve, Steam-engine	J. A. Woodbury	Boston, Mass	Mar. 26, 1867	63,352
Valve, Steam-engine	H. E. Woodford	Watertown, N. Y	Oct. 30, 1860	30,550
Valve, Steam-engine balance	J. W. Carhart	Troy, N. Y	Mar. 27, 1866	53,410
Valve, Steam-engine balance	J. G. Crockett	Portsmouth, N. H	May 14, 1867	64,750
Valve, Steam-engine balance	W. Evered	Chicago, Ill	Feb. 2, 1869	86,381
Valve, Steam-engine balance	W. Glen	Toronto, Canada	July 29, 1873	141,218
Valve, Steam-engine balance	A. Henry	Richmond, Ind	May 13, 1873	138,804
Valve, Steam-engine balance	W. B. Hill	Grand Rapids, Mich	Apr. 25, 1848	5,540
Valve, Steam-engine balance	D. W. Huntington and W. A. Hempstead.	South Coventry, Conn	Nov. 14, 1871	120,878
Valve, Steam-engine balance	N. Jenkins	Detroit, Mich	Apr. 4, 1871	113,523
Valve, Steam-engine balance	W. Joslin	Cleveland, Ohio	Apr. 12, 1864	42,293
Valve, Steam-engine balance	C. H. Parshall	Detroit, Mich	Dec. 1, 1863	40,796
Valve, Steam-engine balance	T. Richards	Lansingburgh, N. Y	May 22, 1866	54,959
Valve, Steam-engine balance	T. Rodda	Saint Louis, Mo	Jan. 29, 1867	61,568
Valve, Steam-engine balance	N. P. Stevens	Hopkinton, N. H	Dec. 23, 1873	145,764
Valve, Steam-engine balance	J. F. Sweet	Cedar Rapids, Iowa	Sept. 26, 1871	119,427
Valve, Steam-engine balance piston	C. W. Tremain	Chicago, Ill	July 6, 1869	92,231
Valve, Steam-engine balance and slide	A. Buchanan	New York, N. Y	Apr. 22, 1856	14,709
Valve, Steam-engine balance slide	D. R. Fraser	Chicago, Ill	July 13, 1869	92,599
Valve, Steam-engine balance slide	G. W. Richardson	Troy, N. Y	Jan. 31, 1871	111,382
Valve, Steam-engine balance slide	W. Thilmany	Cleveland, Ohio	Mar. 17, 1868	75,598
Valve, Steam-engine balance slide	J. F. Wallace	Pittsburgh, Pa	Sept. 23, 1873	143,043
Valve, Steam-engine balancing	W. H. Baker and H. R. Worthington.	Brooklyn, N. Y	May 28, 1846	4,542
Valve, Steam-engine balancing slide	R. Waddell	England	June 6, 1854	10,999
Valve, Steam-engine block slide	L. R. Conard	Philadelphia, Pa	July 18, 1854	11,320
Valve, Steam-engine conical balance	T. McDonough	Middletown, Conn	Feb. 12, 1844	3,437
Valve, Steam-engine-cylinder relief	R. Colburn	Norwich, Conn	Apr. 23, 1872	126,023
Valve, Steam-engine cylindrical throttle	J. H. Simmons	Erwin, N. Y	June 23, 1857	17,643
Valve, Steam-engine exhaust	T. S. Davis	Jersey City, N. J	Dec. 29, 1868	85,289
Valve, Steam-engine faucet	A. Taylor	Pekin, Ill	Mar. 14, 1854	10,647

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Invention.	Inventor.	Residence.	Date.	No.
Valve, Steam-engine foot	S. W. Rogers	Baltimore, Md	Oct. 2, 1849	6, 761
Valve, Steam-engine globe	E. H. Ashcroft	Lynn, Mass	Jan. 1, 1867	60, 816
Valve, Steam-engine globe	A. Crossley	Brooklyn, N. Y	Dec. 24, 1867	72, 458
Valve, Steam-engine globe	T. R. Fancher	Norwalk, Conn	Oct. 9, 1866	58, 625
Valve, Steam-engine globe	R. A. Filkins	North Adams, Mass	July 21, 1868	80, 160
Valve, Steam-engine globe	J. J. French	Baltimore, Md	July 2, 1867	66, 318
Valve, Steam-engine globe	H. H. Hendrick	Dayton, Ohio	Jan. 21, 1868	73, 602
Valve, Steam-engine globe	J. B. Lowell	Baltimore, Md	Dec. 24, 1867	72, 650
Valve, Steam-engine globe	E. C. Mayer and J. Ruppenthal	Saint Louis, Mo	July 16, 1867	66, 724
Valve, Steam-engine globe	B. F. Perkins	Holyoke, Mass	Oct. 6, 1868	82, 870
Valve, Steam-engine globe	C. Stierle and J. C. Baer	Cincinnati, Ohio	Oct. 2, 1866	58, 503
Valve, Steam-engine governor	E. Armstrong	Pittsburgh, Pa	Apr. 3, 1860	27, 677
Valve, Steam-engine governor	W. Chambers	Muscatine, Iowa	May 1, 1860	28, 065
Valve, Steam-engine governor	W. Churchill	Saint Louis, Mo	Oct. 16, 1866	58, 775
Valve, Steam-engine governor	W. A. Cogswell	Rochester, N. Y	June 6, 1871	115, 577
Valve, Steam-engine governor	S. B. McCray	Grand Rapids, Mich	Sept. 7, 1858	21, 433
Valve, Steam-engine governor	S. Mills	Bergen, N. J	July 25, 1865	48, 969
Valve, Steam-engine governor	H. H. Smith	Cincinnati, Ohio	Apr. 8, 1856	14, 620
Valve, Steam-engine governor	E. Ware	Norfolk, Mass	May 20, 1873	139, 096
Valve, Steam-engine governor	A. White	Geneseo, Ill	July 30, 1861	32, 934
Valve, Steam-engine governor	A. White	Geneseo, Ill	Sept. 15, 1863	39, 979
Valve, Steam-engine operating	H. F. Pease	Brooklyn, N. Y	Mar. 23, 1869	88, 204
Valve, Steam-engine oscillating	G. Burnham	Pittsburgh, Pa	Sept. 25, 1860	30, 176
Valve, Steam-engine oscillating	J. S. Everitt and O. Cook	Oshkosh, Wis	June 9, 1868	78, 656
Valve, Steam-engine oscillating	W. B. Kennedy	Louisville, Ky	May 21, 1872	127, 069
Valve, Steam-engine oscillating	T. C. Theaker	Mansfield, Ohio	May 7, 1850	7, 353
Valve, Steam-engine oscillating	A. Trew	Union City, Ind	Mar. 16, 1869	87, 888
Valve, Steam-engine piston	T. C. Ball	Bellows Falls, Vt	Dec. 22, 1863	41, 035
Valve, Steam-engine piston	A. Baumann	London, England	May 27, 1873	139, 357
Valve, Steam-engine piston	R. Gornall	Baltimore, Md	Oct. 13, 1868	82, 936
Valve, Steam-engine piston	R. H. Lecky	Allegheny City, Pa	Aug. 11, 1863	39, 485
Valve, Steam-engine piston	I. Soule	Albany, N. Y	Nov. 26, 1867	71, 337
Valve, Steam-engine piston	W. R. Thomas and T. Evans	Catasauqua, Pa	Mar. 24, 1868	76, 002
Valve, Steam-engine piston	G. M. Weinman	Columbus, Ohio	Apr. 15, 1873	137, 986
Valve, Steam-engine plug	W. H. Akins	Dryden, N. Y	Feb. 13, 1866	52, 511
Valve, Steam-engine puppet	G. F. Morse	Portland, Me	Nov. 2, 1869	96, 463
Valve, Steam-engine regulating	P. W. Mackenzie	Jersey City, N. J	Sept. 4, 1855	13, 527
Valve, Steam-engine regulating	E. G. Russell	Ravenna, Ohio	Aug. 28, 1855	13, 498
Valve, Steam-engine regulating	H. F. Shaw	Woburn, Mass	Sept. 30, 1856	15, 834
Valve, Steam-engine regulator	N. C. Travis	Alton, Ill	Oct. 11, 1859	25, 794
Valve, Steam-engine reversing	P. W. Mellon	Saint Louis, Mo	Mar. 25, 1873	137, 229
Valve, Steam-engine reversing	H. A. Morrill	Boston, Mass	Dec. 20, 1843	3, 383
Valve, Steam-engine reversing	T. Rodda	Saint Louis, Mo	July 5, 1870	105, 129
Valve, Steam-engine rotary	P. Bloomsburg, jr., and J. Molyneux.	Bordentown, N. J	June 4, 1867	65, 470
Valve, Steam-engine rotary	A. R. Buffington	United States Army	Mar. 9, 1869	87, 538
Valve, Steam-engine rotary	T. Stewart	Philadelphia, Pa	Sept. 21, 1858	21, 579
Valve, Steam-engine rotary	G. Westinghouse, jr	Pittsburgh, Pa	May 13, 1873	138, 828
Valve, Steam-engine rotary	J. Wheelock	Worcester, Mass	June 18, 1861	32, 593
Valve, Steam-engine rotating	W. R. Greenleaf	Silver Creek, N. Y	Jan. 23, 1864	41, 699
Valve, Steam-engine safety	H. W. Adams	Philadelphia, Pa	Feb. 6, 1872	123, 436
Valve, Steam-engine safety	J. P. Bakewell	Pittsburgh, Pa	Dec. 21, 1839	1, 438
Valve, Steam-engine safety	A. B. Latta	Cincinnati, Ohio	May 27, 1856	14, 963
Valve, Steam-engine slide	J. F. Allen	New York, N. Y	Apr. 29, 1862	35, 069
Valve, Steam-engine slide	J. F. Allen	Tremont, N. Y	Oct. 19, 1869	95, 863
Valve, Steam-engine slide	L. H. Allen and J. B. Wilford	Tamaqua, Pa	Aug. 4, 1868	80, 698
Valve, Steam-engine slide	A. C. Ancona	Reading, Pa	Sept. 20, 1859	25, 477
Valve, Steam-engine slide	N. Atherton	Philadelphia, Pa	Nov. 24, 1857	18, 667
Valve, Steam-engine slide	J. Baird	New York, N. Y	Apr. 5, 1864	42, 154
Valve, Steam-engine slide	J. S. Barden	Providence, R. I	May 5, 1868	77, 569
Valve, Steam-engine slide	M. H. Barnes	Peoria, Ill	Oct. 27, 1863	40, 441
Valve, Steam-engine slide	E. H. Bellows	Worcester, Mass	Nov. 12, 1867	70, 784
Valve, Steam-engine slide	W. Birch	Cincinnati, Ohio	Mar. 19, 1867	62, 924
Valve, Steam-engine slide	T. A. Bisbee	Dayton, Ohio	Apr. 7, 1868	76, 294
Valve, Steam-engine slide	G. W. Bollen	Saint Louis, Mo	May 19, 1863	38, 623
Valve, Steam-engine slide	J. Bradley	Saint Mary's, Ohio	Jan. 26, 1864	41, 361
Valve, Steam-engine slide	R. C. Bristol	Chicago, Ill	June 21, 1859	24, 439
Valve, Steam-engine slide	R. C. Bristol	Chicago, Ill	Dec. 1, 1863	40, 731
Valve, Steam-engine slide	R. C. Bristol	Saint Clair, Mich	Oct. 23, 1866	58, 980
Valve, Steam-engine slide	W. H. Cavett	Allegheny City, Pa	June 1, 1869	90, 635
Valve, Steam-engine slide	J. H. Cooper and A. D. Emery	Philadelphia, Pa	July 23, 1872	129, 794
Valve, Steam-engine slide	N. Cope	Cincinnati, Ohio	Nov. 1, 1859	25, 952
Valve, Steam-engine slide	C. W. Crawford	Pittsburgh, Pa	Nov. 21, 1865	51, 023
Valve, Steam-engine slide	W. Curry	Springfield, Mass	Sept. 10, 1867	68, 713
Valve, Steam-engine slide	F. Curtis	Newburyport, Mass	Aug. 23, 1870	106, 669
Valve, Steam-engine slide	A. J. Davis and J. J. McGill	Pittsburgh, Pa	Feb. 9, 1869	86, 650
Valve, Steam-engine slide	A. M. Eastwick	Philadelphia, Pa	July 21, 1835	....
Valve, Steam-engine slide	H. Elliot	East Saint Louis, Ill	Aug. 13, 1872	130, 492
Valve, Steam-engine slide	J. S. Everitt and O. Cook	Oshkosh, Wis	Nov. 17, 1868	84, 054
Valve, Steam-engine slide	I. W. Forbes	La Porte, Ind	May 30, 1870	115, 296
Valve, Steam-engine slide	I. W. Forbes	La Porte, Ind	May 30, 1870	115, 299
Valve, Steam-engine slide	J. Freeland and R. H. Lecky	Allegheny, Pa	Feb. 1, 1859	22, 794
Valve, Steam-engine slide	S. F. Gates	Boston, Mass	Dec. 28, 1846	4, 907
Valve, Steam-engine slide	J. Gleason	Northfield, Vt	Aug. 29, 1854	11, 607
Valve, Steam-engine slide	H. W. Goodrich and W. B. Mason	Boston, Mass	Apr. 30, 1867	64, 305
Valve, Steam-engine slide	J. F. Hamilton	Pittsburgh, Pa	July 28, 1863	39, 344
Valve, Steam-engine slide	R. Hardie	Albany, N. Y	Jan. 5, 1869	85, 583
Valve, Steam-engine slide	S. H. Hartman	Pittsburgh, Pa	Aug. 26, 1862	36, 299
Valve, Steam-engine slide	J. Hemphill	Pittsburgh, Pa	May 26, 1868	78, 205
Valve, Steam-engine slide	G. H. Hoagland	Port Jervis, N. Y	July 30, 1867	67, 302
Valve, Steam-engine slide	A. Hobbs	West Cambridge, Mass	May 7, 1867	64, 532
Valve, Steam-engine slide	S. F. Hodge	Detroit, Mich	Aug. 8, 1865	49, 267
Valve, Steam-engine slide	I. V. Holmes	New York, N. Y	Apr. 5, 1864	42, 191
Valve, Steam-engine slide	S. W. Hudson	Beaver Meadow, Pa	Sept. 17, 1867	68, 879
Valve, Steam-engine slide	W. Huston	Wilmington, Del	Oct. 11, 1864	44, 632
Valve, Steam-engine slide	W. R. Jenkins, jr., and H. D. Landis.	Bellefonte, Pa	Apr. 17, 1866	53, 985
Valve, Steam-engine slide	N. Johnson	Jasper, N. Y	June 10, 1873	139, 793

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Invention.	Inventor.	Residence.	Date.	No.
Valve, Steam-engine slide	A. W. Jones	Brooklyn, N. Y	Dec. 19, 1865	51,656
Valve, Steam-engine slide	W. Joslin	Cleveland, Ohio	Apr. 12, 1864	42,294
Valve, Steam-engine slide	J. Kershaw	Paterson, N. J	May 31, 1864	42,950
Valve, Steam-engine slide	J. Kirkpatrick	Baltimore, Md	Sept. 22, 1837	399
Valve, Steam-engine slide	H. Knudsen	North Windsor, Wis	Oct. 5, 1869	95,591
Valve, Steam-engine slide	E. B. Latch	General Wayne, Pa	Nov. 3, 1868	83,716
Valve, Steam-engine slide	J. Lawson	Allegheny City, Pa	Dec. 22, 1868	85,105
Valve, Steam-engine slide	E. D. Leavitt, jr	Lowell, Mass	Dec. 11, 1855	13,923
Valve, Steam-engine slide	E. M. Lewis	Philadelphia, Pa	June 12, 1860	28,718
Valve, Steam-engine slide	W. Love	Buffalo, N. Y	Nov. 11, 1873	144,463
Valve, Steam-engine slide	P. C. McManus	Troy, N. Y	July 30, 1867	67,204
Valve, Steam-engine slide	J. V. Merrick	Philadelphia, Pa	Feb. 25, 1862	34,517
Valve, Steam-engine slide	G. H. Myers	Philadelphia, Pa	Apr. 23, 1867	64,132
Valve, Steam-engine slide	J. Nesbitt	Northfield, Vt	Mar. 19, 1867	62,969
Valve, Steam-engine slide	E. and T. S. Parker	Schenectady, N. Y	Apr. 9, 1867	63,745
Valve, Steam-engine slide	O. M. Pike	Hartford, Conn	June 4, 1872	127,642
Valve, Steam-engine slide	E. J. Piper and J. C. Marshall	Springfield, Mass	Aug. 27, 1867	68,312
Valve, Steam-engine slide	J. T. Plass	New York, N. Y	Mar. 6, 1860	27,381
Valve, Steam-engine slide	W. Porter	Mystic River, Conn	June 30, 1863	39,064
Valve, Steam-engine slide	G. W. Rains	Newburgh, N. Y	Mar. 6, 1860	27,384
Valve, Steam-engine slide	L. P. Rice	Adrian, Mich	Aug. 28, 1860	29,822
Valve, Steam-engine slide	G. Riesick	Pittsburgh, Pa	Mar. 31, 1863	38,062
Valve, Steam-engine slide	J. B. Roach	Elizabethport, N. J	Oct. 28, 1862	36,797
Valve, Steam-engine slide	W. B. Robinson	Detroit, Mich	Sept. 15, 1863	39,955
Valve, Steam-engine slide	W. B. Robinson	Detroit, Mich	Jan. 8, 1867	61,105
Valve, Steam-engine slide	T. Sault	New Haven, Conn	Aug. 28, 1866	57,579
Valve, Steam-engine slide	J. F. Shearman	Brooklyn, N. Y	May 22, 1866	54,968
Valve, Steam-engine slide	A. Staley	Clinton, Iowa	Oct. 29, 1867	70,283
Valve, Steam-engine slide	A. J. Stevens	Aurora, Ill	June 18, 1861	32,589
Valve, Steam-engine slide	A. J. Stevens	San Francisco, Cal	July 7, 1863	39,181
Valve, Steam-engine slide	A. J. Stevens	San Francisco, Cal	Mar. 15, 1870	100,814
Valve, Steam-engine slide	T. Stewart	Philadelphia, Pa	Mar. 6, 1860	27,394
Valve, Steam-engine slide	J. Stocking and E. P. Shaffer	Rochester, N. Y	Apr. 7, 1868	76,545
Valve, Steam-engine slide	D. Stoddart	San Francisco, Cal	Aug. 16, 1859	25,146
Valve, Steam-engine slide	E. D. Taylor	Hornellsville, N. Y	Nov. 6, 1866	59,480
Valve, Steam-engine slide	G. Thackray	Mystic Bridge, Conn	Oct. 31, 1865	50,750
Valve, Steam-engine slide	R. D. Turner	New York, N. Y	Apr. 3, 1866	53,707
Valve, Steam-engine slide	C. H. Vandyne and S. A. Alexander.	Hazleton and Sunbury, Pa	June 25, 1872	128,340
Valve, Steam-engine slide	D. F. Walker	Potosi, Mo	Oct. 25, 1864	44,830
Valve, Steam-engine slide	C. Whittier	Roxbury, Mass	Dec. 24, 1867	72,707
Valve, Steam-engine slide	T. Winans	Baltimore, Md	June 30, 1857	17,712
Valve, Steam-engine slide	P. Wineman	Chicago, Ill	Mar. 19, 1867	63,129
Valve, Steam-engine slide	J. A. Woodbury	Boston, Mass	June 21, 1864	43,250
Valve, Steam-engine slide balance	J. F. Wallace	Birmingham, Pa	June 29, 1869	92,128
Valve, Steam-engine sliding	T. Holloway	Philadelphia, Pa	Jan. 20, 1832	....
Valve, Steam-engine stop	W. H. Howland	San Francisco, Cal	June 15, 1869	91,337
Valve, Steam-engine throttle	C. D. Allen	New York, N. Y	Apr. 6, 1869	88,599
Valve, Steam-engine throttle	H. C. Bull and S. T. Shelley	Louisville, Ky	Dec. 15, 1868	84,992
Valve, Steam-engine throttle	W. Garlin	Providence, R. I	Oct. 11, 1841	2,298
Valve, Steam-engine vibratory	T. Holloway	Philadelphia, Pa	Jan. 20, 1832	....
Valve, Steam-engine water-relief	J. Smith, jr	Allegheny City, Pa	Mar. 5, 1872	124,399
Valve, Steam-generator safety	J. Absterdam	New York, N. Y	Feb. 2, 1869	86,341
Valve, Steam-generator safety	H. Anderson	Chicago, Ill	Oct. 16, 1866	58,934
Valve, Steam-generator safety	S. G. Barker	Dunmore, Pa	Aug. 1, 1865	49,068
Valve, Steam-generator safety	V. D. Green	Watertown, Wis	May 15, 1866	54,716
Valve, Steam-generator safety	C. Mason	Chicago, Ill	June 4, 1867	65,409
Valve, Steam-generator safety	R. Mood	Indianapolis, Ind	Oct. 10, 1865	50,376
Valve, Steam-generator safety	S. Nowlan	New York, N. Y	Dec. 19, 1865	51,610
Valve, Steam-generator safety	F. Rochow	New York, N. Y	Sept. 28, 1869	95,382
Valve, Steam-generator safety	S. Stucky	New Albany, Ind	Sept. 11, 1866	57,993
Valve, Steam-generator safety	H. Taylor and J. M. Coale	Baltimore, Md	Dec. 17, 1867	72,240
Valve, Steam-generator safety	H. Taylor and J. M. Coale	Baltimore, Md	June 1, 1869	90,794
Valve, Steam-generator stop	G. W. Wiswell	Pilot Knob, Mo	Feb. 2, 1869	86,617
Valve, Steam globe	N. Jenkins	Boston, Mass	Oct. 6, 1868	82,844
Valve, Steam globe	A. Moore and A. D. Howes	South Adams, Mass	May 5, 1868	77,517
Valve, Steam globe	L. C. Rodier	Springfield, Mass	Feb. 18, 1868	74,597
Valve, Steam globe	J. H. Webster	Saint Louis, Mo	July 16, 1867	66,757
Valve, Steam-hammer	D. Joy	Middlesborough, England	Nov. 6, 1866	59,524
Valve, Steam-hammer	R. Morrison	Newcastle-upon-Tyne, England.	June 23, 1863	38,976
Valve, Steam-hammer piston	D. Davy	Sheffield, England	June 16, 1868	78,933
Valve, Steam or water	C. E. Ricker	Lowell, Mass	Nov. 28, 1865	51,221
Valve, Steam-pipe	J. W. Hodges	New York, N. Y	Dec. 30, 1873	146,073
Valve, Steam-pipe	A. R. Treadway and S. R. Warner.	New Haven, Conn	Mar. 28, 1865	47,057
Valve, Steam-pipe	S. R. Warner	New Haven, Conn	Mar. 28, 1865	47,073
Valve, Steam-pipe stop	G. E. Whitmore	Housatonic, Mass	Nov. 20, 1866	59,752
Valve, Steam-piston	W. Nichols	Elmira, N. Y	Oct. 30, 1866	59,252
Valve, Steam-plug	R. Burton	South Adams, Mass	June 19, 1866	55,615
Valve, Steam-pump	J. V. V. Booream	Jersey City, N. J	Apr. 4, 1871	113,247
Valve, Steam-pump	J. V. V. Booream	Jersey City, N. J	Apr. 4, 1871	113,248
Valve, Steam-pump	J. F. Hamilton	Alliance, Ohio	Jan. 31, 1871	111,341
Valve, Steam-pump, &c	J. W. Hopkins	New York, N. Y	Sept. 19, 1871	119,030
Valve, Steam-pump	W. Sewell	New York, N. Y	Oct. 28, 1862	36,863
Valve, Steam pump and engine	W. B. Snow	Brooklyn, N. Y	Aug. 15, 1871	118,064
Valve, Steam-pump balance	J. V. Pangburn	Galesburgh, Ill	Aug. 8, 1871	117,808
Valve, Steam-pumping-engine	L. M. Gilbert	Cow Run, Ohio	June 6, 1871	115,726
Valve, Steam-regulator	G. H. Fox	Boston, Mass	June 13, 1865	48,166
Valve, Steam rotary	L. Begon	San Francisco, Cal	Nov. 26, 1867	71,267
Valve, Steam rotary	R. F. Brown	Savannah, Ga	June 4, 1867	65,336
Valve, Steam safety	E. G. Allen	Boston, Mass	Aug. 25, 1868	81,320
Valve, Steam safety	E. H. Ashcroft	Lynn, Mass	Apr. 21, 1868	76,878
Valve, Steam safety	E. H. Ashcroft	Lynn, Mass	June 23, 1868	79,182
Valve, Steam safety	E. H. Ashcroft	Boston, Mass	Sept. 8, 1868	81,863
Valve, Steam safety	E. H. Ashcroft	Lynn, Mass	Sept. 22, 1868	82,270
Valve, Steam safety	J. Ashcroft	New York, N. Y	Aug. 25, 1868	81,326
Valve, Steam safety	J. Ashcroft	New York, N. Y	Feb. 2, 1869	86,346

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Valve, Steam safety	W. H. Bechtel	Philadelphia, Pa	June 30, 1868	79, 436
Valve, Steam safety	H. B. Beckman	Newburgh, N. Y	Sept. 8, 1868	81, 976
Valve, Steam safety	T. H. Burridge	Saint Louis, Mo	Apr. 23, 1867	64, 070
Valve, Steam safety	A. G. Buzby	Philadelphia, Pa	Apr. 21, 1868	76, 992
Valve, Steam safety	G. H. Clemens	New York, N. Y	Jan. 12, 1869	85, 792
Valve, Steam safety	G. H. Clemens	Chicago, Ill	Feb. 28, 1871	112, 222
Valve, Steam safety	G. H. and E. Clemens	New York, N. Y	Sept. 8, 1868	81, 878
Valve, Steam safety	O. R. Davis	Lewistown, Pa	July 28, 1868	80, 461
Valve, Steam safety	V. D. Green	Watertown, Wis	Dec. 17, 1867	72, 192
Valve, Steam safety	E. Hamilton	Chicago, Ill	July 17, 1866	56, 409
Valve, Steam safety	J. G. Harrison	New York, N. Y	Aug. 6, 1867	67, 538
Valve, Steam safety	H. W. Hewet	New York, N. Y	Aug. 18, 1868	81, 167
Valve, Steam safety	W. H. Low	New York, N. Y	Jan. 26, 1869	86, 168
Valve, Steam safety	E. Meggenhofen	Frankfort-on-the-Main, Germany.	May 28, 1867	65, 254
Valve, Steam safety	G. F. Morse	Portland, Me	Sept. 14, 1869	94, 763
Valve, Steam safety	W. Naylor	Mildmay Park, England	Oct. 16, 1866	58, 962
Valve, Steam safety	G. W. Richardson	Troy, N. Y	Sept. 25, 1866	58, 294
Valve, Steam safety	G. W. Richardson	Troy, N. Y	Jan. 19, 1869	85, 963
Valve, Steam safety	G. W. Richardson and H. Waterman.	Troy and Hudson, N. Y	Oct. 20, 1868	83, 320
Valve, Steam safety	J. Schaffer	Saint Louis, Mo	Apr. 16, 1867	63, 816
Valve, Steam safety	J. Slater	Philadelphia, Pa	Dec. 24, 1867	72, 554
Valve, Steam safety	J. N. Wrigley and G. Smith	Newark, N. J	Oct. 1, 1867	69, 527
Valve, Steam slide	J. R. Hall	Salem, Ohio	Sept. 29, 1868	82, 520
Valve, Steam slide	B. W. Hudson	Allentown, Pa	Dec. 3, 1867	71, 618
Valve, Steam slide	J. Martin	Cairo, Ill	Apr. 28, 1868	77, 301
Valve, Steam slide	J. J. Parker	Marietta, Ohio	Aug. 6, 1859	25, 137
Valve, Steam slide	M. Stannard	Hartford, Conn	Nov. 30, 1869	97, 456
Valve, Steam slide	N. P. Stevens	Hopkinton, N. H	Mar. 5, 1872	124, 297
Valve, Steam slide and cut-off	L. Eikenberry	Philadelphia, Pa	Nov. 19, 1861	33, 735
Valve, Steam stop	J. McNab and A. Carr	New York, N. Y	Jan. 15, 1856	14, 108
Valve, Steam throttle	J. W. Osgood	Columbus, Ohio	Jan. 26, 1858	19, 203
Valve, Steam trap	J. Avery, jr	New York, N. Y	Apr. 10, 1860	27, 769
Valve, Steam trap	J. W. Hoard	Providence, R. I	May 25, 1858	20, 388
Valve-stem, Packed rotating	E. Ransom	Flint, Mich	Sept. 6, 1870	107, 198
Valve-stem, Steam-tight-joint	G. R. Babbitt	Providence, R. I	Feb. 18, 1873	135, 876
Valve, Stop	E. Andrews	Pottsville, Pa	Dec. 19, 1865	51, 533
Valve, Stop	R. Beaumont	Momence, Ill	June 18, 1872	127, 951
Valve, Stop	S. H. Brown	Troy, N. Y	May 5, 1868	77, 448
Valve, Stop	S. H. Brown	Troy, N. Y	Apr. 5, 1870	101, 425
Valve, Stop	S. Broadbent and W. B. Culver	Scranton, Pa	Feb. 28, 1871	112, 216
Valve, Stop	G. W. Eddy	Waterford, N. Y	July 1, 1873	140, 407
Valve, Stop	G. W. Eddy	Waterford, N. Y	July 22, 1873	141, 041
Valve, Stop	G. W. Fisher	Saint Louis, Mo	July 16, 1872	129, 017
Valve, Stop	J. Flower	Detroit, Mich	June 21, 1870	104, 568
Valve, Stop	F. McGhan	Washington, D. C	June 21, 1864	43, 218
Valve, Stop	L. D. Gilman	Lansingburgh, N. Y	Mar. 22, 1870	101, 002
Valve, Stop	W. Haas	New York, N. Y	Sept. 5, 1871	118, 715
Valve, Stop	J. Higginbotham	Philadelphia, Pa	Apr. 10, 1860	27, 801
Valve, Stop	C. E. Hutson	Commerce, Mo	Dec. 6, 1870	109, 906
Valve, Stop	F. D. Livingston	Norwich, Conn	Oct. 24, 1871	120, 292
Valve, Stop	H. G. Ludlow and J. Stone	Troy and Waterford, N. Y	Oct. 25, 1870	108, 714
Valve, Stop	J. A. Marden	Boston, Mass	Jan. 4, 1870	98, 510
Valve, Stop	B. G. Martin	New York, N. Y	May 4, 1869	89, 781
Valve, Stop	J. McClelland	Washington, D. C	Feb. 28, 1865	46, 571
Valve, Stop	J. Paterson	Troy, N. Y	Sept. 28, 1869	95, 260
Valve, Stop	J. Paterson	Troy, N. Y	Jan. 24, 1871	111, 241
Valve, Stop	J. Paterson	Troy, N. Y	Jan. 24, 1871	111, 242
Valve, Stop	J. L. Peake	New York, N. Y	Apr. 4, 1871	113, 337
Valve, Stop	S. J. Peet	Boston, Mass	Mar. 19, 1872	124, 850
Valve, Stop	R. Pilling	Waterford, N. Y	Dec. 20, 1870	110, 391
Valve, Stop	R. P. Ross	Bethlehem, Pa	July 25, 1871	117, 466
Valve, Stop	E. Russell	Brooklyn, N. Y	Aug. 1, 1871	117, 689
Valve, Stop	E. Russell	Brooklyn, N. Y	Jan. 2, 1872	122, 494
Valve, Stop	R. Safely	Cohoes, N. Y	Oct. 18, 1870	108, 522
Valve, Stop	W. and A. Shedlock, and G. Marshall.	Brooklyn, N. Y	Feb. 27, 1866	52, 895
Valve, Stop	A. Snyder	Allegheny City, Pa	Sept. 19, 1871	119, 057
Valve, Stop	J. H. Strehli	Cincinnati, Ohio	May 9, 1871	114, 725
Valve, Stop	S. P. M. Tasker	Philadelphia, Pa	July 9, 1872	128, 922
Valve, Stop	S. P. M. Tasker	Philadelphia, Pa	July 9, 1872	128, 923
Valve, Stop	S. P. M. Tasker	Philadelphia, Pa	July 9, 1872	128, 924
Valve, Stop	J. Walsh	Philadelphia, Pa	June 6, 1871	115, 794
Valve, Stop	J. Walsh	Philadelphia, Pa	Mar. 5, 1872	124, 399
Valve, Stop-cock	J. W. Carney	Charlestown, Mass	Aug. 9, 1870	106, 121
Valve, Stop-cock	Z. E. Coffin	Boston, Mass	Apr. 30, 1867	64, 199
Valve, Stop-cock	W. Haas	New York, N. Y	Mar. 7, 1871	112, 450
Valve, Stop-cock	G. Pierce	Boston, Mass	May 2, 1871	114, 338
Valve-stopper for jars, bottles, &c	S. F. Shadbolt	Huntington, N. Y	Dec. 24, 1867	72, 548
Valve, Syringe	N. Lawrence	Taunton, Mass	Dec. 24, 1867	72, 508
Valve, Sirup	A. D. Puffer	Somerville, Mass	Mar. 21, 1865	46, 938
Valve, Tank	J. H. Dorst	New Albany, Ind	Jan. 9, 1872	122, 583
Valve tender, Safety	C. F. Brown	Ashby, Mass	Oct. 9, 1866	58, 587
Valve, Thermo-pneumatic safety	S. H. Whitaker and E. Cope	Cincinnati, Ohio	May 26, 1857	17, 401
Valve, Throttle	A. S. Dawley	Boston, Mass	Apr. 18, 1834	....
Valve, Throttle	T. S. La France	Elmira, N. Y	Apr. 13, 1858	19, 933
Valve, Throttle	G. F. Morse	Portland, Me	May 14, 1867	64, 690
Valve, Tubular elastic	F. Peale	Philadelphia, Pa	June 24, 1856	15, 192
Valve, Two-motion cone	H. Allen	New York, N. Y	June 19, 1855	13, 075
Valve, Water and steam	C. H. Hopkins	Lyndonville, Vt	Mar. 5, 1872	124, 269
Valve, Water-boiler	E. H. Clarkson	Alexandria, Va	July 19, 1870	105, 549
Valve, Water-closet	F. H. Bartholomew	New York, N. Y	May 26, 1863	38, 648
Valve, Water-closet	F. H. Bartholomew	New York, N. Y	Jan. 19, 1864	41, 269
Valve, Water-closet	A. C. Black	Brooklyn, N. Y	July 30, 1872	129, 990
Valve, Water-closet	J. E. Boyle	Brooklyn, N. Y	Jan. 3, 1860	26, 645
Valve, Water-closet	J. E. Boyle	Brooklyn, N. Y	Feb. 23, 1862	37, 213
Valve, Water closet	J. Brower	Newark, N. J	Nov. 22, 1864	45, 135

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Valve, Water-closet	W. S. Carr	New York, N. Y	Mar. 20, 1860	27,522
Valve, Water-closet	W. S. Carr	New York, N. Y	Oct. 23, 1860	30,462
Valve, Water-closet	W. S. Cooper	Philadelphia, Pa	Feb. 25, 1868	74,896
Valve, Water-closet	W. S. Cooper	Philadelphia, Pa	Mar. 10, 1868	75,374
Valve, Water-closet	W. S. Cooper	Philadelphia, Pa	Jan. 19, 1869	85,909
Valve, Water-closet	W. S. Cooper	Philadelphia, Pa	Oct. 29, 1872	132,523
Valve, Water-closet	H. H. Craigie	New York, N. Y	May 31, 1870	103,721
Valve, Water-closet	H. H. Craigie	New York, N. Y	Apr. 30, 1872	126,270
Valve, Water-closet	J. M. Deck	Buffalo, N. Y	Dec. 21, 1869	98,153
Valve, Water-closet	C. T. Forrest	San Francisco, Cal	Mar. 29, 1870	101,350
Valve, Water-closet	J. Gilfillan	Hartford, Conn	July 26, 1859	24,866
Valve, Water-closet	W. Gordon	Philadelphia, Pa	Apr. 18, 1871	113,875
Valve, Water-closet	W. Gordon	Philadelphia, Pa	Oct. 29, 1872	132,654
Valve, Water-closet	A. and J. Louden	Boston, Mass	Aug. 28, 1866	57,526
Valve, Water-closet	C. H. Miller	Buffalo, N. Y	Nov. 26, 1867	71,510
Valve, Water-closet	D. Morrison	New York, N. Y	Sept. 8, 1868	82,057
Valve, Water-closet	J. Regester	Baltimore, Md	Aug. 28, 1866	57,570
Valve, Water-closet	A. J. Smith	San Francisco, Cal	Mar. 7, 1871	112,393
Valve, Water-closet	W. Smith	San Francisco, Cal	Aug. 27, 1867	68,249
Valve, Water-closet	W. Smith	San Francisco, Cal	Aug. 11, 1868	81,024
Valve, Water-closet	W. Smith	San Francisco, Cal	June 22, 1869	91,574
Valve, Water-closet	W. Smith	San Francisco, Cal	Mar. 26, 1872	125,092
Valve, Water-closet	H. Strater, jr	Boston, Mass	Jan. 11, 1870	98,814
Valve, Water-closet-pipe	G. R. Moore	Philadelphia, Pa	Aug. 10, 1869	93,547
Valve, Water-closet slow-closing	C. Harrison	New York, N. Y	Dec. 15, 1868	85,006
Valve, Water-closet slow-closing	W. Smith	San Francisco, Cal	Sept. 21, 1869	95,054
Valve, Water-closet supply	H. H. Craigie	New York, N. Y	Dec. 31, 1867	72,809
Valve, Water-engine	A. Coates	Watertown, N. Y	Dec. 14, 1869	97,881
Valve, Water or steam	R. Berryman	Hartford, Conn	Jan. 17, 1871	111,032
Valve, Water-pipe	W. Kearney	Belleville, N. J	Sept. 11, 1866	57,920
Valve, Water-pipe	G. R. Moore	Lyons, Iowa	Mar. 24, 1868	75,952
Valve, Water-pipe	D. G. Phipps	New Haven, Conn	Nov. 4, 1873	144,356
Valve, Water-pipe safety	B. Holly	Lockport, N. Y	Sept. 14, 1869	94,747
Valve, Water-pipe stop	J. L. Hewes	Newark, N. J	June 11, 1872	127,768
Valve, Water-pressure check	T. Bailey	New York, N. Y	Aug. 27, 1872	130,835
Valve, Water-supply	P. Harvey	Chicago, Ill	July 15, 1873	140,918
Valve, Water-tank outlet	J. Armstrong and D. Cheney	Saint Joseph and Brookfield, Mo.	Aug. 12, 1873	141,747
Valve-wheel, Floating	I. J. Richardson	Geneva, N. Y	Sept. 26, 1816	......
Valves, Adjustable arm for working slide	H. Hendrickson	Red Bank, N. J	Sept. 20, 1870	107,492
Valves and dampers, Electro-magnetic apparatus for regulating.	G. M. Sternberg	Fort Riley, Kans	July 12, 1870	105,272
Valves and exhaust-passages in steam-engines, Arrangement of slide.	W. C. Hicks	Hartford, Conn	Jan. 9, 1855	12,207
Valves and governor-stems, Means of connection between regulator.	J. Tremper	Philadelphia, Pa	Dec. 4, 1855	13,889
Valves and passages in cylinders of steam-engines, Arrangement of.	E. D. Barrett	Cincinnati, Ohio	Jan. 19, 1858	19,119
Valves and passages in cylinders of steam-engines, Arrangement of.	J. A. Reed	Jersey City, N. J	July 28, 1857	17,893
Valves and their arrangement, Pump	T. Thatcher	Wilkesbarre, Pa	July 17, 1849	6,596
Valves and valve-seats for steam-engines, Process for facing.	Q. S. Backus	Winchendon, Mass	Apr. 19, 1870	102,078
Valves, Arrangement of and means for operating slide.	W. M. Henderson	Baltimore, Md	Apr. 8, 1856	14,611
Valves by chamfering the corners, Short slide	J. Mulburg	Parkesburgh, Pa	Feb. 20, 1849	6,128
Valves by the direct action of steam, Arrangement of passages, &c., for working steam.	B. Ruberts and A. Crumbie	Brooklyn, N. Y	Sept. 15, 1857	18,225
Valves by the effect of temperature, Automatic apparatus for opening and closing.	A. A. Common	South Bank, Regent's Park, London, England.	June 27, 1871	116,273
Valves, Cage for globe	J. Wood	Franklin, Pa	Oct. 15, 1872	132,344
Valves, Compensating spring-balance for safety	V. F. Lassoe	Brooklyn, N. Y	Sept. 2, 1873	142,481
Valves, Cross-head attachment for working steam engine.	J. B. Stott and A. Ferguson	Troy, N. Y	July 17, 1855	13,276
Valves, Device for operating folding	E. Bourdon	Paris, France	Nov. 5, 1867	70,511
Valves, Device for operating safety	W. S. Hudson	Paterson, N. J	Feb. 7, 1865	46,238
Valves, Device for operating throttle	H. L. Brevoort	Brooklyn, N. Y	June 8, 1869	91,079
Valves, Eccentric for operating steam	B. Carley	Paterson, N. J	Mar. 2, 1858	19,484
Valves from pressure of steam, Relieving slide	W. Burdon	Brooklyn, N. Y	June 3, 1856	14,999
Valves from pressure, Relieving slide	J. Martin	Mound City, Ill	Jan. 28, 1862	34,250
Valves from pressure, Relieving steam slide	H. R. Worthington	Brooklyn, N. Y	July 22, 1856	15,400
Valves in the same steam-chest, Arrangement of several slide.	C. Richardson	Woburn, Mass	May 7, 1850	7,350
Valves in working steam engines, Using slider instead of.	J. Stevens	Hoboken, N. J	Mar. 16, 1816	......
Valves, Lock for securing throttle	C. C. Torrence	Ripley, Ohio	July 24, 1866	56,639
Valves, Machine for refitting conical	C. F. Hall	Brooklyn, N. Y	Dec. 10, 1867	72,031
Valves, Machine for refitting conical	C. F. Hall	Brooklyn, N. Y	Mar. 8, 1870	100,647
Valves, Machine for refitting conical	A. Nutt	New York, N. Y	June 15, 1869	91,478
Valves, Machine for refitting stop	S. Wing	Monson, Mass	Aug. 1, 1865	49,203
Valves, Mechanical movement for operating throttle	E. Nicholson	Cleveland, Ohio	Jan. 2, 1872	122,484
Valves, Method of attaching stem to conical	H. R. Worthington	Brooklyn, N. Y	June 3, 1856	15,030
Valves, Method of guiding and cushioning puppet	J. Hyde and W. Stearns	Wilmington, Del	June 9, 1857	17,503
Valves, Method of operating and lubricating slide	J. Cochrane	New York, N. Y	Jan. 1, 1856	14,010
Valves, Method of operating steam	N. W. Wheeler	Cincinnati, Ohio	July 31, 1855	13,369
Valves, Mode of suspending hydraulic puppet	G. Trott, R. H. Coles, and W. A. Clark.	Saint Louis, Mo	Sept. 9, 1856	15,712
Valves, Mode of operating safety	J. Shorb	Canton, Ohio	Feb. 20, 1846	4,388
Valves, Mold for casting throttle	R. B. Angus	Tremont, Pa	Aug. 14, 1866	57,062
Valves, Mold for making cores for casting globe	J. M. Cooper	Pittsburgh, Pa	Nov. 19, 1867	70,966
Valves of auxiliary engines for feeding boilers, Arrangement and method of working the.	R. Porter	New York, N. Y	July 10, 1849	6,589
Valves of boilers, Spring-balance for safety	C. Graham	Scranton, Pa	Dec. 18, 1860	30,961
Valves of blower-engines, Means for operating steam.	J. P. Ross	Lewisburgh, Pa	Jan. 22, 1856	14,145
Valves of direct-acting engines by the exhaust steam, Completing the throw-off.	H. R. Worthington	Brooklyn, N. Y	Apr. 22, 1856	14,749
Valves of direct-acting steam-engines, Operating	W. H. Guild and W. F. Garrison	Brooklyn, N. Y	Mar. 27, 1855	12,592

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Valves of direct-acting pumping-engines, Method of insuring the action of.	H. R. Worthington and W. H. Baker.	New York, N. Y	Apr. 3, 1849	6, 274
Valves of direct-action steam-engines, Operating slide.	G. W. Hubbard and W. E. Conant.	Brooklyn and Green Point, N. Y.	Jan. 9, 1855	12, 203
Valves of engines and pumps, Operating slide	W. Braidwood and R. Whiting	Mount Vernon and Brooklyn, N. Y.	Jan. 15, 1861	31, 139
Valves of fluid-meters, Device for actuating	D. B. Spooner	Syracuse, N. Y	Sept. 27, 1870	107, 839
Valves of high-pressure steam-engines, Arrangement of supplemental.	R. Colburn and L. W. Hanson	Norwich, Conn	May 20, 1856	14, 906
Valves of hydraulic engines, Arrangement of	J. D. Heaton	Dixon, Ill	Apr. 8, 1856	14, 627
Valves of hydraulic engines, Arrangement of	W. Kennish	Paterson, N. J	Jan. 15, 1850	7, 023
Valves of hydraulic engines, Method of operating supply and discharge.	H. H. Stuart	New York, N. Y	Mar. 3, 1857	16, 756
Valves of locomotive and other engines, Spring-balance for safety.	J. Hughes	Scranton, Pa	Sept. 3, 1861	33, 198
Valves of locomotive-engines, Means for adjusting	H. W. Farley	East Boston, Mass	May 2, 1854	10, 857
Valves of marine engines, Arrangement of means for controlling throttle.	W. H. Elliott	Plattsburgh, N. Y	Feb. 10, 1857	16, 593
Valves of oscillating-engines upon their seats, Method of keeping.	E. Morris	New York, N. Y	Feb. 3, 1852	8, 706
Valves of partially-condensing engines, Mechanism for operating relief.	W. Few and F. Armstrong	Saint Louis, Mo., and New Orleans, La.	Jan. 27, 1852	8, 684
Valves, &c., of pumps, Arranging	W. D. Tabér	Buffalo, N. Y	Apr. 3, 1847	5, 046
Valves of pumps, Method of operating	J. Edson	Boston, Mass	July 17, 1855	13, 254
Valves of pumping-engines, Method of operating	L. J. Knowles	Warren, Mass	Jan. 4, 1859	22, 503
Valves, &c., of siphon-rams, Arrangement of	E. W. Ellsworth	East Windsor Hill, Conn.	Dec. 9, 1856	16, 178
Valves of steam-boilers, Method of regulating blow-off.	C. W. Copeland	Brooklyn, N. Y	Nov. 27, 1849	6, 913
Valves of steam-boilers, Opening and closing safety	S. Raub, jr	Wilkesbarre, Pa	Nov. 8, 1836	75
Valves of steam-cylinders, Arrangement of	M. E. Stacy	Flemington, Ga	June 30, 1857	17, 718
Valves of steam-engines, Arranging and combining	A. G. Gilbert	Ascension Parish, La	Aug. 10, 1848	5, 705
Valves of steam-engines, Arrangement for balancing slide.	A. Buchanan	Jersey City, N. J	May 15, 1860	28, 251
Valves of steam-engines, Arrangement for operating.	A. J. Laird	Middletown, Pa	Oct. 9, 1860	30, 329
Valves of steam-engines, Arrangement of means for operating.	J. Scheitlin	Washington, D. C	Feb. 26, 1856	14, 338
Valves of steam-engines, Apparatus for operating	L. J. Knowles	Warren, Mass	Oct. 14, 1862	36, 656
Valves of steam-engines, Apparatus for operating	N. W. Wheeler	Brooklyn, N. Y	Dec. 14, 1858	22, 320
Valves of steam-engines, Cam for operating	E. Sprague	Allegheny, Pa	Jan. 14, 1873	134, 944
Valves of steam-engines, Device for operating	L. Eikenberry	Philadelphia, Pa	Apr. 1, 1862	34, 822
Valves of steam-engines, Device for operating	W. J. Stevens	New York, N. Y	Aug. 26, 1873	142, 292
Valves of steam-engines, Giving motion to	H. O. Perry	Buffalo, N. Y	Dec. 22, 1857	18, 925
Valves of steam-engines, Means for reducing friction of slide.	R. L. Stevens	Hoboken, N. J	Mar. 11, 1856	14, 419
Valves of steam-engines, Means of operating throttle.	A. Bisbee	Chelsea, Mass	Jan. 29, 1856	14, 150
Valves of steam-engines, Mode of actuating governor.	P. L. Weimer	Lebanon, Pa	Apr. 17, 1860	27, 939
Valves of steam engines, Opening and closing	F. E. Sickels	New York	July 20, 1843	3, 189
Valves of steam-engines, Opening and closing	F. E. Sickels	New York, N. Y	Oct. 19, 1844	3, 802
Valves of steam-engines, Operating	L. H. Bowman	Norristown, Pa	Dec. 18, 1860	30, 956
Valves of steam-engines, Operating	T. Carpenter	Providence, R. I	Oct. 11, 1859	25, 722
Valves of steam-engines, Operating	R. H. Fletcher	Brooklyn, N. Y	Sept. 15, 1857	18, 197
Valves of steam-engines, Operating	W. H. Guild, jr	Brooklyn, N. Y	May 14, 1872	126, 804
Valves of steam-engines, Operating	T. S. Jamieson	Alexandria, Va	Mar. 16, 1858	19, 640
Valves of steam-engines, Operating	T. H. Mitchell	Albany, N. Y	Aug. 20, 1872	130, 654
Valves of steam-engines, Operating	W. J. Stevens	New York, N. Y	July 23, 1861	32, 917
Valves of steam-engines, Operating	R. H. Townsend	New York, N. Y	Sept. 13, 1853	10, 018
Valves of steam-engines, Operating	O. Tufts	Boston, Mass	June 3, 1856	15, 025
Valves of steam-engines, Operating	H. Uhry and H. A. Luttgens	Paterson, N. J	Sept. 7, 1858	21, 455
Valves of steam-engines, Operating	G. I. Washburn	Worcester, Mass	Jan. 11, 1870	98, 725
Valves of steam engines, Operating	N. W. Wheeler	Cincinnati, Ohio	Mar. 3, 1857	16, 765
Valves of steam-engines, Operating	J. Wilder	New York	Jan. 9, 1841	1, 929
Valves of steam-engines, Operating	S. R. Wilmot	Watertown, Conn	Feb. 17, 1857	16, 668
Valves of steam-engines, Operating puppet	S. Gaty and A. Howe	Saint Louis, Mo	Mar. 8, 1859	23, 165
Valves of steam-engines, Operating slide	J. F. Allen	New York, N. Y	May 27, 1856	14, 991
Valves of steam-engines, Operating slide	R. H. Fletcher	Brooklyn, N. Y	Jan. 6, 1857	16, 358
Valves of steam-engines, Packing slide	D. B. Martin	Washington, N. J	Nov. 21, 1854	11, 968
Valves of steam-engines, Packing slide	N. W. Wheeler	Brooklyn, N. Y	June 5, 1866	55, 406
Valves of steam-engines, Variable eccentric for operating.	S. L. Wiegand	Philadelphia, Pa	Sept. 20, 1857	18, 311
Valves of steam-hammers, Operating	P. L. Weimer and S. P. Francisco.	Lebanon and Reading, Pa	Jan. 27, 1857	16, 515
Valves of steam-hydrants, Arrangement of means for operating.	C. K. Landis	Philadelphia, Pa	May 27, 1856	14, 962
Valves of steam-pumps, Method of operating	R. H. Fletcher	Brooklyn, N. Y	July 1, 1856	15, 227
Valves of steam-pumps, Method of operating steam	R. Henry	Melrose, N. Y	June 24, 1856	15, 211
Valves of steam-pumps, Operating	C. A. Wilson	Newport, Ky	June 13, 1854	11, 073
Valves on the principle of a balance, Construction of	H. Strait	East Nassau, N. Y	June 25, 1834	....
Valves, Operating	A. L. Pennock	Upper Darby, Pa	Aug. 30, 1870	106, 867
Valves, Operating puppet	J. Kirkpatrick	Baltimore, Md	Sept. 25, 1837	400
Valves, Operating slide	I. Church, jr	Norwalk, Conn	June 23, 1868	79, 204
Valves, Operating slide	P. Peartree	Lansingburgh, N. Y	Dec. 24, 1872	134, 218
Valves, Operating throttle	W. Bellis	Indianapolis, Ind	Sept. 5, 1871	118, 676
Valves, Process of constructing water and steam	S. J. Peet and J. W. Willis	Boston, Mass	Dec. 5, 1871	121, 542
Valves, Spring-balance for safety	J. Ayres	Paterson, N. J	Mar. 3, 1868	74, 973
Valves, Spring-balance stop for safety	B. Hathaway	Elizabethport, N. J	May 17, 1870	103, 178
Valves to extinguish fire, Method of opening	S. H. Wilder	Grinnell, Iowa	Sept. 6, 1859	25, 358
Valves while the engine is in motion, Mode of grinding puppet.	E. Rogers	New York, N. Y	July 6, 1852	9, 103
Valves with rock-shafts, Method of connecting the slide.	S. H. Gilman	Cincinnati, Ohio	Jan. 1, 1851	7, 871
Valves within steam-boilers, Arrangement of safety	G. P. Clarke	Newark, N. J	May 19, 1857	17, 348
Vane	L. W. Cushing and S. White	Waltham, Mass	Aug. 18, 1868	81, 146
Vapor and coal-oil furnace	R. C. Jackson	Detroit, Mich	Sept. 6, 1864	44, 097
Vapor apparatus, Hydrocarbon	S. T. McDougall	Brooklyn, N. Y	June 5, 1855	13, 010
Vapor-bath	P. P. N. D. Alvigny	New York	Aug. 17, 1835	....

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Vapor-bath	J. Büler	New York, N. Y	Sept. 16, 1873	142, 767
Vapor-bath	M. B. Carleman	Chicago, Ill	Oct. 15, 1867	69, 765
Vapor-bath	W. Estabrook and S. J. McDonald.	Gallatin, Mo	Dec. 3, 1872	133, 575
Vapor-bath	T. S. Lambert	Utica, N. Y	Apr. 10, 1845	3, 992
Vapor-bath	H. L. Libbey	Cleveland, Ohio	Oct. 21, 1862	36, 7[illegible]0
Vapor-bath	S. E. Payson	Peterborough, N. H	Oct. 28, 1862	36, 856
Vapor-bath	J. H. Ross	New York, N. Y	Apr. 16, 1845	3, 906
Vapor-bath apparatus	A. C. Haines	Plattsburgh, N. J	Dec. 4, 1844	3, 846
Vapor-bath apparatus	W. L. Leets	Oswego, N. Y	Aug. 30, 1870	106, 944
Vapor-bath apparatus	J. McNeven	New York, N. Y	Nov. 16, 1869	96, 940
Vapor-bath apparatus	G. F. Munro, sr	Albany, Mo	Apr. 18, 1871	113, 911
Vapor bath, Electro-magnetic	J. A. Hoffman	Mendota, Ill	July 16, 1872	129, 561
Vapor bath, Medicated	I. E. Hicks and T. Miner	Middletown, Conn	Sept. 17, 1842	2, 775
Vapor bath, Medicated	M. Mattson	Boston, Mass	Sept. 28, 1843	3, 284
Vapor-bath pipe	J. Buhler	New York, N. Y	Dec. 25, 1855	13, 974
Vapor-bath, Portable	C. W. Peale	....	July 16, 1801	....
Vapor cooler or condenser	W. How	....	Apr. 6, 1803	....
Vapor-engine	J. F. Haskins	Fitchburgh, Mass	Feb. 25, 1873	136, 241
Vapor-engine	J. F. Haskins	Fitchburgh, Mass	Mar. 25, 1873	137, 200
Vapor-engine	W. W. Hubbell and D. Matthew.	Philadelphia, Pa	May 29, 1855	12, 947
Vapor-engine	W. Wells	Salem, Mass	Dec. 9, 1873	145, 466
Vapor-engines, Compound liquid for use in	J. A. H. Ellis	Springfield, Vt	Jan. 31, 1871	111, 329
Vapor-engines, Compounds for	J. A. H. Ellis	Springfield, Vt	Aug. 20, 1872	130, 572
Vapor-generator	D. H. Chamberlain	West Roxbury, Mass	Feb. 11, 1862	34, 392
Vapor-generator	W. Wells	Salem, Mass	May 27, 1873	139, 445
Vapor-generator	W. Wells	Salem, Mass	Nov. 11, 1873	144, 581
Vapor generator and burner for heating-purposes	H. R. Foote	Oil City, Pa	Mar. 19, 1867	63, 130
Vapor-generator for vapor-engines	J. A. H. Ellis	Springfield, Vt	Jan. 31, 1871	111, 331
Vapor-heater	O. F. Morrill	Chelsea, Mass	Feb. 16, 1864	41, 635
Vapor-heater	C. M. Young	Philadelphia, Pa	Jan. 26, 1869	86, 198
Vapor, Machine for collecting and condensing metallic.	F. Formhals	San Francisco, Cal	Jan. 21, 1868	73, 519
Vapor machine for illuminating-purposes, Hydrocarbon.	B. B. Douglass	Newark, N. J	June 14, 1870	104, 126
Variocele, sterility, and other diseases of the genital organs, Apparatus for curing.	J. Cheever	Boston, Mass	Jan. 15, 1856	14, 085
Varnish	E. Battley	Mont Clair, N. J	May 1, 1866	54, 461
Varnish	J. Braddock	Indianapolis, Ind	Oct. 30, 1866	59, 174
Varnish	J. M. Butcher	North Lewisburgh, Ohio	July 24, 1866	56, 526
Varnish	G. A. Engelhard	New York, N. Y	Mar. 20, 1860	27, 540
Varnish	W. Hopson	South Malden, Mass	Feb. 9, 1869	86, 652
Varnish	S. Page	Chelsea, Mass	Oct. 11, 1859	25, 757
Varnish	I. Ranney	Delaware, Ohio	Oct. 20, 1868	83, 317
Varnish	A. Sabatier	New York, N. Y	Apr. 10, 1860	27, 833
Varnish, Ageing and rectifying copal	D. Duduit	New York, N. Y	Nov. 17, 1868	84, 174
Varnish and paint, Compound for the manufacture of.	J. Maftel	Cleveland, Ohio	May 17, 1870	103, 074
Varnish, Apparatus for the manufacture of	F. Walton	Manchester, England	Feb. 5, 1861	31, 343
Varnish-can	A. Marshall	Newark, N. J	Feb. 17, 1857	16, 674
Varnish, Coach and furniture	W. H. Furness	Quincy, Ill	Jan. 21, 1862	34, 232
Varnish, Composition for	D. R. Averill	Pulaski, N. Y	Mar. 23, 1858	19, 729
Varnish, &c., Composition for	H. Browning	Limehouse, England	May 10, 1870	102, 911
Varnish, &c., Composition for	P. Prescott	Boonville, N. Y	Jan. 24, 1865	46, 024
Varnish, Composition for black	J. P. Gay	Cincinnati, Ohio	June 2, 1863	38, 737
Varnish, Copal	A. Wheeler	Newton, Mass	Oct. 28, 1862	36, 874
Varnish for coating and water-proofing	C. V. Chapin	Collinsville, Conn	June 6, 1871	115, 570
Varnish for coating the surface of bobbins or spools	W. Brooks	South Canton, Mass	June 13, 1871	115, 816
Varnish for furniture	M. Curtis	Troy, N. Y	Apr. 22, 1826	....
Varnish for leather	J. David	Philadelphia, Pa	May 5, 1810	....
Varnish for making printers' ink, and for other purposes.	D. Steineit	Hamburg	Sept. 15, 1863	39, 968
Varnish for metal, wood, paper, &c	R. Love	Hoboken, N. J	Sept. 8, 1868	81, 916
Varnish for painting	A. Eigner	Augsburg, Bavaria	Jan. 2, 1866	51, 894
Varnish for paper, cloth, &c., Water-proof	J. H. Greene	Christiansburgh, Iowa	June 30, 1863	39, 095
Varnish for pictures	J. McKillop	Brooklyn, N. Y	May 26, 1863	38, 690
Varnish for pictures	J. McKillop	Brooklyn, N. Y	Oct. 4, 1864	44, 543
Varnish for plastered walls and for coating other surfaces.	W. M. Kimber	Sacramento City, Cal	Oct. 19, 1869	96, 012
Varnish for surface of rolls used in textile machinery.	D. Pheteplace	Lewiston, Me	Mar. 31, 1868	76, 245
Varnish for surfacing railway-heads and drawing and spinning frames.	A. Marr	Lewiston, Me	May 17, 1870	103, 214
Varnish for tin-ware	J. Bowker	Baltimore, Md	May 24, 1870	103, 291
Varnish, Imitation-gold	R. Parke	New York, N. Y	Mar. 12, 1872	124, 615
Varnish, Japan	C. Coale	New Brighton, Pa	Apr. 1, 1862	34, 817
Varnish, Manufacture of	J. B. Pollock	Port Richmond, N. Y	Nov. 15, 1870	109, 245
Varnish, Method of making copal	L. Hull	Charlestown, Mass	Nov. 22, 1859	26, 22[illegible]
Varnish, Mode of polishing	W. R. Bennett and C. Storer	Boston, Mass	July 3, 1860	28, 956
Varnish of elastic gum, for water-proofing &c	J. F. Hummel	Philadelphia, Pa	Apr. 29, 1813	....
Varnish or bronze coating for articles of plaster, iron, wood, &c.	C. Rotter	East Birmingham, Pa	May 27, 1873	139, 333
Varnish or polish for wood, metals, &c	J. F. Chevalier	Lyons, France	Nov. 25, 1873	144, 955
Varnish-package	W. C. Kennedy and P. T. Kennedy.	New York, N. Y., and Bradford, Pa.	Aug. 6, 1872	130, 225
Varnish, Process for making	J. Burrage	Roxbury, Mass	Mar. 14, 1854	10, 654
Varnish, Refining	F. Kersting	Grand Rapids, Mich	Nov. 25, 1873	144, 910
Varnish, Rubber-elastic	G. Hook	Harwich, Mass	Jan. 23, 1872	123, 020
Varnish, Shellac	G. S. Meikle	Sterling, Ill	Sept. 1, 1868	81, 663
Varnish, Shellac	L. A. Smith	Cincinnati, Ohio	July 3, 1866	56, 151
Varnish to whip-staff, Applying	F. Morgan	Westfield, Mass	Apr. 27, 1832	....
Varnish, Transparent	J. Restle	Boston, Mass	Nov. 1, 1870	108, 820
Varnish, Treating gum for the manufacture of	J. Johnson	Saco, Me	July 5, 1864	43, 414
Varnisher	R. A. Beattie	Philadelphia, Pa	Nov. 22, 1870	109, 485
Varnishing and protecting surfaces, Method of	F. Kuhlmann	Paris, France	Feb. 8, 1859	22, 878

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Varnishing, coating, and protecting the surfaces of metal, wood, and fibrous materials, Compositions from grahamite for.	H. Wurtz	New York, N. Y	Aug. 13, 1867	67, 697
Varnishing-machine	L. L. Martin	Warsaw, N. Y	Dec. 27, 1864	45, 673
Vase, Flower	L. H. Bigelow	Worcester, Mass	Oct. 29, 1867	70, 316
Vase for cultivating strawberries	R. B. Fuller	Norwich, Conn	June 12, 1866	55, 482
Vase, Self-watering	W. M. Bingham and H. Bemis	Rochester, N. Y	June 27, 1871	116, 401
Vat: *See* Cheese-vat. Dress-vat. Dye-vat. Flue-vat. Glue-vat. Indigo-blue vat. Leaching-vat. Milk-vat. Salt-vat. Tan-vat. Tanning-vat. Wine-vat.				
Vats, Apparatus attached to steam-coil in	J. Trageser	New York, N. Y	Aug. 24, 1858	21, 284
Vats, &c., Method of securing rubber rings or disks to the doors of.	C. H. Mellor	Philadelphia, Pa	Jan. 12, 1869	85, 749
Vault and platform light, Ventilating	J. G. Wolvin	New York, N. Y	June 16, 1857	17, 613
Vault and safe door, Attaching cross-bar fastenings to.	F. C. Goffin	New York, N. Y	Jan. 10, 1854	10, 405
Vault and safe door bolt	L. Yale	Newport, N. Y	Aug. 5, 1856	15, 500
Vault and safe doors, &c., Method of securing	F. C. Goffin	New York, N. Y	Nov. 2, 1852	9, 376
Vault-cover	E. S. Boynton	Alexandria, Va	June 23, 1863	38, 941
Vault-cover	A. Brady	New York, N. Y	June 6, 1854	11, 018
Vault-cover	J. B. Cornell	New York, N. Y	Feb. 19, 1856	14, 281
Vault-cover	J. B. Cornell	New York, N. Y	May 5, 1857	17, 198
Vault-cover	J. B. C.rnell	New York, N. Y	May 5, 1857	17, 199
Vault-cover	F. Fitzgerald	Cincinnati, Ohio	Sept. 25, 1866	58, 240
Vault-cover	T. Floyd	Chambersburgh, Pa	Dec. 2, 1856	16, 161
Vault-cover	J. C. French	Chicago, Ill	May 27, 1873	139, 241
Vault-cover	J. Harrison, jr	Milwaukee, Wis	July 31, 1855	13, 352
Vault-cover	M. Hoyt and G. Van Cleef	Brooklyn and New York, N. Y.	Mar. 30, 1869	88, 386
Vault-cover	T. Hyatt	New York, N. Y	June 25, 1872	128, 311
Vault-cover	T. Hyatt	New York, N. Y	Mar. 4, 1873	136, 519
Vault-cover	T. Hyatt	New York, N. Y	Nov. 12, 1845	4, 266
Vault cover	J. K. Ingalls	Glenora, N. Y	Dec. 17, 1872	134, 062
Vault-cover	G. R. Jackson	Rye, N. Y	Apr. 21, 1857	17, 096
Vault-cover	G. H. Palmer	New York, N. Y	Mar. 30, 1869	88, 504
Vault-cover	J. Ryer	Brooklyn, N. Y	Jan. 26, 1869	86, 323
Vault-cover	T. Sharts	New York, N. Y	Apr. 22, 1873	138, 204
Vault-cover	W. D. Titus	Brooklyn, N. Y	Apr. 15, 1856	14, 680
Vault-cover	A. Trollope	Detroit, Mich	Dec. 31, 1872	134, 447
Vault-cover	W. R. Williams	Indiana Township, Pa	June 17, 1873	139, 938
Vault-cover catch	J. K. Ingalls	Williamsburgh, N. Y	July 4, 1854	11, 227
Vault-cover, Elevating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 207
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Mar. 27, 1855	12, 595
Vault-cover, Illuminating	E. P. Leonard and P. H. Jackson	New York, N. Y	June 29, 1858	20, 721
Vault-cover, Illuminating	T. Hyatt	Atchison, Kans	July 8, 1873	140, 709
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 187
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 188
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 189
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 190
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 191
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 192
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 193
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 194
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 195
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 196
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 197
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 198
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 199
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 200
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 201
Vault-cover, Illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 202
Vault-cover, Illuminating	J. K. Ingalls	Starkey, N. Y	Dec. 30, 1873	146, 074
Vault-cover lock	A. Richardson	New Brunswick, N. J	Dec. 19, 1871	122, 060
Vault-cover, Non-condensing illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 203
Vault-cover, Non-condensing illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 204
Vault-cover, Non-condensing illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 205
Vault-cover, Non-condensing illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145, 206
Vault-cover, Safety	E. L. Brown	Boston, Mass	June 22, 1858	20, 679
Vault-cover, Ventilating	J. Patrick	New York, N. Y	Mar. 29, 1859	23, 387
Vault-covers, Attaching the glasses of	G. R. Jackson	New York, N. Y	Mar. 16, 1858	19, 639
Vault-covers, Illuminating-glass for	T. Hyatt	New York, N. Y	July 27, 1858	21, 050
Vault-door and cast-iron safe	L. Lillie	Troy, N. Y	June 5, 1859	24, 646
Vault, Fire-proof	G. W. Pittman	Keokuk, Iowa	June 17, 1873	139, 916
Vault, Fire-proof	J. W. Warner	Oneida, N. Y	Jan. 7, 1873	134, 575
Vault for wine, potatoes, &c., Ventilated	J. Weed	Muscatine, Iowa	Aug. 7, 1866	57, 022
Vault-glass, Tool for inserting putty beneath	F. Smith	Dorchester, Mass	Jan. 13, 1863	37, 422
Vault-light	C. Donaldson	New York, N. Y	Nov. 16, 1858	22, 069
Vault-light	F. Fitzgerald	Cincinnati, Ohio	Nov. 26, 1867	71, 475
Vault-light	J. C. French	Chicago, Ill	July 18, 1871	117, 062
Vault-light	J. C. French	Chicago, Ill	July 18, 1871	117, 063
Vault-light	J. C. French	Chicago, Ill	Feb. 13, 1872	123, 688
Vault-light	T. Hyatt	New York, N. Y	Sept. 19, 1854	11, 695
Vault-light	T. Hyatt	Atchison, Kans	Nov. 12, 1872	133, 032
Vault light	T. Hyatt	New York, N. Y	Jan. 21, 1873	135, 120
Vault-light	G. H. Johnson	Baltimore, Md	Aug. 28, 1866	57, 515
Vault-light	M. J. McCormick	New York, N. Y	Oct. 16, 1866	58, 859
Vault-light	W. P. Walter and J. Green	Philadelphia, Pa	Aug. 28, 1855	13, 513
Vault-light	J. Wood	New York, N. Y	May 6, 1873	138, 724
Vault-light cover	G. R. Jackson	New York, N. Y	Dec. 15, 1857	18, 851
Vault-lights, Construction of	J. B. Comell	New York, N. Y	Dec. 20, 1859	26, 479
Vault-lights, Metallic frame for	M. Grosz and P. H. Jackson	New York, N. Y	Sept. 28, 1858	21, 605
Vault-lights, Metallic rims for	E. Rockwell	New York	Mar. 8, 1834	....
Vault-lights, Mode of inserting glass in	Z. Cobb	Chicago, Ill	Sept. 27, 1870	107, 663
Vault-lights, Setting	J. Gault	Boston, Mass	Oct. 15, 1861	33, 480

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Invention.	Inventor.	Residence.	Date.	No.
Vault-lock	H. C. Jones	Newark, N. J	Apr. 26, 1845	4,011
Vault-lock, Bank	J. Perkins	Newburyport, Mass	Mar. 23, 1813	....
Vault, Metallic	A. L. Stimson	Chicago, Ill	Sept. 30, 1873	143,309
Vault-plate, Flexible illuminating	T. Hyatt	New York, N. Y	Dec. 2, 1873	145,208
Vaults and privies, Construction and erection of	T. Rundle	Boston, Mass	Sept. 10, 1829	....
Vaults, Bar for securing bank	W. Maurer	New York, N. Y	Apr. 13, 1858	19,940
Vaults, Method of ventilating	G. R. Jackson	Rye, N. Y	Apr. 21, 1857	17,097
Vaults, safes, &c., Compound metallic door for	I. L. Cady	Newport, N. Y	Apr. 29, 1851	8,062
Vegetable and fruit peeler	O. F. Mayhew	Indianapolis, Ind	June 6, 1871	115,624
Vegetable and root cutter	H. Farmer	Pontiac, Mich	Feb. 18, 1862	34,418
Vegetable-boiler	C. Britain	Saint Joseph, Mich	June 14, 1864	43,087
Vegetable-crusher	R. Daniels	Woodstock, Vt	May 25, 1869	90,429
Vegetable-crusher	R. Daniels	Woodstock, Vt	Feb. 21, 1871	111,913
Vegetable-cutter	C. C. G. Armerling	Philadelphia, Pa	Oct. 10, 1871	119,733
Vegetable-cutter	F. Arnold	Haddam Neck, Conn	Oct. 9, 1866	58,570
Vegetable-cutter	W. Avery	Salisbury, N. Y	July 17, 1849	6,599
Vegetable-cutter	H. Baldwin	Nashua, N. H	Oct. 3, 1871	119,553
Vegetable-cutter	C. F. A. Bauder	Newark, N. J	Mar. 27, 1866	53,392
Vegetable-cutter	D. Bearly	Newcastle, Ind	Aug. 14, 1866	57,070
Vegetable-cutter	A. T. Bleyley	Ottumwa, Iowa	Oct. 31, 1865	50,679
Vegetable-cutter	A. T. Bleyley	Ottumwa, Iowa	Mar. 20, 1866	53,262
Vegetable-cutter	T. Bolton	Northampton, Mass	Aug. 20, 1872	130,619
Vegetable-cutter	W. A. Boyden and C. J. Mann	Altoona, Pa	Feb. 22, 1870	100,007
Vegetable-cutter	J. Caldwell	Chillicothe, Ohio	Jan. 28, 1868	73,775
Vegetable-cutter	J. Caldwell, sr	Chillicothe, Ohio	Aug. 22, 1865	49,499
Vegetable-cutter	A. J. Chapman	Scipio, N. Y	Nov. 29, 1859	26,253
Vegetable-cutter	G. W. Childs	Liberty, Pa	Oct. 7, 1856	15,840
Vegetable-cutter	M. H. Chrysler	Kinderhook, N. Y	Nov. 23, 1869	97,047
Vegetable-cutter	J. Clary	Dayton, Ohio	July 19, 1859	24,796
Vegetable-cutter	F. Curtis	Brattleborough, Vt	Oct. 4, 1870	108,007
Vegetable-cutter	R. Daniels	Woodstock, Vt	Oct. 1, 1850	7,681
Vegetable-cutter	W. C. Davol	Fall River, Mass	Feb. 22, 1859	23,014
Vegetable-cutter	C. Degel	New York, N. Y	Mar. 1, 1864	41,761
Vegetable-cutter	W. R. Dunn	Alton, Ind	May 3, 1870	102,666
Vegetable-cutter	J. Fraser	Rochester, N. Y	Jan. 18, 1859	22,639
Vegetable-cutter	W. Gale	Peekskill, N. Y	Nov. 23, 1869	97,184
Vegetable-cutter	M. Gerhard	Newark, N. J	Mar. 1, 1870	100,280
Vegetable-cutter	E. Guyer	Wolcott, Vt	May 7, 1861	32,247
Vegetable-cutter	G. P. Hachenberg	Coxsackie, N. Y	Jan. 21, 1868	73,597
Vegetable-cutter	V. Hagmann	Washington, D. C	Aug. 27, 1867	68,184
Vegetable-cutter	B. and D. H. Harnish	Lancaster and Pequea, Pa	Aug. 22, 1871	118,235
Vegetable-cutter	T. J. Hatfield	Warsaw, Ind	Jan. 7, 1868	73,004
Vegetable-cutter	W. L. Heberling	Mount Pleasant, Ohio	Sept. 5, 1871	118,720
Vegetable-cutter	R. Hemenway	New Cassel, Wis	Sept. 7, 1869	94,600
Vegetable-cutter	D. W. Hersey	Pembroke, Me	Jan. 24, 1871	111,208
Vegetable-cutter	B. C. Hoyt	Port Washington, Wis	Oct. 4, 1859	25,648
Vegetable-cutter	M. R. Hubbell	Wolcott, Vt	Feb. 19, 1861	31,460
Vegetable-cutter	F. Hüllhorst	Freeport, Ill	Jan. 24, 1865	46,002
Vegetable-cutter	E. B. Ives	Bristol, Conn	Dec. 17, 1867	72,301
Vegetable-cutter	N. Kipper	Seymour, Ind	May 17, 1870	103,057
Vegetable-cutter	J. Kram	Germantown, Pa	Nov. 18, 1873	144,773
Vegetable-cutter	H. P. Lauer and H. C. Reichard	Pottsville, Pa	May 10, 1870	102,837
Vegetable-cutter	J. Lusher	La Porte, Ind	Aug. 2, 1870	105,958
Vegetable-cutter	G. Lutz, J. Schultheis, and M. Florentin.	Newark, N. J	Feb. 22, 1870	100,049
Vegetable-cutter	J. S. Mace	Au Sable, N. Y	Mar. 26, 1872	125,061
Vegetable-cutter	G. B. Massey	New York, N. Y	Aug. 15, 1871	118,035
Vegetable-cutter	H. Mellish	Walpole, N. H	June 25, 1836	....
Vegetable-cutter	S. Metzger	Newberry, Pa	Aug. 24, 1869	94,123
Vegetable-cutter	F. Monnet	New York, N. Y	Mar. 28, 1871	113,188
Vegetable-cutter	G. I. Neveil	Rising Sun, Pa	Oct. 14, 1840	1,825
Vegetable-cutter	R. Nutting	Randolph, Vt	Mar. 31, 1863	38,055
Vegetable-cutter	S. W. Packard and C. A. Meekins.	Buckland, Mass	Nov. 22, 1864	45,171
Vegetable-cutter	G. W. Parker	Bellaire, Ohio	Sept. 9, 1873	142,580
Vegetable-cutter	R. H. Peck	Wolcott, Vt	Aug. 12, 1862	36,194
Vegetable-cutter	J. R. Robertson	Syracuse, N. Y	July 8, 1862	38,839
Vegetable-cutter	W. Robinson	Highgate, Vt	Dec. 22, 1857	18,929
Vegetable-cutter	F. Schütte	Philadelphia, Pa	Jan. 3, 1860	26,711
Vegetable-cutter	J. M. Schwartz	Philadelphia, Pa	July 2, 1867	66,402
Vegetable-cutter	H. Seib	New York, N. Y	Oct. 18, 1870	108,525
Vegetable-cutter	F. S. Shaefer	Saint Louis, Mo	June 25, 1872	128,328
Vegetable-cutter	M. P. Smith	Baltimore, Md	Sept. 3, 1872	131,127
Vegetable-cutter	J. W. Stickler	Orange, N. J	Jan. 3, 1860	26,714
Vegetable-cutter	M. Stoner	Waynesborough, Pa	Oct. 22, 1842	2,823
Vegetable-cutter	F. Wagner	New York, N. Y	Aug. 16, 1870	106,520
Vegetable-cutter	W. Weaver	Phœnixville, Pa	Jan. 15, 1867	61,290
Vegetable-cutter	J. W. Webb	Mount Morris, N. Y	Apr. 10, 1843	3,043
Vegetable-cutter	J. R. Weed and A. F. Du Faur	New York, N. Y	Apr. 23, 1872	126,115
Vegetable-cutter	J. R. Weed and A. F. Du Faur	New York, N. Y	Apr. 23, 1872	126,116
Vegetable-cutter	A. H. Wellington	Woodstock, Vt	Dec. 15, 1863	40,971
Vegetable-cutter	J. R. Wharry	Moundsville, W. Va	Nov. 18, 1873	144,645
Vegetable-cutter	D. H. Whittemore	Chicopee Falls, Mass	Oct. 11, 1853	10,116
Vegetable-cutter	J. R. Whittemore	Chicopee Falls, Mass	Apr. 2, 1861	31,921
Vegetable-cutter and coffee-mill, Combined	B. Essig	Pittsburgh, Pa	Nov. 16, 1858	22,070
Vegetable-cutter and feed-grinding machine	J. T. Harvey	Murrysville, Pa	Aug. 31, 1869	94,413
Vegetable cutter and scraper	A. W. Pagett	Springfield, Ohio	June 14, 1870	104,192
Vegetable-cutter for animal-food	R. I. Burbank	Boston, Mass	Nov. 10, 1868	83,829
Vegetable-cutter, Rotary	N. Schlesser	Chicago, Ill	June 24, 1873	140,221
Vegetable cutting and grinding mill	W. H. Harn	Carlisle, Pa	Jan. 23, 1855	12,278
Vegetable cutting and reducing machine	T. J. Sloan	New York, N. Y	June 20, 1865	48,316
Vegetable cutting and slicing machine	E. H. Van Ostrand	New York, N. Y	Aug. 3, 1869	93,253
Vegetable-cutting machine	J. Geiss and J. Brosius	Belleville, Ill	Nov. 11, 1856	16,078
Vegetable-cutting machine	H. A. Willard	Westminster, Vt	Feb. 17, 1857	16,667
Vegetable-gatherer	J. Schermerhorn	Daysville, N. Y	June 8, 1869	91,046
Vegetable-juices by pressure, Process for extracting and assorting.	R. Emerson, jr	Rockford, Ill	Mar. 15, 1859	23,238
Vegetable-knife	F. Durand and W. F. Gilbert	Derby, Conn	Aug. 16, 1870	106,473

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Invention.	Inventor.	Residence.	Date.	No.
Vegetable-lifter	C. C. Fellows	Center Sandwich, N. H	June 18, 1867	65, 896
Vegetable-masher	E. Brown	Burlington, Vt	May 19, 1868	78, 050
Vegetable-masher	H. F. Chase	Boston, Mass	July 20, 1869	92, 703
Vegetable masher and cutter	C. Vignal	New York, N. Y	Mar. 17, 1868	75, 605
Vegetable-matter from animal-fiber, Mode of separating.	H. Sherwood	London, Great Britain	Nov. 12, 1867	70, 754
Vegetable-material, Process for removing the mineral, gummy, and resinous substances from.	A. Mencci	Clifton, N. Y	Oct. 18, 1864	44, 735
Vegetable, meat, &c., cutting or mincing machine	J. G. Conger	Rebursburgh, Pa	Jan. 27, 1838	587
Vegetable-membrane, Constructing	S. Gwynn	New York, N. Y	Mar. 23, 1869	88, 035
Vegetable membrane or parchment	S. Gwynn	New York, N. Y	Mar. 23, 1869	88, 036
Vegetable, mineral, and animal matter with steam, Apparatus for treating.	H. Wood	Montreal, Canada	Aug. 13, 1867	67, 693
Vegetable-roaster	C. G. Baylor	Quincy, Mass	Mar. 22, 1870	101, 085
Vegetable-server	T. F. Bigelow	Boston, Mass	July 7, 1868	79, 543
Vegetable-slicer	A. M. Olds	New York, N. Y	Apr. 16, 1867	63, 809
Vegetable-washer	F. Arnold	Haddam Neck, Conn	Nov. 14, 1865	50, 888
Vegetable-washer	F. W. Bacon	New York, N. Y	June 27, 1865	48, 477
Vegetable-washer	J. Bump	Hartford, N. Y	Aug. 31, 1869	94, 181
Vegetable-washer	R. Derham	Bermondsey, England	June 14, 1870	104, 123
Vegetable-washer	G. H. Tift	Morrisville, Vt	May 12, 1868	77, 944
Vegetable-washer	H. J. Wattles	Rockford, Ill	Apr. 5, 1870	101, 685
Vegetable-washer	U. A. Woodbury	Morrisville, Vt	May 5, 1868	77, 699
Vegetable washing and scouring machine	F. Nishwitz	Brooklyn, N. Y	May 24, 1864	42, 868
Vegetables, Apparatus for desiccating	W. K. Lewis	Boston, Mass	June 2, 1863	38, 753
Vegetables, Composition for preventing disease in	J. B. Tribble	Middleborough, Mass	Mar. 21, 1865	46, 957
Vegetables, Cutting	A. H. Robbins	Denmark, N. Y	May 6, 1836	....
Vegetables, Cutting, crushing, and grinding	L. B. Fisher	Freeport, Ill	July 17, 1849	6, 503
Vegetables for preservation, Machine for preparing.	M. B. Southwick	Saint Hilaire Parish, Canada.	Feb. 19, 1856	14, 297
Vegetables, Machine for skinning	O. Hase	Mecklenberg-Schwerin, Germany.	July 11, 1865	48, 779
Vehicle	J. S. Campbell	Newton, N. J	May 28, 1867	65, 168
Vehicle	B. N. Carpenter	Mount Jackson, Va	Aug. 31, 1869	94, 397
Vehicle	G. Coffee and W. M. Bernard	Dixon, Cal	Apr. 8, 1873	137, 657
Vehicle	C. Daniel	Brownsville, Mo	Dec. 20, 1870	110, 209
Vehicle	C. Elliott	Woodland, Cal	June 27, 1871	116, 284
Vehicle	A. J. Gibson	Clinton, Mass	July 25, 1854	11, 369
Vehicle	C. Gormann and J. B. Thiel	Union Hill, N. J	Dec. 9, 1873	145, 413
Vehicle	J. Jack	Tiskilwa, Ill	Dec. 13, 1870	110, 141
Vehicle	R. Jack	Des Moines, Iowa	Apr. 25, 1871	114, 149
Vehicle	W. A. Jones	Dubuque, Iowa	Nov. 13, 1866	59, 610
Vehicle	W. H. Keppel and H. Huffsey	Tiffin, Ohio	June 27, 1871	116, 528
Vehicle	J. M. Lunsford	Fortville, Ind	Feb. 16, 1869	87, 055
Vehicle	F. H. C. Mey	Buffalo, N. Y	Nov. 29, 1870	109, 644
Vehicle	O. E. Miles	Aurora, Ill	Aug. 8, 1865	49, 289
Vehicle	M. V. Nichols	Osage, Iowa	Nov. 11, 1873	144, 473
Vehicle	B. Parniter and W. Bradley	Morgan County, Ohio	Dec. 30, 1873	145, 965
Vehicle	T. W. Porter	Bangor, Me	Feb. 13, 1866	52, 600
Vehicle	J. D. Ross and M. K. Burk	Truckee, Cal	Dec. 20, 1870	110, 396
Vehicle	E. Rowe	Vandalia, Ill	Apr. 5, 1870	101, 663
Vehicle	S. J. Spencer	Yorkshire, N. Y	Nov. 19, 1867	71, 240
Vehicle	G. Stricker	Catawissa, Pa	Jan. 28, 1868	73, 849
Vehicle	C. Thomas	Boston, Mass	Jan. 31, 1871	111, 492
Vehicle	Z. B. Wakeman	Rockford, Ill	Apr. 25, 1865	47, 473
Vehicle	E. D. Weller	Lima, N. Y	Aug. 19, 1873	141, 905
Vehicle	J. G. Wilkinson	Quincy, Ohio	May 14, 1867	64, 820
Vehicle	E. D. Williams	Wilmington, Del	May 29, 1855	12, 979
Vehicle-axle	C. Ahrenbeck	Navasota, Tex	July 2, 1872	128, 575
Vehicle-axle	E. Ball, jr	Canton, Ohio	Dec. 5, 1871	121, 574
Vehicle-axle	W. Beers	Bridgeport, Conn	July 25, 1865	48, 895
Vehicle-axle	M. R. Brown	Mingo, Ohio	Aug. 13, 1872	130, 359
Vehicle-axle	M. Chapin	Erie, Pa	July 9, 1872	128, 852
Vehicle-axle	T. F. Coleman	Allegheny City, Pa	Oct. 7, 1873	143, 435
Vehicle-axle	J. W. Crannell	Springport Township, Mich	July 15, 1862	35, 870
Vehicle-axle	J. W. Cremin	New York, N. Y	Oct. 31, 1871	120, 418
Vehicle-axle	D. Dalzell	South Edgemont, Mass	Aug. 16, 1870	106, 470
Vehicle-axle	R. Daniels	Woodstock, Vt	June 18, 1872	128, 127
Vehicle-axle	H. Frederick	Butler, Pa	Dec. 2, 1873	145, 165
Vehicle-axle	A. W. Gillett	Sparta, Wis	Jan. 1, 1867	60, 876
Vehicle-axle	A. T. Hubbell	New York, N. Y	May 28, 1872	127, 167
Vehicle-axle	W. Knoch	Allegheny City, Pa	Feb. 11, 1868	74, 382
Vehicle-axle	L. Martin	Oswego, N. Y	Nov. 4, 1873	144, 278
Vehicle-axle	W. Pursell	Princeton, Ind	Nov. 5, 1872	132, 859
Vehicle-axle	W. H. Sparks	Absecom, N. J	Dec. 19, 1871	122, 074
Vehicle-axle	A. J. Straight	Richland Centre, Wis	Aug. 30, 1870	106, 969
Vehicle-axle	S. D. Wackman	Auburn, N. Y	June 23, 1868	79, 165
Vehicle-axle	J. A. Williams	Elizabeth, Ill	Mar. 3, 1868	75, 099
Vehicle-axle	J. B. Wilson	May's Landing, N. J	Sept. 24, 1867	69, 147
Vehicle-axle and axle-box	F. Hunsinger	Morrisania, N. Y	May 13, 1873	138, 890
Vehicle-axle and axle-box	E. Von Jeinsen and J. M. McDonald.	San Francisco, Cal	Mar. 28, 1871	113, 116
Vehicle-axle and journal for machinery	R. P. Gillett	Sparta, Wis	Feb. 13, 1866	52, 561
Vehicle axle and reach	S. O. and E. J. Post	Chicago, Ill., and Vienna, N. J.	Nov. 11, 1862	36, 914
Vehicle axle and sleeve	W. H. Sparks	Absecom, N. J	July 22, 1873	141, 018
Vehicle axle and thimble skein	A. Kessberger	Springfield, Ill	Sept. 2, 1873	142, 344
Vehicle-axle-lubricating device	J. F. Morris	Lansingburgh, N. Y	Feb. 12, 1867	62, 054
Vehicle-axle-lubricating device	C. C. Parker	Kiddville, Mo	Dec. 2, 1873	145, 231
Vehicle-axles, Sand-band for	J. B. Winchell and H. W. Rugg	Benton Harbor, Mich	Nov. 4, 1873	144, 244
Vehicle-beds, Attaching seat to	W. Bench	Auburn, N. Y	Mar. 20, 1866	53, 371
Vehicle bow-iron	G. W. Slater	New Haven, Conn	Sept. 17, 1867	69, 034
Vehicle-brake	J. Boyer	Fairfield Township, Pa	Aug. 29, 1871	118, 583
Vehicle-brake	E. M. Chumard	Pittston, Pa	Nov. 10, 1868	83, 929
Vehicle-brake	F. Fairbanks	Saint Johnsbury, Vt	Aug. 29, 1871	118, 598
Vehicle-brake	H. B. Lee	Maryville, Mo	Oct. 17, 1871	119, 932
Vehicle-brake	G. W. Loomis	Torrington, Conn	Aug. 29, 1871	118, 465
Vehicle-brake	H. B. Marshall	Waldoborough, Me	Feb. 18, 1868	74, 580

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Invention.	Inventor.	Residence.	Date.	No.
Vehicle-brake	T. Parry and J. McHardy	Balham and Edinborough, Great Britain.	Nov. 19, 1872	133, 248
Vehicle-brake	C. Phelon	West Granville, Mass	Nov. 19, 1867	71, 054
Vehicle-brake	W. A. Pier	Corry, Pa	Dec. 17, 1872	134, 096
Vehicle-brake	J. A. Whitney	Maryland, N. Y	June 25, 1861	32, 659
Vehicle-brake-block	I. W. Spore	New Scotland, N. Y	May 23, 1871	115, 129
Vehicle-brake, Self-acting	P. Ten Eyck	New York, N. Y	June 19, 1855	13, 108
Vehicle brake, Wheel	E. Court	Coeymans, N. Y	May 6, 1862	35, 140
Vehicle chafe-iron, Wheeled	E. P. Roche	Bath, Me	Mar. 21, 1871	112, 851
Vehicle check-spring	C. Scherick	Lisburn, Pa	Aug. 29, 1871	118, 648
Vehicle-coupling	U. Bushnell	Cleveland, Ohio	Nov. 9, 1869	96, 670
Vehicle-coupling	C. H. Cratar	North Kingsville, Ohio	Oct. 7, 1873	143, 404
Vehicle-coupling	N. W. Gordon	Waupun, Wis	July 10, 1866	56, 207
Vehicle-coupling	C. W. Greter	Three Rivers, Mich	Aug. 25, 1868	81, 363
Vehicle-coupling	H. Miner, H. M. Stevens, and W. H. Saunders.	New York and Hastings, N. Y.	May 27, 1856	14, 985
Vehicle-coupling	L. C. Sims	Martinsburgh, Ohio	Dec. 5, 1871	121, 675
Vehicle dash-board	H. I. Godwin	Windsor, N. C	Aug. 1, 1871	117, 619
Vehicle-doors, Mode of opening and closing	S. Smith	Halesworth, Great Britain.	Aug. 12, 1873	141, 733
Vehicle draft-attachment	W. P. Brooks	Bloomington, Ill	May 19, 1868	78, 049
Vehicle draft-attachment	E., W., and O. K. Nason	Orneville, Me	Apr. 16, 1867	63, 930
Vehicle-draft-bar	J. B. Brewster	Flushing, N. Y	Oct. 12, 1869	95, 641
Vehicle draft-device	J. S. Tibbets	Brazil, Ind	Aug. 8, 1871	117, 829
Vehicle-equalizer	J. J. Connelly	Chicago, Ill	Sept. 22, 1868	82, 385
Vehicle, Extension	B. W. Gay	New London, N. H	Aug. 14, 1855	13, 428
Vehicle folding-seat, Wheel	H. A. Gilbertson	New York, N. Y	Sept. 12, 1865	49, 872
Vehicle folding-step	W. Henry	New York, N. Y	Oct. 31, 1871	120, 517
Vehicle for carrying mail	D. D. Foley	Washington, D. C	Aug. 24, 1869	94, 168
Vehicle for transporting machines	G. W. Wheeler, 2d	New Ipswich, N. H	Nov. 16, 1869	97, 009
Vehicle, Four-wheeled	D. W. Hutchinson	Big Spring, Kans	Dec. 31, 1867	72, 737
Vehicle-holdback	H. M. Burdick and M. R. Flanders.	Ilion, N. Y	Dec. 30, 1873	145, 042
Vehicle-holdback	W. H. Groesbeck	Saratoga Springs, N. Y	May 10, 1870	102, 935
Vehicle-holdback	N. W. Simons	Williamsfield, Ohio	Apr. 4, 1871	113, 354
Vehicle-holdback	E. Wilson	Northbridge, Mass	Dec. 24, 1872	134, 236
Vehicle holdback and trace fastening	H. W. Catlin	Burlington, Vt	July 19, 1864	43, 570
Vehicle-holdback attachment	J. Thornton and E. G. Latta	Genesee, N. Y	Dec. 19, 1871	122, 078
Vehicle-holdback for shafts	J. Armstrong	Newark, Ohio	Oct. 31, 1871	120, 477
Vehicle holdback, Wheeled	J. S. Swan	Monganp Valley, N. Y	Sept. 9, 1862	36, 425
Vehicle-hound	C. Fishbaugh	Tiffin, Ohio	Nov. 19, 1872	133, 089
Vehicle-hound	A. Muhleisen	Ottawa, Ohio	June 17, 1873	140, 066
Vehicle-hub, Metallic	J. Dump	Kingston, Ohio	Sept. 5, 1871	118, 704
Vehicle-lock coupling, Adjustable	G. G. Burgess	Grafton, Ohio	Jan. 10, 1871	110, 823
Vehicle, Locomotive traction	J. H. Bailey	Sandford, Ind	Dec. 20, 1859	26, 466
Vehicle, Pleasure	C. W. Saladee	Saint Catharine's, Canada	Jan. 9, 1872	122, 536
Vehicle, Pleasure	C. W. Saladee	Saint Catharine's, Canada	May 28, 1872	127, 371
Vehicle, Pleasure	C. W. Saladee	Saint Catharine's, Canada	Dec. 17, 1872	134, 004
Vehicle, Pleasure	C. W. Saladee	Saint Catharine's, Canada	Dec. 17, 1872	134, 005
Vehicle-pole	E. D. Brown	Battle Creek, Mich	July 21, 1868	80, 055
Vehicle-pole	H. Schmidt	Albany, N. Y	Aug. 19, 1873	141, 957
Vehicle-pole coupling	A. Searls	New York, N. Y	Dec. 10, 1867	72, 090
Vehicle, Portable	S. Wheelock	Conway, Mass	Oct. 22, 1867	70, 056
Vehicle propelled by hand	P. Lutteke	Saint Louis, Mo	Oct. 12, 1869	95, 701
Vehicle-reach	K. Wolfram and A. Ellwein	New York, N. Y	July 16, 1872	129, 198
Vehicle recording-apparatus	A. Guebhard and A. P. Tronchon.	Paris, France	Apr. 8, 1873	137, 676
Vehicle rub-iron	D. D. Stelle	New Brunswick, N. J	Aug. 22, 1871	118, 402
Vehicle running-gear	A. R. Bartram	Redding, Conn	Dec. 13, 1859	26, 406
Vehicle running-gear	D. C. Brown	New York, N. Y	July 1, 1862	35, 745
Vehicle running-gear	J. L. Corbus	Quincy, Mich	June 20, 1871	116, 160
Vehicle running-gear	D. D. Gitt	Arendtsville, Pa	Jan. 21, 1868	73, 444
Vehicle running-gear	F. L. Kidder	Brooklyn, N. Y	Oct. 23, 1860	30, 482
Vehicle running-gear	I. O. Meddows	Bonham, Tex	Feb. 25, 1873	136, 331
Vehicle running-gear	R. Murdock	Baltimore, Md	July 10, 1860	29, 093
Vehicle running-gear	B. F. Paine	Roseville, Ill	Sept. 10, 1867	68, 646
Vehicle running-gear	H. Phelps	White Hall, N. C	June 24, 1856	15, 191
Vehicle running-gear	L. R. Rosebrook	Harmon, Ill	Aug. 5, 1873	141, 463
Vehicle running-gear, Four-wheeled	D. C. Brown	New York, N. Y	Oct. 29, 1861	33, 566
Vehicle running-gear, Wheeled	W. C. Cook	Appleton, Wis	Feb. 25, 1868	74, 802
Vehicle-seat	D. R. Allen	Cumberland, Me	Nov. 22, 1870	109, 368
Vehicle-seat	D. R. Allen	Cumberland, Me	Feb. 14, 1871	111, 714
Vehicle-seat	P. F. Dean	Watsonville, Cal	June 28, 1870	104, 714
Vehicle-seat	W. A. Eddy	East Randolph, N. Y	Mar. 10, 1868	75, 397
Vehicle-seat	W. H. Elliott	Beardstown, Ill	July 12, 1870	105, 321
Vehicle-seat	G. Lattin and A. F. Hubbell	Cold Water, Mich	Apr. 2, 1867	63, 535
Vehicle-seat	J. R. Linton	New Bedford, Mass	Apr. 9, 1872	125, 468
Vehicle-seat	J. R. D. V. Linton	New Bedford, Mass	Dec. 17, 1867	72, 307
Vehicle-seat	J. L. Peck	Dansville, N. Y	Mar. 20, 1866	53, 329
Vehicle-seat	L. Pray	Portland, Me	May 12, 1868	77, 838
Vehicle-seat	J. Richert	Madison, Ind	May 14, 1872	126, 832
Vehicle-seat	A. B. Sheaffer	New Holland, Pa	May 6, 1873	138, 537
Vehicle-seat	S. S. Simmons	Watsonville, Cal	June 22, 1869	91, 779
Vehicle-seat	U. C. Snyder	Richmond Township, Ohio	Nov. 18, 1873	144, 709
Vehicle-seat	L. W. Wolfe	Jacksonville, Ill	May 12, 1868	77, 791
Vehicle-seat, Adjustable	R. E. Jones	Goldsborough, N. C	Mar. 28, 1871	113, 060
Vehicle-seat, Adjustable	G. J. Lucas	Poughkeepsie, N. Y	Apr. 27, 1858	20, 127
Vehicle-seat clamp	H. E. Murray	Chester, N. Y	Apr. 28, 1868	77, 309
Vehicle-seat fastener	C. Dixon	Weedsport, N. Y	Aug. 18, 1868	81, 150
Vehicle-seat frame	J. W. Dann	Columbus, Ohio	May 17, 1870	103, 024
Vehicle-seat lock	D. D. Wisell	Zanesville, Ind	Dec. 31, 1872	134, 413
Vehicle-seat spring	C. Duecker	Lively Grove, Ill	Dec. 30, 1873	145, 994
Vehicle-seat spring	B. Hershey	Erie, Pa	Aug. 29, 1871	118, 452
Vehicle, Self-propelling	O. D. Padrick	Shelbyville, Ind	July 21, 1868	80, 206
Vehicle shifting-seat	H. Nagle	Carlisle, Pa	Oct. 24, 1871	120, 312
Vehicle side-bar	F. I. Flowers	Tarrytown, N. Y	Aug. 19, 1873	142, 011
Vehicle-spring	H. Bowles	Trempealeau, Wis	Sept. 2, 1873	142, 325
Vehicle-spring	E. C. Brooks	San Francisco, Cal	Nov. 17, 1863	40, 693
Vehicle-spring	E. Cliff	Saint Louis, Mo	Jan. 14, 1873	134, 853

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Vehicle-spring	D. L. Columbia, R. V. Stocking, and C. W. Woodruff.	Morrison, Ill	May 14, 1867	64, 634
Vehicle-spring	B. P. Crandall, jr	Williamsburgh, N. Y	June 14, 1870	104, 277
Vehicle-spring	J. Davenport	Massillon, Ohio	Apr. 29, 1862	35, 085
Vehicle-spring	J. N. Decker	Covington, Ky	Apr. 4, 1871	113, 270
Vehicle-spring	R. Dudley	Erie, Pa	Apr. 16, 1872	125, 796
Vehicle-spring	R. Dudley	Erie, Pa	Aug. 13, 1872	130, 491
Vehicle-spring	J. Goller	Los Angeles, Cal	Feb. 8, 1870	99, 558
Vehicle-spring	J. H. Gould	Burlingham, Ohio	Nov. 22, 1870	109, 406
Vehicle-spring	B. Hershey and R. Dudley	Erie, Pa	Feb. 21, 1871	112, 037
Vehicle-spring	J. R. Hiller	Woodland, Cal	Mar. 7, 1871	112, 340
Vehicle-spring	F. K. John	Moscow, Russia	Jan. 7, 1873	134, 673
Vehicle-spring	G. W. Lewis	Portsmouth, Va	Sept. 33, 1873	143, 085
Vehicle-spring	D. D. Matteson	Harmonsburgh, Pa	May 7, 1867	64, 434
Vehicle-spring	J. Mayer	Elmer, N. Y	June 10, 1873	139, 801
Vehicle-spring	A. W. McKown	Honesdale, Pa	Mar. 19, 1872	124, 756
Vehicle-spring	P. Penn	Cleveland, Ohio	June 10, 1873	139, 809
Vehicle-spring	E. J. Post	Vienna, N. J	Sept. 24, 1867	69, 125
Vehicle-spring	C. L. Rice	Dunmore, Pa	Feb. 11, 1868	74, 424
Vehicle-spring	L. Righter	Salem, Ohio	Dec. 5, 1871	121, 662
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Apr. 4, 1871	113, 573
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Apr. 4, 1871	113, 574
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Aug. 8, 1871	117, 819
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Mar. 5, 1872	124, 220
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	May 28, 1872	127, 272
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	July 16, 1872	129, 297
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Oct. 29, 1872	132, 693
Vehicle-spring	C. W. Saladee	Saint Catharine's, Canada	Oct. 29, 1872	132, 694
Vehicle-spring	C. W. Saladee	Pittsburgh, Pa	Dec. 30, 1873	146, 100
Vehicle-spring	J. B. Stuart	Bunker Hill, Ill	Mar. 26, 1867	63, 330
Vehicle-spring	C. D. Sutton	Tarrytown, N. Y	Aug. 25, 1868	81, 431
Vehicle-spring	T. R. Tineby	Tarrytown, N. Y	Feb. 25, 1873	136, 284
Vehicle-spring	H. E. Wolcott	Elbridge, N. Y	Oct. 25, 1870	108, 745
Vehicle-spring	E. Wright	Lee County, Iowa	Nov. 8, 1870	109, 095
Vehicle, Spring	J. M. Miller	Cincinnati, Ohio	Jan. 14, 1873	134, 916
Vehicle, Spring	A. Reichert	West Lodi, Ohio	July 4, 1871	116, 756
Vehicle-spring connection	C. W. Saladee	Saint Catharine's, Canada	Nov. 12, 1872	132, 925
Vehicle-spring attachment	E. C. Brooks	San Francisco, Cal	Jan. 21, 1868	73, 497
Vehicle, Spring-bottom	J. S. Merrill	Titusville, Pa	Feb. 6, 1872	123, 409
Vehicle-spring brace	C. V. N. Suydam	Millstone, N. J	Dec. 23, 1873	145, 916
Vehicle-spring coupling	H. P. Dolson	Highland, N. Y	Sept. 16, 1873	142, 901
Vehicle-spring seat	W. Mead, F. D. May, and R. L. Hoyt.	Chestertown, N. Y	Dec. 13, 1870	110, 150
Vehicle-spring seat	S. S. Simmons	Watsonville, Cal	Sept. 21, 1869	94, 979
Vehicle-spring seat	O. Vanorman	Ripon, Wis	Sept. 1, 1868	81, 846
Vehicle spring, Wheel	J. E. Taber	Fall River, Mass	Jan. 26, 1864	41, 404
Vehicle spring, Wheeled	C. W. Saladee	Saint Catharine's, Canada	Apr. 4, 1871	113, 451
Vehicle-springs, Arrangement of	D. Babcock	Homer, N. Y	Feb. 10, 1857	16, 625
Vehicle-springs, Compensating-brace for	S. Jackson	Newark, N. J	Mar. 19, 1867	63, 053
Vehicle-springs, Mode of attaching	T. H. Allen	Corry, Pa	Dec. 5, 1871	121, 570
Vehicle stay-spring, Adjustable	A. A. Horne	Mount Morris, N. Y	Aug. 26, 1873	142, 105
Vehicle, Steam road	I. A. Sabin	Locust Lane, Pa	June 28, 1870	104, 888
Vehicle supporting-bar	J. B. Brewster	Flushing, N. Y	Oct. 12, 1869	95, 642
Vehicle thimble skein and box	T. Smart, jr	Rockville, Canada	Nov. 8, 1870	109, 066
Vehicle, Three-wheeled	E. S. French	Binghamton, N. Y	Feb. 5, 1856	14, 190
Vehicle, Three-wheeled	J. W. Minor and D. P. Ward	New Bedford, Mass	Sept. 71, 1867	69, 012
Vehicle-tops, Attaching and detaching	D. A. King and V. N. Gardner	Lexington, Ky	May 30, 1865	47, 959
Vehicle torsion-spring	R. Dudley	Erie, Pa	Apr. 15, 1873	137, 899
Vehicle, Walking	R. C. Vernol	New York, N. Y	Feb. 4, 1868	74, 176
Vehicle-wheel	C. Anderegg	Lawrenceburgh, Ind	July 22, 1873	141, 099
Vehicle-wheel	D. Argerbright	Tippecanoe, Ohio	Jan. 21, 1873	135, 060
Vehicle-wheel	S. Atha	West Liberty, Ohio	June 11, 1872	127, 824
Vehicle-wheel	J. R. Baird	Vincennes, Ind	July 18, 1871	117, 142
Vehicle-wheel	A. Ball	Canton, Ohio	Oct. 17, 1871	120, 022
Vehicle-wheel	E. Ball, jr	Canton, Ohio	Oct. 10, 1871	119, 811
Vehicle-wheel	J. B. Bauman	Shepherdstown, Pa	July 16, 1872	129, 518
Vehicle-wheel	W. Beers	Milan, Ohio	Dec. 24, 1872	134, 241
Vehicle-wheel	A. L. Blackman	Cross Plains, Tenn	May 28, 1872	127, 300
Vehicle-wheel	A. L. Blackman	Cross Plains, Tenn	Feb. 11, 1873	135, 623
Vehicle-wheel	R. J. Bowman	Mansfield, La	Oct. 20, 1868	83, 245
Vehicle-wheel	A. D. Brown, sr	Columbus, Ga	Jan. 31, 1871	111, 312
Vehicle-wheel	D. Brown	Clinton, Tex	Dec. 23, 1873	145, 783
Vehicle-wheel	H. N. Brown	Whitingham, Vt	June 25, 1872	128, 358
Vehicle-wheel	M. R. Brown	Mingo, Ohio	June 20, 1871	116, 148
Vehicle-wheel	M. R. Brown	Mingo, Ohio	July 30, 1872	130, 012
Vehicle-wheel	J. Q. Bryer	Wilmington, Del	July 22, 1873	141, 111
Vehicle-wheel	A. Buchholz	Janesville, Wis	Dec. 9, 1873	145, 393
Vehicle-wheel	J. P. Chandler and W. V. Tainter.	South Carthage, Me	Sept. 30, 1873	143, 328
Vehicle-wheel	G. J. Cross	Greenwich, England	June 10, 1873	139, 661
Vehicle-wheel	D. Davis	New York, N. Y	Aug. 29, 1871	118, 590
Vehicle-wheel	J. Davis	Long Island City, N. Y	Mar. 12, 1872	124, 554
Vehicle-wheel	D. Dimmick	Orwell Township, Pa	Oct. 21, 1873	143, 813
Vehicle-wheel	J. L. Dom	Hamilton County, Ohio	Mar. 4, 1873	136, 425
Vehicle-wheel	J. F. and W. Downing	Erie, Pa	Feb. 11, 1873	135, 701
Vehicle-wheel	G. R. Duval	Salem, Oreg	Mar. 19, 1872	124, 729
Vehicle-wheel	C. F. Elliott	Great Falls, N. H	Feb. 26, 1867	62, 402
Vehicle-wheel	M. Fancher	West Granby, Conn	Aug. 6, 1872	130, 117
Vehicle-wheel	H. H. Fetta	Richmond, Ind	Aug. 27, 1872	130, 851
Vehicle-wheel	J. W. Ford	Tippecanoe City, Ohio	July 9, 1872	128, 870
Vehicle-wheel	D. B. French	Grafton, Vt	Dec. 9, 1873	145, 291
Vehicle-wheel	H. R. Fry	Wabash, Ind	June 4, 1872	127, 474
Vehicle-wheel	J. C. Garrettson	Marshland, N. Y	Sept. 30, 1873	143, 233
Vehicle-wheel	J. H. Glover	Freedom, Ky	Oct. 21, 1873	143, 820
Vehicle-wheel	C. Godden	Paterson, N. J	Nov. 6, 1866	59, 385
Vehicle-wheel	H. A. Gore	Goshen, Ind	Aug. 26, 1873	142, 098
Vehicle-wheel	J. P. Grosvenor	Lowell, Mass	Dec. 24, 1872	134, 271
Vehicle-wheel	J. Hageman	Williamsburgh, Ohio	May 20, 1873	139, 144

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Vehicle-wheel	P. C. Hairston	Crawfordsville, Miss	Sept. 30, 1873	143, 292
Vehicle-wheel	J. S. Hamlet	Tippecanoe City, Ohio	Sept. 10, 1872	131, 164
Vehicle-wheel	J. Harris	San Francisco, Cal	Mar. 28, 1871	113, 050
Vehicle-wheel	T. C. Hendry	Conyers, Ga	Aug. 7, 1860	29, 546
Vehicle-wheel	S. B. Hindman	Richmond, Ind	Mar. 4, 1873	136, 376
Vehicle-wheel	F. H. Holman, A. Stage, and D. S. Holman.	Conneautville, Pa	Dec. 24, 1872	134, 282
Vehicle-wheel	P. C. House	West Randolph, Vt	Aug. 12, 1873	141, 715
Vehicle-wheel	W. D. Howell	Newburgh, N. Y	Nov. 19, 1872	133, 153
Vehicle-wheel	E. Hoxie	Montezuma, N. Y	June 4, 1867	65, 385
Vehicle-wheel	W. M. Hunt	New York, N. Y	June 20, 1871	116, 193
Vehicle-wheel	J. C. Huxley	Cincinnati, Ohio	Jan. 21, 1873	135, 119
Vehicle-wheel	W. C. Johnson	Philadelphia, Pa	Aug. 6, 1872	130, 134
Vehicle-wheel	P. Jones	Newark, N. J	Oct. 29, 1872	132, 666
Vehicle-wheel	P. Jones	Newark, N. J	Mar. 25, 1873	137, 083
Vehicle-wheel	R. R. Jones	Pillar Point, N. Y	Sept. 23, 1873	143, 077
Vehicle-wheel	R. R. Jones	Pillar Point, N. Y	Sept. 23, 1873	143, 078
Vehicle-wheel	H. Kellogg	Floyd, Iowa	Jan. 14, 1873	134, 894
Vehicle-wheel	H. B. Leckenby	Kalamazoo, Mich	Feb. 4, 1873	135, 434
Vehicle-wheel	W. A. Lewis	Chicago, Ill	July 16, 1872	129, 041
Vehicle-wheel	W. A. Lewis	Chicago, Ill	Nov. 12, 1872	133, 043
Vehicle-wheel	M. Linck	Danville, Ill	Dec. 2, 1873	145, 219
Vehicle-wheel	O. Look	Bridgeport, Conn	Aug. 12, 1873	141, 652
Vehicle-wheel	D. J. Marston	Amesbury, Mass	Dec. 24, 1872	134, 152
Vehicle-wheel	R. W. McClelland	Springfield, Ill	Apr. 4, 1871	113, 682
Vehicle-wheel	R. W. McClelland	Springfield, Ill	May 2, 1871	114, 458
Vehicle-wheel	M. McNally	Houston, Tex	Mar. 18, 1873	136, 928
Vehicle-wheel	S. J. Miller and L. Wright	Economy, Ind	Mar. 18, 1873	137, 017
Vehicle-wheel	J. R. Mills	Macon City, Mo	Apr. 4, 1871	113, 441
Vehicle-wheel	E. N. Morley	Wilmington, Del	Sept. 10, 1872	131, 294
Vehicle-wheel	E. N. Morley	Wilmington, Del	Oct. 15, 1872	132, 310
Vehicle-wheel	D. Mulock	Mount Hope, N. Y	Feb. 28, 1871	112, 167
Vehicle-wheel	I. F. Munson	Washington, D. C	May 10, 1870	102, 853
Vehicle-wheel	J. O'Connor	Jackson, Mo	Oct. 21, 1873	143, 776
Vehicle-wheel	N. G. Olds	Fort Wayne, Ind	June 4, 1872	127, 638
Vehicle-wheel	N. Palmer	Athens, N. Y	Jan. 28, 1873	135, 244
Vehicle-wheel	L. G. Peel	Hazlehurst, Miss	Sept. 30, 1873	143, 378
Vehicle-wheel	C. V. Pettibone	Fond du Lac, Wis	Nov. 22, 1870	109, 447
Vehicle-wheel	J. C. Pierce	Bridgeport, Ill	June 13, 1871	115, 981
Vehicle-wheel	H. Pitcher	Fond du Lac, Wis	Mar. 11, 1873	136, 669
Vehicle-wheel	T. W. Porter	Boston, Mass	Sept. 23, 1873	143, 029
Vehicle-wheel	H. Poth	Pittsburgh, Pa	Sept. 8, 1868	81, 943
Vehicle-wheel	H. A. Potter	Providence, R. I	Aug. 20, 1867	68, 002
Vehicle-wheel	C. P. Presnell	Hartwell, Ga	Aug. 6, 1872	130, 314
Vehicle-wheel	H. H. Ragon	North Liberty, Ind	July 16, 1872	129, 590
Vehicle-wheel	J. J. Ralya	Cleveland, Ohio	Mar. 11, 1873	136, 761
Vehicle-wheel	W. F. Ray	Fort Wayne, Ind	Oct. 10, 1871	119, 788
Vehicle wheel	H. H. Richards	Fond du Lac, Wis	Oct. 8, 1872	132, 107
Vehicle-wheel	J. L. Roberts	Waverly, Iowa	July 16, 1872	129, 593
Vehicle-wheel	J. D. Ross	Truckee, Cal	June 14, 1870	104, 208
Vehicle-wheel	W. T. Sawyer	Mobile, Ala	Oct. 22, 1867	70, 027
Vehicle-wheel	H. Silvester	Saint Louis, Mo	July 23, 1872	129, 865
Vehicle-wheel	G. W. Smith	Darlington, Wis	July 1, 1873	140, 552
Vehicle-wheel	T. J. Smith	Cornersville, Miss	Nov. 22, 1870	109, 465
Vehicle-wheel	O. D. Spalding	Mankato, Minn	Apr. 8, 1873	137, 629
Vehicle-wheel	C. W. Spayd	Wilkesbarre, Pa	Sept. 16, 1873	142, 876
Vehicle-wheel	S. T. F. Sterick	Georgetown, D. C	June 10, 1873	139, 850
Vehicle-wheel	S. C. Tillinghast	Cranston, R. I	Apr. 9, 1872	125, 420
Vehicle-wheel	W. H. Trenwith	Brooklyn, N. Y	Dec. 3, 1872	133, 605
Vehicle-wheel	O. Vanorman	Fond du Lac, Wis	Aug. 13, 1872	130, 394
Vehicle-wheel	S. Vreeland	Pottstown, Pa	Mar. 4, 1873	136, 567
Vehicle-wheel	F. G. Wallace	Syracuse, N. Y	Apr. 12, 1870	101, 948
Vehicle-wheel	J. Weathers	Greensburgh, Ind	Feb. 21, 1871	112, 099
Vehicle-wheel	M. B. White	McLean County, Ill	Oct. 7, 1873	143, 481
Vehicle-wheel	H. Williams	Apple River, Ill	July 29, 1873	141, 411
Vehicle-wheel	J. B. Withey	Chicago, Ill	Sept. 16, 1873	142, 831
Vehicle-wheel	J. Woodburn	Saint Louis, Mo	June 10, 1873	139, 697
Vehicle-wheel	J. F. Wright and B. B. Jones	Columbus, Ind	Apr. 22, 1873	138, 220
Vehicle, Wheel	R. W. and S. Ackley	Lima, Mich	June 28, 1864	43, 276
Vehicle, Wheel	L. D. Brown	La Fayette, Ind	Feb. 9, 1864	41, 476
Vehicle, Wheel	J. F. Cass	L'Original, Canada	July 25, 1871	117, 257
Vehicle, Wheel	H. C. Drew	Oshawa, Canada	Sept. 22, 1863	40, 025
Vehicle, Wheel	J. W. Drew	Stockbridge, Mich	Oct. 30, 1866	59, 194
Vehicle, Wheel	J. W. Drew	Stockbridge, Mich	May 21, 1867	64, 850
Vehicle, Wheel	J. O. Farrell	New York, N. Y	Apr. 22, 1862	35, 017
Vehicle, Wheel	D. Gilbert	Middlefield, N. Y	Mar. 18, 1862	34, 681
Vehicle, Wheel	J. Heiden	New York, N. Y	Jan. 12, 1858	19, 088
Vehicle, Wheel	G. S. Manning	Springfield, Ill	July 21, 1863	39, 297
Vehicle, Wheel	C. J. Preston	Harlam, Ill	Dec. 15, 1863	40, 944
Vehicle, Wheel	G. B. Woodward and M. L Smith	Bolivar and Scio, N. Y	July 10, 1866	56, 315
Vehicle-wheel axle	R. H. Hall	Owego, N. Y	Feb. 11, 1862	34, 361
Vehicle-wheel axle	J. S. Tibbitts and W. M. Merriel	Jeffersonville, Ind	June 6, 1865	48, 114
Vehicle-wheel, Elastic	G. M. Ramsay	New York, N. Y	May 14, 1872	126, 741
Vehicle-wheel, Light	J. Clark	Louisville, Ky	June 25, 1872	128, 211
Vehicle-wheel lock	J. H. Lee	Leavenworth, Kans	Aug. 18, 1863	39, 581
Vehicle-wheel, Metallic	T. McConaughy and J. McCollum.	Burnsville, Ala	June 22, 1858	20, 652
Vehicle-wheels to axles, Securing	C. Oyster	Chambersburgh, Pa	Aug. 13, 1867	67, 794
Vehicle-wheels, Skein and box for	N. L. Holmes	Fond du Lac, Wis	Aug. 26, 1873	142, 233
Vehicle-wheels, Thimble-skein for	J. Lahman	Panora, Iowa	Aug. 5, 1873	141, 598
Vehicles, Adjustable metallic dasher for	G. M. Peters	Columbus, Ohio	Apr. 26, 1870	102, 315
Vehicles, Adjustable railing for	C. Krebs	Chicopee, Mass	Sept. 24, 1867	69, 224
Vehicles, Adjustable spring-back for	L. E. Page	Pontiac, Mich	Nov. 27, 1866	60, 047
Vehicles, Apparatus for detaching poles and shafts from.	L. O. Kunze	Harrisonville, Mo	Nov. 22, 1870	109, 521
Vehicles, Attaching draft to	G. S. Curtis	Chicago, Ill	June 11, 1867	65, 549
Vehicles, Attaching the springs of	F. L. Kidder and A. E. Aeby	Brooklyn, N. Y	Mar. 9, 1858	19, 567
Vehicles, Attaching wheels to	L. Crouch	Baraboo, Wis	Nov. 5, 1867	70, 532

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Vehicles, Attachment of pole-shaft to wheeled	J. McMillin	Ripley, Ohio	May 3, 1870	102, 695
Vehicles, Body-loop-attachment for	J. W. Singleton	Quincy, Ill	Sept. 17, 1872	131, 471
Vehicles, Bolster and axle bed plate for	J. Henry	Suisun, Cal	Mar. 22, 1870	101, 013
Vehicles, Bolster-plate for wheeled	O. E. Miles	Aurora, Ill	Nov. 20, 1866	59, 922
Vehicles, Bolster-spring for	H. Buck	Polo, Ill	Mar. 4, 1873	136, 360
Vehicles, Bracing spring of	C. W. Saladee	Columbus, Ohio	Dec. 15, 1857	18, 865
Vehicles, Brake for light	M. D. Wells	Morgantown, Va	July 11, 1854	11, 310
Vehicles, Connecting side-springs to	C. W. Saladee	Saint Catharine's, Canada	Mar. 5, 1872	124, 221
Vehicles, Construction of	C. Atkinson and G. S. Manning	Danville and Springfield, Ill.	May 26, 1857	17, 358
Vehicles, Construction of	G. P. Kimball	San Francisco, Cal	Mar. 3, 1868	75, 026
Vehicles, Construction of wheeled	O. E. Miles	Aurora, Ill	Feb. 25, 1862	34, 518
Vehicles, Dash-rail for	H. W. Warner	Greenfield, Mass	July 9, 1872	128, 933
Vehicles, Dasher for wheeled	W. Fisher	Marathon, N. Y	May 16, 1871	114, 933
Vehicles, Device for detaching horses from	S. Beck	New Haven, Conn	Dec. 10, 1872	133, 822
Vehicles, Guide-attachment for	N. Drake	Newton, N. J	Apr. 12, 1859	23, 557
Vehicles, Hanging the bodies of wheel	C. Bradfield	Philadelphia, Pa	Aug. 16, 1859	25, 158
Vehicles, Hanging the bodies of	J. H. Case	Lyons, N. Y	July 12, 1859	24, 719
Vehicles, Hound, swag-bar, tongue-brace, and cross-bar of.	G. Doan, T. Wallis, and G. D. Moreland.	Fleming, N. Y	Jan. 17, 1871	111, 046
Vehicles, Iron running-gear for	A. Ball	Canton, Ohio	July 19, 1870	105, 411
Vehicles, Joint-clip and spoke-socket for wheel	H. Bailey	Pittsford, N. Y	July 12, 1864	43, 544
Vehicles, &c., Locomotive-horse for	P. W. Mackenzie	Jersey City, N. J	July 28, 1863	39, 349
Vehicles, Machine for raising	H. Salisbury	Springfield, Mass	Mar. 8, 1828	....
Vehicles, Method of propelling	A. Taylor	Indianapolis, Ind	July 2, 1867	66, 264
Vehicles, &c., Mode of securing cross-bar and shafts to.	L. T. Hazen	Coventry, N. Y	Sept. 16, 1862	36, 461
Vehicles, Power-apparatus for	J. G. Dillaha	Waco, Tex	Aug. 17, 1869	93, 686
Vehicles, Propelling	T. Rhoads	Fiskilwa, Ill	Apr. 14, 1868	76, 814
Vehicles, Propelling wheeled	J. G. Wilkinson	Quincy, Ohio	Mar. 13, 1866	53, 209
Vehicles, Runner for wheeled	F. T. L. Boyle	New York, N. Y	Dec. 3, 1867	71, 576
Vehicles, Shifting-step for	E. Miller	Milwaukee, Wis	Oct. 1, 1867	69, 465
Vehicles, Shifting-top for	M. B. Keller	Penn Township, Pa	Oct. 28, 1873	144, 107
Vehicles, Shifting-top for	H. K. Porter	Boston, Mass	Nov. 18, 1873	144, 790
Vehicles, Sign for moving	E. Y. Clark and W. A. Lillien-dahl.	Brooklyn and New York, N. Y.	Apr. 29, 1873	138, 228
Vehicles, Spring and body brace for	C. C. Gleason	Wanconda, Ill	Apr. 28, 1868	77, 276
Vehicles, Spring-brace for	B. H. Steele and R. Hodgin	Barnesville, Ohio	July 2, 1872	128, 669
Vehicles, Stay and guide-bar for elliptic-spring	J. E. and E. Slegel	Reading, Pa	Sept. 7, 1869	94, 519
Vehicles, traction-engines, &c., Mode of propelling	H. Sells	Vienna, Canada	June 18, 1872	128, 178
Vehicles, Transient-bolt for	C. G. Holsten	Orebro, Sweden	May 16, 1871	114, 821
Vehicles, Whiffletree-attachment for	A. Loursin	Saint Louis, Mo	Mar. 25, 1873	137, 103
Veil-holder	S. M. Meyenberg	New York, N. Y	May 11, 1869	89, 879
Veloci-trot lubricator	G. Dixon	La Fayette, Ind	May 15, 1855	12, 859
Velocimeter	E. A. Lewis	Saint Charles, Mo	Nov. 26, 1867	71, 394
Velocimeter for vessels	A. B. Gray and A. H. Brown	Washington, D. C	Jan. 6, 1857	16, 333
Velocimeter for vessels	I. F. Thompson	New York, N. Y	Jan. 1, 1856	14, 035
Velocimeter for vessels	I. F. Thompson	Westerly, R. I	Feb. 26, 1856	14, 328
Velocimeters, Method of supporting the vanes of aquatic.	J. R. St. John	New York, N. Y	May 13, 1851	8, 085
Velocipede	A. M. Allen	New York, N. Y	June 8, 1869	91, 061
Velocipede	A. M. Allen	New York, N. Y	June 29, 1869	91, 896
Velocipede	A. M. Allen	New York, N. Y	Aug. 24, 1869	94, 055
Velocipede	A. M. Allen	New York, N. Y	Aug. 24, 1869	94, 056
Velocipede	A. M. Allen	New York, N. Y	Aug. 24, 1869	94, 057
Velocipede	A. M. Allen	New York, N. Y	June 7, 1870	103, 957
Velocipede	J. Allgaier	Philadelphia, Pa	May 11, 1869	89, 964
Velocipede	S. Anderson	New Orleans, La	June 22, 1869	91, 589
Velocipede	S. Andrews	Perth Amboy, N. J	July 27, 1869	92, 928
Velocipede	S. Andrews	Perth Amboy, N. J	Oct. 12, 1869	95, 629
Velocipede	J. A. Aspinwall and C. M. Perry	New Utrecht, N. Y	Aug. 3, 1869	93, 159
Velocipede	D. W. Atherton	Detroit, Mich	July 20, 1869	92, 689
Velocipede	S. M. Bailey	Cottage Grove, Minn	Nov. 30, 1869	97, 340
Velocipede	A. O. Baldwin and C. H. Miller	Lincoln, Ill	May 18, 1869	90, 220
Velocipede	R. J. Barr	Philadelphia, Pa	Sept. 21, 1869	94, 992
Velocipede	J. C. Beaumont	Wilkesbarre, Pa	June 22, 1869	91, 702
Velocipede	J. Beck	New York, N. Y	Feb. 2, 1869	86, 495
Velocipede	J. Beck	Morrisania, N. Y	Mar. 1, 1870	100, 356
Velocipede	G. Bergner	Washington, Mo	June 22, 1869	91, 510
Velocipede	J. B. Blair	Philadelphia, Pa	Mar. 23, 1869	88, 120
Velocipede	E. K. W. Blake	Chicago, Ill	Nov. 17, 1868	84, 163
Velocipede	P. J. Boris	Boston, Mass	May 25, 1869	90, 489
Velocipede	C. K. Bradford	Lynnfield, Mass	Oct. 13, 1868	83, 035
Velocipede	G. C. Buell	New Haven, Conn	June 1, 1869	90, 723
Velocipede	J. Burns	New York, N. Y	Mar. 9, 1869	87, 630
Velocipede	V. H. Buschman	Baltimore, Md	Oct. 12, 1869	95, 648
Velocipede	A. L. Butterfield	Brattleborough, Vt	June 22, 1869	91, 602
Velocipede	C. Callaghan	Boston, Mass	Jan. 5, 1869	85, 640
Velocipede	J. N. Case	Worthington, Ohio	Mar. 30, 1869	88, 366
Velocipede	A. Christian	New York, N. Y	Sept. 1, 1868	81, 603
Velocipede	A. Christian and J. Reinhart	New York, N. Y	Feb. 23, 1869	87, 245
Velocipede	W. B. Clark	Whitefield, Me	Sept. 7, 1869	94, 565
Velocipede	W. K. Clarkson, jr	New York	June 26, 1819	....
Velocipede	J. C. Clime	Philadelphia, Pa	Feb. 16, 1869	86, 906
Velocipede	J. C. Clime	Philadelphia, Pa	Aug. 30, 1870	106, 780
Velocipede	J. C. Clime	Philadelphia, Pa	Apr. 2, 1872	125, 273
Velocipede	H. S. Cohn	New York, N. Y	Apr. 20, 1869	89, 128
Velocipede	W. H. Coleman	New Orleans, La	Sept. 28, 1869	95, 325
Velocipede	A. Combs	Helena, Mont	Aug. 24, 1869	93, 967
Velocipede	E. Cowles and G. R. Metten	Cleveland, Ohio	Apr. 27, 1869	89, 293
Velocipede	B. P. Crandall	New York, N. Y	July 7, 1868	79, [illegible]53
Velocipede	B. P. Crandall	New York, N. Y	July 6, 1869	92, 273
Velocipede	J. A. Crandall	Brooklyn, N. Y	Jan. 25, 1870	99, 166
Velocipede	J. M. Crandall	Brooklyn, N. Y	Sept. 5, 1871	118, 693
Velocipede	C. N. Cutter	Worcester, Mass	Nov. 3, 1868	83, 696
Velocipede	C. E. Dayton	Meriden, Conn	Oct. 26, 1869	96, 208
Velocipede	P. Delescaille	Montezuma, Iowa	Nov. 19, 1872	133, 211
Velocipede	W. Denovan	Philadelphia, Pa	Feb. 9, 1869	86, 738

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Velocipede	L. Derozier	New York, N. Y	Feb. 4, 1868	74,058
Velocipede	J. G. Dillaha	Waco, Tex	June 29, 1869	91,829
Velocipede	G. Dismer	Mound City, Ill	May 6, 1873	138,486
Velocipede	C. J. Doty and A. S. Dickinson	Washington, D. C	May 11, 1869	89,977
Velocipede	L. E. Dugas	Warren, Ill	May 4, 1869	89,744
Velocipede	J. Eggert	New York, N. Y	Oct. 4, 1870	107,888
Velocipede	G. D. Emerson	Calumet, Mich	Feb. 8, 1870	99,546
Velocipede	S. F. Estelle	Richmond, Ind	Feb. 16, 1869	87,033
Velocipede	D. J. Farmer	Wheeling, W. Va	July 20, 1869	92,808
Velocipede	A. Farrar	Boston, Mass	Mar. 30, 1869	88,286
Velocipede	H. J. Ferguson	Whiting, N. J	Mar. 23, 1869	88,151
Velocipede	H. J. Ferguson	Whiting, N. J	Apr. 6, 1869	88,703
Velocipede	L. B. Flanders	Philadelphia, Pa	June 22, 1869	91,534
Velocipede	D. P. Flint	Nueces County, Tex	June 15, 1869	91,322
Velocipede	D. P. Flint	Nueces County, Tex	June 15, 1869	91,323
Velocipede	F. J. Forsyth	Bay City, Mich	Apr. 19, 1870	101,993
Velocipede	W. Frankel	Springfield, Ohio	June 1, 1869	90,656
Velocipede	J. Fraser and J. Austin	New York, N. Y	June 22, 1869	91,734
Velocipede	W. Gaffey	Philadelphia, Pa	Apr. 1, 1873	137,431
Velocipede	F. B. Gardner and J. Frageser	New York, N. Y	Mar. 16, 1869	87,769
Velocipede	O. T. Gleason	Farmington, Me	May 5, 1868	77,478
Velocipede	J. Goodman	Blackfriar's Road, England	Sept. 13, 1864	44,256
Velocipede	A. Greene and E. Dyer	Providence, R. I	June 22, 1869	91,535
Velocipede	G. D. Greenwood and F. H. Husted.	Buffalo, N. Y	Jan. 26, 1869	86,339
Velocipede	S. A. Gregg	Oneida, N. Y	Apr. 9, 1872	125,451
Velocipede	G. H. Griffiths	New York, N. Y	Aug. 20, 1872	130,712
Velocipede	J. Guild	Buffalo, N. Y	June 1, 1869	90,837
Velocipede	C. B. Guy	Postville, Iowa	Aug. 10, 1869	93,433
Velocipede	H. F. T. Hale	East Saginaw, Mich	June 29, 1869	92,044
Velocipede	D. Hanchett, J. C. Dancy, and R. Stuart.	Smithfield, Ill	Nov. 22, 1870	109,408
Velocipede	G., W., A., E., and F. Hanlon	New York, N. Y	July 7, 1868	79,654
Velocipede	W. Hanlon	New York, N. Y	Feb. 9, 1869	86,834
Velocipede	C. A. Harper	New York, N. Y	June 15, 1869	91,438
Velocipede	G. L. Haussknecht	Brooklyn, N. Y	Feb. 8, 1870	99,567
Velocipede	J. E. Hawkins	Lansingburgh, N. Y	Jan. 26, 1869	86,153
Velocipede	J. H. Haynes	Union County, Ark	Aug. 24, 1869	93,991
Velocipede	J. H. Haynes	Boston, Mass	Jan. 4, 1870	98,592
Velocipede	R. C. Hemmings	New Haven, Conn	July 13, 1869	92,528
Velocipede	W. S. Hill	Manchester, N. H	Apr. 13, 1869	88,872
Velocipede	L. F. Hodge	Poughkeepsie, N. Y	June 29, 1869	91,937
Velocipede	F. G. Hoeppner	New York, N. Y	May 7, 1867	64,418
Velocipede	J. E. Hoffmire	New Brunswick, N. J	Jan. 21, 1873	134,989
Velocipede	W. F. Holske and B. T. Babbitt	New York, N. Y	June 8, 1869	91,018
Velocipede	J. A. House and W. B. Snyder	Bridgeport, Conn	Apr. 20, 1869	89,047
Velocipede	W. W. Hubbard	New York, N. Y	Mar. 16, 1869	87,936
Velocipede	D. Hunt, jr	Worcester, Mass	Sept. 22, 1868	82,319
Velocipede	E. Huntington	New York, N. Y	May 25, 1869	90,546
Velocipede	E. N. Huntsman	Allegheny, Pa	Feb. 2, 1869	86,545
Velocipede	J. Irwing	New York, N. Y	Apr. 20, 1869	89,149
Velocipede	J. H. Irwin	Philadelphia, Pa	Jan. 5, 1869	85,527
Velocipede	J. H. Irwin	Philadelphia, Pa	Feb. 2, 1869	86,405
Velocipede	J. H. Irwin	Philadelphia, Pa	Feb. 2, 1869	86,406
Velocipede	B. Janson	Effingham, Ill	May 23, 1871	115,212
Velocipede	S. H. Jennings	Deep River, Conn	Aug. 31, 1869	94,215
Velocipede	S. Johnson	West Croydon, England	Aug. 1, 1871	117,638
Velocipede	W. H. Johnson	Springfield, Ill	Nov. 30, 1869	97,411
Velocipede	E. A. Jones	Sturgis, Mich	June 8, 1869	90,947
Velocipede	L. Kellner	Brooklyn, N. Y	Jan. 12, 1858	19,092
Velocipede	P. Lallement	Paris, France	Nov. 20, 1866	59,915
Velocipede	N. Landry	San Francisco, Cal	Sept. 14, 1869	94,899
Velocipede	W. H. Laubach	Philadelphia, Pa	Jan. 26, 1869	86,235
Velocipede	J. Lauer	Chicago, Ill	July 27, 1869	92,976
Velocipede	H. Lawrence	New Orleans, La	July 13, 1869	92,460
Velocipede	H. C. Lawrence	Canandaigua, N. Y	Apr. 27, 1869	89,543
Velocipede	B. S. Lawson	New York, N. Y	May 25, 1869	90,563
Velocipede	E. H. Lewis	Saint Charles, Mo	Oct. 26, 1869	96,124
Velocipede	H. W. Libbey	Cleveland, Ohio	Mar. 30, 1869	88,492
Velocipede	W. Lindon	New Haven, Conn	Apr. 6, 1869	88,574
Velocipede	A. Longett	New York, N. Y	Aug. 12, 1862	36,100
Velocipede	G. Lowden	Brooklyn, N. Y	Oct. 26, 1869	96,128
Velocipede	R. E. Lowe	Upper Alton, Ill	Jan. 25, 1870	99,096
Velocipede	J. Lund	Milwaukee, Wis	June 22, 1869	91,550
Velocipede	H. A. Maltby	Brownsville, Tex	Dec. 13, 1870	110,057
Velocipede	H. A. Maltby	Brownsville, Tex	Feb. 13, 1872	123,571
Velocipede	D. Martin	Harrisburgh, Pa	Mar. 12, 1872	124,500
Velocipede	M. Martin	New York, N. Y	June 20, 1871	116,205
Velocipede	C. A. Maynard	Saint Louis, Mo	Nov. 30, 1869	97,421
Velocipede	F. W. McCleave	New Bedford, Mass	Apr. 13, 1869	88,889
Velocipede	J. F. McClure	Connersville, Ind	Nov. 11, 1873	144,551
Velocipede	S. T. McDougal	Brooklyn, N. Y	May 4, 1869	89,783
Velocipede	L. T. McGilvray	Staunton, Va	June 24, 1873	140,290
Velocipede	W. McKerahan	Pittsburgh, Pa	Mar. 9, 1869	87,579
Velocipede	J. W. McMillan	Greenville, Ala	June 8, 1869	91,035
Velocipede	H. T. Metzgar	Salem Cross Roads, Pa	May 4, 1869	89,679
Velocipede	C. H. Miller and G. Ellis	Cincinnati, Ohio	Feb. 9, 1869	86,682
Velocipede	J. Monroe	New York, N. Y	Feb. 9, 1869	86,856
Velocipede	J. A. Morrell	New York, N. Y	Feb. 2, 1869	86,573
Velocipede	T. N. Morse	Fairhaven, Mass	July 27, 1869	92,991
Velocipede	T. H. Mott	New York, N. Y	Apr. 13, 1869	88,894
Velocipede	B. H. Muckle	Buffalo, N. Y	Nov. 2, 1869	96,466
Velocipede	F. Myers	New York, N. Y	Mar. 2, 1869	87,355
Velocipede	R. Neal	Brooklyn, N. Y	Dec. 21, 1869	98,092
Velocipede	M. Newman	Unadilla, N. Y	Jan. 7, 1868	73,029
Velocipede	A. Nielsen	Williamsburgh, N. Y	June 1, 1869	90,774
Velocipede	S. Nistosduff	Lowell, Mass	Apr. 26, 1870	102,423
Velocipede	R. Oliver	Paris, France	Dec. 7, 1869	97,683

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Velocipede	J. J. Ott	Washington, D. C	Feb. 23, 1869	87, 285
Velocipede	W. L. Paine	Boston, Mass	Mar. 23, 1869	88, 198
Velocipede	G. T. Parry	Philadelphia, Pa	Apr. 20, 1869	89, 069
Velocipede	J. I. Pease	Stockbridge, Mass	Nov. 23, 1869	97, 110
Velocipede	L. G. Perreaux	Paris, France	Mar. 12, 1872	124, 621
Velocipede	S. Perry	Newport, N. Y	Feb. 23, 1869	87, 287
Velocipede	T. R. Pickering	New York, N. Y	Mar. 30, 1869	88, 507
Velocipede	J. F. Piper	Boston, Mass	June 1, 1869	90, 869
Velocipede	R. H. Plass	New York, N. Y	Mar. 23, 1869	88, 205
Velocipede	F. L. Purroy	New York, N. Y	Mar. 29, 1870	101, 310
Velocipede	W. Quinn	Philadelphia, Pa	Apr. 11, 1865	47, 220
Velocipede	W. Quinn	Philadelphia, Pa	Apr. 26, 1870	102, 321
Velocipede	J. Rankin	Detroit, Mich	Apr. 27, 1869	89, 341
Velocipede	H. Rathmann and G. H. Johnson.	Buffalo, N. Y	June 1, 1869	90, 687
Velocipede	J. B. Read	Tuscaloosa, Ala	Apr. 6, 1869	88, 738
Velocipede	G. P. Reed	Boston, Mass	June 1, 1869	90, 782
Velocipede	J. Reinhart	New York, N. Y	Feb. 23, 1869	87, 290
Velocipede	J. Reinhart	New York, N. Y	Oct. 5, 1869	95, 515
Velocipede	J. Repetti	Philadelphia, Pa	Nov. 16, 1869	96, 963
Velocipede	H. A. Reynolds	New York, N. Y	Apr. 24, 1866	54, 207
Velocipede	H. A. Reynolds	Brooklyn, N. Y	July 28, 1868	80, 425
Velocipede	J. Reynolds	Brooklyn, N. Y	May 25, 1869	90, 579
Velocipede	J. H. Rhodes and W. Reed	Philadelphia, Pa	Apr. 26, 1870	102, 322
Velocipede	C. H. Robinson	Bath, Me	Feb. 23, 1869	87, 204
Velocipede	D. I. Robinson	Boston, Mass	Jan. 26, 1869	86, 251
Velocipede	M. L. Rood	Denver, Colo	Sept. 14, 1869	94, 842
Velocipede	P. C. Rowe	Boston, Mass	May 25, 1869	90, 585
Velocipede	I. Samuels	Marysville, Kans	Feb. 23, 1869	87, 205
Velocipede	S. H. Sawhill	Cambridge, Ohio	Aug. 17, 1869	93, 751
Velocipede	F. Schmitt	Springfield,	June 8, 1869	91, 169
Velocipede	L. W. Serrell	Brooklyn, N. Y	Mar. 9, 1869	87, 713
Velocipede	L. T. Simon	New York, N. Y	Aug. 17, 1869	93, 915
Velocipede	X. Simon	Akron, Ohio	Aug. 24, 1869	94, 039
Velocipede	J. Simpson	Newark, Ohio	May 25, 1869	90, 595
Velocipede	L. A. Sinclair	Bellevue, Ohio	June 22, 1869	91, 679
Velocipede	S. M. Skidmore	Brooklyn, N. Y	Dec. 29, 1868	85, 337
Velocipede	S. M. Skidmore	Brooklyn, N. Y	Apr. 13, 1869	88, 815
Velocipede	C. H. Smith and G. D. Walker	Brooklyn, N. Y	June 22, 1869	91, 682
Velocipede	D. R. Smith	San Francisco, Cal	July 27, 1869	93, 016
Velocipede	H. Smith	Newark, N. J	May 11, 1869	90, 032
Velocipede	J. C. Smith	Brooklyn, N. Y	May 4, 1869	89, 695
Velocipede	W. H. Smith	Newport, R. I	Apr. 27, 1869	89, 443
Velocipede	W. H. Smith	Newport, R. I	July 13, 1869	92, 485
Velocipede	L. H. Soule	Mount Morris, N. Y	May 25, 1869	90, 470
Velocipede	F. A. Spofford and M. G. Raffington.	Columbus, Ohio	June 15, 1869	91, 379
Velocipede	C. and A. Spring	Hyde Park and Weston, Mass.	May 11, 1869	90, 034
Velocipede	C. and A. Spring	Hyde Park and Weston, Mass.	May 25, 1869	90, 601
Velocipede	M. B. Stafford	New York, N. Y	Mar. 9, 1869	87, 596
Velocipede	M. Staudt	Summit Hill, Pa	Mar. 14, 1871	112, 646
Velocipede	C. W. Stickney	Albany, N. Y	Apr. 6, 1869	88, 750
Velocipede	E. Tarbox	Charlestown, Mass	July 26, 1870	105, 739
Velocipede	A. D. Thompson and J. Marden, jr.	Baltimore, Md	Feb. 9, 1869	86, 787
Velocipede	H. Thompson	Mobile, Ala	Jan. 1, 1869	90, 797
Velocipede	J. A. Topliff and G. H. Ely	Elyria, Ohio	Feb. 23, 1869	87, 225
Velocipede	C. M. Tyler	Indianapolis, Ind	Sept. 14, 1869	94, 927
Velocipede	W. Van Anden	Poughkeepsie, N. Y	Mar. 23, 1869	88, 238
Velocipede	J. A. Van Der Waag	Brooklyn, N. Y	Mar. 30, 1869	88, 347
Velocipede	W. Volk	Buffalo, N. Y	Dec. 14, 1869	97, 837
Velocipede	A. Wanner	New York, N. Y	Jan. 11, 1870	98, 819
Velocipede	T. W. Ward	New York, N. Y	Apr. 6, 1869	88, 683
Velocipede	C. A. Way	Charlestown, N. H	Nov. 26, 1867	71, 561
Velocipede	C. A. Way	Charlestown, N. H	Nov. 26, 1867	71, 562
Velocipede	I. Weisbaar	Joliet, Ill	Dec. 24, 1872	134, 176
Velocipede	J. W. Weston	New York, N. Y	Apr. 6, 1869	88, 759
Velocipede	F. Westphal	Jersey City, N. J	June 29, 1869	92, 132
Velocipede	J. J. White	Philadelphia, Pa	Apr. 13, 1869	88, 930
Velocipede	T. E. M. White	New Bedford, Mass	Apr. 20, 1869	89, 102
Velocipede	E. Whitehead	Cincinnati, Ohio	Mar. 30, 1869	88, 426
Velocipede	A. O. Willcox, jr	Port Richmond, N. Y	July 6, 1869	92, 412
Velocipede	W. L. Williams	New York, N. Y	Feb. 7, 1871	111, 597
Velocipede	S. Wilmarth	Malden, Mass	May 4, 1869	89, 822
Velocipede	B. F. Wilson	Geddes, N. Y	May 11, 1869	89, 960
Velocipede	C. Windham	Southover Grange, near Lewes, England.	Aug. 16, 1870	106, 529
Velocipede	J. C. Wirtz	New York, N. Y	June 15, 1869	91, 398
Velocipede	C. Witty	Brooklyn, N. Y	Mar. 16, 1869	87, 999
Velocipede	H. Wolfkill	Mill Creek Post-Office, Pa.	July 13, 1869	92, 554
Velocipede	S. A. Wood	Manitowoc, Wis	Dec. 29, 1868	85, 501
Velocipede	S. Wortmann	New York, N. Y	July 27, 1869	93, 030
Velocipede	M. Young	Frederick, Md	Oct. 12, 1869	95, 753
Velocipede, Chiro	G. Barker	Providence, R. I	Nov. 1, 1825	....
Velocipede, Circular	G. J. Sturdy and S. W. Young	Providence, R. I	May 4, 1869	89, 700
Velocipede-connecting apparatus	W. H. Racey	New York, N. Y	May 18, 1869	90, 302
Velocipede, Cotton-picker's	L. M. Asbill	Edgefield County, S. C	Oct. 31, 1871	120, 478
Velocipede, crank axle	M. Young	Frederick, Md	Nov. 9, 1869	96, 648
Velocipede driving-mechanism	M. Howe and D. F. Hartford	Boston, Mass	Feb. 23, 1869	87, 259
Velocipede, Dumb-horse	S. D. Roberts and M. Dingee	Brooklyn, N. Y	July 12, 1870	105, 251
Velocipede, Floating	L. D. Bunn	Morristown, N. J	Sept. 7, 1869	94, 559
Velocipede, Floating	O. A. Davis	Brooklyn, N. Y	Feb. 8, 1870	99, 540
Velocipede, Floating	J. M. De La Rue	Nogent sur Marne, near Paris, France.	Aug. 31, 1869	94, 294
Velocipede, Floating	W. Frankel	Springfield, Ohio	Sept. 7, 1869	94, 588

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Velocipede, Floating	G. Haberland	Pontiac, Ill	Sept. 14, 1869	94, 818
Velocipede, Floating	V. B. Townsend	Worcester, Mass	Aug. 31, 1869	94, 362
Velocipede, Floating	C. O. Wederkinch and A. Starkweather.	Boston, Mass	Nov. 8, 1870	109, 083
Velocipede for land and water	W. G. Crossley	Cambridge, England	Mar. 17, 1868	75, 531
Velocipede, Ice	M. Coffin	Milton, Ky	Sept. 13, 1870	107, 226
Velocipede, Ice	G. H. Miller and J. Jageler	Binghamton, N. Y	June 15, 1869	91, 253
Velocipede, Ice	A. Purvis	Louisville, Ky	Aug. 17, 1869	93, 833
Velocipede, Land and water	D. J. Farmer	Wheeling, W. Va	July 20, 1869	92, 807
Velocipede, Mechanical	A. M. Allen	New York, N. Y	Aug. 24, 1869	94, 058
Velocipede-saddle	G. B. Ambler	Bridgeport, Conn	June 8, 1869	91, 062
Velocipede, Sled	J. Bannihr	Hempstead, N. Y	June 11, 1867	65, 633
Velocipede-steering mechanism	A. Christian	New York, N. Y	Nov. 8, 1870	108, 967
Velocipede trotting or pacing horse	H. A. Reynolds	New York, N. Y	Mar. 7, 1865	46, 705
Velocipede-vehicle	H. Bogel	Watertown, Wis	June 17, 1862	35, 583
Velocipede-vehicle	S. W. Barr	Mansfield, Ohio	Oct. 2, 1860	30, 192
Velocipede, Water	F. A. Spofford and M. G. Raffington.	Columbus, Ohio	Oct. 5, 1869	95, 531
Velocipede-wheel	W. Duryea	Glen Cove, N. Y	Nov. 23, 1869	97, 176
Velocipedes and other machines, Apparatus for operating.	F. Rourk	Erie, Pa	May 18, 1869	90, 310
Velocipede on a single track, Mode of guiding	J. H. Irwin	Philadelphia, Pa	May 4, 1869	89, 584
Velocipedes, Sleigh-attachment for	T. Searing	New York, N. Y	Oct. 5, 1869	95, 521
Velocity-graduating machine	E. W. Jackson	Albany, N. Y	Jan. 5, 1841	1, 923
Velvet, &c., Apparatus for renovating	M. J. and J. T. Dewey	West Troy, N. Y	Aug. 26, 1873	142, 088
Velvet, &c., Press for embossing and figuring	J. Nagele	Altoona, Pa	Nov. 2, 1858	21, 976
Velvet-reel	P. Jürgens	Saint Paul, Minn	May 21, 1872	126, 967
Veneer	H. F. Shepherd	Framingham, Mass	Nov. 10, 1868	84, 008
Veneer	J. B. Wilson	New York, N. Y	Jan. 14, 1868	73, 421
Veneer and ornamental covering for articles, Compound.	R. A. Adams	New York, N. Y	Nov. 9, 1869	96, 650
Veneer-cutter	E. Jewett	Rindge, N. H	Aug. 27, 1867	68, 203
Veneer-cutter	E. Jewett	Rindge, N. H	June 2, 1868	78, 458
Veneer-cutter	G. Koch	New York, N. Y	July 5, 1870	105, 092
Veneer-cutter	J. N. Seib	Boston, Mass	Apr. 1, 1873	137, 489
Veneer-cutter	J. N. Seib	Boston, Mass	Aug. 5, 1873	141, 596
Veneer-cutter	W. Steele	Sisterville, W. Va	Apr. 12, 1870	101, 782
Veneer-cutter	J. B. Wilson	New York, N. Y	Mar. 19, 1867	63, 128
Veneer-cutting	J. Hamilton	New York, N. Y	Nov. 10, 1836	....
Veneer-cutting machine	G. Bishop	New York, N. Y	May 5, 1857	17, 190
Veneer-cutting machine	G. Bishop	Fairfield, Conn	Sept. 21, 1858	21, 590
Veneer-cutting machine	M. Bonnell and I. I. Cole	New York, N. Y., and Tappan, N. J.	Oct. 4, 1859	25, 622
Veneer-cutting machine	J. C. Brown	Nyack, N. Y	Mar. 26, 1872	124, 880
Veneer-cutting machine	I. I. Cole	New York, N. Y	Sept. 10, 1861	33, 279
Veneer-cutting machine	P. Cook	Tonawanda, N. Y	Feb. 3, 1857	16, 529
Veneer-cutting machine	W. H. Doane	Chicago, Ill	Mar. 4, 1862	34, 566
Veneer-cutting machine	D. Donald	New York, N. Y	Apr. 17, 1860	27, 893
Veneer-cutting machine	J. Dresser	Stockbridge, Mass	Sept. 3, 1840	1, 758
Veneer-cutting machine	W. Foster	New York	Sept. 1, 1843	3, 252
Veneer-cutting machine	G. Gardner	Clarksville, N. J	Oct. 27, 1863	40, 402
Veneer-cutting machine	E. S. Gilmore	San Francisco, Cal	Sept. 3, 1872	131, 094
Veneer-cutting machine	J. R. Graham	New York, N. Y	Dec. 20, 1864	45, 488
Veneer-cutting machine	W. R. Greenleaf and A. Cole	Gerry, N. Y	Feb. 18, 1840	1, 493
Veneer-cutting machine	J. Hamilton	New York, N. Y	Nov. 10, 1836	77
Veneer-cutting machine	T. Hanvey	Rochester, N. Y	Apr. 25, 1871	114, 134
Veneer-cutting machine	C. Hart	Bridgeport, Conn	Apr. 4, 1854	10, 739
Veneer-cutting machine	L. P. Hawes	New York, N. Y	Feb. 11, 1862	34, 365
Veneer-cutting machine	H. Kassing	New York, N. Y	Feb. 25, 1868	74, 830
Veneer-cutting machine	G. Koch and A. Stoeckel	New York, N. Y	Apr. 24, 1860	27, 991
Veneer-cutting machine	J. W. Leslie and G. R. Smith	Cairo, Ill	May 13, 1873	138, 901
Veneer-cutting machine	H. Parker and C. W. Hawkes	Boston, Mass	July 28, 1863	39, 352
Veneer-cutting machine	C. Poppenhusen	New York, N. Y	July 16, 1850	7, 512
Veneer-cutting machine	J. N. Seib	Boston, Mass	Aug. 20, 1873	130, 754
Veneer-cutting machine	J. N. Seib	Boston, Mass	Dec. 2, 1873	145, 246
Veneer-cutting machine	J. Skinner	Stockbridge, Mass	Sept. 21, 1837	387
Veneer-cutting machine	T. B. Smith	Ansonia, Conn	July 23, 1867	66, 997
Veneer-cutting machine	J. Sperry	New York, N. Y	May 20, 1862	35, 332
Veneer-cutting machine	C. W. Spurr	Boston, Mass	Dec. 17, 1872	134, 012
Veneer-cutting machine	J. A. Squires	New York, N. Y	Sept. 9, 1873	142, 591
Veneer-cutting machine	P. Weiler	New York, N. Y	Feb. 28, 1860	27, 326
Veneer-cutting machine	W. H. Williams	Brooklyn, N. Y	Nov. 25, 1873	144, 938
Veneer-cutting machinery, &c	E. B. Cherevoy	New York, N. Y	Apr. 17, 1849	6, 326
Veneer-cutting machinery	H. Parker and J. C. Sleeper	Boston, Mass	July 1, 1862	35, 778
Veneer-cutting, Revolving stay-log for	J. N. Lyman	New York, N. Y	Dec. 1, 1868	84, 637
Veneer-keg	G. W. Swan	San Francisco, Cal	Aug. 19, 1873	141, 963
Veneer-machine, Rotary	G. Bishop	New York, N. Y	Aug. 11, 1857	17, 958
Veneer, Mosaic	O. Heinigke and M. Laemmel	Bay Ridge, N. Y	May 29, 1860	28, 481
Veneer-polisher	E. Allen	South Windham, Conn	June 20, 1854	11, 107
Veneer-press	D. Decker	New York, N. Y	Jan. 12, 1869	85, 800
Veneer, Rubber	B. J. Stevens	Prairie du Chien, Wis	Apr. 25, 1871	114, 218
Veneer-sawing machine	C. B. Burnap	New York	Dec. 14, 1830	....
Veneer-sawing machine	J. McGrew	Ravenswood, W. Va	Dec. 24, 1872	134, 297
Veneer-sawing machine	F. H. Plummer	Plymouth, N. H	Sept. 10, 1872	131, 225
Veneer-sawing machine	A. Stewart	Baltimore, Md	July 5, 1817	....
Veneers and cutting and slitting tenons, Machine for slitting small.	J. McClintic	Chambersburgh, Pa	Apr. 21, 1829	....
Veneers, Application of embossed	I. Amies	Philadelphia, Pa	Dec. 11, 1855	13, 899
Veneers by machinery, Mode of cutting	C. B. Burnap	Belfast, Me	May 1, 1829	....
Veneers, Caul for laying	L. A. Johnson	New York, N. Y	May 3, 1870	102, 553
Veneers from cylindrical blocks, Machine for cutting	B. S. Stedman	Warren, Mass	July 3, 1849	6, 567
Veneers, &c., from the circumference of a log, Machine for cutting.	J. Humphrey	Harrington Township, N. J.	Oct. 26, 1842	2, 834
Veneers from the log, Machine for cutting	J. H. Goodell	Bridgeport, Conn	Dec. 23, 1856	16, 308
Veneers into figures, Cutting	J. Fielemeier	Philadelphia, Pa	Sept. 5, 1848	5, 747
Veneers, Knife for cutting	G. Bishop	New York, N. Y	Apr. 21, 1857	17, 072
Veneers, Machine for chamfering	G. Williamson	Newark, N. J	Sept. 4, 1860	29, 942
Veneers, &c., Machine for cutting and straightening	C. E. Warner	New York, N. Y	Dec. 4, 1843	3, 339

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Veneers, Machine for scraping and toothing	A. Goodman and L. Wheeler	Dana, Mass	Feb. 14, 1854	10, 536
Veneers, Machine for straightening	J. H. Goodell	Bridgeport, Conn	July 7, 1857	17, 736
Veneers, Manufacture of plastic	C. Kuttler	West Hoboken, N. J	Nov. 16, 1869	96, 815
Veneers, Method of perfecting	A. H. Allen	Boston, Mass	Apr. 29, 1873	138, 357
Veneers, Mode of manufacturing	E. Jewett	Rindge, N. H	July 30, 1867	67, 312
Veneers of mahogany, Shaving	S. Bonnel	New Jersey	Feb. 28, 1816	....
Veneers on columns, Gluing	B. Hinkley	Fayette, Me	Apr. 27, 1830	....
Veneers on moldings, Laying	J. Sowle	United States	Aug. 31, 1836	13
Veneers on ogee and other moldings, Laying	J. Soule	New Bedford, Mass	Aug. 31, 1836	....
Veneers, Preparing timber for cutting into	T. Hanvey	Elma, N. Y	Apr. 3, 1866	53, 610
Veneers, &c., Sawing	J. P. Allen	Manchester, Mass	Dec. 8, 1826	....
Veneers straight or curved, Machine for laying on	C. Kittenger	Massillon, Ohio	Mar. 14, 1840	1, 514
Veneering	A. McBurth	New York	July 28, 1846	4, 674
Veneering articles with pyroxyle, Method of	L. R. Streeter	Chelsea, Mass	Mar. 23, 1869	88, 228
Veneering, Caul for	H. Knowles	Washington, D. C	Sept. 25, 1849	6, 738
Veneering curved surfaces, Machine for	C. Kittinger	East Greenville, Ohio	Nov. 21, 1842	2, 856
Veneering, inlaying, &c., Treating marine algæ for	T. G. Ghislin	London, England	Nov. 17, 1863	40, 619
Veneering into strips, Machine for cutting	G. W. Manton	Fredonia, N. Y	Mar. 28, 1871	113, 071
Veneering-machine	R. D. Bartlett	Bangor, Me	Dec. 27, 1859	26, 556
Veneering, Method of	C. B. Burnap	Hartford, Conn	Sept. 27, 1853	10, 056
Veneering-plow for cabinet-work	W. Stillman	....	Mar. 16, 1801	....
Veneering-press	L. A. and J. W. Brown	Hartford, Conn	Jan. 10, 1854	10, 400
Veneering-press	J. More	New York, N. Y	Aug. 16, 1870	106, 391
Veneering-saw	A. F. Smith	Salem, Mass	Sept. 10, 1829	....
Veneering the walls of buildings, Mode of	G. B. and B. F. Field	Saint Louis, Mo., and Beloit, Wis.	Mar. 17, 1857	16, 827
Vent	O. S. Camp	Grand Rapids, Mich	Jan. 28, 1873	135, 320
Vent	C. O. H. Loeper	Albany, N. Y	Aug. 13, 1872	130, 379
Vent-apparatus for barrels	O. Ernst	New York, N. Y	Aug. 12, 1862	36, 143
Vent, Beer-cask	L. Poh	Buffalo, N. Y	July 16, 1872	129, 166
Vent-gimlet	H. S. Rummer	Binghamton, N. Y	Aug. 5, 1873	141, 465
Vent for barrels	S. Pike	Brattleborough, Vt.	July 12, 1839	1, 237
Vent for barrels	T. Simmons	Chicago, Ill	Sept. 26, 1865	50, 176
Vent for cans	T. W. Burger	New York, N. Y	May 11, 1869	89, 914
Vent for cans, Self-acting	E. M. Crandal	Alton, Ill	Sept. 24, 1867	69, 078
Vent for casks	W. Ascough	Buffalo, N. Y	July 26, 1870	105, 764
Vent for casks, Spring	E. J. Bennett	Port Huron, Mich	Aug. 8, 1871	117, 731
Vent for sheet-metal cans	R. Porter	Philadelphia, Pa	Feb. 11, 1868	74, 244
Vent peg and valve for beer-casks	S. Bourne	Headstone Drive Harrow, Great Britain.	Mar. 26, 1867	63, 202
Vent-plug	J. Bain	Brooklyn, E. D., N. Y	July 2, 1867	66, 281
Vent-plug	T. R. Hicks	New Britain, Conn	Apr. 9, 1867	63, 636
Vent-plug	E. Mill and A. S. Wetmore	Cleveland, Ohio	Apr. 23, 1872	125, 901
Vent-plug	C. H. Miller and W. Ascough	Buffalo, N. Y	Feb. 7, 1871	111, 664
Vert-plug	M. Vassar	Poughkeepsie, N. Y	June 27, 1846	4, 605
Vent-plug	G. Weaver and H. N. Allen	Boston, Mass	Feb. 9, 1869	86, 890
Vent-plug	O. N. Wood	Windsor, Vt	July 16, 1867	66, 929
Ventilated bath, Veterinary	J. Carver	Philadelphia, Pa	Aug. 8, 1817	....
Ventilating and cooling, Mode of	D. E. Somes	Washington, D. C	Oct. 19, 1869	96, 047
Ventilating and desiccating	E. H. Ashcroft	Lynn, Mass	Aug. 18, 1868	81, 060
Ventilating and illuminating risers, Mode of	M. J. McCormick	New York, N. Y	June 2, 1863	38, 788
Ventilating-apparatus	H. A. Gouge	Brooklyn, N. Y	May 9, 1865	47, 633
Ventilating-apparatus	J. McKinnell	London, England	Nov. 18, 1862	36, 981
Ventilating-apparatus	W. Potts	Handsworth, England	June 16, 1868	78, 894
Ventilating-apparatus	E. Y. Robbins	Cincinnati, Ohio	July 11, 1865	48, 722
Ventilating-apparatus	E. L. Roberts	Brooklyn, N. Y	July 27, 1869	93, 007
Ventilating-cowl	B. F. Miller	New York, N. Y	Dec. 3, 1867	71, 630
Ventilating houses, System of	B. J. Burnett	Mount Vernon, N. Y	Feb. 13, 1866	52, 528
Ventilating-pad	J. P. McLean	Brooklyn, N. Y	Sept. 26, 1865	50, 147
Ventilating-pipe for houses, &c	D. Estes	Newton, Mass	Feb. 5, 1867	61, 820
Ventilating-pipe for stoves and heaters	A. A. Wilder	Detroit, Mich	Sept. 18, 1866	58, 159
Ventilating-register	J. Leeds	Philadelphia, Pa	Jan. 18, 1859	22, 658
Ventilation	G. W. Blake	New York, N. Y	Dec. 1, 1868	84, 608
Ventilation	E. Y. Robbins	Cincinnati, Ohio	May 6, 1862	35, 177
Ventilator: *See* Air-ventilator. Automatic ventilator. Boot and shoe ventilator. Building-ventilator. Cabinet-ventilator. Car-ventilator. Chimney-ventilator. Dwelling-ventilator. Eduction-ventilator. Flour-mill ventilator. Fruit-house ventilator. Grain-ventilator. Hat-ventilator. Hat and cap ventilator. Hat or cap ventilator. House-ventilator. Mill-ventilator. Millstone-ventilator. Mine-ventilator. Mining-shaft and building ventilator. Nautical ventilator. Pump-ventilator. Sash-ventilator. Ship-ventilator. Smoke-ventilator. Stove-ventilator. Stove-pipe ventilator. Tent-ventilator. Thermo-circulating ventilator. Water-closet ventilator. Window-ventilator.				
Ventilator	J. Ballou	Boston, Mass	Aug. 26, 1873	142, 140
Ventilator	G. R. Barker	Philadelphia, Pa	Feb. 14, 1871	111, 718
Ventilator	G. R. Barker	Germantown, Pa	Feb. 4, 1873	135, 507
Ventilator	O. Barr	Beloit, Mich	Apr. 19, 1870	101, 972
Ventilator	B. J. Burnett	Mount Vernon, N. Y	Jan. 10, 1865	45, 814
Ventilator	B. J. Burnett	Mount Vernon, N. Y	Nov. 7, 1865	50, 794
Ventilator	B. J. Burnett	Mount Vernon, N. Y	Feb. 13, 1866	52, 527
Ventilator	B. J. Burnett	Mount Vernon, N. Y	Feb. 9, 1869	86, 809
Ventilator	M. M. Camp	New Haven, Conn	Aug. 17, 1852	9, 193
Ventilator	W. Chadwick	Bury, England	Mar. 6, 1860	27, 405
Ventilator	F. D. Chase	Boston, Mass	June 23, 1863	38, 946
Ventilator	G. B. Clarke	Leonardsville, N. Y	Feb. 21, 1860	27, 204
Ventilator	G. Colhoun	Philadelphia, Pa	Jan. 31, 1860	26, 967
Ventilator	R. T. Crane	Chicago, Ill	Apr. 14, 1868	76, 717
Ventilator	R. T. Crane	Chicago, Ill	Apr. 14, 1868	76, 718

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Ventilator	E. M. Deey	New York, N. Y	Mar. 1, 1870	100, 267
Ventilator	E. M. Deey	New York, N. Y	Jan. 10, 1871	110, 905
Ventilator	A. S. Dozier	Norfolk, Va	Dec. 21, 1852	9, 481
Ventilator	E. J. Durant	Lebanon, N. H	Oct. 18, 1870	108, 464
Ventilator	F. Emerson	Boston, Mass	July 3, 1847	5, 182
Ventilator	F. Emerson	Boston, Mass	July 3, 1847	5, 183
Ventilator	W. Ennis	Philadelphia, Pa	Jan. 3, 1871	110, 641
Ventilator	W. Ennis	New York, N. Y	Jan. 10, 1871	110, 838
Ventilator	J. W. Foard	San Francisco, Cal	July 14, 1868	79, 820
Ventilator	J. F. Frye	Lowell, Mass	Aug. 4, 1868	80, 719
Ventilator	R. A. Goodyear	Binghamton, N. Y	Feb. 1, 1870	99, 429
Ventilator	H. A. Gouge	Brooklyn, N. Y	Apr. 25, 1865	47, 413
Ventilator	H. A. Gouge	Brooklyn, N. Y	June 20, 1871	116, 049
Ventilator	G. D. Greenleaf	Chateaugay, N. Y	June 14, 1859	24, 387
Ventilator	E. M. Greenway, jr	Baltimore, Md	June 25, 1872	128, 301
Ventilator	G. Harley and J. Sedgwick	Philadelphia, Pa	June 1, 1832	....
Ventilator	T. C. Hatch	South Braintree, Mass	June 17, 1851	8, 167
Ventilator	B. R. Hawley	Normal, Ill	Dec. 28, 1869	98, 372
Ventilator	G. Hayes	New York, N. Y	Aug. 31, 1869	94, 203
Ventilator	W. Hobzhäuser	Buffalo, N. Y	Sept. 8, 1868	81, 905
Ventilator	L. Hoszek	New York, N. Y	Nov. 19, 1867	71, 173
Ventilator	A. Hurff	Swedesborough, N. J	Aug. 18, 1868	81, 091
Ventilator	M. T. Hynes	Boston, Mass	Aug. 24, 1869	94, 115
Ventilator	J. Hyslop	New York, N. Y	Sept. 13, 1864	44, 196
Ventilator	H. S. Janes	Oshkosh, Wis	July 12, 1870	105, 215
Ventilator	J. H. Kaman	Cambridgeport, Mass	July 23, 1872	129, 735
Ventilator	H. Kelley	Boston, Mass	Feb. 2, 1869	86, 413
Ventilator	L. Kelley	Boston, Mass	Mar. 19, 1872	124, 687
Ventilator	O. Krakoviez	Chicago, Ill	Feb. 23, 1869	87, 178
Ventilator	S. H. Lamon	Willoughby, Ohio	Nov. 8, 1864	44, 951
Ventilator	P. Lear	Medford, Mass	Dec. 27, 1864	45, 672
Ventilator	P. Lear	Medford, Mass	Mar. 2, 1865	46, 913
Ventilator	J. Leeds	Philadelphia, Pa	Nov. 15, 1853	10, 232
Ventilator	A. Marrio:t	Saint Louis, Mo	Dec. 5, 1871	121, 639
Ventilator	B. F. Miller	New York, N. Y	May 30, 1871	115, 339
Ventilator	J. A. Miller	New York, N. Y	Apr. 23, 1867	64, 128
Ventilator	C. J. Neger	Philadelphia, Pa	Dec. 28, 1869	98, 399
Ventilator	J. and J. Peckham	Middletown, R. I	Oct. 6, 1868	82, 746
Ventilator	W. E. Phelps	Elmwood, Ill	Mar. 15, 1870	100, 797
Ventilator	W. L. Phillips	Normal, Ill	Dec. 7, 1869	97, 689
Ventilator	T. T. Prosser	Fond du Lac, Wis	Feb. 24, 1863	37, 772
Ventilator	M. M. Reily	New Haven, Conn	May 25, 1869	90, 580
Ventilator	E. L. Roberts	New York, N. Y	June 30, 1868	79, 395
Ventilator	W. F. Ross	Davenport, Iowa	Nov. 8, 1870	109, 056
Ventilator	P. I. Schopp	Louisville, Ky	Dec. 31, 1872	134, 401
Ventilator	W. T. Sears and W. Edson	Boston, Mass	Aug. 31, 1869	94, ;45
Ventilator	A. F. Smith	Ellsworth, Me	Oct. 22, 1867	70, 037
Ventilator	J. L. Smith	Tuscola, Ill	May 3, 1864	42, 606
Ventilator	D. M. Sprogle and J. E. Dickson	Annapolis, Md	Feb. 28, 1871	112, 190
Ventilator	E. H. Strong	Janesville, Wis	Dec. 6, 1864	45, 357
Ventilator	W. F. Thoms	New York, N. Y	Dec. 7, 1869	97, 570
Ventilator	F. Z. Tucker	Brooklyn, N. Y	July 9, 1872	128, 929
Ventilator	W. L. Washburn	Springfield, Mass	July 2, 1861	32, 730
Ventilator	D. Wells	Lowell, Mass	Nov. 2, 1852	9, 375
Ventilator	H. White	Chicago, Ill	June 8, 1869	90, 976
Ventilator	R. White	Boston, Mass	Oct. 17, 1871	120, 138
Ventilator	C. F. Whorf	Saint Louis, Mo	Dec. 7, 1869	97, 576
Ventilator	H. B. Worth	Chicago, Ill	Feb. 18, 1868	74, 655
Ventilator	G. J. Zimmerman	Baltimore, Md	Feb. 2, 1869	86, 622
Ventilator and chimney-top	J. McGowan	New York, N. Y	Mar. 7, 1871	112, 475
Ventilator and cooler	J. R. Barry	Philadelphia, Pa	May 15, 1855	12, 851
Ventilator and dust-arrester	L. K. Fuller	Brattleborough, Vt	Sept. 10, 1872	131, 266
Ventilator and refrigerator	W. Wellington	Rockford, Ill	May 11, 1869	89, 905
Ventilator and window-screen	J. R. Wharry	Moundville, W. Va	Jan. 7, 1868	73, 213
Ventilator for rooms, &c	J. M. Burton	Salem, Ga	Aug. 17, 1839	1, 298
Ventilator-operating mechanism	A. L. Pennock	Philadelphia, Pa	June 27, 1871	116, 483
Ventilator or blower	J. F. Collins	New York, N. Y	Jan. 10, 1871	110, 898
Ventilator or cowl	J. Edson	Boston, Mass	June 7, 1870	103, 856
Ventilator-register	H. M. Phinney	Cambridge, Mass	May 10, 1870	102, 967
Ventilators, Apparatus for operating	I. P. Trimble	Livingston, N. Y	Mar. 13, 1855	12, 534
Ventilators in place, Mode of fastening	M. Zabel	Milwaukee, Wis	June 19, 1866	55, 757
Ventilators, Lubricator for	H. Thomas	New York, N. Y	Aug. 31, 1869	94, 254
Verdigris, Manufacturing	G. F. Hagner	Philadelphia, Pa	Oct. 13, 1817	....
Verdigris, Process for manufacturing	L. Brumlen	Hoboken, N. J	Sept. 8, 1857	18, 133
Vermicelli-cutting machine	G. Schwarzwalder	Pittsburgh, Pa	June 29, 1869	91, 971
Vermifuge	J. McKinsey	Millville, N. J	Mar. 17, 1868	75, 561
Vermifuge, Preparing	J. Lehman	Philadelphia, Pa	Aug. 11, 1807	....
Vermin and insects, Device for destroying	D. H. Wood	Sandusky, N. Y	Mar. 29, 1864	42, 135
Vermin, Apparatus for destroying	L. Disbrow	Oswego, N. Y	July 31, 1860	29, 366
Vermin, Apparatus for exterminating	M. V. Nobles	Elmira, N. Y	Dec. 3, 1867	71, 780
Vermin, Composition for destroying	P. Müller	Pittsburgh, Pa	Jan. 9, 18:2	122, 532
Vermin, Compound for destroying	J. B. Hyde	New York, N. Y	Sept. 19, 1865	50, 006
Vermin, Compound for exterminating	A. E. Pearl	Mansfield, Conn	May 30, 1871	115, 512
Vermin-destroyer	W. Whitaker	Troy, N. Y	Jan. 27, 1857	16, 516
Vermin-destroying composition	S. Rose	Cincinnati, Ohio	May 17, 1864	42, 795
Vermin-exterminator	T. W. Houchin	Morrisania, N. Y	Oct. 24, 1871	120, 197
Vermin, Method of destroying	G. W. French and W. Wagstaff	Cambridge, Mass	Dec. 12, 1854	12, 056
Vermin, Preparation for destroying	J. W. Dodge	New York, N. Y	Feb. 23, 1864	41, 687
Vermin-trap	P. Pardee	New Haven, Conn	Jan. 29, 1867	61, 561
Vertical-engine frame	G. B. Sisson	Buffalo, N. Y	Aug. 5, 1873	141, 467
Vertical-spindle step	B. F. Dunklee	Concord, N. H	Nov. 2, 1869	96, 407
Vessel alarm, Sailing	Z. Pangborn	Algonac, Mich	July 20, 1869	92, 746
Vessel, Armor-clad	L. Goddu	Boston, Mass	Feb. 18, 1873	136, 055
Vessel, Ballasting	J. B. Stoner	New York, N. Y	Feb. 4, 1868	74, 169
Vessel, Ballasting	J. B. Stoner, L. Mendelson, and T. Crommelin.	New York, N. Y	Oct. 27, 1868	83, 420
Vessel-band tightener	J. Tingley	Philadelphia, Pa	Sept. 1, 1868	81, 843

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Invention.	Inventor.	Residence.	Date.	No.
Vessel, Chamber	J. Sullivan	Thornton, Canada	Jan. 16, 1872	122, 741
Vessel, Composite	J. Baird	New York, N. Y	Dec. 22, 1868	85, 051
Vessel, Cooking	L. P. and J. S. Bodkin	Brooklyn, N. Y	May 13, 1873	138, 846
Vessel cover, Circular	J. Kline	Rochester, N. Y	Nov. 24, 1868	84, 363
Vessel-covers, Device for securing	C. A. Marshall	Cleveland, Ohio	Feb. 13, 1872	123, 572
Vessel, Covered	W. Bates	Burslem, England	Sept. 23, 1873	143, 116
Vessel-drag	G. L. Upton	Milbridge, Me	Dec. 4, 1866	60, 287
Vessel for boiling	W. Kroeger	Milwaukee, Wis	Mar. 28, 1865	47, 025
Vessel for carrying liquid cargoes	W. G. Warden	Philadelphia, Pa	Jan. 10, 1871	110, 942
Vessel for carrying liquid cargoes	W. G. Warden	Philadelphia, Pa	Oct. 24, 1871	120, 353
Vessel for containing liquids under pressure	S. Marks	San Francisco, Cal	Apr. 29, 1873	138, 266
Vessel-floating machine	J. Denny	Queen Anne County, Md	Oct. 3, 1822	....
Vessel for mineral-water	A. D. Schnackenberg	Brooklyn, N. Y	Mar. 17, 1868	75, 582
Vessel for storing and transporting petroleum and other oils, Sailing.	P. A. Quinan	Baltimore, Md	Nov. 30, 1869	97, 442
Vessel for transporting grain in bulk	F. Demartini and J. Chertizza	New York, N. Y	Sept. 16, 1873	142, 842
Vessel, Iron-clad	R. Montgomery	New York, N. Y	Mar. 18, 1862	34, 727
Vessel, Iron-clad	L. Tees	Philadelphia, Pa	June 2, 1863	38, 771
Vessel-lighter	O. H. Ingram and D. Kennedy	West Eau Claire, Wis	Aug. 6, 1867	67, 433
Vessel-lighter	H. Stanton	Washington, D. C	Aug. 14, 1847	5, 224
Vessel-lighter	J. E. Worthman	Mobile, Ala	Apr. 16, 1872	125, 873
Vessel, Navigable	J. W. Griffiths	Philadelphia, Pa	May 13, 1862	35, 232
Vessel of war	J. L. Jürgens	Isle of Föhr, Denmark	Aug. 4, 1863	39, 408
Vessel of war	J. S. Underhill	New York, N. Y	Jan. 24, 1865	46, 037
Vessel-rudder	J. B. Baptista	New York, N. Y	Sept. 2, 1873	142, 367
Vessel side-light	W. Darley	Chatham, England	Sept. 6, 1870	107, 165
Vessel-signal	W. P. Craig and W. R. Rightor	Newport, Ky	Feb. 12, 1856	14, 226
Vessel-signals, System of	N. Shaler	New York	Feb. 21, 1810	....
Vessel, Steam	R. and T. Winans	Baltimore, Md	Oct. 26, 1858	21, 918
Vessel, the parts applying to other structures for defense, War.	M. J. Montgomery	New York, N. Y	Jan. 5, 1864	41, 167
Vessel, to be propelled by steam applied under water, Ball-proof.	T. Gregg	Connellsville, Pa	Mar. 19, 1814	....
Vessel to prevent it from sinking, Method of constructing steam.	R. McDonald	Harrisburgh, Pa	Nov. 10, 1841	2, 336
Vessel-trimming apparatus	E. L. Evans	Mount Holly, N. J	Mar. 19, 1850	7, 184
Vessel ventilator, alarm, and bilge-pump	W. F. J. Thiers	New York, N. Y	Nov. 29, 1870	109, 779
Vessels, Apparatus for buoying	T. C. McKeen	Irvington, N. J	July 31, 1866	56, 858
Vessels, Apparatus for determining weight of cargo in.	E. Morris	South Bergen, N. J	Sept. 12, 1854	11, 676
Vessels, Apparatus for discharging the cargo of sunken.	P. E. Falcon	Cohasset, Mass	July 25, 1865	49, 026
Vessels, Apparatus for elevating and immersing	J. Jacobs	West Salem, Wis	May 7, 1872	126, 461
Vessels, Apparatus for expelling water from the holds of.	T. W. Fox	New London, Conn	Apr. 2, 1867	63, 496
Vessels, Apparatus for indicating the height of water in the holds of.	W. R. Warden	Boston, Mass	Feb. 10, 1857	16, 621
Vessels, Apparatus for lightening	O. T. Williams	Smithland, Ky	Feb. 24, 1852	8, 766
Vessels, Apparatus for paying the seams of	J. W. Stoakes	Milan, Ohio	Mar. 7, 1854	10, 605
Vessels, Apparatus for raising coal from sunken	R. W. Dugan	Cairo, Ill	Jan. 2, 1872	122, 309
Vessels, Apparatus for raising	J. E. Gowen	Boston, Mass	Dec. 27, 1870	110, 564
Vessels, Apparatus for raising sunken	G. M. Allerton	New York, N. Y	Apr. 28, 1868	77, 237
Vessels, Apparatus for raising sunken	J. Burger	Elizabethport, N. J	Jan. 14, 1868	73, 294
Vessels, Apparatus for raising sunken	R. W. Hallett	Hudson City, N. J	Sept. 3, 1867	68, 501
Vessels, Apparatus for raising sunken	M. Osborne	Osbornville, Ohio	June 15, 1858	20, 578
Vessels, Apparatus for raising sunken	M. Osborne	Cleveland, Ohio	Sept. 5, 1871	118, 741
Vessels, Apparatus for raising sunken	W. D. Robinson	Buffalo, N. Y	Nov. 9, 1869	96, 734
Vessels, Apparatus for raising sunken	T. R. Timby	Auburn, N. Y	Apr. 21, 1842	2, 572
Vessels, Apparatus for raising sunken	E. Turner	Baltimore, Md	Mar. 8, 1864	41, 875
Vessels, Apparatus for raising sunken	T. Whittaker	Buffalo, N. Y	May 22, 1866	55, 026
Vessels, Apparatus for raising sunken	A. Winham	New York, N. Y	Sept. 14, 1858	21, 532
Vessels, Apparatus for relieving grounded	W. R. Rightor	Helena, Ark	Sept. 9, 1873	142, 732
Vessels, Apparatus for removing water from the holds of.	H. L. Stibbs	Savannah, Ga	May 28, 1867	65, 298
Vessels, Apparatus for towing	J. M. Kilner	Chester, England	Feb. 9, 1869	86, 676
Vessels, Apparatus for unloading	R. Ferguson	New Orleans, La	Nov. 3, 1857	18, 539
Vessels, Applying gum-elastic to	G. D. Cooper	New York	Jan. 7, 1835	....
Vessels, Arming war	J. P. Woodbury	West Roxbury, Mass	May 6, 1862	35, 193
Vessels, Armor-plating for	D. Gianibastiani	Washington, D. C	July 6, 1869	92, 302
Vessels, Arrangement of camel for raising sunken	T. Bell	New York, N. Y	July 21, 1857	17, 826
Vessels, Blocks used in building	J. Williston	Portsmouth, Va	Nov. 6, 1834	....
Vessels, Building	W. Annesley	Albany, N. Y	Nov. 6, 1830	....
Vessels, Building	T. W. Bakewell	Cincinnati, Ohio	Feb. 21, 1827	....
Vessels, Building and propelling	G. Burnham	Philadelphia, Pa	Dec. 10, 1840	1, 893
Vessels, Buoy for raising sunken	E. Fitzgerald	New York, N. Y	June 12, 1855	13, 030
Vessels by means of sliding-way, Raising	T. Sheffield	Greene County, N. Y	May 8, 1830	....
Vessels, Camel for raising	S. Woolston	Vincentown, N. J	Dec. 14, 1869	98, 005
Vessels, Camel for raising sunken	H. H. Siebe, W. A. Gorman, and T. Christy, jr.	London, England	July 22, 1873	141, 083
Vessels, Chock for	C. G. Bachelder	Camden, Me	Mar. 16, 1869	87, 751
Vessels, Composition for covering bottoms of	S. Williams	New York, N. Y	Mar. 18, 1842	2, 498
Vessels, Composition for the bottoms of	J. Pratt	Middletown, Conn	Jan. 14, 1809	....
Vessels, Composition stopper for	M. W. Brown	New York, N. Y	Nov. 21, 1871	121, 152
Vessels, Constructing	W. Ballard	New York, N. Y	Jan. 2, 1855	12, 119
Vessels, Constructing	J. Barron	Philadelphia, Pa	Apr. 5, 1833	....
Vessels, Constructing and rigging	I. Garretson	....	May 29, 1797	....
Vessels, Construction and defense of war	E. A. Stevens	Hoboken, N. J	Jan. 13, 1863	37, 411
Vessels, Construction and defense of war	O. Tufts	Boston, Mass	Mar. 24, 1863	38, 014
Vessels, Construction of	T. Bell	New York, N. Y	Feb. 28, 1860	27, 328
Vessels, Construction of	J. P. Curry	New York, N. Y	July 18, 1865	48, 795
Vessels, Construction of	W. A. Farley	Saint Andrew's Bay, Fla	Sept. 28, 1869	95, 215
Vessels, Construction of	J. H. Fellows	Cincinnati, Ohio	Sept. 4, 1847	5, 268
Vessels, Construction of	D. Gerrish	Boston, Mass	July 2, 1836	....
Vessels, Construction of	L. Hein	New York, N. Y	Apr. 5, 1864	42, 190
Vessels, Construction of	H. Hirsch	Middlesex County, England	Dec. 9, 1873	145, 347
Vessels, Construction of	J. Macpherson	Aberdeen, North Britain	June 25, 1872	128, 407
Vessels, Construction of	W. F. Morgan	New York, N. Y	Apr. 22, 1873	138, 178
Vessels, Construction of	Z. Pangborn	Algonac, Mich	Feb. 20, 1855	12, 445

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Vessels, Construction of	N. T. Weston	Boston, Mass	July 30, 1867	67, 241
Vessels, Construction of	A. Wingard	San Francisco, Cal	Oct. 3, 1871	119, 488
Vessels, Construction of hollow	W. F. Holske	New York, N. Y	May 23, 1871	115, 056
Vessels, Construction of iron	B. T. Babbitt	New York, N. Y	July 9, 1861	32, 741
Vessels, Construction of iron	S. J. Seely	Brooklyn, N. Y	May 21, 1861	32, 403
Vessels, Construction of monitor	S. Parr	Boston, Mass	Oct. 25, 1864	44, 837
Vessels, Construction of navigable	R. H. Tucker, jr	New York, N. Y	Apr. 12, 1859	23, 626
Vessels, Construction of steam	J. Montgomery	New York, N. Y	Mar. 1, 1859	23, 105
Vessels, Construction of steam	T. and W. L. Winans	Baltimore, Md	Nov. 4, 1873	144, 243
Vessels, Construction of war	P. Andrew	Cincinnati, Ohio	Sept. 8, 1863	39, 788
Vessels, Construction of war	J. P. Woodbury	Boston, Mass	Mar. 1, 1864	41, 802
Vessels, Construction of ways for drawing up	A. Miller	New London, Conn	Feb. 8, 1826	....
Vessels, Coupling for sectional	L. B. Raymond and W. Hanley	Lockport, Ill	Mar. 17, 1868	75, 645
Vessels, Courses (or lower sails) of square-rigged	S. W. Baxter and J. W. Chapman.	Dennis and Barnstable, Mass.	Sept. 6, 1864	44, 065
Vessels, Device for discharging bilge-water from the holds of.	M. F. Bagley	Alton, Ill	Oct. 30, 1866	59, 161
Vessels, Device for ejecting hot water on war	A. Q. Ross	Cleves, Ohio	Dec. 17, 1867	72, 420
Vessels, Device for expelling water from the holds of.	T. W. Fox	New London, Conn	June 12, 1866	55, 480
Vessels, Device for raising sunken	L. W. Briggs	Chicago, Ill	Sept. 23, 1873	143, 056
Vessels, Device for raising sunken	T. Collier	New York, N. Y	Oct. 10, 1871	119, 742
Vessels, Device for raising sunken	G. W. Fuller	Chelsea, Mass	Aug. 8, 1865	49, 342
Vessels, Device for raising sunken	S. M. Mequay	Melbourne, Australia	July 20, 1869	92, 854
Vessels, Device for scuttling	J. Hall	Mansfield, Mass	Oct. 27, 1868	83, 490
Vessels, Discharging	G. E. Winents	New York, N. Y	Feb. 9, 1864	41, 564
Vessels, Discharging grain from	C. H. Merry	Dunleith, Ill	Oct. 23, 1866	59, 047
Vessels, Drafting and modeling	H. C. Deputy	Michigan City, Ind	Aug. 1, 1854	11, 416
Vessels, Drawing-apparatus for portable	J. L. Treat	New York, N. Y	Feb. 25, 1862	34, 554
Vessels, Fishing-attachment for	S. Bell	Bellport, N. Y	Apr. 7, 1868	76, 387
Vessels, Flexible hose or float for supporting	W. M. Storm	Troy, N. Y	Apr. 29, 1851	8, 070
Vessels for repairing, Mode of raising	B. Waterhouse	New York	Apr. 15, 1826	....
Vessels for repairing, Raising	J. H. Greene	Providence, R. I	June 26, 1828	....
Vessels from cannon-balls, Device for protecting the hulls of.	F. Comtesse	New York, N. Y	Apr. 23, 1861	32, 121
Vessels from dragging anchors and parting cables, Mode of preventing.	R. Evarts	Madison, Conn	Nov. 25, 1839	1, 418
Vessels from lightning in or out of port, Protecting.	E. L. Keen	New York	June 27, 1832	....
Vessels from worms, Method of preserving	R. Peale	....	Dec. 14, 1798	....
Vessels, Gaff-block for	C. D. Smith	Bridgeport, Conn	Feb. 1, 1870	99, 362
Vessels, Grain-ceiling for	C. Lazarevitch	New York, N. Y	Aug. 13, 1872	130, 434
Vessels, Grapple for sunken	J. T. Martin	New York, N. Y	May 5, 1868	77, 501
Vessels, &c., Grappling and raising sunken	S. Rainbird	Norwich, Great Britain	May 6, 1862	35, 172
Vessel's hatch	J. P. Maddox	Belfast, Me	Nov. 15, 1870	109, 330
Vessels, &c., Hawse-hole for	J. C. Osgood	Troy, N. Y	Apr. 7, 1857	16, 992
Vessel's hold, Apparatus for discharging bilge-water from.	A. Herman	New Haven, Conn	Oct. 2, 1866	58, 416
Vessels, Hoop-jack for sailing	E. Foster	Fairton, N. J	Mar. 13, 1855	12, 506
Vessels, Hull of steam	R. and T. Winans	Baltimore, Md	Oct. 26, 1858	21, 917
Vessels in port, Method of ballasting	F. Demartini and J. Chertizza	Brooklyn, N. Y	May 21, 1872	126, 938
Vessels, &c., in the water, Apparatus for floating and raising.	S. Casson	Woodside, England	July 12, 1838	837
Vessels, Indicating the locality of and raising sunken.	J. Hyde	New York, N. Y	Aug. 21, 1855	13, 463
Vessels, Launching	G. Conkling	Conklingville, N. Y	Sept. 14, 1858	21, 534
Vessels, Launching, hauling, and building ways for	A. W. Thompson	New York, N. Y	Aug. 20, 1872	130, 768
Vessels, Lightening sea-going steam	J. C. F. Salomon and G. W. Morris.	Baltimore, Md	Jan. 5, 1858	19, 047
Vessels, Machine for cutting plugs for	J. Josslyn	New York	May 3, 1828	....
Vessels, Machine for paying seams of	S. Baker	Portsmouth, N. H	Apr. 3, 1849	6, 262
Vessels, Machine for puttying seams of	A. Stevens	Georgetown, Me	Nov. 30, 1869	97, 325
Vessels, Machine for tightening shrouds of	D. Stackpole	Portland, Me	Oct. 10, 1834	....
Vessels, Machine for unloading	I. I. Magee	Fernandina, Fla	Nov. 1, 1859	25, 973
Vessels, Machinery for raising sunken	J. Custis	Yarmouth, Mass	Dec. 10, 1841	2, 378
Vessels, Manner of lining sheet-iron	J. Kerr, W. Grant, and J. Potter.	Pittsburgh, Pa	May 7, 1832	2, 612
Vessels, Means for buoying and stopping holes in	J. W. Cooper	Hubbard, Ohio	Mar. 18, 1873	136, 817
Vessels, Means for flooding	J. Quigley	Saugerties, N. Y	Oct. 13, 1857	18, 411
Vessels, Means for stopping shot-holes in	J. Woodville	Chillicothe, Ohio	July 21, 1857	17, 852
Vessels, Means of forcing ashes from	J. Palmer	Sandisfield, Mass	Oct. 7, 1873	143, 461
Vessels, Means of protecting war	E. E. Stevens	Hoboken, N. J	Oct. 28, 1862	36, 868
Vessels, Mechanism for operating booms of	J. M. Wise	Wilmington, N. C	July 12, 1870	105, 286
Vessels, Metal-lined copper and other	J. Matthews	New York, N. Y	Mar. 25, 1873	137, 226
Vessels, Method of ascertaining the center of gravity and sailing-trims of.	J. Hobday	Portsmouth, Va	Sept. 14, 1843	3, 264
Vessels, Method of fitting bows of	B. Barstow	New York, N. Y	July 2, 1850	7, 469
Vessels, Method of graduating	F. P. Shaffner	Louisville, Ky	Dec. 18, 1866	60, 568
Vessels, Method of sheathing	D. Read	Hudson City, N. J	May 11, 1869	90, 022
Vessels, Mode of attaching buoys for raising	J. Brown	Stonington, Conn	Sept. 28, 1839	1, 344
Vessels, Mode of constructing the gaff of sail	J. Brown	Stonington, Conn	Dec. 31, 1838	1, 060
Vessels, Mode of covering the heads of the nails and bolts in.	W. Mellus	Dorchester, Mass	Aug. 3, 1822	....
Vessels, Mode of hauling off stranded	T. Bell	Bellport, N. Y	Oct. 22, 1840	1, 838
Vessels, Mode of heaving down	J. Crowninshield	Salem, Mass	Oct. 19, 1827	....
Vessels, Mode of unloading	G. Milson, H. Spendelow, and G. V. Watson.	Buffalo, N. Y	Aug. 2, 1864	43, 751
Vessels, Model for	S. Andrews	Perth Amboy, N. J	June 25, 1850	7, 449
Vessels, Mooring	A. W. Handcock	Allegan County, Mich	Dec. 29, 1857	18, 969
Vessels of soft metal, Method of making	J. Rand	United States	Aug. 7, 1844	3, 694
Vessels of war, Constructing and arming	E. A. Stevens	Hoboken, N. J	Oct. 28, 1862	39, 869
Vessels of war, Defensive armor for	C. O. Holyoke	Boston, Mass	Aug. 15, 1865	49, 407
Vessels of war, Port-closer for	W. S. Auchincloss	New York, N. Y	Dec. 15, 1863	40, 895
Vessels of war, Port-stopper for	J. Ericsson	New York, N. Y	Dec. 8, 1863	40, 830
Vessels on rollers, Moving	R. P. Joralemon and I. Lockman.	Northfield, N. Y	Apr. 16, 1831	....
Vessels, Oscillating cabin for	B. Weisker	New York, N. Y	July 15, 1873	140, 978
Vessels out of water for repairs, Machine for raising	J. T. Morgan	New York	Oct. 9, 1806	....

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Invention.	Inventor.	Residence.	Date.	No.
Vessels out of water, Raising	J. Chewes	Elmira, N. Y	Mar. 5, 1831	
Vessels over shoals, Method of carrying	J. A. Winslow	Roxbury, Mass	Aug. 20, 1850	7,587
Vessels over shoals, Method of lifting	A. Lincoln	Springfield, Ill	May 22, 1849	6,469
Vessels, Planking	T. Blanchard	New York	Mar. 20, 1834	
Vessels, Planking	W. Scarbrough	Darien, Ga	May 19, 1824	
Vessels, Planking	J. Thomas	Washington, D. C	Dec. 2, 1822	
Vessels, Ponton for raising sunken	J. Rice	Buffalo, N. Y	Aug. 26, 1873	142,275
Vessels, pots, &c., Mold for earthen	P. Schrag	Washington, D. C	Mar. 25, 1856	14,537
Vessels, Preserving iron-plated	J. P. Jouvin	Rochefort, France	Aug. 18, 1863	39,576
Vessels, Protecting bulwarks of war	W. Ballard	New York, N. Y	Nov. 1, 1853	10,174
Vessels, Protecting metallic sheathing of	E. M. Robinson	New Bedford, Mass	Aug. 8, 1837	346
Vessels, Raising	T. Cook	Scituate, Mass	June 30, 1836	
Vessels, Raising	T. R. Gedney	Washington, D. C	Aug. 9, 1833	
Vessels, Raising	F. Huston	New Orleans, La	July 18, 1854	11,327
Vessels, Raising sunken	W. Atkinson and E. Hale	New York	Dec. 2, 1835	
Vessels, Raising sunken	T. Bell	Bellport, N. Y	Feb. 14, 1865	46,333
Vessels, Raising sunken	H. V. Corbett	Buffalo, N. Y	Feb. 27, 1855	12,436
Vessels, Raising sunken	A. Dillon	Paris, France	Apr. 7, 1868	76,416
Vessels, Raising sunken	O. Drouillard	Detroit, Mich	Sept. 11, 1866	57,881
Vessels, Raising sunken	W. H. Fairbank	Broad Creek Neck, Md	Sept. 8, 1863	39,805
Vessels, Raising sunken	P. E. Falcon	Cohasset, Mass	Jan. 20, 1863	37,438
Vessels, Raising sunken	T. G. Ford and P. Plant	New York, N. Y., and Washington, D. C.	Mar. 2, 1858	19,500
Vessels, Raising sunken	R. W. Hallett	Brooklyn, N. Y	Mar. 18, 1873	136,832
Vessels, Raising sunken	C. Harrison	Milwaukee, Wis	Dec. 27, 1864	45,602
Vessels, Raising sunken	W. Irwin	Philadelphia, Pa	Sept. 2, 1851	8,336
Vessels, Raising sunken	J. P. Jourda	New York, N. Y	Jan. 27, 1857	16,487
Vessels, Raising sunken	F. Kettler	Milwaukee, Wis	Jan. 13, 1863	37,401
Vessels, Raising sunken	H. F. Knapp	New York, N. Y	Dec. 10, 1872	133,863
Vessels, Raising sunken	C. Krogh and M. G. Hogness	Kroghville, Wis	Oct. 21, 1862	36,718
Vessels, Raising sunken	C. Krogh and M. G. Hogness	Kroghville and Iowa County, Wis.	Aug. 23, 1864	43,918
Vessels, Raising sunken	G. W. Lane and J. N. Bolles	Baltimore, Md	Oct. 16, 1866	58,842
Vessels, Raising sunken	A. Z. Page	Weaversville, Cal	June 6, 1865	48,091
Vessels, Raising sunken	J. Ponton	New York, N. Y	July 28, 1857	17,892
Vessels, Raising sunken	J. H. Smith	Cohasset, Mass	Feb. 23, 1864	41,726
Vessels, raising weights, &c., Machine for heaving down.	S. Colver		Dec. 14, 1798	
Vessels, Removable ceiling for	W. F. Morgan	New York, N. Y	Aug. 26, 1873	142,262
Vessels, Revolving prow for	D. Bookwalter	Gardner, Ill	Oct. 12, 1869	95,763
Vessels, Rig for	T. Bell	New York, N. Y	May 24, 1859	24,090
Vessels, Scupper for	R. L. P. Menning	Cleveland, Ohio	Mar. 29, 1864	42,096
Vessels, Sea-pipe for	D. W. Nearns	Saint Louis, Mo	June 28, 1864	43,329
Vessels, &c., Self-inflator for raising sunken	T. P. Edson	Cambridge, Ill	July 4, 1865	48,539
Vessels, Sheathing	H. Guest		Jan. 26, 1801	
Vessels, Sheathing for	H. Field, jr	New Bedford, Mass	Nov. 21, 1865	51,110
Vessels, Sheathing for iron	F. P. Warren	East Court, Cosham, Great Britain.	Apr. 17, 1866	54,083
Vessels, Shutter for port-holes of iron-clad	B. H. Bartol	Philadelphia, Pa	Apr. 7, 1863	38,083
Vessels, Slinging the yards of	I. Carver, jr	Prospect, Me	Dec. 11, 1827	
Vessels, Smoke-stack for steam	W. Webster	Jefferson County, Wash	July 13, 1858	20,909
Vessels, Steam-enginery for steam	J. Howe, jr	Boston, Mass	Apr. 6, 1869	88,714
Vessels, Steel-spring-bow fender for	W. Johnson	Louisville, Ky	May 16, 1834	
Vessels, Steering and turning apparatus for	C. G. Forshey	Washington County, Tex	May 9, 1866	55,080
Vessels, Supporting the topping-lift and peak-halyard-block of sail.	W. and S. G. Coleman	Providence, R. I	Mar. 15, 1853	9,619
Vessels, Tank for raising sunken	F. W. Beers	New York, N. Y	Apr. 26, 1870	102,359
Vessels, Theory of construction of	J. K. Howe	New York, N. Y	Sept. 19, 1848	5,771
Vessels to and from wharf or dock to water, Device for moving.	J. Du Bois	Williamsport, Pa	Aug. 18, 1868	81,075
Vessels, Traveler for	D. N. B. Coffin, jr	Boston, Mass	Oct. 17, 1871	119,969
Vessels, Traveler for	G. M. McClain	Rockport, Mass	Dec. 5, 1871	121,643
Vessels, Traveler for the jib-booms of	S. H. Downs	Bangor, Me	Aug. 13, 1867	67,639
Vessels, Ventilating	C. W. Skinner	Norfolk, Va	Aug. 23, 1822	
Vessels, Ventilating and purifying the air in	J. Remington	Baltimore, Md	Mar. 1, 1832	
Vessels, Ventilating the timbers of	E. Knight	Brooklyn, N. Y	July 17, 1847	5,193
Vessels, Warping-chock for	H. Trulsen	Painesville, Ohio	Oct. 17, 1871	120,131
Vessels, Water-defense as the protecting armor of	A. Pagenstecher	Valparaiso, Chili	June 28, 1864	43,377
Vessels, Way for drawing up	A. Miller	New London, Conn	July 7, 1828	
Vessels with crooked keels, Mode of constructing	E. Beebe		Apr. 27, 1803	
Vest	S. W. Huntington	Augusta, Me	Sept. 24, 1867	69,216
Vest	Z. Ober	Boston, Mass	Apr. 23, 1872	125,903
Vest	D. Vogl	London, Great Britain	Dec. 23, 1862	37,261
Vest, Lady's under	O. P. Flynt	Boston, Mass	Sept. 23, 1873	143,002
Vest, Sportsman's cartridge-holding	J. H. Black	Columbia, Pa	Nov. 18, 1873	144,594
Vest-spring and stiffener	J. G. Shute	Boston	Dec. 5, 1827	
Vest-supporter	B. F. Martin and E. Mapes	Rochester, N. Y	July 22, 1873	141,007
Vests, Adjustable back-strap for	R. Gibbons	San Francisco, Cal	Apr. 24, 1866	54,142
Viaduct	C. Bender	Phœnixville, Pa	Oct. 18, 1870	108,317
Viaduct, Iron	E. W. Serrell	New York, N. Y	Jan. 30, 1872	123,297
Viaduct, Iron	C. S. Smith	Baltimore, Md	Jan. 17, 1871	111,010
Viaduct, Tubular submarine	W. G. Mann	Savannah, Ga	May 24, 1870	103,350
Vial	W. S. How	Cincinnati, Ohio	Apr. 28, 1868	77,378
Vial-filling apparatus	J. P. Whipple	Woonsocket, R. I	Dec. 28, 1869	98,451
Vial for holding solutions	C. H. Morse	North Kingston, R. I	June 5, 1866	55,341
Viameter, Ship	J. C. Walker	Waco Village, Tex	Aug. 27, 1867	68,265
Vibrating shears	J. Toulmin	Worcester, Mass	Aug. 25, 1857	18,065
Victorine cape and cuff, Combined	D. Isaacsohn and A. Cohn	New York, N. Y	Oct. 30, 1866	59,227
Victualer, Economical	B. C. Burdett	New York	Aug. 4, 1827	
Vine and weed cutter	H. Lawrence	New York, N. Y	Dec. 27, 1870	110,477
Vine-cutter	C. Crenshaw	Bartlett, Tenn	Aug. 17, 1869	93,681
Vine cutter and garden-cultivator, Combined	P. Alling	Norwalk, Ohio	Oct. 27, 1868	83,437
Vine cutter and trimmer	H. W. White	Joppa Village, Mass	Aug. 16, 1870	106,437
Vine-holder	G. J. Olendorf and A. O. Parshall.	Middlefield, N. Y	Dec. 10, 1867	72,075
Vine-lock	E. F. Underhill	Brocton, N. Y	June 6, 1871	115,662
Vines, Device for training pea	J. T. Bever	Hainesville, Mo	July 12, 1859	24,712
Vines, Mode of protecting	A. H. Grennell	Springfield, Vt	Apr. 15, 1856	14,654

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Vines, plants, &c., Compound for destroying the oidium of.	C. P. Folliet	Amonce, France	Sept. 6, 1870	107, 027
Vines, Training	J. Sollenberger	Higginsport, Ohio	Apr. 4, 1854	10, 745
Vines, Training grape	R. Rowley	Rochester, N. Y	Dec. 22, 1868	85, 244
Vinegar and acidifying liquids, Manufacture of	R. D. Turner	New York, N. Y	July 12, 1870	105, 390
Vinegar and ageing spirits, Apparatus for making	W. M. Skelton	Greencastle, Ind	July 8, 1873	140, 653
Vinegar, Apparatus for making	P. Casamajor	New York, N. Y	Feb. 18, 1862	34, 403
Vinegar, Apparatus for making	T. Grundmann	Saint Anthony, Minn	Sept. 11, 1866	57, 894
Vinegar, Apparatus for making	T. Grundmann	Milwaukee, Wis	Apr. 2, 1867	63, 508
Vinegar, Apparatus for making	A. Hoeppner	Saint Louis, Mo	Oct. 16, 1866	58, 823
Vinegar, Apparatus for making	A. D. Strong	Ashtabula, Ohio	Dec. 14, 1869	97, 987
Vinegar, Apparatus for making	W. Weis	Saint Paul, Minn	Mar. 5, 1867	62, 715
Vinegar, Apparatus for making	C. Wesener	Cincinnati, Ohio	Oct. 17, 1865	50, 526
Vinegar, Apparatus for manufacture of	E. Arleth	Cincinnati, Ohio	Sept. 18, 1866	58, 044
Vinegar, Apparatus for manufacture of	J. Firmenich	Buffalo, N. Y	Mar. 19, 1867	62, 950
Vinegar, Apparatus for manufacture of	A. Foubert	New York, N. Y	Mar. 19, 1867	63, 031
Vinegar, Apparatus for manufacture of	T. Grundmann	Cleveland, Ohio	Oct. 6, 1868	82, 712
Vinegar, Apparatus for manufacture of	T. Grundmann	Cincinnati, Ohio	Dec. 20, 1870	110, 229
Vinegar, Apparatus for manufacture of	F. E. Josel	Freeport, Ill	Apr. 6, 1869	88, 642
Vinegar, Apparatus for manufacture of	S. Myers	Chicago, Ill	Mar. 29, 1864	42, 145
Vinegar, Apparatus for manufacture of	J. Richardson	New Haven, Conn	Aug. 20, 1867	67, 909
Vinegar, Apparatus for manufacture of	F. M. Ruschhaupt	New York, N. Y	July 31, 1860	29, 407
Vinegar, Apparatus for manufacture of	A. S. Tiffany and A. L. Wilson	Scott County, Iowa, and Rock Island County, Ill	Apr. 17, 1866	54, 041
Vinegar, Apparatus for manufacture of	R. D. Turner	New York, N. Y	June 11, 1872	127, 812
Vinegar, Apparatus for manufacture of	W. Weis	Saint Paul, Minn	June 4, 1867	65, 458
Vinegar, Apparatus for manufacturing	W. Scheide	New York, N. Y	Dec. 31, 1872	134, 441
Vinegar, Apparatus for purifying mash for the manufacture of.	G. Waters	Cincinnati, Ohio	Apr. 16, 1867	63, 970
Vinegar by quick process, Apparatus for making	A. Werné	Pittston, Pa	Feb. 25, 1862	34, 542
Vinegar by quick process, Arrangement of apparatus for manufacture of.	F. Michael	Des Moines, Iowa	Sept. 3, 1861	33, 206
Vinegar, Compound for the manufacture of	H. C. Luce and W. L. Rabe	Bloomington, Ill	Feb. 16, 1869	86, 969
Vinegar-generator	J. B. Netscher	Mansfield, Ohio	July 16, 1872	129, 162
Vinegar-manufacture	H. Eckert	Lodi, Wis	Nov. 28, 1865	51, 159
Vinegar-manufacture	A. Foubert	New York, N. Y	Mar. 10, 1868	75, 404
Vinegar-manufacture	M. Rino	Williamsburgh, N. Y	Mar. 21, 1865	46, 943
Vinegar-manufacture	H. A. Tilden	New Lebanon, N. Y	Oct. 27, 1868	83, 423
Vinegar-manufacture	A. C. Wills and H. Sharp	Marlton, N. J	Aug. 14, 1866	57, 238
Vinegar, Manufacture of	D. E. Cole	Manayunk, Pa	Mar. 20, 1866	53, 273
Vinegar, Manufacture of	J. Firmenich	Buffalo, N. Y	May 12, 1868	77, 727
Vinegar, Manufacture of	T. M. Freeman	Saint Louis, Mo	Oct. 30, 1866	59, 206
Vinegar, Manufacture of	J. Higbie	Rondout, N. Y	May 14, 1867	64, 669
Vinegar, Manufacture of	G. Kamps	Pittsburgh, Pa	Mar. 26, 1867	63, 256
Vinegar, Manufacture of	B. Koegel	New York, N. Y	Nov. 29, 1859	26, 271
Vinegar, Manufacture of	J. Palmer	Fort Scott, Kans	Aug. 7, 1860	29, 550
Vinegar, Manufacture of	P. Plodeck	Cleveland, Ohio	Oct. 11, 1870	108, 291
Vinegar, Manufacture of	J. Ruggles	Philadelphia, Pa	Jan. 30, 1849	6, 072
Vinegar, Manufacture of	H. P. Witbeck	Rochester, N. Y	Feb. 12, 1867	61, 978
Vinegar, Manufacture of	H. Wittich	Baltimore, Md	June 14, 1864	43, 148
Vinegar, Manufacturing	E. Clark	Saugerties, N. Y	June 19, 1834	....
Vinegar, Method of manufacturing	F. Schleifer	San Francisco, Cal	July 27, 1869	93, 012
Vinegar, Mode of making	F. W. Boden	New Lancaster, Ohio	July 6, 1835	....
Vinegar, Process for making	S. R. Holt	Worthington, Ohio	Sept. 1, 1868	81, 637
Vinegar, Process for manufacture of	A. H. Low	Tidioute, Pa	July 2, 1872	128, 496
Vinegar-room and white-lead-corroding chamber, Mutual arrangement of.	R. Rowland	Saint Louis, Mo	Oct. 9, 1855	13, 657
Violin	J. Belknap	Adrian, Mich	Sept. 23, 1873	143, 117
Violin	B. Bishop	New Russia, N. Y	Jan. 21, 1868	73, 569
Violin	N. Coburn	Savannah, Ga	May 17, 1853	9, 723
Violin, &c	C. S. Cooper	New York, N. Y	Nov. 8, 1853	10, 203
Violin	B. Fitts	Charlton, Mass	May 19, 1857	17, 324
Violin	J. Grandjon	Paris, France	Mar. 1, 1870	100, 284
Violin	G. H. Hulskamp	Troy, N. Y	Oct. 21, 1862	36, 713
Violin, &c	G. H. Hulskamp	New York, N. Y	July 2, 1867	66, 347
Violin	T. P. Knox	Boston, Mass	June 14, 1870	104, 324
Violin	J. Lenhard	New York, N. Y	June 8, 1869	91, 029
Violin	W. S. Mount	Stony Brook, N. Y	June 1, 1852	8, 981
Violin	S. Short	New London, Conn	May 2, 1854	10, 867
Violin	M. W. White	Boston, Mass	Nov. 29, 1870	109, 696
Violin and other bow-instruments	G. Gemünder	New York, N. Y	Nov. 19, 1867	70, 991
Violin-attachment	J. Gorham	Bairdstown, Ga	Oct. 3, 1857	18, 544
Violin-attachment	A. Hett	Augusta, Ga	May 5, 1857	17, 218
Violin-bow	S. F. French	Franklin, Vt	May 13, 1856	14, 860
Violin-bridge	S. Boden	Louisville, Ky	Mar. 2, 1869	87, 461
Violin chin-rest	A. W. White and J. J. Watson	Boston and Gloucester, Mass.	Oct. 26, 1869	96, 174
Violin-damper	A. F. H. Braun	San Francisco, Cal	July 11, 1865	48, 648
Violin-holder	I. H. Arey	Boscawen, N. H	June 21, 1870	104, 405
Violin, Piano	E. D. Blakeman	Mount Lebanon, N. Y	May 9, 1871	114, 520
Violin-players, Arm-regulator for	E. Mollenhauer	New York, N. Y	Mar. 24, 1868	75, 950
Violin-practice, Device for	S. Upson	New York, N. Y	Mar. 30, 1869	88, 423
Violin, Teaching the art of performing on the	R. McCormick, jr	Augusta County, Va	Apr. 21, 1831	....
Violins, Construction of	W. B. Tilton	Carrollton, Ala	Sept. 2, 1851	8, 338
Violins, Cutting the fronts and backs of	M. Keller	Philadelphia, Pa	Dec. 4, 1855	13, 878
Violins, Keyed finger-board for	W. Robertson	New York, N. Y	Nov. 8, 1853	10, 213
Violins, Tail-piece for	R. Kirk	Clarksville, Ohio	June 20, 1871	116, 198
Violins, Tail-piece for	J. Pfaff	Philadelphia, Pa	June 7, 1859	24, 329
Violins, Tail-piece for	J. Pfaff	Philadelphia, Pa	May 13, 1862	35, 256
Violins, Tail-piece for	J. Thomas	South Boston, Mass	Dec. 10, 1867	72, 121
Violins, Tail-piece for	C. M. Zimmerman	Philadelphia, Pa	Nov. 18, 1856	16, 102
Violins, &c., Tuning-peg for	J. Albert	Philadelphia, Pa	Feb. 5, 1861	31, 288
Vise	N. Allen	West Meriden, Conn	Apr. 28, 1863	38, 273
Vise	A. G. Andrén	Gottenburg, Sweden	June 8, 1869	91, 065
Vise	Q. S. Backus	Winchendon, Mass	June 2, 1868	78, 565
Vise	Q. S. Backus	Winchendon, Mass	June 8, 1869	91, 068
Vise	N. Baldwin	Buffalo, N. Y	June 15, 1869	91, 199
Vise	S. S. Barnaby	Macon, Ga	Feb. 4, 1868	73, 944

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Vise	C. Barnes	Cincinnati, Ohio	Apr. 14, 1868	76, 584
Vise	T. L. Baylies and E. Crawley	Richmond, Ind	Sept. 15, 1868	82, 073
Vise	J. D. Beck	Liberty, Pa	Apr. 13, 1869	88, 834
Vise	J. D. Beck	Liberty, Pa	Oct. 26, 1869	96, 189
Vise	J. D. Beck	Liberty, Pa	June 21, 1870	104, 541
Vise	A. H. Brainard	Dorchester, Mass	Jan. 3, 1865	45, 693
Vise	H. C. Brown	Yellow Springs, Ohio	July 8, 1856	15, 277
Vise	H. C. Brown	Warren, Ill	May 30, 1871	115, 275
Vise	C. Buss	Marlborough, N. H	May 6, 1856	14, 795
Vise	W. Butler	Little Falls, N. Y	Oct. 5, 1852	9, 294
Vise	I. and T. Byrd, jr	Calvin Township, Mich	Dec. 20, 1870	110, 198
Vise	H. B. Chaffee	New York, N. Y	June 24, 1856	15, 170
Vise	J. Chavanne	Porrentray, Switzerland	Oct. 4, 1870	107, 873
Vise	C. B. Clark	Oriskany Falls, N. Y	Mar. 16, 1858	19, 622
Vise	D. S. Coe	New Hartford, Conn	July 1, 1873	140, 404
Vise	I. Cogswell, jr	La Salle, Ill	Aug. 10, 1869	93, 416
Vise	C. A. Cole	Saint Louis, Mich	Sept. 28, 1869	95, 195
Vise	E. Coon	Kalamazoo, Mich	Dec. 4, 1866	60, 144
Vise	J. W. Coyne	Madrid, N. Y	Sept. 26, 1871	119, 327
Vise	E. Crawley and T. L. Baylies	Richmond, Ind	Apr. 27, 1869	89, 469
Vise	E. Crawley and T. L. Baylies	Richmond, Ind	Dec. 21, 1869	98, 040
Vise	E. Crawley and T. L. Baylies	Richmond, Ind	May 10, 1870	102, 919
Vise	E. Crawley and T. L. Baylies	Richmond, Ind	Feb. 20, 1872	123, 872
Vise	A. Crease	Cleveland, Ohio	July 11, 1871	116, 932
Vise	P. Crowl	Brownsville, Pa	May 29, 1866	55, 200
Vise	P. Crowl	Brownsville, Pa	Feb. 26, 1867	62, 319
Vise	J. C. Crumpton	Philadelphia, Pa	Oct. 13, 1868	83, 045
Vise	D. C. Cumings	Fulton, N. Y	Apr. 20, 1869	89, 130
Vise	R. J. Cushing	Bowdoinham, Me	Mar. 15, 1870	100, 868
Vise	S. Darling	Bangor, Me	Apr. 7, 1868	76, 410
Vise	H. B. Dart	Westfield, Mass	Aug. 1, 1865	49, 094
Vise	R. W. and D. Davis	Yellow Springs, Ohio	Aug. 28, 1855	13, 489
Vise	O. Dean	Richmond, Va	Oct. 12, 1869	95, 663
Vise	F. J. Dibble	Chicago, Ill	Sept. 15, 1868	82, 095
Vise	A. Dick	Buffalo, N. Y	Oct. 18, 1870	108, 335
Vise	J. Edson	Boston, Mass	June 21, 1870	104, 437
Vise	G. M. Evans	Pittsburgh, Pa	June 18, 1872	127, 969
Vise	S. Fahrney	Boonsborough, Md	June 3, 1856	15, 051
Vise	J. Findlay	Toronto, Canada	Nov. 8, 1870	109, 121
Vise	I. Fisher	Saint Louis, Mo	May 5, 1868	77, 472
Vise	I. Fisher	Saint Louis, Mo	Sept. 1, 1868	81, 764
Vise	O. V. Flora	Madison, Ind	June 18, 1867	65, 898
Vise	O. V. Flora	Madison, Ind	July 7, 1868	79, 566
Vise	O. V. Flora	Madison, Ind	Sept. 29, 1868	82, 612
Vise	O. V. Florey	Yellow Springs, Ohio	Apr. 8, 1856	14, 603
Vise	F. H. Furniss	Waterloo, N. Y	Apr. 20, 1869	89, 138
Vise	O. H. Gardner	Fulton, N. Y	Aug. 4, 1868	80, 722
Vise	O. H. Gardner	Fulton, N. Y	Nov. 9, 1869	96, 580
Vise	D. Green	Renrock, Ohio	Apr. 1, 1873	137, 302
Vise	T. Hall	Florence, Mass	June 24, 1873	140, 269
Vise	W. P. Harwood	Cambridge, N. Y	Apr. 4, 1871	113, 656
Vise	F. Higel	Philadelphia, Pa	May 16, 1871	114, 817
Vise	R. S. Hildreth	South Adams, Mass	Nov. 1, 1870	108, 784
Vise	J. S. Hoar	West Acton, Mass	May 28, 1867	65, 081
Vise	B. Hughes	Rochester, N. Y	June 13, 1854	11, 067
Vise	T. H. Humphreys	Trenton, N. J	Feb. 4, 1868	74, 093
Vise	H. C. Hunt	Ottumwa, Iowa	Aug. 16, 1859	25, 118
Vise	J. Hunt	Richmond, Ind	Sept. 2, 1873	142, 470
Vise	J. L. Isbell	Naugatuck, Conn	June 18, 1872	128, 045
Vise	W. H. Jacoby	Minneapolis, Minn	Oct. 22, 1872	132, 402
Vise	A. Jameson	Trenton, N. J	July 3, 1866	56, 057
Vise	A. Jameson	Trenton, N. J	July 16, 1867	66, 712
Vise	A. Jameson	Trenton, N. J	July 23, 1867	66, 965
Vise	A. Jameson	Trenton, N. J	Apr. 28, 1868	77, 289
Vise	F. B. Johnson	De Witt, Iowa	June 9, 1868	78, 746
Vise	J. Johnson	Geneseo, N. Y	Oct. 16, 1855	13, 681
Vise	T. B. Lamb	Summit, Mich	May 22, 1860	28, 382
Vise	J. Lang	Harrison County, Pa	Jan. 10, 1834	....
Vise	J. Larkin	Detroit, Mich	Aug. 10, 1869	93, 454
Vise	J. Lee	New London, Conn	Aug. 27, 1867	68, 215
Vise	J. H. Lewis	Duxbury, Mass	May 28, 1867	65, 097
Vise	J. H. Lewis	Duxbury, Mass	May 4, 1869	89, 671
Vise	A. Z. Mason	Adrian, Mich	Apr. 28, 1868	77, 390
Vise	A. Z. Mason	Adrian, Mich	July 6, 1869	92, 331
Vise	A. Z. Mason and R. B. Robbins	Adrian, Mich	Sept. 8, 1868	82, 014
Vise	E. G. Matthews	Worcester, Mass	Aug. 11, 1843	3, 212
Vise	G. Mitchell	Trenton, N. J	July 19, 1870	105, 588
Vise	J. H. Murray	Trenton, N. J	Oct. 1, 1867	69, 361
Vise	C. Parker	Meriden, Conn	Sept. 11, 1866	57, 957
Vise	C. Parker	Meriden, Conn	Sept. 28, 1869	95, 258
Vise	J. Peace	Camden, N. J	Jan. 30, 1872	123, 195
Vise	B. F. Perkins	North Adams, Mass	May 28, 1867	65, 114
Vise	R. Phillips	Boston, Mass	Sept. 26, 1871	119, 280
Vise	R. Porter	Bristol, Conn	Dec. 12, 1871	121, 895
Vise	H. K. and T. W. Porter	Boston, Mass	Dec. 17, 1867	72, 327
Vise	M. Prentiss	Cambridge, N. Y	Mar. 17, 1868	75, 576
Vise	J. S. Ralston	Indiana, Pa	Jan. 22, 1867	61, 457
Vise	B. L. Randall	Roxbury, Mass	Apr. 14, 1868	76, 656
Vise	J. Renshaw	Michigan City, Ind	Mar. 14, 1865	46, 822
Vise	J. Ridge	Richmond, Ind	Nov. 5, 1872	132, 776
Vise	I. Roberts	Meriden, Ill	Jan. 14, 1873	134, 932
Vise	P. Shellenbock	Middletown, Ohio	Dec. 31, 1867	72, 921
Vise	J. Simpson	Cleveland, Ohio	Oct. 3, 1871	119, 658
Vise	J. E. Sinclair	Worcester, Mass	Nov. 1, 1870	108, 840
Vise	A. P. Stephens	Brooklyn, N. Y	Apr. 5, 1864	42, 236
Vise	A. P. Stephens	Brooklyn, N. Y	July 19, 1870	105, 507
Vise	A. P. Stephens	Brooklyn, N. Y	Apr. 9, 1872	125, 625
Vise	W. X. Stevens	East Brookfield, Mass	Sept. 28, 1869	95, 399

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Vise	W. H. Sullenberger	Harrisburgh, Pa	Oct. 22, 1872	132, 499
Vise	I. C. Tate	New London, Conn	Aug. 13, 1867	67, 685
Vise	R. W. Thickens	Brasher Iron Works, N. Y	Aug. 19, 1856	15, 583
Vise	L. Tilliers	Mott Haven, N. Y	Apr. 16, 1861	32, 093
Vise	C. C. Walworth	Boston, Mass	Oct. 7, 1856	15, 862
Vise	J. Wetherell	Allegheny, Pa	Apr. 22, 1839	1, 132
Vise	J. B. Willett	West Meriden, Conn	June 1, 1869	90, 800
Vise	P. Wright	Dudley, England	May 19, 1863	38, 621
Vise	L. Yale, jr	Cooperstown, N. Y	Jan. 7, 1868	73, 152
Vise	L. Yale, jr	Shelburne Falls, Mass	Feb. 4, 1868	74, 025
Vise	J. A. Younce and G. W. Smith	Hartford, Ind	Sept. 12, 1871	118, 999
Vise, Adjustable	J. Fraser	New York, N. Y	July 17, 1855	13, 257
Vise, Adjustable bench	J. B. Wardwell	Lawrence, Mass	Nov. 25, 1873	144, 934
Vise adjustable jaw	C. L. Butler	Greenfield, Mass	Nov. 19, 1872	133, 198
Vise adjustable jaw	H. N. King	Adrian, Mich	Mar. 17, 1868	75, 552
Vise and drill, Combined	O. Dean	Richmond, Va	June 15, 1869	91, 309
Vise and drill, Combined	O. Dean	Richmond, Va	Nov. 29, 1870	109, 594
Vise and saw-set	N. Allen	Unionville, Conn	Dec. 27, 1859	26, 553
Vise, Attachment for converting the ordinary into a taper.	J. W. Bliss	Hartford, Conn	Nov. 30, 1852	9, 429
Vise base, Bench	A. P. Stephens	Brooklyn, N. Y	Oct. 26, 1869	96, 282
Vise, Bench	B. G. Ball	Nashua, N. H	Apr. 1, 1856	14, 550
Vise, Bench	L. A. Beardsley	South Edmiston, N. Y	Apr. 24, 1860	27, 960
Vise, Bench	N. F. Cone	Kingsville, Ohio	Sept. 16, 1851	8, 367
Vise, Bench	J. Cowles	Belchertown, Mass	Feb. 22, 1848	5, 458
Vise, Bench	L. Dean	Utica, N. Y	Feb. 16, 1837	127
Vise, Bench	G. M. Evans	Pittsburgh, Pa	Aug. 16, 1870	106, 349
Vise, Bench	C. R. Gibson	Madison, Ind	May 14, 1867	64, 658
Vise, Bench	S. Gissinger	Allegheny, Pa	Feb. 5, 1856	14, 192
Vise, Bench	G. A. Gray, jr	Cincinnati, Ohio	Nov. 29, 1859	26, 266
Vise, Bench	J. S. Hoar	West Acton, Mass	June 19, 1866	55, 656
Vise, Bench	J. S. Hoar	West Acton, Mass	Jan. 22, 1867	61, 429
Vise, Bench	H. P. Hood	Lowell, Mass	May 1, 1866	54, 352
Vise, Bench	R. Jones	Paterson, N. J	Apr. 3, 1866	53, 738
Vise, Bench	C. L. Kingsley	Meriden, Conn	Nov. 26, 1867	71, 498
Vise, Bench	J. Peck	Waterbury, Conn	Dec. 20, 1843	3, 384
Vise, Bench	J. Pickering	New Hope, Pa	Dec. 1, 1868	84, 508
Vise, Bench	H. Wood	Troy, N. Y	Feb. 22, 1848	5, 457
Vise, Bench or standing	L. M. Peck	Philadelphia, Pa	July 18, 1844	3, 670
Vise, Bevel-jawed	A. Z. Mason	Adrian, Mich	Mar. 8, 1870	100, 541
Vise-boxes, Die for forging	C. Konold	Pittsburgh, Pa	June 14, 1870	104, 165
Vise, Broom	T. C. Hargrave	Schenectady, N. Y	Dec. 3, 1861	33, 837
Vise, Carpenter's	G. F. Bissell	Oneonta, N. Y	Dec. 13, 1870	110, 001
Vise, Carpenter's	O. V. Flora	Madison, Ind	Aug. 14, 1866	57, 250
Vise, Carpenter's	O. V. Flora	Madison, Ind	July 7, 1868	79, 565
Vise, Carpenter's bench	W. H. Cutter	Saint Louis, Mo	Feb. 20, 1866	52, 689
Vise, Cast-iron	C. Parker	Meriden, Conn	June 20, 1854	11, 137
Vise-clamp	B. F. Bergh	Boston, Mass	Feb. 8, 1870	99, 626
Vise-clamp	H. O. Nanen	New York, N. Y	Jan. 7, 1868	73, 028
Vise, Engraver's	G. N. Munger	New Haven, Conn	Sept. 29, 1868	82, 627
Vise, Engraver's	W. W. Wilcox	Grand Rapids, Mich	Oct. 8, 1872	132, 127
Vise, Engraver's	A. H. Wood	Boston, Mass	Feb. 21, 1860	27, 253
Vise for holding and swaging horseshoes	S. B. Skiff	New Bedford, Mass	Mar. 25, 1862	34, 786
Vise for holding saws	G. N. Stearns	Syracuse, N. Y	Oct. 9, 1866	58, 692
Vise for holding wood	I. C. Tate	New London, Conn	June 4, 1867	65, 449
Vise for gun-lock, Spring	J. Stokes and T. Bennett	Springfield, Mass., and Hartford, Conn.	Apr. 12, 1870	101, 937
Vise for joiner's bench, Wood	H. E. Long	Plymouth, Ind	Sept. 3, 1867	68, 519
Vise for wood-work, Bench	E. Sprague	Allegheny, Pa	Jan. 31, 1871	111, 396
Vise for wood-working	J. Simpson	Cleveland, Ohio	Dec. 7, 1869	97, 712
Vise, Gas-fitter's	J. S. Ford	Philadelphia, Pa	Nov. 2, 1858	21, 951
Vise, Hand	G. D. Belcher	Springfield, Mass	Sept. 17, 1872	131, 326
Vise, Hand	J. W. Devlin	Yonkers, N. Y	Feb. 7, 1871	111, 618
Vise, Hand	T. Overton	Corpus Christi, Tex	Nov. 19, 1872	133, 171
Vise-handle	J. T. Ogden	Boston, Mass	Mar. 4, 1856	14, 366
Vise, Horseshoe	E. Coon and N. Hill	Comstock, Mich	Feb. 13, 1866	52, 538
Vise, Horseshoe-calking	F. B. Curtis	Gardiner, Me	Aug. 15, 1865	49, 388
Vise, Horseshoe-calking	W. Delano	Bangor, Me	Apr. 3, 1866	53, 733
Vise, Horseshoe-calking	G. L. Gerald	Thorndike, Mass	May 19, 1568	77, 973
Vise-jaw, Making	W. Simm	Schenectady, N. Y	Oct. 11, 1841	2, 315
Vise, Joiner's	J. Good	Lancaster, Pa	Mar. 21, 1871	112, 801
Vise, Joiner's bench	B. Haworth	Ridge Farm, Ill	July 23, 1861	32, 913
Vise, Lathe	J. B. Low	Ravenna, Ohio	July 2, 1872	128, 641
Vise, Machinist's	J. D. Beck	Liberty, Pa	Nov. 21, 1871	121, 149
Vise, Machinist's	A. L. Demmon and A. W. Diefendorf.	Pardeeville, Wis	Nov. 26, 1872	133, 423
Vise, Machinist's	H. E. Long	Decatur, Ill	Oct. 31, 1871	120, 524
Vise, Metal-bench	T. and J. Keene	Haverstraw, N. Y	Aug. 20, 1838	889
Vise, Miter	C. W. Wilson	Norfolk, Va	Sept. 28, 1860	95, 299
Vise or chuck for holding cylindrical bodies	C. Gregg	Brooklyn, N. Y	May 30, 1854	10, 985
Vise or clamp, Hand	A. C. Stockmar	New York, N. Y	Aug. 21, 1866	57, 447
Vise, Parallel	N. P. Otis	Yonkers, N. Y	May 5, 1863	38, 405
Vise, Parallel	S. R. Simpson	Springfield, Ohio	Jan. 7, 1851	7, 892
Vise, Parallel bench	W. H. Taylor and A. P. Norton	Rochester and Waterville, N. Y.	May 16, 1845	4, 033
Vise, Perpetual-lever	C. Wing	Gardiner, Me	Mar. 2, 1826	....
Vise, Pipe	W. H. Barwick and W. T. Farre	Montreal, Canada	Apr. 9, 1872	125, 473
Vise, Pipe	F. Glasser	Mystic Bridge, Conn	June 21, 1864	43, 194
Vise, Pipe	C. E. Haynes	Boston, Mass	July 9, 1872	128, 727
Vise, Pipe	D. Saunders	Brooklyn, N. Y	May 28, 1867	65, 124
Vise, Portable gas-pipe	T. Marshall	Paterson, N. J	Aug. 16, 1870	106, 380
Vise, Saw-filer's	N. H. Baldwin	Laconia, N. H	Dec. 26, 1871	122, 144
Vise, Saw-filer's	T. Terrell	Yonkers, N. N	July 25, 1871	117, 483
Vise-screw box	A. Jameson	Trenton, N. J	June 11, 1867	65, 676
Vise, Smith's	S. S. Hepworth	Boston, Mass	Apr. 10, 1866	53, 821
Vise, Socket	L. Hemenway	Sullivan, N. H	Sept. 4, 1828	....
Vise, Socket and hand	E. D. McCord	Sandy Hill, N. Y	Oct. 1, 1830	....
Vise, Turning jaw	A. Hulbert	Augusta, Ga	Nov. 9, 1852	9, 385

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Vise used in cutting combs	P. Pratt	Meriden, Conn	Nov. 22, 1825	....
Vise, Watchmaker's	A. W. Bush	Saint Cloud, Minn	Nov. 1, 1870	108, 877
Vise, Wood	R. F. Cook and J. F. Post	Potsdam, N. Y	Oct. 12, 1869	95, 772
Vises, Method of working the pall in parallel	J. Johnson	Genesee, N. Y	Apr. 9, 1850	7, 262
Vises, Process for steel-facing	T. S. Norton	Chicopee, Mass	Feb. 27, 1866	52, 8[illegible]6
Vitreography	C. C. Stremme	Austin, Tex	Mar. 26, 1867	63, 328
Vitreous substances, Machine for cutting	O. M. Pike	Leverett, Mass	Dec. 22, 1868	85, 396
Vitrified compound	J. O'Friel	Blair County, Pa	Apr. 7, 1868	76, 509
Vitriol, Apparatus and art of making oil of	R. Maiben	New York, N. Y	Aug. 21, 1812	....
Voltaic battery	A. C. Garratt	Boston, Mass	Apr. 20, 1869	89, 036
Voltaic battery	H. Palmer	Evanston, Ill	Oct. 13, 1868	82, 981
Voltaic battery and apparatus for medical and other purposes.	I. L. Pulvermacher	Breslau, Prussia	Feb. 1, 1853	9, 571
Voltaic gas-battery, Construction of	M. Vergnes	New York, N. Y	May 15, 1860	28, 317
Voltaic pile	A. C. Garratt	Boston, Mass	Dec. 24, 1867	72, 628
Voltaic pile	J. J. Geiger	Chicago, Ill	Jan. 26, 1869	86, 221
Volute spring	M. R. Dand	Philadelphia, Pa	Mar. 16, 1869	87, 827
Volute spring	J. Freeland and D. Ward	New York, N. Y	Aug. 20, 1867	67, 972
Volute spring	P. G. Gardiner	New York, N. Y	Nov. 4, 1873	144, 201
Volute spring	D. G. Rollin	New York, N. Y	Feb. 23, 1858	19, 450
Volute spring	J. Trent	Millerton, N. Y	Apr. 7, 1868	76, 557
Volute spring	J. Trent	Millerton, N. Y	Feb. 9, 1869	86, 713
Volute spring	J. Trent	Millerton, N. Y	June 7, 1870	103, 944
Volute spring, Double	J. Hobart	Boston, Mass	Aug. 4, 1868	80, 628
Volute springs, Machine for making	D. G. Rollin	New York, N. Y	Dec. 29, 1857	18, 991
Volute springs, Making	J. Freeland and D. Ward	New York, N. Y	Mar. 7, 1865	46, 655
Vote-indicator	S. Huffman	Charleston, Ill	May 15, 1855	12, 886
Vote-recorder	J. E. Beardsley, A. F. Boyle, E. M. Lewis, and M. A. Clancy.	Washington, D. C	Oct. 1, 1867	69, 389
Vote-recorder	A. Weston	Keeseville, N. Y	Apr. 4, 1871	113, 376
Vote-recorder, Electrographic	T. A. Edison	Boston, Mass	June 1, 1869	90, 646
Vote-register	M. A. Patterson	Winchester, Tenn	May 12, 1868	77, 836
Votes, Electro-magnetic apparatus for registering	J. Blackie	New York, N. Y	Mar. 26, 1867	63, 201
Votes in legislative bodies, Machine for recording	T. C. Connolly	Washington, D. C	Apr. 10, 1855	12, 671
Voting-apparatus	H. T. McAllister	McAllisterville, Pa	Apr. 2, 1872	125, 316
Voting apparatus, Legislative	J. A. Criswell	Mifflintown, Pa	Aug. 19, 1873	142, 002
Voting apparatus, Legislative	W. M. Springer	Springfield, Ill	July 20, 1869	92, 897
Voting-register	T. B. Stout and J. F. Morell	Keyport, N. Y	Oct. 28, 1851	8, 473
Voting-register	G. W. Yerby	Washington, D. C	Aug. 5, 1851	8, 279
Voting-register for legislative bodies	R. E. Monaghan	Liverpool, Pa	Mar. 14, 1848	5, 469
Voting register, Legislative	J. W. Wetmore	Erie, Pa	Apr. 3, 1860	27, 753
Vulcanite or hard rubber, Coloring	A. D. Schlesinger	College Point, Long Island, N. Y.	Feb. 15, 1870	99, 956
Vulcanizable compound of rubber, &c., Apparatus for mixing.	T. J. Mayall	Boston, Mass	Nov. 25, 1873	144, 998
Vulcanizable compound to imitate horn, hard rubber, &c.	F. Marquard	Newburyport, Mass	Jan. 19, 1869	85, 945
Vulcanizable gum, Compound	D. M. Lamb	Strathroy, Canada	Nov. 18, 1873	144, 622
Vulcanizable-gum molds, Filling	J. C. Howells	Washington, D. C	Aug. 11, 1863	39, 481
Vulcanizable gums and caoutchouc, Treating	D. M. Lamb	Strathroy, Canada	Nov. 18, 1873	144, 623
Vulcanizable gums, Treating	C. Goodyear	New Haven, Conn	Apr. 4, 1854	10, 738
Vulcanization of caoutchouc, Mode of holding sockets of molds during.	F. D. Hayward	Malden, Mass	Nov. 27, 1860	30, 787
Vulcanized gum	A. G. De Wolfe	Seymour, Conn	Aug. 9, 1859	24, 996
Vulcanized-India-rubber roll for wringers, grain-drills, &c.	J. R. Bird and G. A. Smith	Brooklyn and Matteawan, N. Y.	May 24, 1870	103, 416
Vulcanized India rubber, Working over	H. Forstrick	Hoboken, N. J	Oct. 28, 1856	15, 998
Vulcanized-rubber articles from the molds, Mode of detaching.	J. Moulton	Boston, Mass	Nov. 17, 1868	84, 209
Vulcanized rubber, Coloring-matter to be used in	J. Halliday	Lynn, Mass	Feb. 15, 1870	99, 885
Vulcanized rubber, Covering harness-trimmings with.	A. Albright	Dryden, N. Y	Feb. 12, 1867	62, 106
Vulcanized rubber, Disintegrating waste	J. H. Smyser	Pittsburgh, Pa	Dec. 26, 1871	122, 289
Vulcanized-rubber goods, Manufacture of	H. L. Hall	Beverly, Mass	Dec. 7, 1858	22, 265
Vulcanized rubber, Restoring waste	F. Baschnagel	Wenham, Mass	Apr. 19, 1859	23, 740
Vulcanized rubber, Restoring waste	H. L. Hall	Beverly, Mass	Aug. 16, 1859	25, 160
Vulcanized rubber, Restoring waste	D. D. Parmelee	Salem, Mass	Sept. 25, 1860	30, 181
Vulcanized-rubber-thread waste, Process of treating	J. H. Tuttle	East Hampton, Mass	July 20, 1869	92, 764
Vulcanized rubber, Treatment of	H. W. Beins	New York, N. Y	Mar. 8, 1859	23, 151
Vulcanized rubber, Treatment of	T. J. Mayall	Roxbury, Mass	Apr. 26, 1859	23, 773
Vulcanizer, &c., Apparatus for automatically regulating the flow of gas used in heating.	J. M. Osgood	Somerville, Mass	Aug. 2, 1870	105, 971
Vulcanizer gas-regulator	G. M. Hopkins	Albion, N. Y	June 3, 1873	139, 579
Vulcanizing-apparatus	B. M. Hotchkiss and G. M. Allerton.	Naugatuck, Conn., and New York, N. Y.	May 23, 1871	115, 207
Vulcanizing-apparatus, Regulator for	G. H. Hurd	Memphis, Tenn	June 8, 1869	91, 134
Vulcanizing belting, hose, &c., Plate for	D. C. Gately	Newtown, Conn	July 1, 1873	140, 494
Vulcanizing caoutchouc	A. K. Eaton	King's County, N. Y	Apr. 3, 1860	27, 706
Vulcanizing caoutchouc	O. Falke and A. C. Richard	College Point, N. Y., and Newtown, Conn.	Dec. 4, 1860	30, 807
Vulcanizing caoutchouc	C. T. Harris	New Brunswick, N. J	Apr. 10, 1860	27, 798
Vulcanizing caoutchouc	D. D. Parmelee	New York, N. Y	May 3, 1859	23, 855
Vulcanizing caoutchouc	D. D. Parmelee	New York, N. Y	June 14, 1859	24, 401
Vulcanizing caoutchouc, Apparatus for	C. S. Putnam	New York, N. Y	Feb. 15, 1859	22, 976
Vulcanizing caoutchouc, Apparatus for	S. W. Warren	New York, N. Y	May 22, 1860	28, 428
Vulcanizing caoutchouc-compounds, Process of	L. O. P. Meyer	Newtown, Conn	Dec. 20, 1853	10, 339
Vulcanizing caoutchouc, &c., Process of	D. C. Gately	Newtown, Conn	Sept. 17, 1861	33, 303
Vulcanizing elastic gum	E. E. Marcy	New York, N. Y	Nov. 7, 1854	11, 897
Vulcanizing-flask	D. J. Peer	Rochester, N. Y	Apr. 3, 1866	53, 667
Vulcanizing-flask	A. B. Wood	Alfred Centre, N. Y	Jan. 16, 1866	52, 107
Vulcanizing-flasks, Closing	H. M. Edson	Mount Vernon, Ohio	July 14, 1868	79, 816
Vulcanizing-flasks, Fastening cover to	G. E. Hayes	Buffalo, N. Y	July 8, 1862	35, 821
Vulcanizing-flasks, Steam-compressor for	G. E. Hayes	Buffalo, N. Y	Jan. 14, 1868	73, 326
Vulcanizing heater or boiler	B. W. Franklin	New York, N. Y	Aug. 12, 1862	36, 146
Vulcanizing India rubber, &c	R. Haering	New York, N. Y	Apr. 14, 1857	17, 037
Vulcanizing India rubber, De-	C. Poppenhusen and L. Held	Brooklyn, N. Y	May 12, 1857	17, 295
Vulcanizing India rubber	J. T. Trotter	New York, N. Y	Dec. 3, 1850	7, 816
Vulcanizing India rubber and other gums	L. O. P. Meyer	Newtown, Conn	Feb. 28, 1854	10, 586

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Vulcanizing India-rubber car-springs and other articles.	H. W. Beins	Mount Vernon, N. Y	May 19, 1868	77,952
Vulcanizing India rubber in connection with leather, Process of.	A. Cutler	Malden, Mass	July 24, 1866	56,670
Vulcanizing-machine	E. A. L. Roberts	New York, N. Y	Jan. 27, 1863	37,523
Vulcanizing-press	J. Banigan	Smithfield, R. I	Nov. 30, 1869	97,266
Vulcanizing rubber	A. K. Eaton	New York, N. Y	July 5, 1859	24,695
Vulcanizing rubber	E. C. R. Walker and C. McBurney.	Boston, Mass	Apr. 16, 1872	125,707
Vulcanizing rubber and other gums, Arrangement of metallic plates for.	O. Fiske and E. Simon	New York, N. Y., and Washington, N. J.	Oct. 22, 1861	33,523
Vulcanizing rubber, Apparatus for	G. E. Hayes	Buffalo, N. Y	June 12, 1860	28,668
Vulcanizing rubber, Apparatus for	E. A. L. Roberts and W. J. Demorest.	New York, N. Y	May 10, 1859	23,948
Vulcanizing rubber, Apparatus for	H. W. Weicker	Woonsocket, R. I	Mar. 14, 1871	112,755
Vulcanizing rubber-belting, &c	T. J. Mayall	Boston, Mass	July 1, 1873	140,519
Vulcanizing rubber-compounds	A. K. Eaton	New York, N. Y	Nov. 22, 1859	26,172
Vulcanizing rubber, &c., Mold for	H. A. Alden	Matteawan, N. Y	Jan. 19, 1864	41,347
Vulcanizing rubber, Mold for	D. D. Parmelee	New York, N. Y	Mar. 6, 1866	53,034
W.				
Wad-greasing apparatus	A. C. Hobbs	Bridgeport, Conn	Jan. 12, 1869	85,823
Wad-winding machine	A. C. Hobbs	Bridgeport, Conn	Apr. 15, 1873	137,773
Wadding and machine for its manufacture	A. Chambers	Providence, R. I	June 24, 1873	140,184
Wadding and paper, Machine for cutting and folding	J. Wood	Brooklyn, N. Y	Apr. 26, 1859	23,802
Wadding, batting, &c., Machine for making	M. D. Whipple	Brighton, Mass	Jan. 30, 1872	123,136
Wadding, Glazing cotton	S. Turner	Cranston, R. I	July 25, 1833	....
Wadding, &c., Machine for surface-sizing	S. Baxendale	South Malden, Mass	Aug. 23, 1864	43,894
Wadding, &c., Machine for surface-sizing	S. Baxendale	South Malden, Mass	Jan. 31, 1865	46,065
Wadding, Machinery for making	H. T. Lawton	Troy, N. Y	Nov. 23, 1852	9,421
Wadding, Machinery for winding	T. Thompson	Niverville, N. Y	Apr. 28, 1857	17,177
Wadding, Manufacturing	J. C. Hurd and M. A. Johnson	Dorchester and Lowell, Mass.	July 5, 1859	24,640
Wadding, Manufacturing	I. Stratton	Swanzey, N. H	Feb. 16, 1864	41,648
Wadding, Manufacturing cotton	J. Beaumont	Canton, Mass	Dec. 3, 1814	....
Wadding, Manufacturing cotton	J. Parke and W. S. Peck	Westmoreland, N. Y	July 10, 1835	....
Wadding, paper, &c., Drying-apparatus for	H. W. Jenkins	Boston, Mass	Aug. 6, 1872	130,133
Wadding-waste machine	G. Cox	Reading, Pa	Jan. 29, 1868	61,519
Wafer-iron	G. W. Mason	Jersey City, N. J	June 11, 1872	127,905
Waffle-baker	S. S. Fitch	New York, N. Y	Oct. 14, 1873	143,564
Waffle-iron	C. Swartwout	Troy, N. Y	Aug. 24, 1869	94,043
Wages-indicator	W. N. White	Winchendon, Mass	Nov. 12, 1867	70,926
Wagon	J. F. Applegate	New Albany, Ind	June 16, 1868	78,913
Wagon	J. F. Applegate	New Albany, Ind	Nov. 10, 1868	83,900
Wagon	E. Ball, jr	Canton, Ohio	Dec. 13, 1870	110,107
Wagon	J. H. Barr	Mansfield, Ohio	Mar. 1, 1870	100,251
Wagon	S. R. Bolton	Prescott, Wis	May 24, 1864	42,830
Wagon	E. Brown	Stockbridge, Mass	Jan. 23, 1834	....
Wagon	B. B. Bundy	Walton, N. Y	Feb. 26, 1856	14,304
Wagon	G. W. Buss	Boston, Mass	Oct. 28, 1862	36,766
Wagon	V. M. Chafee	Xenia, Ill	Oct. 1, 1867	69,404
Wagon	F. W. Cole	Philadelphia, Pa	Oct. 31, 1871	120,495
Wagon	J. Dowd	Boston, Mass	June 27, 1865	48,381
Wagon	J. Dowd	Boston, Mass	Jan. 29, 1867	61,523
Wagon	L. M. Ham and J. H. Dodge	Boston and Chelsea, Mass	July 28, 1863	39,345
Wagon	L. D. Harvey	Harvey, Mich	Sept. 17, 1867	68,989
Wagon	H. S. Heermance	Claverack, N. Y	Apr. 2, 1867	63,516
Wagon	R. Hurd	Morrison, Ill	Aug. 3, 1869	93,205
Wagon	G. W. Janvrin	Great Falls, N. H	July 28, 1868	80,489
Wagon	C. Jarnagin	Bean's Station, Tenn	Nov. 12, 1872	133,034
Wagon	J. Jenkins	Sligo, Md	Nov. 28, 1871	121,378
Wagon	C. C. Johnson	Springfield, Vt	Aug. 10, 1869	93,621
Wagon	H. Kruse	New Orleans, La	Nov. 11, 1856	16,060
Wagon	C. S. Martin	Milwaukee, Wis	Aug. 7, 1866	56,963
Wagon	D. Mater, jr	Bellmore, Ind	Nov. 7, 1871	120,758
Wagon	O. E. Miles	Aurora, Ill	Apr. 17, 1866	54,001
Wagon	M. Miller	Waterloo, Ind	Aug. 22, 1871	118,257
Wagon	J. Mills	Pitt Township, Pa	Oct. 31, 1848	5,900
Wagon	A. Moffitt	Washington, D. C	Feb. 7, 1871	111,665
Wagon	J. A. Mowris	Neversink, N. Y	May 27, 1862	35,384
Wagon	W. A. Nichols	Zionsville, Ind	Nov. 28, 1871	121,403
Wagon	H. Parker	Leesburgh, Miss	Nov. 26, 1867	71,406
Wagon	J. Parsons	Dublin, Ind	Aug. 28, 1855	13,503
Wagon	A. and E. W. Pate	Nankin, Mich	Sept. 22, 1868	82,343
Wagon	E. Petteys	Chestertown, N. Y	Feb. 22, 1870	100,187
Wagon	T. W. Porter	Boston, Mass	Sept. 23, 1873	143,030
Wagon	F. Post	Clinton, Iowa	Sept. 23, 1873	143,185
Wagon	E. Robinson	Greenbush, Wis	Aug. 13, 1867	67,802
Wagon	J. T. Russell	Tyler County, Va	July 24, 1855	13,[illegible]23
Wagon	B. Ryder, jr	South Orrington, Me	Mar. 26, 1867	63,309
Wagon	J. H. Sawyer	Troy, Pa	Jan. 19, 1869	86,036
Wagon	S. Seitz and L. D. Arnold	Melmore, Ohio	Aug. 18, 1868	81,216
Wagon	J. Skeen	Mound City, Ill	July 11, 1871	117,004
Wagon	S. W. Slocumb	Albany, Ill	June 25, 1867	66,049
Wagon	G. C. Stamper	Pella, Iowa	June 23, 1868	79,155
Wagon	J. N. Stewart	Belfast, Me	Dec. 31, 1872	134,445
Wagon	J. W. West	Saylorville, Iowa	Oct. 18, 1870	108,419
Wagon	R. B. White	Sheboygan Falls, Wis	June 6, 1871	115,797
Wagon	J. S. Wilson	Allegheny, Pa	Jan. 18, 1870	99,043
Wagon, Advertising	G. W. Thompson	New York, N. Y	June 2, 1868	78,552
Wagon, Ambulance	I. Moses	New York, N. Y	Sept. 28, 1858	21,615
Wagon and buggy brace	N. Ramseyer	Farmersville, Ill	Aug. 23, 1870	106,618
Wagon and car brake	J. Veasey	Highland, Me	Aug. 22, 1871	118,409
Wagon and car unloader	N. Swickard	Galva, Ill	Oct. 13, 1868	83,005
Wagon and carriage axle, Hollow	W. A. Lewis	Chicago, Ill	Oct. 10, 1871	119,863
Wagon and carriage axle, Wrought-metal	W. A. Lewis	Chicago, Ill	Oct. 10, 1871	119,868

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Invention.	Inventor.	Residence.	Date.	No.
Wagon and carriage bodies, Manner of combining springs and levers to sustain.	E. Ring	Trumansburgh, N. Y	July 29, 1841	2, 200
Wagon and carriage boxes, Application of soft-metal bearing for.	G. W. Disman	Upper Sandusky, Ohio	June 4, 1867	65, 356
Wagon and carriage brake	L. R. Carpenter	Lancaster, Ohio	Jan. 3, 1865	45, 699
Wagon and carriage brake	J. J. Hartman	Saint Louis, Mo	Dec. 3, 1872	133, 643
Wagon and carriage brake	R. Rice	Pittsfield, Vt	June 9, 1868	78, 762
Wagon and carriage brake	C. A. Slack	Frenchtown, N. J	Jan. 21, 1862	34, 218
Wagon and carriage spring	S. J. Pearsall and S. P. Briggs	Saratoga Springs, N. Y	Jan. 10, 1871	110, 934
Wagon and carriage seats, Corner-post for	J. Roberts	Worcester, Mass	Aug. 8, 1871	117, 816
Wagon and carriage wheel	T. Salorgne	Saint Louis, Mo	July 7, 1868	79, 602
Wagon and carriage wheel	F. G. Simmons	Lansingburgh, N. Y	Dec. 17, 1867	72, 233
Wagon and carriage wheels, Construction of	M. J. Dawkins	Brookston, Ind	Sept. 8, 1868	81, 883
Wagon and other carriages	H. Wood	Greenwich, N. Y	July 8, 1843	3, 159
Wagon and plow, Steam	W. C. Bibb	Madison, Ga	Sept. 26, 1871	119, 216
Wagon and sleigh box	A. R. Ambrose	Chicago, Ill	Dec. 5, 1871	121, 571
Wagon and sleigh seat	J. F. Minard	Danbury, N. H	Jan. 28, 1862	34, 261
Wagon, Army	A. Sully	United States Army	Sept. 22, 1868	82, 472
Wagon, Army cooking	G. F. Wilson	Providence, R. I	Nov. 19, 1861	33, 768
Wagon, Army or train	A. Little	Wheeling, W. Va	Mar. 29, 1864	42, 142
Wagon-axle	C. G. Bachelder	Camden, Me	Sept. 15, 1868	82, 068
Wagon-axle	H. T. Briggs	Moline, Ill	May 21, 1872	127, 021
Wagon-axle	T. M. Cluxton	Rising Sun, Ind	Apr. 5, 1870	101, 586
Wagon-axle	C. W. Fillmore and T. M. Jones	Chicago, Ill	June 7, 1870	104, 005
Wagon-axle	G. S. Garth	Mill Hall, Pa	Sept. 1, 1868	81, 621
Wagon-axle	R. P. Gillett	Veroquo, Wis	Sept. 30, 1862	36, 564
Wagon-axle	E. D. Gird	Syracuse, N. Y	Nov. 26, 1872	133, 433
Wagon-axle	G. H. Glad and J. C. Becker	Boston, Mass	Nov. 1, 1870	108, 903
Wagon-axle	J. and P. Herrmann	Fell City, Ind	May 30, 1871	115, 317
Wagon-axle	D. Jones	San Francisco, Cal	Jan. 14, 1868	73, 340
Wagon-axle	A. Kessberger	Springfield, Ill	Apr. 18, 1871	113, 896
Wagon-axle	W. A. Lewis	Joliet, Ill	Oct. 25, 1870	108, 607
Wagon-axle	W. A. Lewis	Joliet, Ill	Oct. 25, 1870	108, 608
Wagon-axle	W. A. Lewis	Joliet, Ill	Oct. 25, 1870	108, 609
Wagon-axle	F. McManus	Ellenburgh Centre, N. Y	June 4, 1867	65, 411
Wagon-axle	F. McManus	Ellenburgh Centre, N. Y	Mar. 9, 1869	87, 580
Wagon-axle	N. Mead	Oil City, Pa	Sept. 12, 1871	118, 869
Wagon-axle	S. W. Slocumb	Albany, Ill	July 20, 1869	92, 891
Wagon-axle	A. E. Smith	Bronxville, N. Y	Dec. 24, 1867	72, 535
Wagon-axle and box	J. N. and T. Wallis	Fleming, N. Y	June 11, 1867	65, 622
Wagon-axle and gearing	L. F. Palmer	Endfield, N. Y	Oct. 22, 1867	70, 013
Wagon-axle and thimble-skein	E. H. Wheeler	Memphis, Mo	Jan. 30, 1872	123, 135
Wagon-axle bearing	H. Richardson	Janesville, Wis	Sept. 3, 1867	68, 460
Wagon-axle-forming machine	J. E. Cromwell	Jackson, Mich	July 9, 1867	66, 569
Wagon, &c., axle nut	J. Haggert	New York, N. Y	Nov. 20, 1866	59, 835
Wagon-axle skeins, Clip for	J. M. Orpat	Malta, Ill	Nov. 18, 1873	144, 695
Wagon-axle-tree	C. L. Campbell	Binghamton, N. Y	June 11, 1867	65, 541
Wagon-axle-tree	G. P. Kimball	San Francisco, Cal	Oct. 15, 1867	69, 819
Wagon-axle-tree	J. A. Yeckley	Perry, N. Y	June 7, 1830	....
Wagon-axle, Tubular double-arch	W. A. Lewis	Chicago, Ill	Oct. 10, 1871	119, 869
Wagon-axles, Apparatus for setting	D. Ducharne	Mechanicsville, N. Y	Oct. 13, 1868	82, 929
Wagon-axles, &c., Composition for lubricating	J. P. Gay	Cincinnati, Ohio	Feb. 24, 1863	37, 746
Wagon-axles, Gage for setting	D. F. Stratton	Christiansburgh, Ohio	Dec. 17, 1867	72, 427
Wagon-axles, Gage for setting the pitch to	J. Goston	Providence, R. I	July 25, 1865	48, 928
Wagon-axles, Machine for making the spindle of	J. M. Jay	Canton, Ohio	May 16, 1865	47, 768
Wagon-axles, Machine for turning	G. A. Bolser	Indianapolis, Ind	Sept. 2, 1873	142, 368
Wagon-axles, Machine for turning	A. Booth	Springfield, Ill	June 8, 1869	91, 074
Wagon-bed	R. Bratton	Oskaloosa, Iowa	Aug. 13, 1867	67, 628
Wagon-bed	E. F. Conner	Greensburgh, Ind	July 23, 1867	67, 028
Wagon-bed	W. H. Porter	Brazil, Ind	Sept. 20, 1870	107, 536
Wagon-bed	V. Wasem	Fayetteville, Ill	July 23, 1872	129, 769
Wagon-bed, Adjustable and folding	S. Heffley and J. D. Pettit	Rochester, Ind	June 27, 1871	116, 308
Wagon-bed lifter	D. Rood	Mount Erie, Ill	Aug. 12, 1873	141, 669
Wagon-bed plate, bolster-plate, and lock-bracket	H. C. Kochensperger	Thornville, Ohio	Feb. 2, 1869	86, 418
Wagon-bed strap-bolt	W. J. Lewis and H. W. Oliver, jr	Pittsburgh, Pa	Oct. 18, 1870	108, 493
Wagon-beds, Device for supporting	N. Berkeley	Aldie, Va	Aug. 24, 1869	93, 953
Wagon-body	J. H. Aldrich	Nashua, N. H	May 28, 1867	65, 039
Wagon-body	B. Burr	Batavia, Ill	Sept. 23, 1873	142, 969
Wagon-body	M. M. Carr	Ringwood, Ill	June 30, 1868	79, 311
Wagon-body	N. B. Cooper	Gratis, Ohio	Mar. 10, 1863	37, 855
Wagon-body	N. B. Cooper	Liberty, Ind	Feb. 11, 1873	135, 779
Wagon-body	G. W. Hoskin	Philadelphia, Pa	Dec. 31, 1867	72, 736
Wagon-body	H. Lavies and H. Stiefvater	Greenfield, Wis	May 6, 1873	138, 506
Wagon-body	T. E. Lewis	Pennville, Ind	Sept. 1, 1868	81, 800
Wagon-body	H. A. Luttgens	Paterson, N. J	Jan. 21, 1873	134, 996
Wagon-body	J. C. McFerran and A. P. Blunt	Washington, D. C	Jan. 19, 1869	85, 947
Wagon-body	J. D. Pettit	Rochester, Ind	Nov. 28, 1871	121, 409
Wagon-body	J. D. Pettit	Rochester, Ind	Aug. 13, 1872	130, 531
Wagon-body	C. W. Ray	Summitville, Ind	July 16, 1872	129, 055
Wagon-body	J. Sommers and J. S. Whitmire	Metamora, Ill	Apr. 16, 1872	125, 701
Wagon body and rack	I. N. Hoyt	Wayland, Mich	Dec. 5, 1871	121, 623
Wagon body and slat	P. S. Rich	Avalanch, Wis	Feb. 25, 1873	136, 268
Wagon-body, Composition	J. W. Jarboe	Green Point, N. Y	July 13, 1869	92, 611
Wagon-body fastening	A. A. Hotchkiss	Hannibal, Mo	Dec. 22, 1868	85, 096
Wagon-body lifter	E. A. Chatfield	Waterloo, Iowa	Mar. 19, 1872	124, 720
Wagon-body rails, Machine for chamfering	C. Spofford	Boston, Mass	Jan. 9, 1872	122, 674
Wagon bodies and seats, Device for securing corners of.	E. Andrews	Bryan, Ohio	July 29, 1873	141, 306
Wagon-bodies, Elevator connected to	M. G. Balfour	Mason City, Iowa	Mar. 12, 1872	124, 531
Wagon-bodies, Spring-bottom for	E. D. Cramer	Hackettstown, N. J	Jan. 10, 1871	110, 830
Wagon-bodies to perches, Connecting	S. G. Rowe	Dover, Me	July 2, 1872	128, 511
Wagon-bodies upon rubber springs, Supporting	W. A. Nichols	Zionsville, Ind	Apr. 30, 1872	126, 153
Wagon-bolster	D. L. Babcock	Saint Charles, Minn	June 12, 1866	55, 453
Wagon-bolster	J. W. Pearman and J. F. C. Lutz.	Holden, Mo	Nov. 15, 1870	109, 243
Wagon-bolster	G. Richards	Richland Centre, Wis	June 16, 1868	79, 005
Wagon-bolster	C. Stebbins	Owego, N. Y	Jan. 21, 1868	73, 471

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Invention.	Inventor.	Residence.	Date.	No.
Wagon-bolster plate	T. and J. Pickard	Minonk, Ill	May 13, 1873	138, 816
Wagon-bolster stake	L. W. Shaeffer	Elizabethtown, Ky	Apr. 4, 1871	113, 458
Wagon bottom and chute, Adjustable	A. Bitner, jr	Lancaster, Pa	Dec. 14, 1869	97, 753
Wagon-box	W. B. Geer and A. H. Palmer	Portland, Ill	Jan. 9, 1866	51, 938
Wagon-box	T. M. Marcy	Windham, Ohio	Dec. 15, 1868	84, 892
Wagon-box	W. F. Moore and J. A. Bowers	Channahon, Ill	Oct. 12, 1869	95, 712
Wagon-box	G. W. Oviatt	Potter Centre, N. Y	Apr. 16, 1867	63, 931
Wagon-box	H. Parker	Salem, Ill	June 23, 1868	79, 251
Wagon-box	H. W. Persing	Centralia, Ill	Dec. 8, 1868	84, 757
Wagon-box	D. H. Peterson	Terre Haute, Ill	July 16, 1867	66, 882
Wagon-box and hay-rack	S. Dickson	Sandwich, Ill	Mar. 14, 1871	112, 559
Wagon-box and wagon-rack lifter	I. Van Kersen	Kalamazoo, Mich	Jan. 17, 1871	111, 021
Wagon-box, Compound	I. Drake	Mansfield, N. J	Aug. 20, 1850	7, 575
Wagon-box-corner fastening	J. W. Crandell	Homer, N. Y	Sept. 30, 1873	143, 333
Wagon box, Dumping	G. R. Clark	Livonia, N. Y	Sept. 24, 1867	69, 075
Wagon-box strap-bolt	W. J. Lewis	Pittsburgh, Pa	Nov. 12, 1872	132, 912
Wagon-boxes, Apparatus for removing	S. S. Brewster	Manchester, Mich	July 21, 1868	80, 127
Wagon-boxes, Casting skeins of	T. Considine	Chicago, Ill	Oct. 10, 1865	50, 340
Wagon-boxes, Machine for letting in	O. A. Fuller	Vernon, N. Y	Dec. 21, 1831	......
Wagon-boxes, Metallic stand for	E. Milner	Marquette, Mich	July 26, 1870	105, 714
Wagon-boxes, Mold for casting	J. Molineaux	Northampton, Pa	July 12, 1843	3, 169
Wagon-boxes to bolsters, Device for holding	H. L. Anderson	Chicago, Ill	Sept. 23, 1873	142, 978
Wagon-bow fastening	A. R. Scott	Bethel, Ohio	Oct. 16, 1866	58, 897
Wagon brace and fender	J. E. Strode	Carrollton, Ill	Oct. 8, 1867	69, 722
Wagon-brake	J. J. Adgate	Stevensville, N. Y	July 11, 1871	116, 910
Wagon-brake	W. P. Alcorn	New Wilmington, Pa	July 13, 1869	92, 557
Wagon-brake	H. Anderson	Shepherdstown, Pa	Dec. 1, 1868	84, 463
Wagon-brake	D. M. Bailey	Carlisle, Pa	Apr. 28, 1868	77, 345
Wagon-brake	W. W. Bean	Iowaville, Iowa	Apr. 16, 1867	63, 833
Wagon-brake	G. and W. Bench	Auburn, N. Y	Dec. 26, 1865	51, 684
Wagon-brake	C. G. Bennet and S. A. Drake	Farmer Village, N. Y	June 4, 1867	65, 332
Wagon-brake	E. Bennett	Clarksville, N. Y	Feb. 16, 1864	41, 595
Wagon-brake	G. M. Bennett	Burlington, Iowa	Oct. 10, 1871	119, 736
Wagon-brake	J. F. Bennett	Lenora, Minn	July 13, 1869	92, 512
Wagon-brake	J. H. H. Bennett	Hunt's Hollow, N. Y	July 24, 1860	29, 232
Wagon-brake	J. E. Blodgett	Hannibal, N. Y	Mar. 20, 1855	12, 539
Wagon-brake	S. R. Bolton	Prescott, Wis	Oct. 13, 1868	83, 032
Wagon-brake	S. R. Bolton	Prescott, Mo	Apr. 25, 1871	114, 100
Wagon-brake	W. H. Bradt	New Scotland, N. Y	Dec. 14, 1869	97, 867
Wagon-brake	D. F. Breed	Fulton, N. Y	July 1, 1856	15, 217
Wagon-brake	H. Brewer	East Parsonfield, Me	Nov. 12, 1872	132, 803
Wagon-brake	R. D. Brown	Prattsburgh, N. Y	Dec. 20, 1859	26, 472
Wagon-brake	W. Bryant	Batesville, Ark	July 18, 1871	117, 147
Wagon-brake	E. T. Buckman	Sonora, Cal	Dec. 31, 1872	134, 417
Wagon-brake	W. P. Buckner	Union County, Tenn	Oct. 21, 1873	143, 747
Wagon-brake	M. C. Chamberlin	Johnsonsburgh, N. Y	Oct. 13, 1857	18, 386
Wagon-brake	T. Christian	Washington, D. C	July 5, 1864	43, 453
Wagon-brake	E. M. Chumard	Pittston, Pa	Feb. 11, 1868	74, 198
Wagon-brake	R. O. Codding and G. W. Pringle.	Coddingville, Ohio	Mar. 19, 1867	63, 020
Wagon-brake	B. R. Codwise	Montrose, Md	Dec. 17, 1867	72, 370
Wagon-brake	B. W. Coe	Des Moines, Iowa	Nov. 11, 1873	144, 443
Wagon-brake	L. T. Conant	New Lisbon, Ohio	July 6, 1869	92, 168
Wagon-brake	J. B. Cook	Lyons, Iowa	Apr. 28, 1868	77, 260
Wagon-brake	C. J. Crounse	Clarksville, N. Y	Aug. 17, 1869	93, 682
Wagon-brake	G. W. Crowe	Cincinnati, Ohio	Aug. 28, 1866	57, 625
Wagon-brake	E. N. Curtice	Springwater, N. Y	Nov. 5, 1867	70, 533
Wagon-brake	H. Davidson	New Salem, Ill	Sept. 8, 1868	81, 882
Wagon-brake	R. H. Dement	Hudson, Ill	Apr. 4, 1871	113, 636
Wagon-brake	C. Dold	Mason, Ohio	Aug. 10, 1869	93, 524
Wagon-brake	G. B. Douglass	Sedalia, Mo	May 4, 1869	89, 639
Wagon-brake	C. Ducreaux	New York, N. Y	May 5, 1868	77, 467
Wagon-brake	J. F. Durbin	Pana, Ill	Sept. 30, 1873	143, 337
Wagon-brake	D. Eaton	Rochester, Vt	June 29, 1869	92, 025
Wagon-brake	W. R. English and S. Rogers	English Centre, Pa	June 7, 1869	90, 829
Wagon-brake	O. F. Evans	Guilford, N. Y	Apr. 13, 1869	88, 859
Wagon-brake	H. C. Fairchild	Brooklyn, Pa	Oct. 16, 1866	58, 797
Wagon-brake	C. A. Fargo	Soquel, Cal	Oct. 8, 1867	69, 553
Wagon-brake	T. J. Farr	Medina, Ohio	May 7, 1867	64, 413
Wagon-brake	C. M. Flint	Hancock, N. H	Sept. 29, 1868	82, 611
Wagon-brake	C. W. Gage	Homer, N. Y	Feb. 20, 1866	52, 703
Wagon-brake	J. A. Gerhart	Easton, Pa	Dec. 12, 1871	121, 772
Wagon-brake	G. Gibbs	Fairview, Ind	Feb. 9, 1869	86, 659
Wagon-brake	W. Glaze	Rochester, Ind	June 13, 1865	48, 169
Wagon-brake	I. and I. M. Gross	New Galena, Pa	Nov. 20, 1866	59, 834
Wagon-brake	H. G. Hadden, jr	Catskill, N. Y	Apr. 30, 1872	126, 201
Wagon-brake	W. T. Hamilton	Luthersburgh, Pa	Aug. 29, 1871	118, 530
Wagon-brake	D. Healy	Dansville, N. Y	Mar. 30, 1869	88, 293
Wagon-brake	D. Healy	South Dansville, N. Y	July 11, 1871	116, 957
Wagon-brake	S. S. Henderson	North Cohocton, N. Y	Apr. 28, 1868	77, 190
Wagon-brake	J. Hoke	Cordova, Ill	Mar. 16, 1869	87, 847
Wagon-brake	S. A. Hough	Oxford, Ga	Jan. 12, 1858	19, 112
Wagon-brake	C. M. Howell	Andover, N. J	Jan. 25, 1870	99, 194
Wagon-brake	W. Hull	Fort Wayne, Ind	Oct. 29, 1867	70, 217
Wagon-brake	R. Hurd	Morrison, Ill	Apr. 19, 1870	102, 009
Wagon-brake	R. Hurd	Morrison, Ill	Feb. 28, 1871	112, 252
Wagon-brake	S. S. Hurlburt	Racine, Wis	Nov. 19, 1872	133, 154
Wagon-brake	S. E. Hyndman	Middletown, Ohio	Apr. 30, 1867	64, 225
Wagon-brake	E. N. Jack	Williamsburgh, Ohio	Nov. 25, 1873	144, 849
Wagon-brake	G. W. Jackman	Bath, N. H	Dec. 17, 1872	134, 065
Wagon-brake	A. C. Jaques	Leavenworth, Kans	Dec. 14, 1869	97, 775
Wagon-brake	W. K. Johnson	Cordova, Ill	June 29, 1869	91, 941
Wagon-brake	W. D. Johnston	Harrisville, Pa	July 2, 1872	128, 545
Wagon-brake	E. P. Jones	Shell Mound, Miss	Mar. 15, 1870	100, 901
Wagon-brake	F. M. Kelley	Hart County, Ky	Sept. 19, 1871	119, 033
Wagon-brake	A. Kessberger	Springfield, Ill	Apr. 6, 1869	88, 721
Wagon-brake	D. J. Kirkman and E. H. Gray	Winchester, Ill	Mar. 5, 1867	62, 658

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Wagon-brake	T. D. Ladenberger	Glenbeulah, Wis	Aug. 25, 1868	81, 382
Wagon-brake	J. Lathrop	Lapeer, N. Y	Aug. 3, 1869	93, 315
Wagon-brake	N. Lezat	New Baltimore, N. Y	Sept. 5, 1865	49, 771
Wagon-brake	G. Long	Marlborough Township, Ohio.	July 23, 1867	67, 126
Wagon-brake	J. Long	Morristown, Ind	Apr. 2, 1861	31, 894
Wagon-brake	J. J. Look	Farmington, Me	Dec. 4, 1866	60, 209
Wagon-brake	J. Ludeke	Griffin's Corners, N. Y	Sept. 7, 1869	94, 622
Wagon-brake	C. M. Lufkin	Unity, N. H	Oct. 3, 1871	119, 524
Wagon-brake	A. B. Mattoon	Niles, N. Y	Sept. 26, 1865	50, 145
Wagon-brake	J. S. McGlumphy	Wind Ridge, Pa	Aug. 28, 1866	57, 538
Wagon-brake	G. McKenzie	Zanesville, Ohio	Nov. 3, 1868	83, 781
Wagon-brake	J. McQuead	Mount Sterling, Ill	Feb. 20, 1866	52, 731
Wagon-brake	J. Mickley and J. E. Hartman	Cashtown, Pa	Dec. 6, 1870	109, 832
Wagon-brake	S. H. Miller and E. Grubb	Liberty, Ill	Jan. 19, 1864	41, 315
Wagon-brake	C. H. Mills	Ravenna, Ohio	Mar. 16, 1869	88, 796
Wagon-brake	B. B. Monroe	Jackson, Mich	July 16, 1867	66, 866
Wagon-brake	G. W. Morgan	Prattsburgh, N. Y	Mar. 20, 1860	27, 558
Wagon-brake	W. B. Morgan and J. H. Terrell	Antioch, Ind	July 21, 1868	80, 201
Wagon-brake	B. B. Munroe	South Dansville, N. Y	June 8, 1858	20, 504
Wagon-brake	H. W. Norville	Livingston, Ala	July 24, 1860	29, 299
Wagon-brake	A. S. Notestein	Luray, Mo	Apr. 23, 1872	125, 902
Wagon-brake	A. V. D. H. Oliver	Bethlehem, N. Y	Jan. 3, 1871	110, 673
Wagon-brake	W. F. Osborne	Burlington, Kans	Sept. 9, 1873	142, 579
Wagon-brake	D. J. Owen	Springfield, Pa	Dec. 15, 1868	85, 025
Wagon-brake	J. Paney and M. Martin	Walla Walla, Wash	Aug. 13, 1872	130, 439
Wagon-brake	A. Peirce	Lake City, Minn	May 18, 1869	90, 186
Wagon-brake	L. C. Percival	Philadelphia, Pa	Feb. 13, 1866	52, 595
Wagon-brake	J. S. Pfrimmer	Lanesville, Ind	Sept. 22, 1868	82, 439
Wagon-brake	D. Philips	Cordova, Ill	July 14, 1868	79, 855
Wagon-brake	D. Philips	Cordova, Ill	Sept. 22, 1868	82, 344
Wagon-brake	J. W. Phillippi	Stahlstown, Pa	May 14, 1867	64, 700
Wagon-brake	M. G. Pickett	Kingston Kings, Canada	Feb. 6, 1872	123, 359
Wagon-brake	J. J. Pierce	Maquoketa, Iowa	Nov. 10, 1868	83, 879
Wagon-brake	M. Powell	Umatilla, Oreg	Mar. 29, 1870	101, 308
Wagon-brake	A. Quinby	Salem, Mass	Aug. 16, 1870	106, 406
Wagon-brake	H. Racine	Paola, Kans	July 26, 1870	105, 845
Wagon-brake	R. Roberts	Dubuque, Iowa	Feb. 4, 1873	135, 491
Wagon-brake	D. Robinson	Lenox, Pa	Jan. 25, 1859	22, 749
Wagon-brake	J. Robinson	Sedalia, Mo	Nov. 29, 1870	109, 761
Wagon-brake	J. J. Rose	Elmwood, Ill	May 16, 1871	114, 973
Wagon-brake	J. Row	Mantorville, Minn	May 26, 1863	38, 697
Wagon-brake	D. J. Rundell	South Westerlo, N. Y	Nov. 1, 1870	108, 835
Wagon-brake	D. Sager	Albany, N. Y	Sept. 11, 1866	57, 975
Wagon-brake	H. Sager	Penn Station, Pa	Oct. 3, 1871	119, 655
Wagon-brake	G. W. Sanborn	Gilmanton, N. H	Dec. 6, 1870	109, 843
Wagon-brake	M. Satterlee	Foreston, Ill	Sept. 28, 1869	95, 384
Wagon-brake	F. W. Schultz	Mount Pleasant, Iowa	June 27, 1871	116, 503
Wagon-brake	J. F. W. Schultz	Moline, Ill	May 14, 1867	64, 801
Wagon-brake	B. B. Scofield	Woodhull, Ill	Mar. 26, 1867	63, 312
Wagon-brake	P. Seward	Chaseville, N. Y	Apr. 9, 1861	32, 006
Wagon-brake	R. C. Shockley	Fayette, Wis	Apr. 25, 1871	114, 054
Wagon-brake	H. Slater	Auburn, N. Y	June 30, 1857	17, 700
Wagon-brake	J. H. Smiley	Caroline, N. Y	Jan. 14, 1868	73, 265
Wagon-brake	J. H. Smiley	Caroline, N. Y	June 9, 1868	78, 841
Wagon-brake	A. P. Smith	Greensburgh, Pa	Sept. 17, 1867	69, 035
Wagon-brake	G. P. Smith and J. Desso	Lake City, Minn	Dec. 3, 1867	71, 802
Wagon-brake	J. Smith	McKay, Ohio	Feb. 23, 1869	87, 213
Wagon-brake	T. Smith	California, Mo	Nov. 5, 1867	70, 639
Wagon-brake	D. T. Snelbaker	Cincinnati, Ohio	Oct. 19, 1869	95, 946
Wagon-brake	D. T. Snelbaker	Cincinnati, Ohio	May 28, 1872	127, 380
Wagon-brake	A. Snyder	Knox Township, Ohio	Mar. 12, 1872	124, 636
Wagon-brake	J. Snyder	Centre County, Pa	July 5, 1864	43, 436
Wagon-brake	W. I. Spore	New Scotland, N. Y	May 23, 1871	115, 130
Wagon-brake	T. G. Springer	Conneautville, Pa	Oct. 30, 1866	59, 285
Wagon-brake	W. B. Stanley	Groveton, N. H	Apr. 8, 1873	137, 633
Wagon-brake	W. Tash	Berlin, Ill	Apr. 9, 1867	63, 765
Wagon-brake	O. C. Taylor	Rome, Pa	Feb. 26, 1867	62, 509
Wagon-brake	F. L. Tripp	Prescott, Wis	Mar. 14, 1865	46, 834
Wagon-brake	W. H. Tucker	Sunman, Ind	Aug. 4, 1868	80, 684
Wagon-brake	T. Urie	Springfield, Iowa	Dec. 22, 1868	85, 148
Wagon-brake	A. Volaw	New Garden, Ohio	Mar. 12, 1867	62, 789
Wagon-brake	H. Walmer	Lebanon, Pa	May 16, 1871	114, 995
Wagon-brake	J. Walton	Delevan, Wis	Feb. 18, 1868	74, 642
Wagon-brake	W. T. Ward	Indianapolis, Ind	Dec. 1, 1868	84, 662
Wagon-brake	S. Warren	Hollis, Me	July 16, 1867	66, 917
Wagon-brake	J. Weathers	Greensburgh, Ind	Aug. 21, 1866	57, 477
Wagon-brake	G. W. Welsh and G. Wylie	Arlington, Wis	Dec. 22, 1868	85, 151
Wagon-brake	H. West	Quincy, Mass	Sept. 29, 1836	36
Wagon-brake	B. F. Wheeler	Calais, Vt	Feb. 11, 1868	74, 462
Wagon-brake	J. S. Whisler	Albany, Ill	May 21, 1861	32, 392
Wagon-brake	T. T. Wier	Gallatin, Mo	Sept. 11, 1866	58, 014
Wagon-brake	J. H. Wilkinson	Kickapoo, Ill	Mar. 13, 1866	53, 210
Wagon-brake	W. D. Williams	Raleigh, N. C	Nov. 8, 1853	10, 218
Wagon-brake	I. Willits	Deer Plain, Ill	July 27, 1869	93, 028
Wagon-brake	J. F. Wilson	Lewisville, Ind	Oct. 31, 1865	50, 762
Wagon-brake	L. Wolf	Louisville, Ky	Jan. 5, 1869	85, 715
Wagon-brake	J. Wölfa	Cincinnati, Ohio	Dec. 13, 1870	110, 183
Wagon-brake	J. F. Wood, 2d	Cohocton, N. Y	May 10, 1864	42, 711
Wagon-brake	J. F. Wood, 2d	Cohocton, N. Y	Mar. 12, 1867	62, 796
Wagon-brake	L. E. Woodard	Cohocton, N. Y	Sept. 4, 1866	57, 810
Wagon-brake	L. E. Woodard	Owasso, Mich	Oct. 15, 1867	69, 886
Wagon-brake	G. S. Ziegenfuss	Doylestown, Pa	June 18, 1867	65, 983
Wagon-brake and dumping-device, Combined	L. M. Osborn	Hamilton, N. Y	May 7, 1867	64, 560
Wagon-brake and tongue-support	A. C. Jaques	Leavenworth, Kans	Apr. 13, 1869	88, 962
Wagon-brake, Automatic	S. Alley and S. D. Williamson	Clifty, Ind	Oct. 8, 1867	69, 604
Wagon-brake, Automatic	W. D. Miller	Enon, Ohio	Mar. 12, 1867	62, 869
Wagon-brake, Automatic	F. M. Pickerill	Indianapolis, Ind	May 3, 1870	102, 589

Index of patents issued from the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Wagon-brake, Automatic	S. J. and F. M. Pickerill	Indianapolis, Ind	Jan. 25, 1870	99, 230
Wagon-brake block	W. H. Bradt	New Scotland, N. Y	Apr. 12, 1870	101, 818
Wagon-brake block	H. Crowell	Washington Corners, Cal	Feb. 9, 1869	86, 648
Wagon-brake-lever lock	W. K. Johnston	Cordova, Ill	Dec. 24, 1867	72, 502
Wagon-brake lock	L. and H. Egeberg	Columbus City, Iowa	Mar. 26, 1872	124, 941
Wagon-brake lock	S. S. Hurlbut	Racine, Wis	May 21, 1872	126, 964
Wagon-brake lock	T. Urie	Springfield, Iowa	May 28, 1867	65, 311
Wagon-brake rack	W. J. Lewis	Pittsburgh, Pa	Oct. 4, 1870	107, 930
Wagon-brake, Self-acting	G. Buchanan	Hickory, Pa	Aug. 28, 1860	29, 764
Wagon-brake, Self-acting	M. C. Chamberlin	Johnsonsburgh, N. Y	June 9, 1857	17, 493
Wagon-brake, Self-acting	J. Dutcher	Gibson, Pa	Jan. 24, 1860	26, 896
Wagon-brake, Self-acting	O. Fish	Coulterville, Cal	Aug. 13, 1872	130, 364
Wagon-brake, Self-acting	F. M. Hartman	Marathon, Ohio	Dec. 3, 1872	133, 644
Wagon-brake, Self-acting	B. S. Healy	Cohocton, N. Y	Aug. 16, 1859	25, 115
Wagon-brake, Self-acting	A. Larrowe	Cohocton, N. Y	Sept. 21, 1858	21, 569
Wagon-brake, Self-acting	W. May	Winchester, Ohio	June 5, 1860	28, 636
Wagon-brake, Self-acting	T. J. Reckey	McElhattan, Pa	Sept. 11, 1866	57, 972
Wagon-brake, Self-acting	J. Rosenkrans	Avoca, N. Y	May 31, 1859	24, 239
Wagon-brake, Self-acting	D. Sager	Albany, N. Y	Oct. 28, 1862	36, 801
Wagon-brake, Self-acting	T. Smith	California, Mo	Sept. 1, 1868	81, 606
Wagon-brake, Self-acting	P. H. Van Houten	Cohocton, N. Y	June 21, 1864	43, 244
Wagon-brake, Self-acting	J. A. and W. W. Williams	Mattoon, Ill	Feb. 11, 1868	74, 468
Wagon-brake, Self-acting	J. F. Wood, 2d	Cohocton, N. Y	Sept. 17, 1867	68, 926
Wagon-brake, Self-acting	A. Zink	Lancaster, Ohio	Nov. 8, 1870	109, 097
Wagon-brake, Self-regulating	R. Turner	Ward, Mass	Aug. 29, 1828	......
Wagon-brake shoe	H. Seitz	Palmyra, Mo	May 20, 1873	139, 086
Wagon-brakes, Device for operating	D. W. Carkhuff	Lambertville, N. J	Sept. 1, 1868	81, 750
Wagon-brakes, Holder and seat for	H. C. Kochensperger	Thornville, Ohio	May 28, 1867	65, 236
Wagon-brakes, Operating	J. H. Lee	Leavenworth, Kans	Dec. 1, 1863	40, 759
Wagon-brakes, Rubber-block holder for	W. J. Lewis	Pittsburgh, Pa	Feb. 14, 1871	111, 756
Wagon, Buck-board	M. Miller	Buffalo, N. Y	Sept. 6, 1870	107, 076
Wagon, Buggy	T. Winans	Baltimore, Md	Jan. 29, 1856	14, 174
Wagon chafing-iron	E. P. Roche	Bath, Me	Sept. 28, 1869	95, 381
Wagon chafing-roller	J. M. Mayhew	Providence, R. I	July 14, 1868	79, 995
Wagon-clip	G. S. Ziegenfuss	Doylestown, Pa	Jan. 21, 1868	73, 686
Wagon-clips, Machine for making	G. Feightner	Wooster, Ohio	May 14, 1867	64, 754
Wagon, coach, and brake	H. West	Quincy, Mass	Sept. 29, 1836	......
Wagon, Coasting	A. Brown	Springfield, Vt	June 27, 1871	116, 409
Wagon, Coke	C. Wheat and A. Catchpole	Geneva, N. Y	Dec. 14, 1869	98, 001
Wagon coupling	J. Boyers	Grandville, Va	Feb. 3, 1857	16, 523
Wagon-coupling	A. Fassett	Sterling, Ill	May 30, 1871	115, 453
Wagon-coupling	W. D. Guseman	Morgantown, Va	May 26, 1857	17, 369
Wagon coupling	H. Mitchell	Racine, Wis	Feb. 25, 1868	74, 843
Wagon-coupling	J. M. Wynn	Scipio, Ind	Aug. 18, 1868	81, 240
Wagon-coupling	U. Wynn	Sterling, Ill	Feb. 11, 1873	135, 742
Wagon-coupling, Extension	J. P. Allensworth	Mackinaw, Ill	June 29, 1869	91, 811
Wagon-cover frame, Folding	B. G. Luther	Providence, R. I	June 22, 1869	91, 551
Wagon, Cradle	G. Smith	Brooklyn, N. Y	Mar. 8, 1859	23, 197
Wagon crank-axle	T. E. Lutner	Philadelphia, Pa	May 25, 1869	90, 455
Wagon draft-attachment	W. P. Brown	Malta, Ohio	Sept. 10, 1872	131, 248
Wagon draft-equalizer	C. C. Bradley	Brodhead, Wis	Nov. 10, 1868	83, 914
Wagon, Dumping	J. H. Adriaans	Washington, D. C	Apr. 22, 1873	138, 111
Wagon, Dumping	J. F. Applegate	New Albany, Ind	Feb. 6, 1872	123, 440
Wagon, Dumping	W. S. Babcock	Stonington, Conn	Aug. 8, 1854	11, 466
Wagon, Dumping	T. Bailey	Friendship, Va	Mar. 8, 1859	23, 147
Wagon, Dumping	H. Barton	Black Earth, Wis	Oct. 9, 1866	58, 575
Wagon, Dumping	H. Barton	Elyria, Ohio	Mar. 31, 1868	76, 039
Wagon, Dumping	U. N. Beardsley	Lawton, Mich	July 27, 1869	93, 041
Wagon, Dumping	I. Bodley	Saint Louis, Mo	Jan. 28, 1873	135, 195
Wagon, Dumping	J. and M. Broderick	Louisville, Ky	Sept. 12, 1871	118, 841
Wagon, Dumping	W. Buck	Peterborough, Canada	Nov. 26, 1872	133, 300
Wagon, Dumping	W. S. Bullock and H. Hanigan	Wilmington, Del	Nov. 10, 1868	83, 920
Wagon, Dumping	G. Burket and S. Lantz	Bluffton and Ada, Ohio	May 24, 1870	103, 426
Wagon, Dumping	J. G. Burwell and J. J. Walls	Crystal Springs, Miss	Dec. 7, 1869	97, 598
Wagon, Dumping	W. W. Carré	New Orleans, La	Jan. 9, 1872	122, 565
Wagon, Dumping	T. Castor	Frankford, Pa	Aug. 3, 1852	9, 164
Wagon, Dumping	N. Clute	Schenectady, N. Y	June 25, 1867	66, 076
Wagon, Dumping	M. Y. and T. J. Cope	Centre Bridge, Pa	Oct. 20, 1857	18, 438
Wagon, Dumping	J. Craig	San Francisco, Cal	Mar. 30, 1869	88, 277
Wagon, Dumping	G. R. Cramer	Cincinnati, Ohio	Feb. 26, 1867	62, 478
Wagon, Dumping	A. V. Cross	Washington, D. C	June 22, 1852	9, 050
Wagon, Dumping	D. Dennett	Buxton, Me	Dec. 18, 1866	60, 489
Wagon, Dumping	J. Esch	Milwaukee, Wis	Dec. 21, 1869	98, 044
Wagon, Dumping	W. Fields	Wilmington, Del	Nov. 18, 1873	144, 608
Wagon, Dumping	D. S. Gardner	Bristol, Md	Sept. 7, 1869	94, 485
Wagon, Dumping	T. H. Gary	Bristol, Md	Feb. 16, 1869	86, 979
Wagon, Dumping	T. H. Gary	Bristol, Md	Apr. 13, 1869	88, 955
Wagon, Dumping	R. Greer and W. J. Thomasson	Raleigh, N. C	Oct. 14, 1873	143, 570
Wagon, Dumping	O. Gunnuldson	Christiana, Wis	Apr. 29, 1873	138, 395
Wagon, Dumping	D. E. Haines	Uniontown, D. C	Apr. 29, 1873	138, 246
Wagon, Dumping	J. Highfield	Centreville, Ind	July 8, 1873	140, 703
Wagon, Dumping	B. Holmes	Buffalo, N. Y	Aug. 31, 1869	94, 315
Wagon, Dumping	B. Holmes	Buffalo, N. Y	July 26, 1870	105, 684
Wagon, Dumping	J. Holmes	Johnson, Vt	Mar. 31, 1868	76, 192
Wagon, Dumping	A. Iske	Lancaster, Pa	July 12, 1859	24, 741
Wagon, Dumping	A. Iske	Lancaster, Pa	Dec. 5, 1871	121, 459
Wagon, Dumping	E. R. Katz	Springfield Township, Pa	Sept. 3, 1872	131, 006
Wagon, Dumping	V. H. Lyon	Plainfield, Ind	Mar. 22, 1870	101, 030
Wagon, Dumping	A. D. Manley	Washington, Mich	May 15, 1866	54, 747
Wagon, Dumping	S. D. and W. McCaleb	Louisville, Ky	Apr. 25, 1871	114, 173
Wagon, Dumping	E. Miller	Milwaukee, Wis	Feb. 22, 1870	100, 052
Wagon, Dumping	C. T. Moore	Gilmanton, N. H	Aug. 17, 1869	93, 828
Wagon, Dumping	G. N. Munger	New Haven, Conn	Feb. 12, 1867	61, 948
Wagon, Dumping	J. W. Nye	Fairfield, Vt	Mar. 26, 1861	31, 851
Wagon, Dumping	J. L. Ordner	Cleveland, Ohio	Dec. 11, 1866	60, 413
Wagon, Dumping	C. F. Parker	Greenfield, Ohio	Apr. 26, 1870	102, 436
Wagon, Dumping	J. Priest	Detroit, Mich	Feb. 4, 1868	74, 131
Wagon, Dumping	W. Robinson	Highgate, Vt	Mar. 5, 1867	62, 687

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Wagon, Dumping	H. Shirey	Fond du Lac, Wis	Feb. 25, 1868	74, 856
Wagon, Dumping	J. Skeen	Mound City, Ill	May 23, 1871	115, 244
Wagon, Dumping	J. Skeen	Mound City, Ill	June 25, 1872	128, 429
Wagon, Dumping	D. D. Smith	Louisville, Ky	Aug. 27, 1872	130, 950
Wagon, Dumping	D. D. Smith	Louisville, Ky	Aug. 19, 1873	142, 049
Wagon, Dumping	G. R. and C. H. Sneath	Wilmington, Del	Oct. 13, 1868	83, 003
Wagon, Dumping	L. B. Snow	Cleveland, Ohio	Dec. 5, 1871	121, 552
Wagon, Dumping	W. H. Start	Smyrna, Del	Feb. 6, 1849	6, 098
Wagon, Dumping	W. H. Stearett	Wilmington, Del	Sept. 14, 1869	94, 850
Wagon, Dumping	C. G. Taft	Triangle, N. Y	Dec. 3, 1872	133, 602
Wagon, Dumping	G. W. Tolhurst and D. C. Sartwell	Liverpool, Ohio	May 8, 1860	28, 216
Wagon, Dumping	W. B. Twiford	Horntown, Va	Oct. 28, 1856	15, 987
Wagon, Dumping	W. B. Twiford	Chincoteague, Va	Aug. 9, 1859	25, 062
Wagon, Dumping	J. Wilkinson	Baltimore, Md	Jan. 15, 1861	31, 135
Wagon, Dumping	E. Williams and A. Kinney	Potosi, Wis	Dec. 3, 1872	133, 611
Wagon, Dumping	D. Willson	Ishpeming, Mich	Dec. 14, 1869	97, 846
Wagon, Dumping	J. I. Wolf	Greenfield, Ohio	Nov. 7, 1871	120, 805
Wagon end-board and platform, Convertible	T. T. Powell and J. F. Burroughs	Lawn Ridge, Ill	Dec. 14, 1869	97, 808
Wagon end-board, Extension	S. Neill and A. Pick	Chillicothe, Ill	May 11, 1869	89, 939
Wagon end-board, Fastening	G. W. Diller	Odell, Ill	Feb. 21, 1871	111, 915
Wagon end-gate	J. C. Baird and M. Miller	Heaton, Ill	Nov. 11, 1873	144, 429
Wagon end-gate	T. A. and J. L. Brown	Roanoke, Ill	Oct. 28, 1873	143, 960
Wagon end-gate	J. D. Carey	Monica, Ill	Dec. 31, 1872	134, 358
Wagon end-gate	J. D. Carey	Monica, Ill	June 10, 1873	139, 766
Wagon end-gate	C. W. Falleick	Beaver Falls, Pa	May 21, 1872	126, 943
Wagon end-gate	F. Grundy	Morrisonville, Ill	Sept. 9, 1873	142, 566
Wagon end-gate	W. W. Hinman	Elkhart, Ill	Dec. 3, 1872	133, 646
Wagon end-gate	G. Lounsberg	Chenoa, Ill	Mar. 26, 1872	124, 902
Wagon end-gate	E. S. Miller	Baltimore, Ohio	Mar. 31, 1868	76, 095
Wagon end-gate	S. F. Robertson	Rockford, Ill	June 17, 1873	139, 974
Wagon end-gate	J. F. Sener	Lancaster, Pa	Mar. 21, 1871	112, 968
Wagon end-gate	R. Smillie and C. H. Brooks	Virden, Ill	Aug. 5, 1873	141, 602
Wagon end-gate	R. F. Stocking and C. P. Greene	Lawn Ridge, Ill	Dec. 6, 1870	109, 965
Wagon end-gate	R. F. Stocking and C. P. Greene	Lawn Ridge, Ill	Dec. 6, 1870	109, 966
Wagon end-gate	J. L. Stropes	Bloomfield, Ind	July 11, 1871	117, 014
Wagon end-gate	S. G. Thomas	Eden, Ill	Feb. 6, 1872	123, 430
Wagon end-gate, Grain	C. H. Comstock	Chebanse, Ill	Mar. 22, 1870	101, 102
Wagon, Express	W. D. Osborn	Boston, Mass	Dec. 4, 1866	60, 234
Wagon, Express	T. W. Porter	Boston, Mass	Mar. 24, 1868	75, 972
Wagon, Extension	E. D. Rosencrantz	New York, N. Y	May 6, 1856	14, 831
Wagon extension-bed, Farm	S. W. Meredith and D. Mulligan	Greensburgh, Ind	Sept. 10, 1867	68, 772
Wagon extension-trough	A. Iske	Lancaster, Pa	Apr. 1, 1873	137, 371
Wagon, Farm	C. Mahan	Grand Island, Cal	May 5, 1868	77, 500
Wagon for hauling stone or heavy bodies	L. E. Truesdell	Warren, Mass	Feb. 25, 1873	136, 287
Wagon for loading timber	J. Skeen	Mound City, Ill	Dec. 6, 1870	109, 956
Wagon for transporting medicine	J. Dunton	Philadelphia, Pa	Mar. 24, 1863	37, 955
Wagon for transporting medicine	T. M. Perot	Philadelphia, Pa	Sept. 15, 1863	39, 951
Wagon for unloading coal	J. H. Wood	Trenton, N. J	Jan. 21, 1868	73, 684
Wagon-gearing	J. B. Augur	Poughkeepsie, N. Y	Oct. 11, 1870	108, 085
Wagon-gearing	E. Huson	Ithaca, N. Y	Feb. 17, 1857	16, 648
Wagon-gearing	J. Shoudler	Scottsville, N. Y	May 30, 1871	115, 366
Wagon, Grain	D. Warnock	Champaign, Ill	Jan. 23, 1872	123, 065
Wagon, Gravel	A. Neer	Bellefontaine, Ohio	Apr. 30, 1867	64, 350
Wagon hammer-strap	C. Brown	Adrian, Mich	May 24, 1870	103, 421
Wagon, Hand	S. D. Scott	Eureka, Cal	Aug. 26, 1873	142, 285
Wagon, Hay	A. B. Barlow	Adrian, Mich	Mar. 26, 1872	124, 876
Wagon hay and grain rack	C. Jarnagin	Bean's Station, Tenn	Nov. 12, 1872	133, 035
Wagon, Hay-loading	A. M. Clara	Whitney's Point, N. Y	Aug. 28, 1866	57, 478
Wagon hay-rack	D. Dennett	Buxton, Me	June 26, 1866	55, 829
Wagon hay-rack	F. M. Evringham	La Fayette, N. Y	Dec. 4, 1866	60, 161
Wagon hay-rack	A. Jackson	Clifton Springs, N. Y	May 22, 1866	54, 914
Wagon hay-rack	A. Naramor	Utica, Mich	Sept. 25, 1866	58, 280
Wagon hay-rack	G. Y. Smith	Plainfield, Ill	Dec. 4, 1866	60, 271
Wagon hay-rack	S. J. Smith	Farmington, N. Y	Nov. 30, 1869	97, 322
Wagon hay-rack	S. J. Smith	Farmington, N. Y	Nov. 15, 1870	109, 261
Wagon hay-rack	J. W. Stevens and J. P. Bacome	Westville, Ohio	June 14, 1870	104, 373
Wagon hay-rack	W. M. Thomas	Binghamton, N. Y	Aug. 15, 1865	49, 455
Wagon hay shelf or rack	J. A. Hughes	Tindall, Mo	June 14, 1870	104, 313
Wagon-hold back	J. McNamee	Easton, Pa	July 14, 1863	39, 260
Wagon-hound	J. Fishbaugh	Tiffin, Ohio	Apr. 30, 1872	126, 279
Wagon-hound	F. Smith	Tiffin, Ohio	Sept. 26, 1871	119, 420
Wagon-hound	C. K. Wilcox	Sandusky City, Ohio	Oct. 15, 1872	131, 342
Wagon hound and pole brace	F. Smith	Tiffin, Ohio	Oct. 8, 1867	69, 716
Wagon-hound coupling box and plate	W. J. Lewis	Pittsburgh, Pa	Feb. 14, 1871	111, 755
Wagon-iron	W. J. Kochensperger	Thornville, Ohio	Nov. 22, 1870	109, 425
Wagon-jack	F. Arnold	Haddam Neck, Conn	June 30, 1868	79, 430
Wagon-jack	E. R. Baldwin	Southfield, Mass	Sept. 15, 1868	82, 069
Wagon-jack	M. Biglin and D. W. Bennett	Wilkesbarre, Pa	Feb. 18, 1868	74, 491
Wagon-jack	M. Burk	North Rush, N. Y	Dec. 2, 1873	145, 046
Wagon-jack	W. Clifford	Mina, N. Y	Sept. 22, 1868	82, 384
Wagon-jack	L. H. Colby	Groton, N. Y	Mar. 20, 1860	27, 595
Wagon-jack	A. G. Cooley	Hillsborough, Ohio	Oct. 21, 1873	143, 886
Wagon-jack	N. Crandall	Wooster, Ohio	Aug. 12, 1873	141, 709
Wagon-jack	W. M. Doty	Janesville, Wis	July 10, 1866	56, 192
Wagon-jack	C. Douglass	Hebron, Conn	Nov. 22, 1859	26, 170
Wagon-jack	A. Dunn	Plainfield, N. J	July 24, 1866	56, 538
Wagon-jack	G. B. Fowler	Brooklyn, N. Y	Apr. 4, 1871	113, 285
Wagon-jack	A. R. Giles	Adams, N. Y	May 16, 1871	114, 937
Wagon-jack	T. L. Goble	Orange, N. Y	Mar. 31, 1868	76, 073
Wagon-jack	J. M. Harlan	Owensville, Ind	Oct. 8, 1872	132, 005
Wagon-jack	T. S. Harris	Lockport, Ill	Oct. 15, 1867	69, 804
Wagon-jack	N. W. Hess and J. H. Fry	Fort Wayne, Ind	Jan. 14, 1868	73, 329
Wagon, &c., jack	W. Hoyet	Brookville, Ind	June 3, 1825	......
Wagon-jack	J. Hunt, jr	West Hampton Township, N. J.	Oct. 15, 1867	69, 810
Wagon-jack	H. W. Long	Council Bluffs, Iowa	Nov. 3, 1868	83, 778
Wagon-jack	A. S. Lovell	Unionville, Conn	Oct. 15, 1872	132, 163

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Wagon-jack	J. Moody	Harwich, Mass	Dec. 1, 1868	84, 567
Wagon-jack	R. B. Prindle	Norwich, N. Y	Aug. 20, 1867	68, 003
Wagon-jack	R. B. Prindle	Norwich, N. Y	Dec. 31, 1867	72, 901
Wagon-jack	S. Rice	Westford, Vt	Aug. 4, 1868	80, 768
Wagon-jack	A. Ross	Freeport, Ill	Apr. 14, 1868	76, 662
Wagon-jack	P. B Russell	Malone, N. Y	Feb. 1, 1870	99, 483
Wagon-jack	J. M. Spitler	Clinton, Kans	Aug. 27, 1867	68, 252
Wagon-jack	W. H. Trusty	Philadelphia, Pa	Oct. 29, 1867	70, 291
Wagon-jack	G. H. Tule	Haddonfield, N. J	Jan. 17, 1871	111, 098
Wagon-jack	I. Van Kersen	Kalamazoo, Mich	Mar. 19, 1872	124, 704
Wagon-jack	J. Wagner	Lancaster County, Pa	May 30, 1871	115, 396
Wagon-jack	J. W. Walton	Decatur, Mich	Sept. 6, 1870	107, 133
Wagon-jack	J. Weathers	Greensburgh, Ind	Nov. 14, 1871	121, 030
Wagon-jack	J. Zeller	Stouchsburgh, Pa	May 18, 1869	90, 147
Wagon-jack, Portable	H. Stowell and L. Spencer	Placerville, Cal	May 24, 1859	24, 160
Wagon jump-seat	C. H. Howell	Middletown, Del	Apr. 8, 1873	137, 681
Wagon-ladder	I. Williams	Bucyrus, Ohio	Nov. 23, 1869	97, 142
Wagon, Light	H. L. Isham	Plattsburgh, N. Y	Aug. 1, 1865	49, 112
Wagon-loader	J. Johnson	Iowa City, Iowa	Mar. 25, 1873	137, 138
Wagon loader and unloader	B. Coply	Washington, D. C	Sept. 30, 1873	143, 222
Wagon-lock	J. A. Counts	Indianapolis, Iowa	Dec. 10, 1867	71, 992
Wagon-lock	A. Downer	Hammondsville, Ohio	Sept. 3, 1867	68, 493
Wagon-lock	S. S. Hurlbut	Cardova, Ill	Oct. 4, 1870	107, 914
Wagon-lock	S. Jones	Bridgeport, Pa	May 4, 1830	....
Wagon-lock	O. A. Kenyon	McGregor, Iowa	Feb. 25, 1868	74, 831
Wagon-lock	F. A. Kington	Mendon, Ill	Aug. 11, 1868	80, 973
Wagon-lock	C. Noethlick	Muscatine, Iowa	May 12, 1868	77, 754
Wagon-lock	T. Service	Utica, Pa	Apr. 16, 1861	32, 086
Wagon-lock	J. F. Yates	Mooresville, Ind	June 13, 1865	48, 228
Wagon, Log	I. S. Pigott	Central Station, W. Va	Dec. 3, 1867	71, 785
Wagon, Lumber	C. F. Hall	Toronto, Canada	Aug. 28, 1866	57, 650
Wagon, Lumber	J. Skeen	Mound City, Ill	Feb. 28, 1871	112, 186
Wagon, Lumber	J. Skeen	Mound City, Ill	July 2, 1872	128, 667
Wagon lumber-rack	C. C. Comstock	Grand Rapids, Mich	Feb. 5, 1867	61, 808
Wagon, Manure	J. W. Barnes	Murfreesborough, N. C	Mar. 2, 1858	19, 477
Wagon, Manuring	J. Bowman	Coosawatchies, S. C	Aug. 12, 1829	....
Wagon, Market	J. Tampkins	Conklin, N. Y	Aug. 19, 1873	142, 058
Wagon, Military	J. Francis	New York, N. Y	Dec. 4, 1855	13, 872
Wagon, Milk	B. B. Gudge	Chicago, Ill	Nov. 1, 1870	108, 780
Wagon or carriage body	M. C. Boyer	Norristown, Pa	Oct. 17, 1871	120, 025
Wagon or carriage to be worked by hand	J. Bolton, jr		Sept. 29, 1804	....
Wagon or cart for removing earth	J. Owings	Baltimore, Md	Aug. 27, 1824	....
Wagon or sleigh seat fastening	J. G. Knapp and J. F. Robertson.	Warwick, N. Y	Mar. 7, 1871	112, 469
Wagon, Peddler's	S. T. Lamb and G. A. Rankin	New Albany, Ind	Sept. 28, 1869	95, 236
Wagon, Peddler's	J. Treffeison	Pittston, Pa	Apr. 23, 1872	126, 126
Wagon-platform	I. Bronson	Lockport, N. Y	Apr. 30, 1872	126, 177
Wagon, Pleasure	I. Crandal	Middlefield, N. Y	Feb. 11, 1862	34, 350
Wagon-pole	J. R. Madison and M. Thomas	Oneida, Ill	July 7, 1868	79, 584
Wagon-pole	W. Trump	Louisville, Ohio	June 1, 1869	90, 890
Wagon-pole support	D. Newton	Batavia, Ill	Feb. 18, 1868	74, 581
Wagon-poles, Device for steadying	R. A. Seaders	San Francisco, Cal	Jan. 2, 1872	122, 334
Wagon-protector	G. R. K. Smith	Brooklyn, N. Y	Jan. 7, 1868	73, 132
Wagon-reach	E. F. Flood	Chicago, Ill	Oct. 15, 1867	69, 789
Wagon-reach	T. Laux	Bucyrus, Ohio	Aug. 29, 1871	118, 540
Wagon-reach	J. H. Moffett	Reading, Mich	Aug. 24, 1869	94, 126
Wagon-reach	Z. Plumb	De Witt, Iowa	Nov. 5, 1867	70, 607
Wagon-reach	C. Stohr and H. Sackmann	New York, N. Y	Apr. 30, 1872	126, 342
Wagon reach and hound	W. R. Santley	New London, Ohio	Aug. 24, 1869	94, 034
Wagon-reach coupling	W. P. Ripley	Friendship, Tenn	June 18, 1872	128, 068
Wagon reach, Extension	J. W. Langdon	Marengo, Ill	Feb. 16, 1858	19, 372
Wagon reach, Lumber	G. and W. Bench	Auburn, N. Y	Jan. 30, 1866	52, 260
Wagon, Road	J. W. Lawrence	New York, N. Y	Dec. 11, 1860	30, 886
Wagon, Road	T. H. Prushaw	Fredonia, N. Y	Nov. 7, 1871	120, 598
Wagon, Road	C. W. Saladee	Saint Catharine's, Canada	Apr. 1, 1873	137, 324
Wagon, Road	C. W. Saladee	Saint Catharine's, Canada	Apr. 15, 1873	137, 963
Wagon rubber-spring	A. Higley	Cleveland, Ohio	Apr. 4, 1871	113, 664
Wagon, &c., running-gear	I. Crandal	Cherry Valley, N. Y	Jan. 3, 1854	10, 360
Wagon running-gear	J. Hibbs	Tullytown, Pa	July 6, 1858	20, 795
Wagon running-gear	A. Lewis	Minneapolis, Minn	June 3, 1873	139, 588
Wagon running-gear	I. O. Meddows	Bonham, Tex	June 24, 1873	140, 154
Wagon running-gear	G. Phillips	Augusta, Me	Sept. 30, 1873	143, 249
Wagon running-gear	T. H. Prushaw	Fredonia, N. Y	Dec. 24, 1872	134, 312
Wagon running-gear	C. M. Sexton	Aurora, Ill	Aug. 18, 1868	81, 217
Wagon running-gear	J. S. Whitehill	West Chester, Pa	Jan. 28, 1862	34, 278
Wagon running-gear, Iron	J. Ball, sr	Canton, Ohio	Sept. 19, 1871	119, 106
Wagon running-gear, Spring	J. Faussett	Leonardtown, Md	Jan. 16, 1872	122, 820
Wagon, Sail	W. Thomas	Benton County, Ark	Mar. 15, 1859	23, 277
Wagon-seat	C. W. Aiken	Decatur, Ill	Dec. 1, 1868	84, 603
Wagon-seat	T. J. Alexander	Westerville, Ohio	Nov. 11, 1873	144, 492
Wagon-seat	J. G. and J. S. Armstrong	Reed Township, Ohio	Feb. 25, 1873	136, 123
Wagon-seat	J. Beck	Williamsville, Ill	Jan. 29, 1867	61, 507
Wagon-seat	W. Beers	Milan, Ohio	Nov. 9, 1869	96, 662
Wagon-seat	L. H. Bullock	Champaign City, Ill	May 23, 1871	115, 158
Wagon-seat	I. H. Chappell	Decatur, Ill	Feb. 16, 1869	87, 026
Wagon-seat	I. H. Chappell	Decatur, Ill	June 22, 1869	91, 714
Wagon-seat	E. C. Cole	Pawling, N. Y	Apr. 1, 1872	137, 419
Wagon-seat	A. J. Crogan	Bonhomme, Dak	Mar. 18, 1873	136, 814
Wagon-seat	J. A. and W. F. Dann	New Haven, Conn	June 6, 1871	115, 583
Wagon-seat	T. De Kimp	Kirksville, Mo	May 18, 1869	90, 082
Wagon-seat	W. R. English and J. McClure	English Centre, Pa	Oct. 26, 1869	96, 213
Wagon-seat	J. B. Foote	Hamden, N. Y	Sept. 12, 1871	118, 919
Wagon-seat	L. Graham	Plymouth, Ill	June 2, 1868	78, 590
Wagon-seat	E. Hitt	Poundridge, N. Y	Mar. 30, 1869	88, 481
Wagon-seat	C. F. Hollenbeck	Kirkville, Mo	Sept. 27, 1870	107, 684
Wagon-seat	A. Hunt and C. C. Chapman	Macomb, Ill	July 14, 1868	79, 909
Wagon-seat	C. Jarnagin	Clinton, Tenn	Oct. 31, 1854	11, 864
Wagon-seat	M. Jincks	Wallace, N. Y	Oct. 5, 1869	95, 500

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Wagon-seat	I. Kinney	Detroit, Mich	Aug. 11, 1868	80, 897
Wagon-seat	M. Likes	Mansfield, Ohio	Sept. 23, 1873	143, 086
Wagon-seat	V. Myers	Cogan Station, Pa	Mar. 21, 1871	112, 834
Wagon-seat	J. H. Nale	Decatur, Ill	Jan. 26, 1869	86, 241
Wagon-seat	J. H. Nale	Decatur, Ill	June 1, 1869	90, 680
Wagon-seat	J. W. Plattenburgh	Tiffin, Ohio	May 6, 1873	138, 693
Wagon-seat	I. Powers	Laingsburgh, Mich	Oct. 14, 1873	143, 715
Wagon-seat	E. Reed	Owego, N. Y	Apr. 2, 1867	63, 425
Wagon-seat	D. W. Richardson	Henrietta, N. Y	Feb. 22, 1870	100, 190
Wagon-seat	R. N. Rockwell	Glenwood, Iowa	Nov. 5, 1867	70, 619
Wagon-seat	J. Sebastian	New York, N. Y	Dec. 17, 1867	72, 424
Wagon-seat	A. Sheline	Edon, Ohio	May 25, 1869	90, 466
Wagon-seat	J. U. Shultz	Shelby, Ohio	May 20, 1873	139, 027
Wagon seat	H. Wahlstedt	Princeton, Ill	June 20, 1871	116, 119
Wagon-seat	S. S. Webb and D. F. Crawford	Oaks, N. C	July 30, 1872	129, 912
Wagon-seat	J. Winecoff	Lavansville, Pa	May 6, 1873	138, 598
Wagon-seat and spring	R. L. Allen	New York, N. Y	Sept. 3, 1867	68, 479
Wagon-seat attachment	W. Beers	Milan, Ohio	May 17, 1870	103, 129
Wagon-seat fastener	G. Ruston	Freeport, Ill	July 29, 1873	141, 292
Wagon-seat fastening	E. Caswell	Lyons, N. Y	Oct. 17, 1871	120, 035
Wagon-seat fastening	C. Collins	Vernon Centre, N. Y	Dec. 14, 1869	97, 883
Wagon-seat fastening	P. Faber and H. Martin	Canandaigua, N. Y	Apr. 13, 1869	88, 950
Wagon-seat fastening	J. H. Fellows	Alba, Pa	Aug. 8, 1871	117, 874
Wagon-seat fastening	N. A. Gardiner	Virgil, N. Y	July 16, 1872	129, 470
Wagon-seat fastening	F. Norris	Freedom Plains, N. Y	July 26, 1870	105, 832
Wagon-seat fastening	J. C. Rankin	Mount Vernon, N. Y	Dec. 6, 1870	109, 943
Wagon-seat fastening	J. J. Schairer and C. Reimold	Saline, Mich	Nov. 26, 1872	133, 490
Wagon-seat-fastening device	J. H. Fellows	Alba, Pa	May 4, 1869	89, 570
Wagon-seat-fastening device	G. G. Heermance	Claverack, N. Y	Dec. 5, 1871	121, 519
Wagon-seat lock	E. Hitt	Poundridge, N. Y	Feb. 22, 1870	100, 150
Wagon-seat, manger, and tail-board, Convertible	C. Matheny	Greensburgh, Ind	Sept. 3, 1867	68, 766
Wagon-seat, Mode of attaching	J. L. Linville and W. Shimanour	Findlay, Ohio	Mar. 14, 1871	112, 723
Wagon-seat, Securing	E. Hoxie	Montezuma, N. Y	June 4, 1867	65, 384
Wagon-seat, Sliding	R. O. Knowles	Coolville, Ohio	Aug. 2, 1870	105, 955
Wagon-seat, Spring	P. Burress	Braidwood, Ill	Mar. 1, 1870	100, 370
Wagon-seat, Spring	A. Fassett	Stirling, Ill	May 30, 1871	115, 454
Wagon-seat, Spring	A. Reichert	Cogan Station, Pa	May 19, 1868	78, 009
Wagon-seat, Spring	G. H. Spencer	Hudson City, N. J	Sept. 24, 1872	131, 716
Wagon-seat, Spring	T. J. Alexander	Westerville, Ohio	Nov. 7, 1865	50, 785
Wagon-seat, Spring	G. W. Bennett	Avon, N. Y	May 21, 1872	126, 867
Wagon-seat, Spring	S. W. Denny	Blueville, Ill	Mar. 19, 1872	124, 670
Wagon-seat, Spring	W. P. Elam	Petersburgh, Ill	Mar. 14, 1871	112, 695
Wagon-seat, Spring	H. E. Foster	Decatur, Ill	May 3, 1870	102, 673
Wagon-seat, Spring	A. L. Hurtt	Monticello, Ind	Dec. 21, 1869	98, 063
Wagon-seat, Spring	A. S. Newman	Plymouth, Ill	Aug. 22, 1871	118, 385
Wagon-seat, Spring	H. H. Palmer	Rockford, Ill	Aug. 4, 1868	80, 562
Wagon-seat, Spring	W. Pruett	Duquoin, Ill	Mar. 1, 1870	100, 444
Wagon-seat, Spring	S. Reynolds	Northumberland, N. Y	July 17, 1829	....
Wagon-seat, Spring	J. R. Rudulph	Holland, Ohio	Dec. 3, 1872	133, 596
Wagon-seat, Spring	F. H. Steigmeyer and A. Reichert	Attica, Ohio	July 16, 1872	129, 371
Wagon-seat spring	C. C. Carter	Exeter, Ill	Nov. 23, 1869	97, 043
Wagon-seat spring	G. H. Mittan	De Witt, Ill	May 25, 1869	90, 375
Wagon-seat spring	J. H. Nale and J. W. Rogers	Decatur, Ill	Sept. 22, 1868	82, 340
Wagon-seat-spring holder	J. A. Leeforgee	Decatur, Ill	Feb. 1, 1870	99, 448
Wagon-seat standard	W. Campbell	Belleville, Mich	Sept. 19, 1871	119, 118
Wagon-seat support	J. H. Fellows	Alba, Pa	July 2, 1872	128, 477
Wagon-seat supporter	J. Lunger	Waldo, Ohio	Apr. 23, 1867	64, 120
Wagon-seat, Turn-out	G. Gregory	New Haven, Conn	Dec. 26, 1865	51, 780
Wagon-seats, Hanging	H. F. Moore and J. S. Blaisdell	Medford, Mass	June 4, 1867	65, 414
Wagon-seats, Mode of attaching	D. J. Wilcoxson	Milan, Ohio	Nov. 16, 1869	97, 013
Wagon-seats, Shifting-rail for	J. L. Read	Hastings, Mich	Sept. 26, 1871	119, 408
Wagon, Self-loading	T. Handy	Springfield, Ill	June 24, 1873	140, 271
Wagon-shackle	L. M. B. Coleman	Danby, N. Y	Sept. 18, 1866	58, 071
Wagon-shackle	T. D. Powers	Rochester, Wis	Oct. 29, 1867	70, 357
Wagon-shackles, Method of making solid blank for	J. B. Clark	Plantsville, Conn	July 23, 1867	67, 024
Wagon-sheet and tent	M. M. Fitzgerald	Gonzales, Tex	Aug. 13, 1872	130, 417
Wagon-shelving	G. R. Cannon	Guilford, Ohio	Nov. 6, 1866	59, 356
Wagon shifting-top	H. H. Dikeman	New Haven, Conn	Dec. 20, 1859	26, 547
Wagon shoe-brake	A. Quinn	Brooklyn, N. Y	Mar. 28, 1871	113, 091
Wagon shoe-lock	A. Hamilton	Washington, D. C	Dec. 19, 1865	51, 585
Wagon side-brace	T. H. Daniels	Anderson, Ind	May 23, 1871	115, 034
Wagon-skein	J. C. Johnson	Golconda, Ill	Nov. 30, 1869	97, 408
Wagon-skein	C. F. Ravn	Milwaukee, Wis	May 5, 1868	77, 656
Wagon, &c., skein and box	J. R. Davies	Racine, Wis	Sept. 10, 1872	131, 213
Wagon-skein, Roller	J. W. Morrett and H. Watts	Shepherdstown, Pa	Aug. 4, 1868	80, 758
Wagon-skeins, Casting	A. Leonard	Kenosha, Wis	Feb. 24, 1857	16, 688
Wagon-slider	V. M. Chafee	Clay City, Ill	July 4, 1871	116, 682
Wagon-spindle	J. M. Walter	Schwenksville, Pa	Apr. 4, 1871	113, 710
Wagon, Spring	G. A. Brice	Townville, Pa	Oct. 28, 1873	143, 958
Wagon, Spring	J. N. Byington	Stockton, Minn	Nov. 27, 1866	59, 961
Wagon, Spring	J. A. Chapman	Rochester, Minn	Oct. 22, 1872	132, 441
Wagon, Spring	W. Mansfield	South Braintree, Mass	July 23, 1867	67, 128
Wagon, Spring	F. Scherb	San Francisco, Cal	Sept. 28, 1869	95, 385
Wagon-spring	C. Atherton	Wales, Mich	Aug. 25, 1868	81, 327
Wagon-spring	D. A. Boyle	Attica, Ohio	Oct. 21, 1873	143, 744
Wagon-spring	W. H. Brace	Nunda, N. Y	June 24, 1873	140, 110
Wagon-spring	J. N. Crannell	Champaign, Ill	Feb. 22, 1870	100, 122
Wagon-spring	J. O. Farrell	Boston, Mass	Apr. 1, 1862	34, 858
Wagon-spring	N. Frey	Erie, Pa	May 16, 1871	114, 796
Wagon-spring	L. L. Gordon	Detroit, Mich	Feb. 15, 1870	99, 771
Wagon-spring	C. H. Guard	New York, N. Y	Nov. 19, 1872	133, 150
Wagon-spring	C. P. Hawley	Mosherville, N. Y	Sept. 24, 1867	69, 208
Wagon-spring	B. Hershey	Erie, Pa	Sept. 24, 1867	69, 094
Wagon-spring	E. Horton	Okee, Wis	Feb. 11, 1868	74, 363
Wagon-spring	W. Janes	Ashford, Conn	June 6, 1826	....
Wagon-spring	N. Jenkins	New York, N. Y	Aug. 14, 1860	29, 598
Wagon-spring	J. Kieser	New York, N. Y	Jan. 30, 1872	123, 108

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Wagon-spring	H. Knowles	Colchester, Conn	Nov. 4, 1825	......
Wagon-spring	G. C. Lansing and J. G. Ostrom.	Rhinebeck, N. Y	June 11, 1867	65, 681
Wagon-spring	C. S. Martin	Mackford, Wis	Feb. 9, 1864	41, 520
Wagon-spring	C. S. Martin	Milwaukee, Wis	July 3, 1866	56, 073
Wagon-spring	C. S. Martin	Milwaukee, Wis	July 3, 1866	56, 074
Wagon-spring	J. McDuflie	Heller's Corners, Ind	Oct. 1, 1867	69, 354
Wagon-spring	E. P. McCarthy	San Francisco, Cal	Aug. 13, 1867	67, 782
Wagon-spring	E. P. McCarthy	San Francisco, Cal	June 1, 1869	90, 861
Wagon-spring	T. A. McFarland	Erie, Pa	June 6, 1871	115, 758
Wagon-spring	A. W. McKown	Honesdale, Pa	Nov. 8, 1870	109, 033
Wagon-spring	J. Sebastian	New York, N. Y	Dec. 17, 1867	72, 425
Wagon-spring brace	J. H. Lockie	Humphrey, N. Y	Dec. 11, 1866	60, 393
Wagon-spring, Rubber	S. G. Clough	Waupun, Wis	Dec. 26, 1865	51, 697
Wagon-spring, Wooden	A. Searls	San Francisco, Cal	Dec. 3, 1867	71, 797
Wagon-springs, Arrangement of	H. W. Ballard	Burlington, Vt	Mar. 6, 1855	12, 475
Wagon-springs, Mode of attaching	J. H. Cornwell	Corry, Pa	July 23, 1872	129, 717
Wagon-springs, Roller applied to	J. Barton, jr	Providence, R. I	Sept. 9, 1825	......
Wagon springs, Shackle for platform	J. Price	New York, N. Y	Feb. 18, 1868	74, 591
Wagon, Square-topped or jagger	J. N. Hazelip	Baltimore, Md	Oct. 29, 1872	132, 531
Wagon-stake	A. Fassett	Sterling, Ill	Nov. 3, 1868	83, 614
Wagon-stake	E. Milner	Marquette, Mich	Oct. 19, 1869	95, 923
Wagon-standard	B. F. Bean	Schuylkill, Pa	July 1, 1862	35, 743
Wagon-standard	J. McCullough	Quincy, Ind	Dec. 7, 1869	97, 666
Wagon-standard	J. Harding	Ainsworth, Iowa	May 16, 1871	114, 808
Wagon-standard	J. Henry	Suisun, Cal	Mar. 22, 1870	101, 014
Wagon-standard	J. L. Hudson	Cumming, Ga	Apr. 29, 1873	138, 402
Wagon-standard	J. Jensen	Racine, Wis	Aug. 1, 1871	117, 637
Wagon-standard	J. H. Knisley and J. C. Ferguson	Rainsborough, Ohio	May 13, 1873	138, 807
Wagon-standard	O. E. Mills	Aurora, Ill	Oct. 27, 1863	40, 422
Wagon-standard	G. Richards	Richland Centre, Wis	Aug. 31, 1869	94, 340
Wagon-standard	G. Richards	Richland Centre, Wis	Nov. 9, 1869	96, 731
Wagon-standard	C. W. Saladee	Pittsburgh, Pa	Dec. 16, 1873	145, 594
Wagon-standard	J. W. Smith	Dixon, Iowa	Oct. 17, 1871	120, 115
Wagon-standard	P. Sweeney	Cordova, Ill	Aug. 27, 1872	130, 881
Wagon-standard, Movable	W. D. Fink	Windsor, Ill	June 27, 1871	116, 289
Wagon-standard support	G. Stiber	Cogan Station, Pa	Apr. 9, 1872	125, 626
Wagon, Steam	O. H. Burdett	New Athens, Ohio	Sept. 26, 1871	119, 308
Wagon, Steam	R. H. Lecky	McClure, Pa	Apr. 5, 1864	42, 203
Wagon, Steam	J. Percy	Albany, N. Y	Sept. 30, 1856	15, 815
Wagon, Steam	E. P. Talcott	Blair, Nebr	Feb. 22, 1870	100, 086
Wagon, Steam road	C. W. Hermance	Schuylersville, N. Y	Feb. 7, 1871	111, 644
Wagon, Steam road	C. F. Thomas, A. J. and J. A. Craig, and J. W. Hathaway.	Jasper and Woodhull, N. Y.	June 6, 1871	115, 786
Wagon-step	M. C. Floyd	Bloomfield, Iowa	June 21, 1870	104, 569
Wagon-step	W. Youngblood	New York, N. Y	Sept. 17, 1867	68, 930
Wagon-step, Spring	J. H. Deal	Hornellsville, N. Y	July 23, 1867	66, 954
Wagon, Stone-loading	N. Drake	Newton, N. J	Dec. 20, 1859	26, 489
Wagon, Stone-loading	D. S. Fancher	Logansport, Ind	Dec. 13, 1859	26, 421
Wagon tail-board	J. O Farrell	Boston, Mass	Apr. 23, 1861	32, 163
Wagon tail-board	J. O. Farrell	Chicago, Ill	Jan. 22, 1867	61, 329
Wagon tail-board	F. M. Harris	Carroll, Ohio	June 13, 1854	11, 065
Wagon tail-board	W. Vanscoyoc	Oxford, Ohio	Oct. 19, 1869	96, 058
Wagon tail-board, Releasing	C. Dreher	Detroit, Mich	Sept. 5, 1865	49, 734
Wagon thimble-skein	H. H. Richards	Fond du Lac, Wis	Aug. 22, 1871	118, 391
Wagon thimble-skein	A. L. Shears	Saint Louis, Mich	July 11, 1871	117, 000
Wagon, Three-wheeled farm	E. T. Crockett	Guilford, Me	Feb. 18, 1868	74, 511
Wagon, Tilting	A. Hobart	Braintree, Mass	Feb. 17, 1807	......
Wagon, Tilting	G. R. and C. H. Sneath	Wilmington, Del	Feb. 11, 1868	74, 251
Wagon-tilts	S. Beebe	Norwich, Conn	June 22, 1836	......
Wagon, Tip	S. Chamberlin	Boston, Mass	Nov. 19, 1867	70, 957
Wagon-tongue	J. T. Baughman	Frazeysburgh, Ohio	May 6, 1856	14, 794
Wagon-tongue	E. P. Carter	Arcade, N. Y	Apr. 5, 1870	101, 429
Wagon-tongues, Apparatus for working	A. J. Beach	Linden, Mich	Mar. 24, 1868	75, 840
Wagon-top	A. R. Tully	Harlem, N. Y	Sept. 11, 1866	58, 001
Wagon-top bow	S. C. La Halt, P. Listeman, and C. Hadley.	Collinsville, Ill	Nov. 17, 1868	84, 199
Wagon-top bows, Apparatus for regulating the setting of.	A. McKinney	Montgomery, N. Y	Aug. 13, 1850	7, 566
Wagon, Weighing	G. A. Wilcox	Chicago, Ill	Dec. 13, 1870	110, 100
Wagon-wheel	C. Anderegg	Lawrenceburgh, Ind	Jan. 2, 1872	122, 347
Wagon-wheel	C. W. Bierbach	Milwaukee, Wis	June 15, 1869	91, 204
Wagon-wheel	B. M. Esterlo	San Francisco, Cal	Dec. 18, 1866	60, 495
Wagon-wheel	H. D. and J. T. Keith	Mansfield, Ohio	July 25, 1871	117, 300
Wagon-wheel	J. Maris	Athens, Ohio	Dec. 3, 1867	71, 774
Wagon-wheel	B. Pearson	Salem, Mass	Dec. 26, 1865	51, 747
Wagon-wheel	S. Perkins	Pittsburgh, Pa	June 5, 1855	13, 012
Wagon-wheel	J. Priest	Detroit, Mich	Sept. 12, 1871	118, 815
Wagon-wheel	J. Priest	Detroit, Mich	June 11, 1872	127, 924
Wagon-wheel	P. Richardson, jr	Warren County, Ill	Apr. 7, 1868	76, 534
Wagon-wheel	P. R. Ridgely	Iron Mountain, Mo	Mar. 31, 1868	76, 249
Wagon-wheel	S. Shirley	Rockford, Ill	Nov. 10, 1868	84, 009
Wagon-wheel	J. Thrasher	West Liberty, Ohio	Jan. 30, 1866	52, 341
Wagon-wheel	S. B. Welton	Waterbury, Conn	Aug. 20, 1867	68, 017
Wagon-wheel-dressing machine	S. T. Jackson	Sheboygan Falls, Wis	Sept. 26, 1865	50, 130
Wagon-wheel, Expansion	S. Belden and J. P. Ford	Visalia and Santa Clara, Cal.	Dec. 29, 1868	85, 269
Wagon-wheel lock	T. G. Clifford	Derby, Conn	May 14, 1867	64, 631
Wagon-wheels, Attaching runners to	E. Ward	New York, N. Y	Feb. 27, 1866	52, 916
Wagon-wheels, Iron rim for	L. Hubbard	Ottawa, Ohio	July 18, 1871	117, 077
Wagon-wheels, Locking	G. Diven	Franklin County, Pa	Apr. 14, 1828	......
Wagon-wheels, Machine for making	A. Beswick, P. Richardson, and J. W. Brown.	Kelley, Ill	Oct. 1, 1867	69, 307
Wagon-wheels, Machine for making	J. M. Howe	Portland, Oreg	July 11, 1865	48, 687
Wagon-wheels, Machine for making	F. J. Weber	Carey, Ohio	Sept. 24, 1867	69, 286
Wagon-wheels while being painted, Stand for supporting.	J. N. Woodward	Aurora, Ill	Sept. 10, 1867	68, 823
Wagon-wheels while machinery is being run on the wagon, Mode of holding.	W. T. Pogue	Vienna, Ind	Feb. 25, 1862	34, 551

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Invention.	Inventor.	Residence.	Date.	No.
Wagon-wrench	R. J. North	Cornwall, Conn	Apr. 16, 1872	125, 753
Wagon-wrench	G. B. Phillips	Newark, N. J	Mar. 12, 1861	31, 693
Wagon-wrench	P. D. Van Hoesen	New York, N. Y	Oct. 2, 1860	30, 268
Wagons, cars, &c., Mode of attaching body or box to facilitate tilting of.	J. C. Osgood	Chittenango, N. Y	Sept. 28, 1839	1, 348
Wagons and carriages from their wheels and lowering to place again, Machine for raising.	T. Scott	London, Pa	Mar. 3, 1829	....
Wagons and carts, Spring seat for	P. Weyand and P. Hill	Morrisania, N. Y	Nov. 11, 1873	144, 426
Wagons and sleighs, Binder for loaded	J. Paff	Lawrenceburgh, Pa	June 17, 1873	139, 969
Wagons, Apparatus for hoisting and dumping loaded.	W. J. Brown	Momence, Ill	Mar. 11, 1873	136, 698
Wagons, Apparatus for unloading corn from	T. Barron	Black Oak, Mo	Dec. 23, 1873	145, 779
Wagons, Arrangement of springs for side-spar	M. G. Hubbard	Penn Yan, N. Y	Oct. 14, 1856	15, 885
Wagons, carriages, &c., Constructing	J. Kirkman	Peoria, Ill	Dec. 1, 1863	40, 758
Wagons, Construction of lumber	S. D. Carpenter	Madison, Wis	Jan. 7, 1868	73, 076
Wagons, Draw-bar in draft-equalizers for	J. M. Orput	Malta, Ill	Nov. 18, 1873	144, 694
Wagons, Fastening slide-board to grain	G. Seitzinger	Seneca, Ill	Jan. 18, 1870	99, 010
Wagons, Hanging, &c	H. Mellish	Walpole, N. Y	Jan. 11, 1836	....
Wagons, Hay-binder-pole of	D. Potter	Peoria, Ill	June 14, 1870	104, 349
Wagons, Hay-binding device for	J. M. Miller	Greenwood Township, Pa	May 22, 1866	54, 936
Wagons, Hopper-attachment for	F. Gerard	Lincoln, Ill	Apr. 14, 1868	76, 744
Wagons, &c., Loading and unloading hay	S. Rogers	Pittsburgh, Pa	Jan. 10, 1865	45, 865
Wagons, Loading-attachment for hay	L. M. Doudna	Elmira, N. Y	Oct. 18, 1864	44, 713
Wagons, Loading-attachment for hay	J. M. Miller	Greenwood Township, Pa	May 22, 1866	54, 936
Wagons, Loading-attachment for hay	W. B. Niles and S. M. Gillett	Little York, N. Y	Jan. 23, 1866	52, 150
Wagons, Locking	J. M. Davidson	Brownsville, Pa	Dec. 31, 1828	....
Wagons, Making	S. Blair	New Haven, Conn	June 20, 1823	....
Wagons, Manufacturing	R. Rich	Albion, N. Y	July 22, 1834	....
Wagons, Portable crane for loading	A. Leitner	Hopewell Township, Ohio	Aug. 27, 1867	68, 216
Wagons, Rail-guide for guiding	C. Plagge	Darmstadt, Hesse	Oct. 29, 1867	70, 259
Wagons, Regulating cannon lumber	J. W. Drew	Stockbridge, Mich	May 26, 1868	78, 194
Wagons, Shipping and unshipping hind boards for freight.	F. W. Bishop	West Haven, Conn	Sept. 19, 1865	49, 966
Wagons, Trestle-platform for unloading from	J. K. Wilson	Brimfield, Ill	Apr. 8, 1873	137, 584
Wagons, Trussed axle for lumber	G. H. Turner and J. Conde	Flint, Mich	May 7, 1872	126, 594
Wagons, Unloading-attachment for	J. H. Stevens	East Durham, N. Y	July 25, 1865	49, 006
Wagons, Unloading-device for	I. Williams	Westfield, Ind	Nov. 8, 1870	109, 088
Wagoner's implement	J. Richards	Washington, D. C	July 16, 1867	66, 739
Wainscot, Flexible	J. F. Worth	Brooklyn, N. Y	Aug. 17, 1869	93, 789
Wainscoting, Table for making	I. W. Boughton and E. C. Hussey.	New York, N. Y	May 16, 1871	114, 907
Waist-block, Revolving	W. T. Adams	Baltimore, Md	Mar. 5, 1867	62, 588
Waistcoats, pantaloons, &c., Making	C. Kenrick	New York	Feb. 8, 1822	....
Waiter	O. Fahnestock	Lebanon, Ind	Dec. 28, 1869	98, 362
Waiter, Dumb	T. Lawson	Washington, D. C	Feb. 21, 1871	112, 035
Waiter-machine	D. F. Myers	New York, N. Y	Dec. 15, 1868	84, 898
Waiter or tray, Table	N. Waterman	Boston, Mass	May 12, 1863	38, 519
Waiter, Table	J. C. Libbey	Biddeford, Me	Mar. 31, 1868	76, 211
Walk-edger	I. V. Brower and J. C. Higgins	Millstone, N. J	Nov. 4, 1873	144, 252
Walking figures, Automatic apparatus for	E. R. Morrison	New York, N. Y	July 15, 1862	35, 886
Walking stick and stool, Combined	C. G. Young	Fenton, Mich	May 14, 1872	126, 767
Wall and ceiling, Lath and plaster	O. Jevne	Chicago, Ill	Feb. 27, 1872	124, 138
Wall and floor for buildings	J. J. Schillinger	New York, N. Y	June 14, 1870	104, 360
Wall, Brick	J. M. Deitz	Berne, N. Y	Aug. 25, 1868	81, 350
Wall-building and stump-extracting, Machine for	T. S. Greenman	Mystic Bridge, Conn	Dec. 10, 1867	72, 024
Wall-builder and stump-extractor	G. W. Packer, jr	Mystic River, Conn	Aug. 29, 1865	49, 647
Wall, Concrete	E. E. Clark	New Haven, Conn	Apr. 24, 1860	27, 970
Wall-coping	J. Grindrod	Albany, N. Y	Mar. 15, 1870	100, 751
Wall-coping	D. M. Sprogle	Annapolis, Md	June 6, 1871	115, 653
Wall for buildings	T. Hyatt	New York, N. Y	Sept. 2, 1873	142, 474
Wall for buildings	M. P. Turner	Des Moines, Iowa	Dec. 28, 1869	98, 446
Wall for buildings, Fire-proof	S. M. Groff	Elizabethtown, Pa	July 23, 1872	129, 650
Wall for buildings, Wooden	J. Busser	Troy, Ohio	June 22, 1869	91, 518
Wall, Hollow-tile	G. H. Johnson	New York, N. Y	Mar. 21, 1871	112, 925
Wall, Hollow-tile	G. H. Johnson and W. Freeborn	Chicago, Ill	Oct. 15, 1872	132, 291
Wall or wainscot chair	J. L. Kapple	Chicago, Ill	June 20, 1871	116, 064
Wall or window washer	E. N. Bradley	Bridgeport, Conn	Apr. 1, 1873	137, 340
Wall-paper	J. P. Howland and A. Griswold	Muncy, Pa	Aug. 10, 1833	....
Wall-paper, &c., Apparatus for drying	N. Hall	Philadelphia, Pa	June 18, 1872	128, 136
Wall-paper, Composition for water-proofing	C. Van Herwerden	Williamsburgh, N. Y	Aug. 5, 1873	141, 525
Wall-paper, Cutter for trimming	H. C. Snow	Princeton, Ill	Mar. 5, 1867	62, 698
Wall-paper, Device for hanging	J. W. Davis	Washington, D. C	Oct. 16, 1866	58, 784
Wall-paper-edging machine	H. I. Brunner	Nazareth, Pa	Feb. 26, 1856	14, 303
Wall-paper-edging machine	W. P. Yeoman	Waukegan, Ill	June 9, 1868	78, 707
Wall-paper, Machine for hanging	L. Cline	Chicago, Ill	May 18, 1869	90, 081
Wall-paper, Manufacture of	A. W. Paull and J. H. Ewing	Wheeling, W. Va	Sept. 17, 1872	131, 458
Wall-paper, Manufacture of	W. Wilson	Edgewater, N. J	May 9, 1871	114, 632
Wall-paper, Pasting and hanging	A. H. Clay	Pottsgrove Township, Pa	Mar. 9, 1869	87, 545
Wall-paper-pasting machine	J. M. Welsh	New Athens, Ohio	Dec. 10, 1872	133, 909
Wall-paper, Printing	P. H. Bowers	Brooklyn, N. Y	Mar. 31, 1868	76, 152
Wall-paper, Process of preparing	A. W. Paull	Wheeling, W. Va	July 1, 1873	140, 533
Wall-paper protector	M. Disston	Philadelphia, Pa	May 24, 1870	103, 432
Wall-paper, show-cards, &c., flocking machine	H. W. Bulkley	New York, N. Y	July 26, 1870	105, 774
Wall-paper trimmer	W. H. Guthrie	Brooklyn, N. Y	Nov. 3, 1868	83, 709
Wall-paper-trimming machine	S. Elder	Buffalo, N. Y	Jan. 26, 1869	86, 143
Wall-paper-trimming machine	D. Flower	Geneva, N. Y	July 1, 1862	35, 750
Wall-paper-trimming machine	A. L. Whipple	Elmira, N. Y	Oct. 4, 1859	25, 696
Wall-papering apparatus	B. Masslich	Union City, Ind	Aug. 6, 1861	32, 004
Wall-papering machine	H. F. Baker	Centreville, Ind	Nov. 21, 1854	11, 900
Wall-papering machine	A. Weiss	Newport, Ky	June 18, 1872	128, 193
Wall, Plaster	M. F. Lyons	New York, N. Y	Apr. 22, 1873	138, 170
Wall, Portable fire	J. F. Bishop	Afton, Iowa	Nov. 2, 1869	96, 386
Wall-protector	B. K. Maltby	Cincinnati, Ohio	Oct. 18, 1870	108, 497
Wall-protector and towel-rack, Combined	J. F. Hummel	Cincinnati, Ohio	July 1, 1873	140, 506
Wall, Subterranean	M. Thode	Mattoon, Ill	June 16, 1868	79, 028
Wall-tie, Hollow	E. Tutte	Fareham, England	Jan. 18, 1870	99, 035
Wall, Water-proof	H. Mattfeld	New York, N. Y	Jan. 14, 1873	134, 911

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Invention.	Inventor.	Residence.	Date.	No.
Walls against dampness, Mode of protecting plastered.	W. E. Worthen and T. New	New York and Brooklyn, N. Y.	Sept. 28, 1869	95, 300
Walls, Anchor-beam support for brick	W. W. Goodrich	Rondout, N. Y	Nov. 22, 1870	109, 405
Walls and ceilings, Applying plaster to	A. Derrom	Paterson, N. J	Jan. 23, 1872	122, 938
Walls and ceilings, Lathing for	D. D. Garland	Kewaunee, Wis	Jan. 7, 1864	41, 018
Walls and ceilings, Method of coating and ornamenting.	J. H. Crittenden	Fall River, Mass	July 29, 1873	141, 330
Walls, Apparatus for building concrete	E. E. Clarke	New Haven, Conn	Apr. 3, 1860	27, 692
Walls, Box for pisé-work	O. and W. Needham	New Haven, Conn	Feb. 3, 1857	16, 548
Walls, ceilings, &c., Coating and decorating	C. T. Kemmer	Cleveland, Ohio	Jan. 31, 1871	111, 459
Walls, ceilings, &c., Ornamenting	W. West	Philadelphia, Pa	May 20, 1826	....
Walls, &c., Coating brick, wood, and other surfaces on.	E. E. Alvord	Salt River, Mich	Feb. 7, 1871	111, 602
Walls, Composition for water-proofing	R. M. Caffall and D. Miller	Afton, England	Oct. 17, 1871	119, 964
Walls, &c., Compound fabric for covering	J. M. Perkins	Plainfield, N. J	Mar. 31, 1868	76, 244
Walls, concrete, &c., Hardening artificial stone	J. L. Rowland	Milwaukee, Wis	July 16, 1872	128, 980
Walls, Constructing hollow	F. Collin	Detroit, Mich	June 11, 1872	127, 848
Walls, Construction of concrete	S. T. Fowler	Brooklyn, N. Y	May 1, 1860	28, 069
Walls, Construction of prison	E. May	Indianapolis, Ind	Jun. 28, 1870	104, 865
Walls, Construction of sea	J. Kelly	San Francisco, Cal	Feb. 18, 1868	74, 547
Walls, Covering for plastered	A. R. Davis	Cambridge, Mass	Nov. 26, 1867	71, 367
Walls, Decorating	J. C. Finn	Philadelphia, Pa	May 12, 1868	77, 876
Walls for buildings, Building concrete and mortar.	E. Hunt	Davenport, Mass	May 22, 1866	54, 910
Walls for buildings, Construction of	W. L. Stauffer	Allentown, Pa	Jan. 23, 1872	123, 057
Walls for houses, &c., Building brick	L. Goodrich	San José, Cal	Sept. 27, 1864	44, 418
Walls, Framing for building concrete	S. Ellis	New York, N. Y	Apr. 10, 1855	12, 676
Walls, Gage for erecting plank	T. W. H. Moseley	Hyde Park, Mass	July 15, 1873	140, 943
Walls, Hose port-hole for partition	H. Woodman	Boston, Mass	Mar. 11, 1873	136, 687
Walls into flues, Mode of warming building by converting hollow.	J. A. Stewart	Philadelphia, Pa	June 17, 1840	1, 639
Walls, Mastic for covering	A. C. Maestue	Kane County, Ill	Jan. 29, 1856	14, 163
Walls, Metallic studding for fire-proof	I. V. Holms	New York, N. Y	Mar. 30, 1869	88, 294
Walls, Mode of securing staples to	J. L. Mott	Mott Haven, N. Y	July 25, 1854	11, 383
Walls of buildings, Compound for coating the outside.	J. S. Houghton	Philadelphia, Pa	Dec. 1, 1868	84, 550
Walls of buildings, Construction of	C. Williams	Vineland, N. J	Mar. 3, 1868	75, 098
Wall, Process for removing paper from	C. F. Ware	San Francisco, Cal	Apr. 1, 1873	137, 396
Walls under water, Building	H. K. May	Boston, Mass	Sept. 23, 1833	....
Walls under water, Method of building	W. H. Horstmann	New York, N. Y	Sept. 14, 1858	21, 498
Walls with felt, &c., Lining	J. Phillips	Chicago, Ill	Mar. 7, 1871	112, 376
Wallet-fastener	J. T. Sargent	Carlinville, Ill	Apr. 6, 1858	19, 875
Wardrobe	J. Byrnes	Chicago, Ill	Aug. 20, 1872	130, 566
Wardrobe	A. Davis	Reno, Nev	Oct. 31, 1871	120, 370
Wardrobe	E. Durand	Chelsea, Mich	May 12, 1863	38, 473
Wardrobe	A. G. Mack	Rochester, N. Y	Dec. 14, 1869	97, 942
Wardrobe	N. Turner	West Lynn, Mass	Dec. 10, 1867	72, 124
Wardrobe	H. Whittemore	Orangetown, N. Y	Sept. 26, 1871	119, 289
Wardrobe and bedstead	O. L. W. Gardner	Glen Gardner, N. J	Sept. 26, 1871	119, 268
Wardrobe and bedstead	L. Wing and D. Myers	Chicago, Ill	June 12, 1866	55, 568
Wardrobe and bedstead, Combined	R. M. Austin	Philadelphia, Pa	Oct. 8, 1872	131, 991
Wardrobe and book-case	F. F. Voigt	New Orleans, La	Aug. 27, 1872	130, 957
Wardrobe and book-case, Combined	F. F. Voigt	New Orleans, La	Apr. 18, 1871	113, 821
Wardrobe, bedstead, and bureau	J. R. Davis and F. Rominger	Bloomfield, Iowa	Sept. 6, 1870	107, 013
Wardrobe, bedstead, chair, and table, Combined	W. Getchell	Bath, Me	Sept. 2, 1873	142, 387
Wardrobe, bureau, desk, wash-stand, and bed, Combined.	E. Hambujer	Detroit, Mich	May 15, 1866	54, 718
Wardrobe, Extension	J. G. Roux	Crystal Springs, Miss	Mar. 17, 1868	75, 579
Wardrobe frame, Extension	E. Gill	New York, N. Y	Aug. 4, 1868	80, 723
Wardrobe-hook	J. B. Sargent	New Haven, Conn	Feb. 22, 1870	100, 194
Wardrobe-hook	A. J. Walker	New York, N. Y	Mar. 1, 1864	41, 798
Wardrobe-hook	A. J. Walker	New York, N. Y	Mar. 22, 1864	42, 033
Wardrobe-hook, Locking	O. Nicholson	New York, N. Y	July 6, 1869	92, 344
Wardrobe or closet	I. Moser	Cincinnati, Ohio	July 30, 1867	67, 339
Wardrobe or hat hook	C. R. Scott	New York, N. Y	Mar. 28, 1871	113, 209
Wardrobe, Portable	J. P. Buckingham	Chicopee, Mass	Sept. 19, 1871	119, 074
Wardrobe, Portable	J. N. Fowler	Green Point, N. Y	June 24, 1873	140, 130
Wardrobe, Portable	S. L. Hobart	Hingham, Mass	Sept. 21, 1852	9, 273
Wardrobe, Portable	G. Niermann	Cincinnati, Ohio	Dec. 15, 1868	85, 023
Wardrobe, Portable	T. R. Timby	Tarrytown, N. Y	Sept. 10, 1872	131, 313
Ware, Bailed hollow	J. B. Crowley	Cincinnati, Ohio	Mar. 29, 1864	42, 138
Warehouse and factory elevator	A. Betteley	Boston, Mass	Aug. 2, 1859	24, 923
Warehouse-bin	F. W. Aufderheide	Saint Louis, Mo	Nov. 28, 1871	121, 310
Warehouses, Elevator for hoisting goods in	A. Betteley	Boston, Mass	May 31, 1859	24, 188
Warehouses, Safety-hatch for	W. H. Thompson and E. P. Morgan.	Biddeford, Me	June 24, 1856	15, 201
Warm-air furnace	M. B. Dyott	Philadelphia, Pa	May 22, 1855	12, 901
Warm-air furnace	F. P. Heller and E. Young	Cincinnati, Ohio	July 17, 1860	29, 167
Warm-air furnace	A. Kelsey	Rochester, N. Y	Apr. 27, 1852	8, 908
Warm-air furnace	W. M. Wright	Pittsburgh, Pa	Sept. 23, 1856	15, 791
Warm-air register	P. G. Woodside	Philadelphia, Pa	Oct. 8, 1850	7, 713
Warm-air register and ventilator	E. A. Tuttle	Brooklyn, N. Y	Apr. 27, 1859	20, 106
Warm and hot bath, Portable	S. K. Jennings	Lynchburgh, Va	Jan. 21, 1814	....
Warm-bath apparatus	L. H. Lefebvre	New Orleans, La	Aug. 21, 1855	13, 467
Warming and cooling apartments, Apparatus for	W. A. Lighthall	New York, N. Y	Nov. 9, 1869	96, 709
Warming and ventilating churches and public halls	E. J. Hardy	Buffalo, N. Y	Nov. 29, 1864	45, 244
Warming-apparatus	L. A. Colbert	Baltimore, Md	Nov. 13, 1860	30, 614
Warming-apparatus	J. H. Davis	Woburn, Mass	July 31, 1860	29, 364
Warming-apparatus, Portable	T. R. Timby	Worcester, Mass	Oct. 28, 1862	36, 871
Warp and paper-pulp fabric, Apparatus for the manufacture of.	L. M. Crane	Ballston Spa, N. Y	June 4, 1872	127, 463
Warp-beams, Bushing for	R. Ferguson	Louisville, Ky	Dec. 27, 1870	110, 450
Warp-beams from one machine to another, Machine for conveying.	B. Saunders	Nashua, N. H	Aug. 16, 1864	43, 884
Warp-creel bracket	N. B. Peck	Woonsocket, R. I	June 27, 1871	116, 482
Warp-creel bracket	W. Welch	Woonsocket, R. I	June 11, 1872	127, 816
Warp-dresser	B. Saunders	Nashua, N. H	Sept. 1, 1868	81, 826
Warp-dresser beams, Friction-apparatus for	B. Saunders	Nashua, N. H	Nov. 15, 1864	45, 082
Warp-dresser guide of glass or other plastic anti-corrosive material, Mold for making.	A. B. Corey	Franklin, Conn	Sept. 14, 1858	21, 487

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Warp-dressers, Friction-apparatus for yarn-beam of.	B. Saunders	Nashua, N. H	Feb. 26, 1867	62, 369
Warp dressing and beaming machine	W. Potter and A. W. Sheldon	Lowell, Mass	Nov. 21, 1865	51, 082
Warp dressing and sizing	W. Bradley	Manchester, Va	May 11, 1858	20, 190
Warp dressing and sizing machinery	A. B. Corey	Sprague, Conn	Nov. 4, 1862	36, 833
Warp-dressing and weaving, Expansible reed for	A. J. Nichols	Providence, R. I	Feb. 14, 1865	46, 381
Warp-dressing frame	A. M. Damon	Lowell, Mass	Oct. 9, 1866	58, 611
Warp-dressing guide	A. B. Corey	Franklin, Conn	Sept. 14, 1858	21, 488
Warp-dressing machine	M. Nelson	Taunton, Mass	Sept. 14, 1869	94, 765
Warp-dressing machine	R. Pilson	Laurel, Md	Oct. 30, 1860	30, 543
Warp-dressing machine, Device for imparting a lateral reciprocation to the raddle of.	B. Saunders	Nashua, N. H	Feb. 26, 1867	62, 370
Warp-dressing machines, "Dresser-copper" for	W. H. Boyden	Rockland, R. I	Dec. 8, 1868	84, 793
Warp-dressing machinery	S. Campbell	Whitestown, N. Y	Nov. 10, 1857	18, 620
Warp in weaving, Delivering parti-colored	E. B. Bigelow	Clinton, Mass	Mar. 18, 1851	7, 982
Warp-net fabric	J. S. Glover	Ipswich, Mass	June 27, 1846	4, 6[illegible]7
Warp-net fabric	J. Mee	Lowell, Mass	May 10, 1853	9, 719
Warp or yarn, Sizing-compound for	W. Mallerd	Providence, R. I	July 16, 1850	7, 511
Warp-setting frame	J. H. Higgins	New York, N. Y	Dec. 17, 1872	134, 057
Warp-threads, Machine for dressing	W. H. Boyden	Rockland, R. I	July 20, 1869	92, 784
Warp-threads, Rod for drawing in	M. S. Jordan	Tilton, N. H	Nov. 18, 1873	144, 620
Warps, Apparatus for coloring	N. D. White	Winchendon, Mass	June 20, 1871	116, 125
Warps, Clamp for holding palm-leaf	C. Powers	Greenwich Village, Mass	Mar. 31, 1868	76, 246
Warps, Composition for sizing and dressing	T. Johnson	Tewksbury, Mass	Sept. 15, 1868	82, 120
Warps, Machine for cut-marking	A. M. Damon	Lowell, Mass	Feb. 13, 1872	123, 617
Warps, Machinery for sizing and dressing	J. A. Elder and E. Wood	Westbrook and Winthrop, Me.	July 31, 1855	13, 350
Warps upon the beam, Machinery for winding	D. Hussey	Nashua, N. H	Aug. 30, 1859	25, 266
Warper	W. Welch	Woonsocket, R. I	Apr. 30, 1872	126, 358
Warper and dresser plates	A. J. Nichols	North Providence, R. I	Oct. 1, 1867	69, 471
Warper drop-wire	J. E. Prest	Hopedale, Mass	Dec. 31, 1872	134, 396
Warper-guide	W. Hayden	Windham, Conn	Mar. 27, 1849	6, 229
Warping-frame	C. H. Howard	Lewiston, Me	June 2, 1868	78, 453
Warping-machine	L. Abbott	Lewiston, Me	July 5, 1870	104, 920
Warping-machine	J. B. Bancroft	Hopedale, Mass	Feb. 11, 1873	135, 619
Warping-machine	S. Campbell and D. McFarlane	Palmer, Mass., and Troy, N. Y.	Feb. 15, 1870	99, 843
Warping-machine	J. Furrer	New York, N. Y	Dec. 20, 1870	110, 225
Warping-machine	C. King	Scipio, N. Y	Jan. 28, 1846	4, 368
Warping-machine	C. Mather and W. Rosseter	Salford, England	June 14, 1870	104, 329
Warping-machine	R. C. Reynolds and C. I. Barker	Lewiston, Me	Feb. 22, 1870	100, 070
Warping-machine	T. Siddall	Germantown, Pa	Mar. 2[illegible], 1815	... ...
Warping-machine	T. Singleton	Over Darwen, England	Jan. 3, 1871	110, 795
Warping-machine	L. H. Tobie	Portland, Me	Dec. 24, 1872	134, 331
Warping-machine	J. and T. Walmsley	Blackburn, Great Britain	Nov. 1, 1870	108, 856
Warping-machine drop-wires, Supporting bar or plate for.	I. C. Downes and H. Douk	Lewiston, Me	Mar. 22, 1870	101, 110
Warping-machine stop-mechanism	G. S. Follensbee and T. C. Entwistle.	Lewiston, Me	Apr. 8, 1873	137, 605
Warping-machine stop-motion	E. H. Cummings, G. Heyes, and T. Enwistle.	Lewiston, Me., and Accrington, England.	Mar. 28, 1871	113, 028
Warping-machine stop-motion	F. H. Perry	Niagara Falls, N. Y	Apr. 16, 1872	125, 689
Warping-machine stop-motion	J. E. Prest	Milford, Mass	Sept. 17, 1872	131, 372
Warping-machine stop-motion	L. V. Richmond	Brainerd, N. Y	July 16, 1867	66, 886
Warping-machine stop-motion	J. Siegrist	New York, N. Y	Oct. 20, 1868	83, 330
Warping-machine stop-motion	P. Wilson and J. Hunter	Manchester, N. H	May 30, 1871	115, 403
Warping-machine-stop-motion mechanism	H. Weber	New York, N. Y	Mar. 2, 1869	87, 528
Warping machine, Yarn	G. Draper	Hopedale, Mass	Feb. 7, 1871	111, 523
Warping-mill	J. W. Fries	Salem, Mass	Nov. 12, 1872	132, 959
Wash-basin	W. Bradley	Lynn, Mass	Aug. 27, 1867	68, 036
Wash-basin	J. Broadfoot	Glasgow, Scotland	Nov. 26, 1872	133, 405
Wash-basin	F. Imhorst	New York, N. Y	Dec. 24, 1872	134, 285
Wash-basin	J. C. Knoepke	Philadelphia, Pa	May 15, 1866	54, 741
Wash-basin	C. C. Marsh	New York, N. Y	Oct. 24, 1871	120, 300
Wash-basin	J. C. Moore	Philadelphia, Pa	June 25, 1872	128, 415
Wash-basin clamp	J. Ewing	New York, N. Y	Nov. 13, 1866	59, 572
Wash-basin, Folding	C. J. Nesbitt	Plattsburgh, Mo	June 25, 1872	128, 322
Wash-basin overflow and discharge pipe	B. Havanagh	New York, N. Y	June 23, 1868	79, 117
Wash-basin, Stationary	A. Ivers	New York, N. Y	May 21, 1867	64, 982
Wash-basin, Stationary	T. S. White	Grand Haven, Mich	Apr. 2, 1872	125, 365
Wash-basin with urinal attachment	J. L. Mott	Mott Haven, N. Y	May 7, 1872	126, 478
Wash-basins, Waste-trap for	H. H. Craigie	New York, N. Y	Jan. 28, 1873	135, 206
Wash-basins, Water-supply attachment to	F. Norboe	Chicago, Ill	June 20, 1871	116, 086
Wash-bench	F. Diebold	Boston, Mass	June 16, 1868	78, 937
Wash-bench	A. G. Emery	South Boston, Mass	Oct. 14, 1873	143, 562
Wash-bench	W. F. Gilbert	Derby, Conn	Aug. 13, 1872	130, 494
Wash-bench	L. Streeter	Hartford, Conn	July 23, 1872	129, 690
Wash-bench, Extension	S. Wiswall	Hyde Park, Vt	Oct. 9, 1860	30, 371
Wash-bench, Folding	G. King	Hartford, Conn	Dec. 24, 1872	134, 149
Wash-bench, Folding	J. N. Valley	North East, Pa	Feb. 20, 1872	123, 955
Wash-board	J. Adams	Pittsburgh, Pa	Nov. 16, 1858	22, 053
Wash-board	P. Andanin	New York, N. Y	Sept. 3, 1867	68, 481
Wash-board	S. I. Babbitt	Hackettstown, N. J	Jan. 7, 1862	34, 046
Wash board	W. T. Barnes	Buffalo, N. Y	June 17, 1851	8, 161
Wash-board	S. M. Barrett, R. S. Lee, and J. M. Waters.	Cincinnati, Ohio	June 8, 1858	20, 473
Wash-board	J. H. Beidler	Lincoln, Ill	Mar. 3, 1868	75, 114
Wash-board	H. H. Bellows	Brooklyn, N. Y	May 30, 1871	115, 416
Wash board	W. Bellus and C. Bowers	Fredonia, Ohio	Sept. 7, 1869	94, 551
Wash-board	J. S. Brooks	Rochester, N. Y	Sept. 10, 1872	131, 246
Wash-board	L. Butler	Kenosha, Wis	Aug. 31, 1852	9, 228
Wash-board	I. Cook	Mount Pleasant, Iowa	June 5, 1860	28, 629
Wash-board	A. R. Crihfield	Lincoln, Ill	Oct. 18, 1870	108, 456
Wash-board	L. De Golia	Batchellerville, N. Y	Aug. 27, 1867	68, 174
Wash-board	G. Elsey	Sterling, Ill	Apr. 22, 1873	138, 140
Wash-board	J. Epeneter and B. Grahl	Council Bluffs, Iowa	May 28, 1872	127, 325
Wash-board	J. B. Fisher	Amsterdam, N. Y	Mar. 18, 1873	136, 828
Wash-board	W. M. Galusha and B. W. Safford.	Arlington, Vt	Dec. 29, 1857	18, 965

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Invention.	Inventor.	Residence.	Date.	No.
Wash-board	B. F. Gott	Brooklyn, N. Y	Oct. 12, 1869	95, 792
Wash-board	B. F. Gott	Brooklyn, N. Y	Dec. 21, 1869	98, 160
Wash-board	L. B. Hartt	Detroit, Mich	July 18, 1865	48, 811
Wash-board	R. Hatch	Stafford, Vt	Apr. 8, 1856	14, 638
Wash-board	E. Hatfield	Brownsville, Pa	Apr. 10, 1860	27, 800
Wash-board	W. Hill	East Smithfield, Pa	Aug. 6, 1861	32, 994
Wash-board	A. Hoagland	Jersey City, N. J	Sept. 11, 1860	29, 972
Wash-board	N. Homes	Laona, N. Y	Apr. 11, 1865	47, 206
Wash-board	J. H. Hubbell	West Salem, Ohio	Feb. 8, 1870	99, 676
Wash-board	S. Hubbell, jr	West Salem, Ohio	May 3, 1870	102, 545
Wash-board	J. Hyde	New York, N. Y	Aug. 1, 1854	11, 426
Wash-board	W. A. Jordan	New Orleans, La	Jan. 29, 1867	61, 668
Wash-board	P. H. Keck	Morgantown, Va	July 4, 1854	11, 228
Wash-board	J. Keech	Waterloo, N. Y	Oct. 16, 1855	13, 682
Wash-board	J. Keech	Waterloo, N. Y	June 22, 1858	20, 644
Wash-board	J. Keech	Waterloo, N. Y	Apr. 10, 1860	27, 811
Wash-board	J. S. Lash	Philadelphia, Pa	Aug. 29, 1865	49, 635
Wash-board	C. Letterman	Syracuse, N. Y	Mar. 21, 1871	112, 820
Wash-board	F. E. Maberry	Haverhill, Mass	Apr. 7, 1868	76, 481
Wash-board	R. M. Mansur	Augusta, Me	June 30, 1868	79, 367
Wash-board	M. McGarry	Westfield, N. Y	May 12, 1868	77, 828
Wash-board	J. T. McNally and F. T. McNally.	Brooklyn and East New York, N. Y.	Jan. 7, 1873	134, 607
Wash-board	H. L. Meservey	Boston, Mass	Mar. 20, 1866	53, 321
Wash-board	J. K. Miller and F. D. Bashore	Shamokin, Pa	June 4, 1872	127, 629
Wash-board	J. Miner and S. Merrick	New Brighton, Pa	Nov. 16, 1858	22, 087
Wash-board	J. K. O'Neil	Kingston, N. Y	Jan. 18, 1859	22, 667
Wash-board	I. S. Parker	Sharon, Vt	Jan. 15, 1856	14, 111
Wash-board	O. Rice	Cincinnati, Ohio	Oct. 30, 1849	6, 835
Wash-board	S. Rust	Manlius, N. Y	Feb. 9, 1833	......
Wash-board	M. Sands	Franklin, N. Y	Feb. 12, 1842	2, 456
Wash-board	A. D. Smith	Grafton, Ohio	Nov. 14, 1871	120, 831
Wash-board	D. Smith	Hartfield, N. Y	Mar. 12, 1867	62, 895
Wash-board	E. M. Stevens	Boston, Mass	Jan. 14, 1868	73, 404
Wash-board	H. B. Straut	Greenleaf, Minn	Sept. 15, 1868	82, 175
Wash-board	O. H. Taylor	San Francisco, Cal	Oct. 11, 1864	44, 677
Wash-board	J. Thompson	Vevay, Ind	Oct. 15, 1867	69, 864
Wash-board	W. Todd	Allegheny, Pa	Feb. 7, 1871	111, 585
Wash-board	W. H. Towers	Boston, Mass	Oct. 24, 1871	120, 346
Wash-board	C. H Warren and A. C. Baldwin	Tiffin, Ohio	Dec. 19, 1865	51, 634
Wash-board	L. Wentworth	Chicago, Ill	July 30, 1872	129, 913
Wash-board	G. Whitford	Providence, R. I	Aug. 20, 1861	33, 118
Wash-board	G. L. Witsil	Philadelphia, Pa	Aug. 16, 1864	43, 887
Wash-board and rubber	C. Krebs	Wilmington, Del	Apr. 15, 1873	137, 847
Wash-board and wringer	J. Wheeler	Augusta, Me	Dec. 4, 1866	60, 304
Wash-board and wringer-frame	A. Tower	New York, N. Y	Nov. 2, 1869	96, 512
Wash-board attachment	C. H. Hudson	New York, N. Y	Feb. 14, 1865	46, 361
Wash-board blank	B. D. Sanders	Wellsburgh, W. Va	Dec. 3, 1872	133, 545
Wash-board, Circular	T. Fisler	Camden, N. J	Aug. 12, 1862	36, 145
Wash-board, Double	H. F. Hildebrand	Baltimore, Md	Jan. 25, 1870	99, 190
Wash-boards, Clamping and nailing	J. Poole and T. J. Pattin	Harmar, Ohio	May 5, 1863	38, 411
Wash-boards, Fluting and counter-fluting	E. Loud	Winchendon, Mass	Mar. 8, 1834	......
Wash-boards, Machine for cutting the zigzag grooves in the stiles of.	O. L. Reynolds	Dover, N. H	Dec. 22, 1857	18, 944
Wash-boards, Machine for fluting	C. J. Weld	West Wardsborough, Vt	July 17, 1866	56, 472
Wash-boards, Machine for making	E. and B. Holmes	Buffalo, N. Y	May 19, 1857	17, 329
Wash-boards, Machine for making	W. B. Stewart	Cincinnati, Ohio	Oct. 2, 1849	6, 765
Wash-boards, Machine for nailing	J. B. Holmes	Cincinnati, Ohio	Jan. 3, 1854	10, 392
Wash-boards, Machinery for manufacturing	J. B. Holmes	Cincinnati, Ohio	May 13, 1856	14, 869
Wash-boards, Method of manufacturing wooden	L. B. Batcheller	Arlington, Vt	Sept. 8, 1857	18, 171
Wash-boards, Rubber attachment for	J. Hull	Vienna, N. J	Sept. 22, 1863	40, 040
Wash-boards, Rubber attachment to	S. Peck	West Haven, Conn	Oct. 30, 1866	59, 257
Wash-boards, Swage for zinc	J. Poole and T. J. Pattin	Harmar, Ohio	May 5, 1863	38, 410
Wash-boards to walls, Mode of securing	T. Estlack	Philadelphia, Pa	June 5, 1855	13, 000
Wash-boiler	G. W. and H. B. Adams	Candor and Owego, N. Y	Apr. 23, 1872	126, 005
Wash-boiler	J. Adams	Cleveland, Ohio	Aug. 11, 1868	80, 797
Wash-boiler	J. Adams	Newark, Ohio	May 27, 1873	139, 349
Wash-boiler	J. Armstrong	Bucyrus, Ohio	Dec. 21, 1869	98, 009
Wash-boiler	C. R. Arnold	Hamilton, Ill	May 4, 1869	89, 726
Wash-boiler	I. Atyco	North Fairfield, Ohio	Aug. 8, 1871	117, 720
Wash-boiler	O. Baldwin	Keokuk, Iowa	Aug. 31, 1869	94, 378
Wash-boiler	A. R. Ball and W. M. Phelps	Marshall, Mich	Aug. 25, 1868	81, 460
Wash-boiler	S. W. Bartholomew	Louisburgh, N. C	June 24, 1873	140, 238
Wash-boiler	J. H. Batchelder and S. J. Sargent.	Lincoln, Vt	May 6, 1873	138, 603
Wash-boiler	J. W. and M. A. Bates	Saint Paul, Minn	Sept. 20, 1870	107, 591
Wash-boiler	J. W. and M. A. Bates	Saint Paul, Minn	Sept. 19, 1871	119, 109
Wash-boiler	M. M. Beard	Canton, Miss	Feb. 25, 1873	136, 125
Wash-boiler	A. Becker	Peotone, Ill	July 1, 1873	140, 398
Wash boiler	H. P. Bemiss	Milan, Ohio	Dec. 29, 1868	85, 358
Wash-boiler	S. Bennett	Newcastle, Pa	Sept. 26, 1871	119, 300
Wash-boiler	W. C. Berger	Bethel, Pa	Aug. 20, 1872	130, 617
Wash-boiler	C. D. Blinn	Port Huron, Mich	Feb. 15, 1870	99, 753
Wash-boiler	E. C. Brewster	Holly, Mich	Jan. 30, 1872	123, 226
Wash-boiler	E. C. Brewster	Holly, Mich	Jan. 30, 1872	123, 227
Wash-boiler	P. M. Burns	Freetown, Mass	Aug. 18, 1868	81, 134
Wash-boiler	J. H. Burtis	Brooklyn, N. Y	Oct. 20, 1868	83, 251
Wash-boiler	S. Buynitzky	St. Petersburg, Russia	June 30, 1868	79, 310
Wash-boiler	G. E. Calkins	Rock Island, Ill	Nov. 23, 1869	97, 942
Wash-boiler	S. L. Cheney	Kansas City, Mo	June 4, 1872	127, 567
Wash-boiler	M. J. Clapper	Holland, Mich	July 1, 1873	140, 470
Wash-boiler	L. T. Conant	New Lisbon, Ohio	Dec. 8, 1868	84, 732
Wash-boiler	H. B. Corner	Worcester, Mass	Dec. 24, 1872	134, 255
Wash-boiler	S. Covey and O. A. Slafter	McHenry, Ill	May 13, 1873	138, 738
Wash-boiler	J. Cramer	Monee, Ill	May 13, 1873	138, 739
Wash-boiler	O. E. Culver and L. E. Moseley	Eagle Bridge, N. Y	Dec. 16, 1873	145, 558
Wash-boiler	D. A. Danforth	Elkhart, Ind	July 28, 1868	80, 397
Wash-boiler	J. Davis	Florida, Mass	Sept. 10, 1872	131, 212

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Wash-boiler	A. Day	Detroit, Mich	Apr. 27, 1869	89, 385
Wash-boiler	J. W. Deming	Paris, Me	May 27, 1873	139, 301
Wash-boiler	G. De Witt	Baltimore, Md	July 16, 1872	129, 540
Wash-boiler	W. J. Dodge	New York, N. Y	Oct. 3, 1871	119, 510
Wash-boiler	C. H. Dunbrack	Jacksonville, Ill	Apr. 8, 1873	137, 663
Wash-boiler	J. H. Elward	Palo, Ill	Aug. 24, 1869	94, 092
Wash-boiler	T. Evans	Newark, N. J	Jan. 11, 1870	98, 679
Wash-boiler	W. Exner	Harper's Ferry, W. Va	Apr. 15, 1873	137, 902
Wash-boiler	B. T. Fellows	Lancaster, Pa	Aug. 29, 1871	118, 442
Wash-boiler	G. Fenn	Boston, Mass	Oct. 6, 1868	82, 817
Wash-boiler	S. Fisk	Winchester, Ind	May 4, 1869	89, 572
Wash-boiler	B. G. Fitzhugh	Frederick, Md	June 28, 1870	104, 722
Wash-boiler	J. H. Garner	Pontiac, Ill	May 2, 1871	114, 431
Wash-boiler	W. G. Gibson	Lynchburgh, Ohio	May 6, 1873	138, 632
Wash-boiler	O. F. Glidden	Stoneham, Mass	Apr. 8, 1873	137, 545
Wash-boiler	S. A. Goodwin	Buffalo, N. Y	Oct. 20, 1868	83, 277
Wash-boiler	S. A. Goodwin	Buffalo, N. Y	Oct. 20, 1868	83, 278
Wash-boiler	S. A. Goodwin	Buffalo, N. Y	Oct. 5, 1869	95, 464
Wash-boiler	G. M. Granger	Memphis, Mich	June 8, 1869	90, 942
Wash-boiler	L. Granger	Memphis, Mich	Dec. 1, 1868	84, 487
Wash-boiler	J. Green	New York, N. Y	Feb. 16, 1869	86, 918
Wash-boiler	A. W. Hall	New York, N. Y	Aug. 4, 1868	80, 727
Wash-boiler	G. Hall	Morgantown, W. Va	Mar. 5, 1872	124, 353
Wash-boiler	T. G. Hall	Watkins, N. Y	July 30, 1872	130, 040
Wash-boiler	J. A. Hammer and T. Chadwick	Newton, Iowa	Oct. 6, 1868	82, 713
Wash-boiler	W. H. Hammond	Syracuse, Mo	Nov. 18, 1873	144, 761
Wash-boiler	R. J. Harrison	Raleigh, N. C	Nov. 4, 1873	144, 336
Wash-boiler	A. S. Herr	Bainbridge, Pa	Nov. 28, 1871	121, 285
Wash-boiler	W. D. Hillis	Elgin, Ill	Jan. 19, 1869	86, 013
Wash-boiler	J. W. Hoit	Lebanon, Ill	Aug. 17, 1869	93, 886
Wash-boiler	M. L. Horton	Windsor, Vt	May 30, 1871	115, 320
Wash-boiler	F. A. Hovey	Hudson, N. Y	Feb. 13, 1872	123, 698
Wash-boiler	C. W. Howard	Philadelphia, Pa	Feb. 6, 1872	123, 346
Wash-boiler	M. C. Hubbard	Troy, N. Y	Nov. 28, 1871	121, 370
Wash-boiler	T. G. Hughes	Elysian, Minn	Mar. 1, 1870	100, 409
Wash-boiler	G. A. Hynds	Rome, N. Y	Jan. 23, 1872	122, 891
Wash-boiler	P. H. Inman and C. B. Withington.	Janesville, Wis	Mar. 30, 1869	88, 387
Wash-boiler	W. F. Jenkins	Indianapolis, Ind	Dec. 1, 1868	84, 493
Wash-boiler	F. Judson	Castleton, N. Y	Aug. 18, 1868	81, 174
Wash-boiler	O. L. Kenyon and E. B. Palmer	Rome, N. Y	Apr. 18, 1871	113, 774
Wash-boiler	W. E. Kinnear	Upper Sandusky, Ohio	Aug. 15, 1871	118, 024
Wash-boiler	P. Krumscheid	Boston, Mass	Apr. 8, 1873	137, 612
Wash-boiler	R. Langenbach	New York, N. Y	Apr. 22, 1873	138, 167
Wash-boiler	R. Lawyer	Pittsburgh, Pa	Jan. 28, 1873	135, 349
Wash-boiler	R. Lawyer	Pittsburgh, Pa	Nov. 18, 1873	144, 774
Wash-boiler	G. J. Leach	Rome, N. Y	Sept. 26, 1871	119, 373
Wash-boiler	A. Lee	Scranton, Pa	Mar. 2, 1869	87, 202
Wash-boiler	E. F. Lewis	Winsted Lake, Minn	Oct. 17, 1871	119, 933
Wash-boiler	W. H. Lines	Cannonsville, N. Y	Nov. 26, 1872	133, 374
Wash-boiler	W. H. Lowrey	Columbiana, Ohio	Sept. 10, 1872	131, 285
Wash-boiler	D. and J. Lucas	Green Bay, Wis	Oct. 26, 1869	96, 129
Wash-boiler	J. T. Maxson	De Witt, Iowa	Mar. 12, 1872	124, 603
Wash boiler	D. McCleary	Allegheny City, Pa	May 2, 1871	114, 457
Wash-boiler	A. McDaniel	Dubuque, Iowa	Mar. 23, 1869	88, 193
Wash-boiler	E. H. McDonald	Wytheville, Va	July 15, 1873	140, 936
Wash-boiler	S. A. McGeorge	Almont, Mich	Feb. 2, 1869	86, 568
Wash-boiler	J. McInnes	Oxford, Pa	Mar. 7, 1871	112, 368
Wash-boiler	T. McMullin and I. N. and M. Mendenhall, jr.	Osgood, Ind	Apr. 27, 1869	89, 325
Wash-boiler	J. C. Merrell	Medina, N. Y	May 5, 1868	77, 511
Wash-boiler	A. Michel	Saint Louis, Mo	Nov. 17, 1868	84, 204
Wash-boiler	S. S. Miles	Delta, N. Y	Feb. 14, 1871	111, 860
Wash-boiler	C. E. Miller	Indianapolis, Ind	June 23, 1868	79, 142
Wash-boiler	C. E. Miller	Indianapolis, Ind	Aug. 4, 1868	80, 651
Wash-boiler	C. E. Miller	Indianapolis, Ind	Apr. 27, 1869	89, 545
Wash-boiler	F. W. Miller	Cincinnati, Ohio	May 4, 1869	89, 784
Wash-boiler	W. W. Moore	Clinton, Wis	Sept. 3, 1872	131, 020
Wash-boiler	J. Moreland, T. P. Reay, and J. M. Lazier.	Morgantown, W. Va	Mar. 12, 1872	124, 608
Wash-boiler	J. C. Nobles	Lawrence, Kans	Oct. 8, 1872	132, 097
Wash-boiler	J. Okey	Indianapolis, Ind	Sept. 8, 1868	81, 934
Wash-boiler	A. O'Neill	Portsmouth, Ohio	Aug. 11, 1868	80, 995
Wash-boiler	H. and G. W. Packer	Sandwich, Ill	Nov. 2, 1869	96, 473
Wash-boiler	T. U. Parker	Mifflintown, Pa	Feb. 28, 1871	112, 275
Wash-boiler	T. U. Parker	Mifflintown, Pa	Jan. 23, 1872	123, 044
Wash-boiler	N. Parks	Mohawk, N. Y	Aug. 24, 1869	94, 120
Wash-boiler	N. Parks and G. A. Hynds	Rome, N. Y	Aug. 22, 1871	118, 265
Wash-boiler	W. N. Peirce	West Boylston, Mass	Oct. 20, 1868	83, 307
Wash-boiler	H. W. Pell	Rome, N. Y	Apr. 18, 1871	113, 920
Wash-boiler	H. W. Pell	Rome, N. Y	May 23, 1871	115, 234
Wash-boiler	J. R. Pendell	Dryden, N. Y	May 6, 1873	138, 576
Wash-boiler	J. W. Plouff	Gloucester, Mass	Dec. 12, 1871	121, 812
Wash-boiler	D. A. Porterfield	New Paris, Ohio	Dec. 8, 1868	84, 759
Wash-boiler	C. W. Powell	Bloomfield, Conn	Mar. 14, 1871	112, 697
Wash-boiler	C. W. Powell	Yalesville, Conn	May 30, 1871	115, 353
Wash-boiler	G. M. Prime	El Dorado, Ark	Nov. 12, 1872	132, 979
Wash-boiler	W. C. Putt	Ludlow, Ill	Nov. 19, 1872	133, 174
Wash-boiler	W. Reinemer	Homburg, Prussia	Nov. 18, 1873	144, 705
Wash-boiler	J. Reinig	Fond du Lac, Wis	Apr. 29, 1873	138, 285
Wash-boiler	N. L. Rigby	Chetopah, Kans	Apr. 30, 1872	126, 283
Wash-boiler	H. R. Robbins	Baltimore, Md	Aug. 23, 1870	106, 723
Wash-boiler	H. R. Robbins	Baltimore, Md	Mar. 14, 1871	112, 739
Wash-boiler	H. Ross	Plattsburgh, N. Y	Dec. 30, 1873	146, 022
Wash-boiler	F. J. Schirmayer	Milwaukee, Wis	May 6, 1873	138, 380
Wash-boiler	E. Schofield	Worcester, Mass	Sept. 2, 1873	142, 518
Wash-boiler	E. Seeley	Scranton, Pa	Dec. 15, 1868	85, 031
Wash-boiler	I. D. Seeley	Hudson, Wis	May 5, 1868	77, 663

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Invention.	Inventor.	Residence.	Date.	No.
Wash-boiler	I. D. Seeley	Hudson, Wis	Dec. 29, 1868	85,483
Wash-boiler	J. Shedd	Waltham, Mass	June 1, 1869	90,694
Wash-boiler	P. L. Shepler and S. L. Irwin	Whitehouse, Ohio	Oct. 20, 1868	83,218
Wash-boiler	A. Sherwood	Auburn, N. Y	Oct. 20, 1868	83,329
Wash-boiler	J. P. Sherwood	Fort Edward, N. Y	Dec. 21, 1869	98,199
Wash-boiler	J. H. Siebcke	Ann Arbor, Mich	Apr. 4, 1871	113,582
Wash-boiler	G. Sinniger and S. S. Sabine	Chatham, Ill	Sept. 24, 1872	131,635
Wash-boiler	A. Sluthour	New Philadelphia, Ohio	Jan. 28, 1873	135,374
Wash-boiler	H. H. Smith	Bainbridge, Pa	June 18, 1872	128,185
Wash-boiler	H. L. Sprague and J. N. Guyon	Tottenville, N. Y	Nov. 29, 1870	109,774
Wash-boiler	M. W. Staples	Catskill, N. Y	Feb. 12, 1867	62,084
Wash-boiler	M. W. Staples	Catskill, N. Y	Dec. 8, 1868	84,715
Wash-boiler	O. F. Stedman	Westfield, N. Y	Sept. 29, 1868	82,636
Wash-boiler	O. F. Stedman	Westfield, N. Y	Aug. 16, 1870	106,516
Wash-boiler	O. F. Stedman	Westfield, N. Y	Nov. 1, 1870	108,944
Wash-boiler	G. F. Stone	Baltimore, Md	Sept. 24, 1872	131,638
Wash-boiler	D. P. Sulouff	Milton, Pa	Dec. 19, 1871	122,077
Wash-boiler	J. B. Sweetland	Pontiac, Mich	Oct. 27, 1868	83,566
Wash-boiler	J. P. Swetland and S. T. Fenn	Pontiac, Mich	Aug. 25, 1868	81,556
Wash-boiler	M. A. Taylor	Cincinnati, Ohio	July 31, 1866	56,830
Wash-boiler	W. J. Thomas	Frederick City, Md	July 1, 1873	140,444
Wash-boiler	J. C. Tilton	Pittsburgh, Pa	Sept. 19, 1871	119,063
Wash-boiler	J. C. Tilton	Pittsburgh, Pa	Mar. 5, 1872	124,394
Wash-boiler	J. C. Tilton	Pittsburgh, Pa	Aug. 27, 1872	130,830
Wash-boiler	J. C. Tilton	Pittsburgh, Pa	Feb. 25, 1873	136,283
Wash-boiler	J. C. Tilton	Pittsburgh, Pa	Dec. 23, 1873	145,767
Wash-boiler	C. A. Totten	Hudson, N. J	Nov. 24, 1868	84,395
Wash-boiler	P. Trentz	New Albany, Ind	Feb. 2, 1869	86,526
Wash-boiler	L. W. Truesdell and F. Curtis	Owego, N. Y	Oct. 21, 1873	143,796
Wash-boiler	W. W. Turtelot	Rome, N. Y	Dec. 9, 1873	145,318
Wash-boiler	C. N. Tyler	New York, N. Y	Dec. 15, 1868	84,918
Wash-boiler	J. Varley	Hudson City, N. J	Sept. 1, 1868	81,847
Wash-boiler	S. J. Wallace	Keokuk, Iowa	Mar. 23, 1869	88,243
Wash-boiler	H. and D. Weidley	Greene Post-Office, Pa	Sept. 19, 1871	119,067
Wash-boiler	W. A. Wells and L. P. Converse	Saint Paul, Minn., and Milwaukee, Wis.	Apr. 4, 1871	113,712
Wash-boiler	W. B. White	Rome, N. Y	Mar. 14, 1871	112,760
Wash-boiler	G. W. Wilson	Freeport, Ill	Nov. 16, 1869	96,857
Wash-boiler	H. T. Woodman	Dubuque, Iowa	Oct. 11, 1870	108,226
Wash-boiler	E. M. Wright	Castile, N. Y	Aug. 24, 1869	94,165
Wash-boiler	E. M. Wright	Geneva, N. Y	Oct. 3, 1871	119,489
Wash-boiler	H. Yost	Dayton, Ohio	June 28, 1870	104,810
Wash-boiler and similar vessels, Bottom for	G. H. Hazelton	Philadelphia, Pa	June 21, 1870	104,589
Wash-boiler apparatus	J. Ringle	Jersey City, N. J	May 3, 1870	102,712
Wash-boiler attachment	C. Beach	Rochester, N. Y	June 18, 1872	128,097
Wash-boiler attachment	H. Bickel	Myerstown, Pa	Jan. 21, 1873	135,069
Wash-boiler attachment	C. P. Chapman	Afton, Iowa	July 29, 1873	141,322
Wash-boiler attachment	E. Choate	New York, N. Y	Dec. 31, 1872	134,420
Wash-boiler attachment	E. Davis	Hanover, Ind	Aug. 5, 1873	141,429
Wash-boiler attachment	W. W. Glanville	Crawford County, Iowa	Nov. 11, 1873	144,531
Wash-boiler attachment	R. B. Hart	Salado, Tex	Feb. 11, 1873	135,708
Wash-boiler attachment	S. B. Hartman	Lancaster, Pa	Jan. 14, 1873	134,800
Wash-boiler attachment	D. F. Jauss	Harrisburgh, Pa	Sept. 10, 1872	131,275
Wash-boiler attachment	R. Jeffers and D. C. Bockoven	South Sodus, N. Y	Jan. 28, 1873	135,225
Wash-boiler attachment	B. Jennings	Paw Paw, Mich	Dec. 10, 1872	133,779
Wash-boiler attachment	M. Martin	Baltimore, Md	Feb. 4, 1873	135,569
Wash-boiler attachment	R. A. McCauley	Baltimore, Md	Jan. 21, 1873	134,999
Wash-boiler attachment	A. H. Proctor	Galesburgh, Mich	May 24, 1870	103,503
Wash-boiler attachment	C. D. Reinking	Des Moines, Iowa	Mar. 4, 1873	136,385
Wash-boiler attachment	W. E. Rice and J. Barnes	Brooklyn, N. Y	June 17, 1873	139,918
Wash-boiler attachment	A. Schloesser	Des Moines, Iowa	Dec. 24, 1872	134,318
Wash-boiler attachment	I. C. Schramm	Des Moines, Iowa	July 1, 1873	140,546
Wash-boiler attachment	T. Shuman	Corning, Iowa	Apr. 1, 1873	137,492
Wash-boiler attachment	C. W. Sterick	Northumberland, Pa	Nov. 7, 1871	120,792
Wash-boiler attachment	W. Turner and J. C. Tregear	Stockton, Pa	Dec. 17, 1872	134,017
Wash-boiler attachment	C. N. Tyler	Buffalo, N. Y	Sept. 3, 1872	131,136
Wash-boiler attachment	G. H. Waldo	Prattsburgh, N. Y	Nov. 12, 1872	132,940
Wash-boiler attachment	N. C. Warner	Hopewell Furnace, Mo	Mar. 11, 1873	136,686
Wash-boiler attachment	H. W. Williams	Grinnell, Iowa	May 13, 1873	138,974
Wash-boiler bottom	C. Burnham	Springfield, Mass	June 28, 1864	43,287
Wash-boiler fountain	R. S. Manning	Trenton, N. J	Oct. 8, 1872	132,094
Wash-boiler fountain	R. S. Manning	Trenton, N. J	Dec. 3, 1872	133,654
Wash-boiler fountain	G. F. Stone	Baltimore, Md	Oct. 24, 1871	120,218
Wash-boiler, Hydraulic	J. B. Waring	Brooklyn, N. Y	Dec. 15, 1868	84,923
Wash-boiler, Steam	J. C. Nobles	Lawrence, Kans	Nov. 12, 1872	132,918
Wash-boiler, Steam	G. S. Wright and E. W. Harrington.	Racine, Wis., and Geneva, N. Y.	Sept. 24, 1872	131,647
Wash-boiler trap	H. R. Robbins	Baltimore, Md	Oct. 3, 1871	119,649
Wash-boiler tube	T. W. R. Rayner	New York, N. Y	Sept. 28, 1869	95,266
Wash-boilers and other vessels, Manufacture of	G. H. Hazelton	Philadelphia, Pa	Sept. 20, 1864	44,309
Wash-boilers, Automatic circulator for	W. L. Hubbell	Brooklyn, N. Y	June 25, 1872	128,398
Wash-boilers, Diaphragm for	J. R. Manny	Chicago, Ill	Aug. 24, 1869	94,121
Wash-boilers, kettles, and other vessels made of sheet-metal, Manufacture of.	E. M. Manigle	Philadelphia, Pa	Nov. 13, 1866	59,722
Wash-bowl	C. Knowles	Boston, Mass	Aug. 15, 1871	118,026
Wash-bowl	W. Westlake	Chicago, Ill	Dec. 19, 1871	122,089
Wash-bowl and water-closet, Combined	A. J. Knox	Boston, Mass	Oct. 30, 1866	59,233
Wash-bowls, Manufacture of	J. Gilbert and P. M. Sofield	Newark, N. J	Mar. 24, 1868	75,896
Wash-liquor, Recovering fatty and coloring matters from waste.	J. Thom and J. Stenhouse	London, Great Britain	Apr. 8, 1873	137,636
Wash-mixture	S. Crane	Charleston, S. C	Jan. 29, 1850	7,049
Wash-mixture for woolens, &c	W. Reisig	Astoria, N. Y	Sept. 8, 1857	18,160
Wash or steep for roots, seeds, &c	P. G. Kenny	Rahway, N. J	July 2, 1867	66,356
Wash-pave-key handle	W. H. Johnson	Philadelphia, Pa	Oct. 19, 1869	95,908
Wash-pounder	L. S. Enos	Almont, N. Y	June 24, 1873	140,261
Wash-pounder	P. A. La France	Elmira, N. Y	Dec. 1, 1868	84,633
Wash-stand	A. Bayley	Newark, N. J	July 3, 1866	55,982
Wash-stand	Z. E. Fobes	Troy, N. Y	Mar. 22, 1864	41,986

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Invention.	Inventor.	Residence.	Date.	No.
Wash-stand	A. H. Lorton	New York, N. Y	Jan. 14, 1873	134,903
Wash-stand	C. Magee	Pittsburgh, Pa	Dec. 31, 1872	134,387
Wash-stand	W. H. Miller	Brandenburgh, Ky	Dec. 5, 1854	12,029
Wash-stand	E. Ripley	Schenectady, N. Y	Dec. 27, 1833	....
Wash-stand	G. Seelig	New York, N. Y	Feb. 23, 1869	87,399
Wash-stand	A. Stankowitch	Philadelphia, Pa	Mar. 10, 1868	75,311
Wash-stand	J. Williams	Baltimore, Md	Mar. 15, 1828	....
Wash-stand and clothes-dryer	F. H. Carrier	Bridgeport, Conn	Dec. 10, 1867	71,976
Wash-stand and desk	D. W. Bashore	Erie, Pa	Aug. 7, 1866	56,876
Wash-stand and night-stool, Combined	F. W. Hamilton	Conshohocken, Pa	June 1, 1858	20,428
Wash-stand and sick-chair	V. Schreck	Philadelphia, Pa	Sept. 22, 1868	82,441
Wash-stand and tank	H. W. Catlin	Burlington, Vt	Sept. 27, 1870	107,661
Wash-stand and water-closet, Combined	S. Bissicks	New York, N. Y	Mar. 17, 1863	37,896
Wash-stand and water-closet, Combined	A. J. Brown	New Castle, Del	July 21, 1868	80,129
Wash-stand and water-closet, Combined	W. Campbell	Waterloo, Pa	Feb. 16, 1864	41,602
Wash-stand and writing-desk, Combined	J. J. Arnaud	Boston, Mass	May 21, 1872	126,863
Wash-stand appliances for one-armed persons	G. Dietrich	New York, N. Y	July 4, 1865	48,533
Wash-stand bracket	A. Cary	Norwich, N. Y	Aug. 22, 1871	118,341
Wash-stand, bureau, and toilet-table, Combined	H. Whittemore	Orangetown, N. Y	Sept. 26, 1871	119,290
Wash-stand, bureau, desk, and wardrobe	A. Lee	New York, N. Y	Dec. 20, 1864	45,5[illegible]5
Wash-stand, Cabinet	N. H. Thompson	Albion, Mich	Jan. 2, 1872	122,337
Wash-stand, curtain frame, and towel-rack, Combined.	A. McFall	Yonkers, N. Y	Jan. 30, 1872	123,187
Wash-stand, Folding	D. O. Parker	Liverpool, Canada	Aug. 29, 1871	118,478
Wash-stand, Fountain	J. R. Ender	Trenton, La	Aug. 7, 1860	29,476
Washs-tand, Incased	E. E. B. Low	New Brighton, N. Y	June 11, 1872	127,698
Wash-stand, Marble-top	P. E. and J. P. Gruger	Lancaster, Pa	Jan. 26, 1869	86,222
Wash-stand, Portable	S. B. Guernsey	Chicago, Ill	Dec. 11, 1866	60,362
Wash-stand, &c., screen	C. A. Johnson	Philadelphia, Pa	July 23, 1872	129,667
Wash-stand screen	R. Nelson	Cincinnati, Ohio	July 28, 1868	80,496
Wash-stand screen-attachment	E. F. Gilbert	Lyons, N. Y	Jan. 28, 1868	73,796
Wash-stand water supply and waste arrangement.	H. J. Ruthrauff	Warrenburgh, Mo	June 4, 1872	127,433
Wash-stand, Water-tight	C. Gies	New York, N. Y	Mar. 23, 1858	19,694
Wash-stands, Marble top and back of	W. J. Bender	Cincinnati, Ohio	Apr. 4, 1871	113,388
Wash-stand, Shield and towel-rack for	J. M. Oakley	Green Point, N. Y	Oct. 17, 1871	120,086
Wash-stands, Wall-protector for	F. Allen	Chicago, Ill	Jan. 16, 1872	122,693
Wash-tub	A. M. Cushing	Cambridge, Mass	July 18, 1871	117,154
Wash-tub	B. Morahan	Brooklyn, N. Y	Sept. 7, 1869	94,501
Wash-tub and bucket, Sheet-iron	D. Alcorn and J. Walsh	New York, N. Y	Jan. 11, 1870	98,729
Wash-tub attachment	O. Baldwin	Keokuk, Iowa	Oct. 8, 1867	69,609
Wash-tub holder	A. M. Olds	Greeley, Colo	Apr. 1, 1873	137,473
Wash-tub, Stationary	B. Morahan	Brooklyn, N. Y	June 10, 1873	139,684
Wash-tub, Stationary	B. Morahan	Brooklyn, N. Y	June 10, 1873	139,685
Wash-tub support	E. F. Shaw	Boston, Mass	June 17, 1873	138,925
Wash-tub support	G. F. Shaw	West Roxbury, Mass	Oct. 7, 1873	143,469
Washer:				
See Accelerating-washer. Nut-stop washer.				
Anti-friction washer. Ore-washer.				
Axle-washer. Ore and mineral washer.				
Axle-box washer. Paper-engine washer.				
Barrel-washer. Paper-pulp washer.				
Bolt-washer. Paper-stock washer.				
Bottle-washer. Potato-washer.				
Car and window washer. Pulp-washer.				
Carriage-washer. Rotary washer.				
Clothes-washer. Slate-washer.				
Dish-washer. Spring-washer.				
Elastic washer. Spring-plate washer.				
Felt washer. Steam-washer.				
Gold-washer. Street-washer.				
Leather washer. Tumbler-washer.				
Locking-washer. Vegetable-washer.				
Metallic washer. Wall-washer.				
Nut-washer. Wall or window washer.				
Nut-lock washer.				
Nut-locking washer. Window-washer.				
Washer	J. Hale	Somerville, Mass	Sept. 10, 1867	68,624
Washer	T. Shaw	Philadelphia, Pa	Apr. 28, 1868	77,326
Washer	J. A. Way	Bristol, Conn	July 28, 1868	80,435
Washer and boiler	J. Slater	Norwich, N. Y	Aug. 16, 1870	106,414
Washer and boiler, Combined	J. Runkle	Reading, Pa	Sept. 24, 1872	131,629
Washer and boiler, Combined	G. C. Taylor and J. B. Chrisman	Port Jervis, N. Y	Nov. 21, 1871	121,136
Washer and churn	G. B. Gibbs	Le Raysville, Pa	Oct. 10, 1829	....
Washer and wringer	D. T. Gale	Poughkeepsie, N. Y	Feb. 8, 1870	99,552
Washer and wringer	P. Wetherbee	Port Washington, Ohio	Mar. 28, 1871	113,227
Washer and wringer, Combined	J. H. Murray	Kirkwood, N. Y	May 2, 1871	114,462
Washer and wringer, Combined	D. B. Smith	Binghamton, N. Y	Nov. 19, 1872	133,176
Washer, Anti-rattling	B. Morton	Fertility, Pa	Feb. 21, 1871	111,964
Washer, Columbian	R. P. Clarke	Broad Albin, N. Y	Apr. 16, 1830	....
Washer-cutter	W. A. Clark	Woodbridge, Conn	Sept. 14, 1869	94,870
Washer-cutter	E. S. Hidden	Milburn, N. J	Apr. 30, 1872	126,295
Washer-cutter	P. McCormick	Newark, N. J	Sept. 27, 1870	107,760
Washer-cutter	H. B. Whipple	Providence, R. I	Oct. 14, 1873	143,738
Washer-cutting device	A. P. Gruger	Lancaster, Pa	Apr. 16, 1867	63,8[illegible]2
Washer-cutting tool	C. A. King and O. A. Smith	Middletown, Conn	Oct. 24, 1865	50,600
Washer for carriages, Elastic	G. W. Billings	Chicago, Ill	Dec. 14, 1869	97,752
Washer-making die	G. W. Billings	Chicago, Ill	July 4, 1871	116,541
Washer-making machine	R. H. Cole	Saint Louis, Mo	Apr. 27, 1858	20,043
Washers and attaching them to carpet-tacks, Machine for forming.	J. G. Howard	North Easton, Mass	June 25, 1850	7,456
Washers, Die for punching	R. Humphrey	Unionville, Conn	July 22, 1873	141,055
Washers, &c., Machine for beveling surfaces of	W. Field	Providence, R. I	Sept. 3, 1850	7,615
Washers, Rolled metallic strip for	T. C. Hargrave	Boston, Mass	Apr. 4, 1871	113,427
Washers to tacks, Machine for applying	J. G. Howard	South Braintree, Mass	Aug. 14, 1860	29,595
Washing and boiling machine	J. T. W. Dennis	Paintville, Ohio	Dec. 16, 1829	....
Washing and churning machine	G. Bishop	Cazenovia, N. Y	Sept. 7, 1808	....
Washing and churning machine	J. Grout	Caroline, N. Y	Sept. 10, 1828	....

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Invention.	Inventor.	Residence.	Date.	No.
Washing and churning machine	G. Osgood	Madison County, N. Y	June 7, 1809	....
Washing and churning machine	Z. Phinney	Cairo, N. Y	June 19, 1812	....
Washing and churning machine	J. B. Pratt	Milo, N. Y	July 14, 1829	....
Washing and churning machine	F. Reed	Pike Township, Pa	June 11, 1829	....
Washing and churning machine	J. Roberts	Germantown, Pa	Apr. 25, 1810	....
Washing and churning machine	J. White	South Union, Ky	Apr. 11, 1831	....
Washing and churning machine	S. Winchester	Newtown, Conn	Aug. 31, 1808	....
Washing and cleansing fluid	F. F. N. Marais	New York, N. Y	July 20, 1869	92,855
Washing and cooking boiler	N. T. and E. J. Case	Des Moines, Iowa	June 14, 1870	104,266
Washing and drying machine	W. P. Ublinger	Philadelphia, Pa	May 24, 1870	103,528
Washing and fulling machine	B. Dewey	Milton Township, Ohio	Nov. 19, 1833	....
Washing and fulling machine	J. Taylor	Philadelphia, Pa	May 11, 1869	90,035
Washing and heating water, Machine for	E. D. Cherry	Auburn, N. Y	Sept. 10, 1829	....
Washing and pressing machine	H. Averill	Richland, N. Y	Aug. 14, 1828	....
Washing and pressing machine	M. C. Davis and L. C. Keith	Folsom, Cal	May 3, 1864	42,567
Washing and scouring machine	A. Higham	Hudson, N. Y	May 4, 1805	....
Washing and scouring machine	W. Price	Cincinnati, Ohio	Oct. 25, 1864	44,820
Washing and scouring machine, Horizontal double	N. Morrison and J. Lewis	Uniontown, Pa	Mar. 14, 1832	....
Washing and scouring machine, Rotary	J. F. Holmes	Providence, R. I	Jan. 23, 1872	123,019
Washing and scouring machine, Sand	J. Taylor	Connellsville, Pa	Jan. 26, 1869	86,256
Washing and wringing machine	L. Bachelor	Vernon, N. Y	Apr. 24, 1809	....
Washing and wringing machine	E. Bartholomew	Cleveland, Ohio	Dec. 29, 1868	85,355
Washing and wringing machine	C. F. and F. Blood	Gravesville, Wis	July 9, 1867	66,450
Washing and wringing machine	G. R. Clarke	New York, N. Y	Nov. 21, 1871	121,042
Washing and wringing machine	J. Cram	Boston, Mass	Mar. 8, 1864	41,886
Washing and wringing machine	L. Face	Covington, Ohio	Nov. 12, 1861	33,698
Washing and wringing machine	H. Fisher and M. Ball	Canton, Ohio	Mar. 13, 1866	53,132
Washing and wringing machine	G. P. Fuller	Philadelphia, Pa	Aug. 4, 1868	80,540
Washing and wringing machine	R. A. Gawler	Concord, N. H	Dec. 19, 1865	51,580
Washing and wringing machine	J. Hewit	Carmichael, Pa	Sept. 15, 1863	39,917
Washing and wringing machine	J. Hodskinson and O. C. Smith	Salem, Mass	Oct. 7, 1862	36,615
Washing and wringing machine	I. Hogeland	La Fayette, Ind	July 16, 1867	66,839
Washing and wringing machine	G. W. Kintz	West Henrietta, N. Y	Apr. 21, 1868	76,924
Washing and wringing machine	J. Lamb	Jeffersonville, N. Y	Oct. 23, 1866	59,038
Washing and wringing machine	J. Lamb	Jeffersonville, N. Y	Mar. 30, 1869	88,308
Washing and wringing machine	J. S. Lash	Carlisle, Pa	Oct. 14, 1862	36,658
Washing and wringing machine	M. Leavitt and A. Foster	Ottawa, Ill	June 16, 1868	78,975
Washing and wringing machine	J. Lee	Galesburgh, Ill	Jan. 20, 1863	37,452
Washing and wringing machine	E. C. Patterson	Chicago, Ill	Mar. 13, 1866	53,176
Washing and wringing machine	J. Pinter	Saint Louis, Mo	Apr. 20, 1869	89,166
Washing and wringing machine	H. O. Reddish	Linden, N. Y	Apr. 13, 1869	88,905
Washing and wringing machine	J. S. Sandt	Saint Joseph, Mo	Apr. 4, 1871	113,352
Washing and wringing machine	W. S. Shoemaker	Greenwood Post-Office, Md	July 3, 1866	56,110
Washing and wringing machine	O. Skeel	Winslow, Ill	Sept. 14, 1869	94,848
Washing and wringing machine	E. Springer	Davis, Ill	Oct. 10, 1865	50,401
Washing and wringing machine	J. Taber	South Wolfborough, N. H	May 16, 1871	114,990
Washing and wringing machine	R. K. Tomlinson	Brownsburgh, Pa	Aug. 4, 1868	80,784
Washing and wringing machine	S. Tucker	Dublin, Pa	Jan. 12, 1809	....
Washing and wringing machine	J. B. Wakeman and A. R. Field	Hamden, N. Y	May 3, 1870	102,6[illegible]8
Washing and wringing machine	E. B. Wells	Uniontown, Pa	Mar. 15, 1864	41,953
Washing and wringing machine	C. A. White	Fairfield, Vt	Feb. 26, 1867	62,459
Washing and wringing machine	J. Whitney	Bristol, Vt	Aug. 27, 1867	68,270
Washing and wringing machine	G. L. Witsil	Philadelphia, Pa	Feb. 10, 1863	37,666
Washing and wringing machine, Combined	S. Conklin	Kirkwood, N. Y	Jan. 2, 1872	122,441
Washing and wringing machine, Combined	C. Robinson	Boston, Mass	Nov. 12, 1872	132,985
Washing-apparatus	C. C. H. Glidden	Boston, Mass	Sept. 5, 1865	49,748
Washing-apparatus	J. T. Grose	Upper Sandusky, Ohio	Jan. 4, 1870	98,585
Washing-apparatus	J. T. King	Baltimore, Md	Oct. 21, 1851	8,446
Washing-apparatus	C. Maitland	Alloa, Scotland	Dec. 6, 1864	45,369
Washing-boiler	L. H. Suits	Troy, N. Y	Aug. 27, 1872	130,828
Washing clothes, churning, &c., Machine for	R. R. Palmer	Caroline Township, Tompkins County, N. Y.	Mar. 21, 1828	....
Washing-compound	R. W. Chappell	Chicago, Ill	Sept. 19, 1865	49,977
Washing-compound	W. Leonard and J. J. Johnston.	Allegheny City, Pa	Aug. 7, 1866	56,959
Washing-compound	H. A. S. Park and J. H. Van Pelt.	Cumberland, Md	Nov. 26, 1867	71,526
Washing-compound	H. C. Putnam and B. F. Johnson.	Squaw Grove, Ill	Sept. 3, 1867	68,457
Washing-compound	H. W. White	Conneaut Township, Pa	July 14, 1868	79,882
Washing-cylinder, Rag	G. W. Hammond and T. J. Foster.	Westbrook, Me	Apr. 16, 1872	125,810
Washing-fluid	J. Bell	Sonora, Cal	Feb. 16, 1869	86,898
Washing-fluid	P. R. Cross	Lowell, Ind	Dec. 15, 1863	40,914
Washing-fluid	A. A. Enquoist	San Francisco, Cal	Oct. 23, 1866	58,997
Washing-fluid	D. Hess	Pittsburgh, Pa	Feb. 26, 1867	62,331
Washing-fluid	D. Johnson	Chicago, Ill	Dec. 27, 1864	45,613
Washing-fluid	S. Kent	Providence, R. I	Mar. 22, 1864	42,001
Washing-fluid	N. W. Lane	Mendocino, Cal	July 29, 1873	141,364
Washing-fluid	E. H. Neill	San Francisco, Cal	May 2, 1871	114,464
Washing-fluid	H. Rose	Milford, Mass	Jan. 5, 1864	41,124
Washing-fluid	M. A. Sanderson	Fremont, Mich	Nov. 12, 1872	132,987
Washing-implement	C. R. Gramm	Bainbridge, Pa	May 6, 1873	138,495
Washing-knuckle	A. Warner	Brooklyn, N. Y	July 30, 1861	32,932
Washing-machine	J. Abbot	Fitchburgh, Mass	Nov. 28, 1871	121,307
Washing-machine	A. Adair	Buffalo, N. Y	Sept. 24, 1867	69,061
Washing-machine	A. T. Adams	Indianapolis, Ind	Oct. 27, 1868	83,435
Washing-machine	I. H. Adams	Montana, Iowa	Aug. 1, 1871	117,499
Washing-machine	J. Adams	Janesville, Wis	June 28, 1864	43,277
Washing-machine	J. Adams	Janesville, Wis	Aug. 22, 1865	49,490
Washing-machine	J. Adams	Janesville, Wis	Jan. 16, 1866	52,108
Washing-machine	S. T. Adams	Medina, Ohio	Aug. 5, 1862	36,064
Washing-machine	S. T. and D. Adams	Medina, Ohio	Aug. 21, 1860	29,655
Washing-machine	W. W. Adams	West Derby, Vt	July 23, 1867	67,013
Washing-machine	S. Ainsworth	Pittsburgh, Pa	Jan. 18, 1870	98,902
Washing-machine	S. Ainsworth	Pittsburgh, Pa	Jan. 16, 1872	122,751
Washing-machine	J. H. Aldrich and O. C. Foote	Rushville, N. Y	Feb. 10, 1846	4,376
Washing-machine	A. Alexander	Middleville, Mich	July 31, 1866	56,688

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Washing-machine	H. C. Alford	Minooka, Ill	Feb. 12, 1861	31, 431
Washing-machine	O. M. Alger	Richmond, Vt	July 2, 1867	66, 275
Washing-machine	D. Allan	Saint Louis, Mo	Aug. 26, 1851	8, 309
Washing-machine	D. Allan	Saint Louis, Mo	Aug. 17, 1858	21, 175
Washing-machine	D. N. Allard	Rokeby, Ohio	Aug. 12, 1856	15, 503
Washing-machine	J. Allen	Galena, Md	Sept. 14, 1858	21, 476
Washing-machine	L. Allen	Sleepy Creek, Va	July 19, 1859	24, 784
Washing-machine	P. Z. Allen	Knox, N. Y	June 26, 1860	28, 821
Washing-machine	J. E. Anderson	Boiling Springs, Pa	June 17, 1873	139, 992
Washing-machine	L. Anderson	Bristol, Pa	Mar. 23, 1809	....
Washing-machine	L. B. Anderson	Hewlett's Va	May 28, 1872	127, 290
Washing-machine	C. L. Andrews	Conneaut, Ohio	July 30, 1867	67, 248
Washing-machine	S. A. Andrus	Roscoe, Ill	Nov. 29, 1859	26, 240
Washing-machine	P. Armstrong	Camden, Ala	June 14, 1859	24, 363
Washing-machine	W. T. Armstrong	Sandwich, Ill	Sept. 14, 1858	21, 477
Washing-machine	W. T. Armstrong	Sandwich, Ill	Oct. 26, 1858	21, 867
Washing-machine	D. Arndt	Ripon, Wis	Oct. 22, 1867	70, 064
Washing-machine	A. P. Arnold	Readfield, Me	Mar. 12, 1836	....
Washing-machine	G. Arnold and J. Greve	Cleveland, Ohio	June 18, 1867	65, 858
Washing-machine	R. C. Arnold	New Haven, Conn	June 15, 1830	....
Washing-machine	W. Arnold	Pawtucket, R. I	Nov. 16, 1869	96, 864
Washing-machine	W. Arnold	Pawtucket, R. I	Nov. 14, 1871	120, 809
Washing-machine	W. E. Arnold	Haddam, Conn	Jan. 11, 1830	....
Washing-machine	W. E. Arnold	Rochester, N. Y	July 13, 1844	3, 665
Washing-machine	G. H. Ashworth and A. F. Van Voorhis.	Arcola, Ill	June 4, 1872	127, 545
Washing-machine	L. A. Aspinwall	Albany, N. Y	June 25, 1872	128, 353
Washing-machine	A. Assmann	Rahway, N. J	May 2, 1871	114, 250
Washing-machine	A. A. Atherton	Waterbury, Vt	June 23, 1868	79, 095
Washing-machine	J. H. Atwater	Kalamazoo, Mich	July 31, 1855	13, 344
Washing-machine	J. E. Atwood	Lynn, Mass	Aug. 15, 1865	49, 360
Washing-machine	H. Ault	Philadelphia, Tenn	Oct. 14, 1835	....
Washing-machine	J. M. Austin	Georgetown, Mo	Apr. 27, 1869	89, 377
Washing-machine	I. Avery	Springfield, Pa	June 22, 1832	....
Washing-machine	I. Avery	Tunkhannock, Pa	Nov. 12, 1846	4, 850
Washing-machine	I. Avery	Tunkhannock, Pa	Mar. 5, 1867	62, 592
Washing-machine	D. S. Ayres	Hope, N. J	June 7, 1859	24, 272
Washing-machine	F. Ayres	Rahway, N. J	Feb. 7, 1860	27, 031
Washing-machine	F. M. Bacon	Plainfield, N. J	June 7, 1870	103, 959
Washing-machine	J. and G. Bacon	Medina, Wis	July 2, 1861	32, 677
Washing-machine	W. Badger	Hastings on Hudson, N. Y	May 3, 1870	102, 472
Washing-machine	A. Badlam, sr	San Francisco, Cal	Oct. 16, 1866	58, 753
Washing-machine	A. M. Bailey	Middlefield, Conn	Mar. 28, 1871	113, 130
Washing-machine	B. A. Bailey	Wheaton, Ill	July 16, 1872	129, 511
Washing-machine	B. C. Bailey	Constitution, Ohio	Nov. 29, 1870	109, 710
Washing-machine	F. L. Bailey	Freeport, Ind	Feb. 15, 1870	99, 747
Washing-machine	H. Bailey	Columbia, Me	Apr. 23, 1861	32, 113
Washing-machine	J. G. Bailey	Hillsdale, Mich	July 16, 1867	66, 775
Washing-machine	T. Bailey	Ballston Spa, N. Y	Apr. 8, 1862	34, 870
Washing-machine	T. Bailey and V. W. Blanchard	Bridgeport, Vt	Mar. 9, 1869	87, 617
Washing-machine	W. C. Bain and J. J. Kendall	Troy's Store, N. C	Feb. 28, 1871	112, 107
Washing-machine	D. C. Baker	Buffalo, N. Y	May 12, 1868	77, 861
Washing-machine	I. Baker	Tomah, Wis	June 14, 1870	104, 096
Washing-machine	O. Baldwin	Summitville, Iowa	May 24, 1864	42, 826
Washing-machine	S. Baldwin	Williamson, N. Y	Sept. 12, 1848	5, 764
Washing-machine	J. Ballard	Almont, Mich	Dec. 18, 1866	60, 612
Washing-machine	J. Ballard	Almont, Mich	Sept. 29, 1868	82, 584
Washing-machine	J. Ballard	Almont, Mich	Mar. 25, 1873	137, 046
Washing-machine	J. Balsley	Bedford, Ind	Dec. 21, 1869	98, 012
Washing-machine	J. Balsley	Bedford, Ind	Apr. 5, 1870	101, 414
Washing-machine	J. S. Balsly	North Bend, Ky	Apr. 25, 1871	114, 093
Washing-machine	J. S. Balsly	Hebron, Ky	Apr. 9, 1872	125, 430
Washing-machine	D. W. Bancroft	Marshfield, Vt	Mar. 31, 1868	76, 037
Washing-machine	C. S. Banker and A. Purdy	Hector, N. Y	Sept. 6, 1870	107, 151
Washing-machine	J. Barber	Sweden, N. Y	Aug. 30, 1831	....
Washing-machine	S. Barber	South Brunswick, N. J	Nov. 22, 1859	26, 153
Washing-machine	H. Barker	Aurora, Ind	Oct. 16, 1866	58, 756
Washing-machine	S. Barker	Hartford, Conn	July 21, 1868	80, 114
Washing-machine	A. P. Barlow	Dixon, Ill	Oct. 22, 1861	33, 511
Washing-machine	J. Barnes	Spartanburgh, Ind	Sept. 24, 1872	131, 592
Washing-machine	S. M. Barnett	New York, N. Y	June 30, 1863	39, 020
Washing-machine	E. S. Barringer	Troy, N. Y	Mar. 5, 1872	124, 193
Washing-machine	J. Barron	Norfolk, Va	Dec. 7, 1821	....
Washing-machine	B Beach	New Milford, Conn	Nov. 24, 1826	....
Washing-machine	W. B. H. Beach	Naples, N. Y	Nov. 15, 1870	109, 287
Washing-machine	W. B. H. Beach	Naples, N. Y	May 28, 1872	127, 298
Washing-machine	I. N. Beals	Middleborough, Mass	July 25, 1865	48, 893
Washing-machine	C. Bean and S. Logee	East Douglas, Mass	May 3, 1870	102, 477
Washing-machine	D. Beard	Buffalo, N. Y	June 27, 1827	....
Washing-machine	W. Beaton	Grinnell, Iowa	July 25, 1865	48, 894
Washing-machine	L. Beaulien	Woonsocket, R. I	May 20, 1873	139, 107
Washing-machine	M. Beck	Lake View, Ill	Dec. 3, 1867	71, 570
Washing-machine	D. S. Beckley	Toledo, Iowa	July 9, 1867	66, 551
Washing-machine	B. B. Beckwith	Rockville, Conn	Aug. 3, 1869	93, 164
Washing-machine	E. Beckwith	South Pass, Ill	Dec. 11, 1866	60, 326
Washing-machine	E. Beckwith	South Pass, Ill	Aug. 27, 1867	68, 155
Washing-machine	N. W. Beckwith	McDonough, N. Y	Apr. 26, 1870	102, 358
Washing-machine	O. D. Beebe	Beaver Dam, Wis	July 3, 1866	55, 986
Washing-machine	T. Beebe	Northport, N. Y	Feb. 28, 1871	112, 110
Washing-machine	B. B. Beers and N. Couch	New Fairfield, Conn	Oct. 5, 1869	95, 415
Washing-machine	H. Behn	New York, N. Y	Apr. 30, 1861	32, 175
Washing-machine	A. Belcher	Delhi, N. Y	Mar. 22, 1870	101, 087
Washing-machine	N. Bennet	New Lebanon, N. Y	Jan. 26, 1858	19, 181
Washing-machine	J. Bennett	El Paso, Ill	Oct. 21, 1873	143, 869
Washing-machine	T. C. Benteen and H. W. Zimmerman.	Petersburgh, Va	Aug. 26, 1845	4, 102
Washing-machine	G. W. Benton	Dansville, N. Y	Apr. 30, 1867	64, 275
Washing-machine	G. W. Benton	East Pike, N. Y	Sept. 21, 1869	94, 938

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Washing-machine	D. C. Bernhardt and S. F. Houston.	Charlotte, N. C	Oct. 15, 1867	69, 751
Washing-machine	C. H. Berry	Natick, Mass	Apr. 18, 1871	113, 727
Washing-machine	E. Berry	New York	Nov. 12, 1829	....
Washing-machine	S. Berry	New York, N. Y	Jan. 28, 1873	135, 261
Washing-machine	J. T. Bever	Haynesville, Mo	June 3, 1856	15, 034
Washing-machine	J. T. Bever	Lathrop, Mo	Sept. 27, 1870	107, 652
Washing-machine	J. Bevis	Putnam, Ohio	Nov. 5, 1867	70, 508
Washing-machine	F. Bezner	Delavan, Ill	Sept. 17, 1872	131, 327
Washing-machine	W. Bicknell	Hartford, Me	July 9, 1867	66, 553
Washing-machine	W. Biddle	La Fayette, Ind	Aug. 29, 1854	11, 594
Washing-machine	J. A. Bills	Troy, N. Y	Oct. 9, 1855	13, 635
Washing-machine	P. F. Bindewald	Strongsville, Ohio	Feb. 25, 1868	74, 790
Washing-machine	M. E. Binford	Jackson, Tenn	Aug. 20, 1872	130, 691
Washing-machine	W. E. Bird	West Bridgewater, Mass	Dec. 24, 1867	72, 592
Washing-machine	B. Bisbee	East Pharsalia, N. Y	Aug. 14, 1866	57, 075
Washing-machine	G. Bishop	Madison County, N. Y	Apr. 17, 1809	....
Washing-machine	M. B. Bishop	Whitingham, Vt	Nov. 22, 1859	26, 157
Washing-machine	S. Bishop	Homer, N. Y	June 3, 1856	15, 033
Washing-machine	A. Bissell	Berlin, Wis	Sept. 20, 1859	25, 483
Washing-machine	J. Blackwood	Scranton, Pa	Nov. 26, 1867	71, 445
Washing-machine	E. S. Bliss	Richburgh, N. Y	June 17, 1873	139, 940
Washing-machine	A. Blodget	Amherst, Mass	Feb. 16, 1809	....
Washing-machine	E. Blodget	Watervliet, N. Y	Dec. 10, 1828	....
Washing-machine	A. Blood, sr	Janesville, Wis	Mar. 19, 1867	63, 003
Washing-machine	D. S. Blue	Fremont, Ohio	Mar. 5, 1872	124, 322
Washing-machine	J. Boardman	Little Valley, N. Y	July 15, 1851	8, 215
Washing-machine	L. I. Bodenhamer	Ruffin, N. C	Jan. 2, 1872	122, 431
Washing-machine	G. M. Bohlender	Peoria, Ill	Aug. 24, 1869	93, 954
Washing-machine	H. Boies	Hamburgh, N. Y	June 25, 1861	32, 615
Washing-machine	J. M. Bois	Aurora, N. Y	Jan. 29, 1861	31, 223
Washing-machine	G. N. Bolles	Kalamazoo, Mich	Jan. 31, 1865	46, 175
Washing-machine	E. Bonham	Brantford Township, Canada.	Sept. 3, 1872	130, 972
Washing-machine	N. Booth	Cheshire, Conn	May 30, 1871	115, 272
Washing-machine	F. W. Born	Cleveland, Ohio	May 18, 1869	90, 072
Washing-machine	S. Bostwick	Thompson, Ohio	Dec. 8, 1825	....
Washing-machine	J. and L. M. Boswell, J. Palmer, and J. H. James.	Wilmington, Ohio	Mar. 7, 1871	112, 411
Washing-machine	B. W. Bowen	Greenville, Pa	Aug. 19, 1873	141, 850
Washing-machine	J. Bowen	Yellow Bud, Ohio	Dec. 7, 1858	22, 227
Washing-machine	I. W. Bowers	Ovid Centre, Mich	Aug. 25, 1863	39, 627
Washing-machine	E. B. Boyce	Green Point, N. Y	Mar. 18, 1862	34, 667
Washing-machine	E. Y. Boyce	Middlebury, Vt	Apr. 7, 1868	76, 393
Washing-machine	J. A. Boyce	Altoona, Pa	Nov. 28, 1871	121, 322
Washing-machine	J. K. Boyce	Napoleon, Ohio	Dec. 15, 1863	40, 903
Washing-machine	R. H. Boyd	Londonderry, Ohio	Aug. 6, 1872	130, 272
Washing-machine	L. W. Boynton	Hampton, Conn	Mar. 22, 1864	42, 042
Washing-machine	S. Brackett	Port Huron, Mich	July 9, 1867	66, 555
Washing-machine	S. Brackett	Wenona, Mich	Apr. 19, 1870	102, 083
Washing-machine	B. Bradbury	Abingdon, Ill	Apr. 19, 1859	23, 657
Washing-machine	D. Bradley and A. Doney	Saratoga Springs, N. Y	Nov. 28, 1871	121, 323
Washing-machine	J. W. Bradley	Rocheport, Mo	Apr. 30, 1867	64, 276
Washing-machine	G. Bradshaw	Sandoval, Ill	May 18, 1869	90, 231
Washing-machine	W. H. Brainard and C. B. Bulkeley.	Chatham, Conn	Oct. 16, 1830	....
Washing-machine	J. A. Brandon	Akron, Ohio	Aug. 6, 1872	130, 105
Washing-machine	W. Brannan	Gloucester, N. J	Apr. 30, 1861	32, 177
Washing-machine	B. Breeden	Lexington, Va	May 25, 1869	90, 480
Washing-machine	E. E. Brewster	Cleveland, Ohio	June 23, 1868	79, 101
Washing-machine	H. L. Bridwell	New Albany, Ind	Dec. 22, 1857	18, 889
Washing-machine	H. P. Briggs	Brookfield, Conn	Apr. 1, 1862	34, 812
Washing-machine	J. E. Briggs	West Randolph, Vt	May 29, 1866	55, 049
Washing-machine	F. Brinckman	Chester, Ill	Aug. 17, 1869	93, 942
Washing-machine	J. Brinkerhoff	Auburn, N. Y	Mar. 30, 1869	88, 266
Washing-machine	T. M. Brintnall and W. E. Powers.	Medina, Ohio, and Cortland, N. Y.	Dec. 26, 1871	122, 150
Washing-machine	C. B. Bristol	New Haven, Conn	Nov. 16, 1869	96, 877
Washing-machine	P. B. Bristol	Auburn, N. Y	Feb. 20, 1872	123, 862
Washing-machine	C. B. Broadwell	New Orleans, La	Jan. 2, 1872	122, 434
Washing-machine	R. Brookes	Fredericktown, Mo	July 2, 1872	128, 529
Washing-machine	A. Brooks	Waverly, N. Y	June 18, 1867	65, 870
Washing-machine	W. P. Brooks	Lawrence, Kans	Jan. 28, 1873	135, 318
Washing-machine	W. P. Brooks and J. D. Hartzell.	Ozawkie, Kans	Apr. 29, 1873	138, 374
Washing-machine	J. Brower and J. and H. Campbell.	West Alexandria, Ohio	Nov. 14, 1871	120, 848
Washing-machine	A. Brown	Bloomington, Ill	May 14, 1872	126, 780
Washing-machine	A. Brown	Bloomington, Ill	Nov. 19, 1872	133, 078
Washing-machine	A. G. Brown	Lima, Ohio	July 14, 1863	39, 212
Washing-machine	A. S. Brown	Lebanon, Pa	Mar. 17, 1863	37, 900
Washing-machine	E. P. Brown	Thomasville, Ga	Jan. 31, 1871	111, 313
Washing-machine	H. Brown	Burton, Ohio	May 30, 1865	47, 924
Washing-machine	I. F. Brown	Columbus, Ga	Sept. 9, 1856	15, 684
Washing-machine	I. F. Brown	New London, Conn	July 29, 1873	141, 200
Washing-machine	J. Brown	West Manchester, Ohio	May 30, 1871	115, 276
Washing-machine	R. Brown	Stroudsburgh, Pa	July 5, 1859	24, 612
Washing-machine	T. Brown	Roseburgh, Oreg	Sept. 10, 1867	68, 599
Washing-machine	W. Brown	Duncannon, Pa	July 20, 1858	20, 932
Washing-machine	W. Brown	Petersburgh, Pa	May 20, 1862	35, 296
Washing-machine	W. A. Brown	Philadelphia, Pa	Mar. 1, 1870	100. 253
Washing-machine	S. A. Brownson	Montrose, Pa	Dec. 26, 1828	....
Washing-machine	D. Broy	Quincy, Ill	Aug. 2, 1870	106, 029
Washing-machine	R. M. Bruce	Camp Point, Ill	Dec. 12, 1871	121, 844
Washing-machine	R. Buck	....	May 29, 1806	....
Washing-machine	F. Buckelew	San Rafael, Cal	June 1, 1869	90, 817
Washing-machine	W. Buckman	Anne Arundel County, Md	Mar. 23, 1809	....
Washing-machine	H. Bucknall	Darien, Wis	June 19, 1866	55, 610

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Washing-machine	H. L. Buckwater	Kimberton, Pa	May 9, 1865	47, 678
Washing-machine	S. Budlong	Providence, R. I	Sept. 9, 1873	142, 676
Washing-machine	A. Bull	Caroline, N. Y	Mar. 28, 1828	....
Washing-machine	W. V. Bulla and J. B. Birdsell	South Bend, Ind	Jan. 18, 1870	98, 845
Washing-machine	E. L. Bullock	Hartford, Conn	Sept. 20, 1870	107, 443
Washing-machine	E. L. Bullock, W. Tuller, and S. Kinney, jr.	Hartford and Windsor, Conn.	May 14, 1872	126, 672
Washing-machine	O. S. Burges, sr.	Battle Creek, Mich	Feb. 15, 1870	99, 836
Washing-machine	J. C. Burgner	Poplar Creek, Miss	Apr. 22, 1873	138, 128
Washing-machine	E. Burke	Philadelphia, Pa	Feb. 14, 1865	46, 327
Washing-machine	R. P. Burlingame	Rochelle, Ill	Nov. 21, 1865	51, 015
Washing-machine	W. Burnham	Union City, Mich	July 3, 1866	56, 0[illegible]1
Washing-machine	S. Burr	Cedar Grove, Wis	Oct. 29, 1861	33, 567
Washing-machine	S. Bushnell, 2d	Saybrook, Conn	Dec. 20, 1830	....
Washing-machine	J. B. Byers	Geneseo, Ill	Dec. 24, 1867	72, 451
Washing-machine	P. Cady	Brooklyn, Conn	Jan. 17, 1822	....
Washing-machine	C. A. Calaway	Madison, Ohio	Aug. 24, 1869	93, 963
Washing-machine	L. Caldwell	Burgettstown, Pa	Sept. 24, 1872	131, 659
Washing-machine	N. W. Calhoun	Upper Tract, W. Va	Feb. 15, 1870	99, 842
Washing-machine	A. H Calkins	Lineville, Ind	Oct. 17, 1871	119, 965
Washing-machine	A. H. Calkins	Chesterton, Ind	Sept. 10, 1872	131, 149
Washing-machine	A. H. Calkins	Chesterton, Ind	May 13, 1873	138, 733
Washing-machine	A. H. Calkins	Chesterton, Ind	May 13, 1873	138, 734
Washing-machine	W. C. Camp	Holden, Mass	July 16, 1867	66, 792
Washing-machine	A. M. Campbell	Kline's Grove, Pa	Sept. 23, 1873	143, 060
Washing-machine	A. R. Campbell	Cheltenham, Mo	Nov. 12, 1867	70, 693
Washing-machine	G. G. Campbell	Janesville, Wis	Jan. 30, 1866	52, 265
Washing-machine	C. M. Carleton	Forrester, Mich	Aug. 27, 1867	68, 286
Washing-machine	W. H. Carman and R. P. Mc-Collum.	Philadelphia, Pa	Feb. 21, 1871	111, 906
Washing-machine	J. E. Carroll and J. Lord	Philadelphia, Pa	Apr. 4, 1871	113, 493
Washing-machine	C. Carter	Franklin, Iowa	Dec. 6, 1859	26, 335
Washing-machine	C. Carter	Franklin Centre, Iowa	Feb. 26, 1861	31, 528
Washing-machine	C. E. Carter	Martinsville, Ohio	Apr. 4, 1871	113, 254
Washing-machine	C. L. Carter	Union, Ind	Mar. 26, 1867	63, 210
Washing-machine	E. Carter	Troy, N. Y	Apr. 30, 1872	126, 128
Washing-machine	H. Carter	Greene, N. Y	Aug. 3, 1869	93, 173
Washing-machine	H. H. Case	Berea, Ohio	Mar. 25, 1873	137, 177
Washing-machine	H. J. Case and F. I. Johnson	Sugar Grove, Pa	Apr. 28, 1868	77, 252
Washing-machine	H. Cassell	Fredericktown, Ohio	Apr. 13, 1858	19, 911
Washing-machine	Z. Casterline	Liberty, Ind	Feb. 1, 1859	22, 780
Washing-machine	J. Catt	Bourbon, Ind	Mar. 13, 1866	53, 112
Washing-machine	J. R. Cazier	Hemlock, Mich	Nov. 14, 1871	120, 939
Washing-machine	E. R. Chamberlin	Bellefontaine, Ohio	May 9, 1871	114, 643
Washing-machine	G. E. Chamberlin	New York, N. Y	Jan. 4, 1870	98, 556
Washing-machine	C. F. Chambers	Chambersburgh, Ind	Nov. 6, 1860	30, 562
Washing-machine	C. F. Chambers	Hutsonville, Ill	Oct. 20, 1868	83, 254
Washing-machine	J. F. Chambers	Calistoga, Cal	Mar. 24, 1868	75, 859
Washing-machine	J. Champlin	East Middlebury, Vt	Aug. 8, 1865	49, 229
Washing-machine	R. H. Champlin	East Greenwich, R. I	Nov. 1, 1859	25, 949
Washing-machine	G. R. Chandler	Detroit, Mich	Mar. 29, 1870	101, 226
Washing-machine	J. Chase	Waterborough, Me	June 23, 1834	....
Washing-machine	J. C. Chase	Monticello, Minn	July 23, 1872	129, 714
Washing-machine	M. Chase	Baltimore, Md	Jan. 23, 1846	4, 361
Washing-machine	O. Chatfield	Burlington, N. Y	May 15, 1809	....
Washing-machine	W. B. Cheeseman	Winona, Minn	July 26, 1870	105, 646
Washing-machine	J. F. Chesebro	Trenton, N. J	Dec. 12, 1871	121, 753
Washing-machine	E. Chipman	New York, N. Y	Oct. 13, 1863	40, 246
Washing-machine	E. Chipman	New York, N. Y	Jan. 12, 1864	41, 194
Washing-machine	S. Church and H. Clark	Utica, N. Y	July 6, 1826	....
Washing-machine	W. Church	La Harpe, Ill	Oct. 29, 1872	132, 521
Washing-machine	T. C. Churchman	Sacramento, Cal	Dec. 29, 1857	18, 956
Washing-machine	A. P. Cindel and M. Vogel	Jacksonville, Ill	Dec. 21, 1869	98, 148
Washing-machine	N. B. Clabaugh	Frederick City, Md	June 24, 1862	35, 669
Washing-machine	N. B. Clabaugh	Frederick, Md	Dec. 6, 1864	45, 317
Washing-machine	N. B. Clabaugh	Frederick, Md	Jan. 16, 1866	52, 030
Washing-machine	W. Clack	Prairie du Chien, Wis	Aug. 8, 1871	117, 740
Washing-machine	A. B. Clark	Delevan, Wis	Oct. 17, 1865	50, 454
Washing-machine	A. B. Clark and C. Davis	Richmond, Ind	Feb. 18, 1868	74, 502
Washing-machine	C. A. Clark	Pulaski, Iowa	June 28, 1864	43, 290
Washing-machine	C. W. Clark	New Milford, Conn	Jan. 25, 1870	99, 060
Washing-machine	J. Clark	Sharon, Pa	July 21, 1863	39, 273
Washing-machine	J. M. Clark	Lancaster, Pa	Aug. 1, 1871	117, 603
Washing-machine	M. J. Clark	Auburn, N. Y	Nov. 8, 1825	....
Washing-machine	S. J. Clark	Richmond, Ind	Jan. 10, 1871	110, 825
Washing-machine	U. S. Clark	Manor Township, Pa	Feb. 6, 1834	....
Washing-machine	N. G. Clary	Northfield, Minn	May 16, 1871	114, 764
Washing-machine	J. Cleaveland	Franklin County, Pa	June 6, 1807	....
Washing-machine	A. H. Clement	Sunbury, Pa	Oct. 22, 1867	69, 969
Washing-machine	E. B. Clement	Barnet, Vt	June 8, 1856	20, 482
Washing-machine	E. B. Clement and S. G. Willie	Barnet, Vt	Mar. 11, 1856	14, 391
Washing-machine	C. L. Clowes	Union, Va	Feb. 27, 1830	....
Washing-machine	T. Clucas, jr	Saint Louis, Mo	Feb. 25, 1873	136, 135
Washing-machine	J. D. Cochran	Milford, N. H	May 28, 1861	32, 411
Washing-machine	C. A. Codding	Battle Creek, Mich	Aug. 21, 1866	57, 291
Washing-machine	J. B. Coffin	Big Prairie, Ohio	Feb. 2, 1844	3, 422
Washing-machine	J. B. Coffin	Hayesville, Ohio	Oct. 23, 1860	30, 464
Washing-machine	J. B. Coffin	Ashland, Ohio	Aug. 6, 1867	67, 499
Washing-machine	G. J. Colby	Reading, Mich	Apr. 29, 1873	138, 379
Washing-machine	C. Cole	Meriden, N. H	Mar. 18, 1873	136, 970
Washing-machine	D. M. Cole and E. E. Hoxie	Elgin, Ill	Apr. 9, 1872	125, 542
Washing-machine	S. W. Cole	Millington, Md	Oct. 5, 1858	21, 653
Washing-machine	T. Cole	Marshalltown, Iowa	Sept. 4, 1866	57, 679
Washing-machine	H. M. Collier	Binghamton, N. Y	June 4, 1861	32, 469
Washing-machine	R. Collins	Chicopee, Mass	Mar. 3, 1857	16, 715
Washing-machine	W. and J. D. Collins	Norwich, Conn	Aug. 27, 1835	....
Washing-machine	L. W. Colver	Saint Louis, Mo	July 3, 1849	6, 577
Washing-machine	L. W. Colver	Louisville, Ky	June 5, 1855	12, 996

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Washing-machine	M. P. Colvin	Battle Creek, Mich	Nov. 7, 1871	120, 717
Washing-machine	T. Colvin and R. M. Patchen	Meriden, Conn	Sept. 23, 1873	143, 123
Washing-machine	G. Combs	Utica, N. Y	Nov. 16, 1869	96, 888
Washing-machine	J. L. Conklin, sr., and J. Foust	Saint Louis, Mo	June 1, 1858	20, 408
Washing-machine	J. D. Conner	Bloomington, Ill	Nov. 2, 1869	96, 397
Washing-machine	J. E. Connolly	Dublin, Md	Mar. 12, 1872	124, 548
Washing-machine	H. W. Connor	Richmond, Ind	Mar. 22, 1870	101, 103
Washing-machine	J. Connoran and J. Shafer	Red Oak, Iowa	July 30, 1872	130, 022
Washing-machine	J. W. Conroy	Terry, Miss	July 15, 1873	140, 812
Washing-machine	J. G. Conser	Miles Township, Pa	Apr. 21, 1831	....
Washing-machine	J. Contrell	New York, N. Y	July 10, 1860	29, 121
Washing-machine	R. J. Converse	Coventry, N. Y	Feb. 26, 1861	31, 532
Washing-machine	E. H. Cook	Clarendon, Mich	June 12, 1866	55, 471
Washing-machine	H. Cook	New Bridgeport, Pa	Apr. 26, 1870	102, 373
Washing-machine	L. W. Cook	Dowagiac, Mich	Sept. 20, 1864	44, 284
Washing-machine	E. and S. Cool	Buckhannon, W. Va	July 26, 1870	105, 650
Washing-machine	D. C. Cooley	Wilkesbarre, Pa	Nov. 22, 1870	109, 387
Washing-machine	H. M. Coombs and L. W. Nelson	Portland, Oreg	Aug. 23, 1859	25, 177
Washing-machine	A. R. Cooper	Mason City, Ill	Dec. 8, 1863	40, 821
Washing-machine	J. Cooper	Dublin, Ind	Aug. 13, 1867	67, 725
Washing-machine	J. Cooper	Dublin, Ind	Mar. 17, 1868	75, 629
Washing-machine	W. Cooper	Galesburgh, Ill	Nov. 3, 1868	83, 764
Washing-machine	W. Cooper	Ypsilanti, Mich	Apr. 23, 1872	126, 030
Washing-machine	F. L. Copps	Atlanta, Ill	May 23, 1871	115, 170
Washing-machine	J. W. Cord	Pleasant Hill, Ind	Oct. 19, 1869	95, 989
Washing-machine	V. Corder	Shelbyville, Mo	July 16, 1872	129, 533
Washing-machine	S. T. Cornell and B. Brown	Jacksonville, Ill	Aug. 2, 1864	43, 672
Washing-machine	W. Cornell and T. L. Blakley	Buchanan, Mich	Nov. 17, 1868	84, 050
Washing-machine	B. P. Coston	Philadelphia, Pa	Apr. 27, 1832	....
Washing-machine	G. W. Cottingham	Marshall, Tex	June 28, 1870	104, 708
Washing-machine	T. Courser	Burlington, Iowa	Oct. 29, 1867	70, 170
Washing-machine	J. Couch	Memphis, Tenn	Feb. 21, 1871	111, 909
Washing-machine	E. H. Covel	New York, N. Y	Feb. 4, 1868	74, 052
Washing-machine	E. H. Covel	New York, N. Y	Oct. 5, 1869	95, 565
Washing-machine	H. C. Covert	Fayette, N. Y	Mar. 5, 1867	62, 529
Washing-machine	L. Coville and W. Keeler	Oxford, N. Y	July 30, 1867	67, 271
Washing-machine	J. F. Cowgill and W. Hill	Bushnell, Ill	Apr. 9, 1872	125, 544
Washing-machine	B. Cox	Hadley, Mass	Aug. 15, 1820	....
Washing-machine	E. Cox	Wonewoc, Wis	Nov. 26, 1872	133, 357
Washing-machine	W. H. Cox	Knox County, Mo	Apr. 12, 1870	101, 714
Washing-machine	W. W. Cox	Carbondale, Ill	Nov. 19, 1867	70, 967
Washing-machine	J. Cram	Boston, Mass	Aug. 23, 1864	43, 899
Washing-machine	C. H. Cramer	Rutland, N. Y	Oct. 13, 1868	82, 924
Washing-machine	H. Cramer	Sonora, Cal	Aug. 31, 1869	94, 287
Washing-machine	H. Cramer	Sonora, Cal	Nov. 16, 1869	96, 780
Washing-machine	J. Crampton and W. H. Pangborn.	Plainfield, N. J	Oct. 5, 1869	95, 567
Washing-machine	A. O. Crane	Boston, Mass	Jan. 10, 1871	110, 831
Washing-machine	J. W. Crane, jr	Freeport, Ill	June 12, 1860	28, 659
Washing-machine	T. Crane	Fort Atkinson, Wis	May 26, 1868	78, 187
Washing-machine	R. Cranston	Edinburgh, Scotland	June 21, 1864	43, 269
Washing-machine	J. C. Crawford	Saint Charles, Ill	May 19, 1868	78, 067
Washing-machine	E. Crick	Phillipsburgh, N. J	Mar. 28, 1871	113, 024
Washing-machine	F. J. Crissey	Leesburgh, Pa	Aug. 30, 1859	25, 247
Washing-machine	N. Crockett	Portland, Me	Sept. 19, 1871	119, 125
Washing-machine	M. C. Cronk	Auburn, N. Y	Apr. 19, 1864	42, 352
Washing-machine	M. C. Cronk and S. W. Palmer	Auburn, N. Y	Oct. 20, 1863	40, 330
Washing-machine	E. D. Crosley	Scott, N. Y	Jan. 29, 1867	61, 609
Washing-machine	M. Culler	Fredericksburgh, Ohio	Sept. 22, 1868	82, 386
Washing-machine	E. Culver	Shelburne, Mass	May 23, 1865	47, 892
Washing-machine	W. H. Cumming	Guilford County, N. C	Nov. 3, 1832	....
Washing-machine	W. Cunningham	Holliday's Cove, Va	Jan. 24, 1854	10, 444
Washing-machine	G. G. Curtis	Rochester, N. Y	Oct. 21, 1873	143, 749
Washing-machine	S. W. Curtiss	Sugar Grove, Pa	Dec. 10, 1867	71, 995
Washing-machine	G. Custer	Norristown, Pa	Mar. 3, 1868	75, 129
Washing-machine	R. C. Cyphers	Milledgeville, Ga	Oct. 25, 1859	25, 887
Washing-machine	G. A. Dabney	San José, Cal	May 5, 1863	38, 376
Washing-machine	G. A. Dabney	San José, Cal	Oct. 20, 1868	83, 260
Washing-machine	P. G. Dahmer	New York, N. Y	June 3, 1873	139, 497
Washing-machine	A. A. Dailey	Wilson, N. Y	Oct. 21, 1856	15, 945
Washing-machine	R. Daily	Canal Township, Pa	Aug. 13, 1867	67, 731
Washing-machine	S. W. Dana	Rutland, Vt	Aug. 30, 1808	....
Washing-machine	C. Daniel	Lamonte, Mo	Jan. 22, 1867	61, 405
Washing-machine	J. Danner	Canton, Ohio	May 13, 1862	35, 220
Washing-machine	J. Danner	Canton, Ohio	July 28, 1863	39, 341
Washing-machine	J. Danner	Canton, Ohio	June 27, 1865	48, 375
Washing-machine	J. Dare	Liberty, Ind	Oct. 27, 1868	83, 473
Washing-machine	J. Davenport	Nepeuskun, Wis	Sept. 26, 1865	50, 100
Washing-machine	V. R. David	Newark, Ill	July 18, 1865	48, 865
Washing-machine	A. Davidson	Littleton, Mass	June 11, 1836	....
Washing-machine	A. Davidson	Clinton, Mass	May 30, 1865	47, 934
Washing-machine	E. Davis	Keokuk, Iowa	Oct. 25, 1870	108, 689
Washing-machine	G. R. Davis	Nobleville, Ohio	Feb. 25, 1873	136, 219
Washing-machine	J. R. Davis	Hartland, N. Y	Sept. 2, 1828	....
Washing-machine	J. S. Davis	Tiffin, Ohio	Aug. 14, 1860	29, 574
Washing-machine	L. Davis	Norwich, Conn	Feb. 12, 1836	....
Washing-machine	L. H. Davis	West Chester, Pa	Sept. 30, 1873	143, 225
Washing-machine	S. Davis	Providence, R. I	Aug. 25, 1863	39, 634
Washing-machine	S. Davis	Providence, R. I	Jan. 5, 1864	41, 142
Washing-machine	S. Davis	Kansas, Mo	July 2, 1867	66, 224
Washing-machine	S. and L. A. Davis	Providence, R. I	Feb. 4, 1862	34, 292
Washing-machine	T. M. Day	Washington Court House, Ohio.	Oct. 8, 1872	131, 942
Washing-machine	A. Dean	Richmond, Ind	Mar. 20, 1860	27, 533
Washing-machine	C. Dean	Buffalo, N. Y	Apr. 5, 1870	101, 592
Washing-machine	O. Deane	Walpole, Mass	Jan. 11, 1826	....
Washing-machine	S. Decker and F. Ayres	Rahway, N. J	July 25, 1871	117, 265
Washing-machine	A. Dehuff	York, Pa	Nov. 12, 1872	134, 950

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Washing-machine	C. H. De Knight	Pittsburgh, Pa	Aug. 9, 1870	106, 137
Washing-machine	D. C. Delinger	Decatur, Ohio	Aug. 17, 1869	93, 812
Washing-machine	J. De Long	Monroe, Wis	Dec. 10, 1861	33, 878
Washing-machine	T. H. De Motte	Woodford County, Ill	May 11, 1869	90, 042
Washing-machine	A. Denison	Stillwater, N. Y	Sept. 17, 1867	68, 851
Washing-machine	E. Denison	New Lisbon, N. Y	Dec. 30, 1812	....
Washing-machine	G. M. Denison	New London, Conn	May 29, 1866	55, 068
Washing-machine	G. M. Denison	New London, Conn	Dec. 3, 1867	71, 716
Washing-machine	J. Dennis	Marion, Iowa	Jan. 7, 1862	34, 107
Washing-machine	D. Dennison	Annisquam, Mass	Apr. 10, 1866	53, 793
Washing-machine	J. T. Denniston	Alexander, N. Y	May 22, 1835	....
Washing-machine	J. K. Derby	Jamestown, N. Y	Apr. 5, 1870	101, 441
Washing-machine	W. H. Derosear	Primrose, Iowa	Nov. 5, 1872	132, 816
Washing-machine	S. De Veau	Syracuse, N. Y	July 19, 1870	105, 439
Washing-machine	S. De Veau	Syracuse, N. Y	Jan. 3, 1871	110, 749
Washing-machine	E. Dewey	Butternuts, N. Y	June 24, 1824	....
Washing-machine	T. De Witt	Detroit, Mich	May 3, 1870	102, 512
Washing-machine	H. Dextor	Chicago, Ill	Apr. 29, 1873	138, 319
Washing-machine	E. Dickerman	Middlefield, Conn	May 10, 1864	42, 723
Washing-machine	E. Dickerman	Middlefield, Conn	Apr. 29, 1873	138, 235
Washing-machine	H. Dickinson	Marlborough, Conn	Dec. 6, 1870	109, 810
Washing-machine	A. Dickson	Hillsborough, N. C	Nov. 17, 1857	18, 633
Washing-machine	P. C. Dillan	Villisca, Iowa	Mar. 18, 1873	136, 908
Washing-machine	D. Dishart	Canton, Ohio	Mar. 20, 1866	53, 278
Washing-machine	D. Dishart	Canton, Ohio	Nov. 20, 1866	59, 897
Washing-machine	E. W. Dixon	Forest Grove, Oreg	Dec. 31, 1867	72, 819
Washing-machine	J. Dodder	Washington, Iowa	June 7, 1864	43, 011
Washing-machine	L. M. Doddridge	Union City, Ind	Aug. 22, 1871	118, 219
Washing-machine	C. F. Dodge	New York, N. Y	Oct. 5, 1869	95, 573
Washing-machine	J. G. Dodge	Louisville, Ky	July 16, 1867	66, 811
Washing-machine	W. J. Dodge	Syracuse, N. Y	Dec. 27, 1870	110, 555
Washing-machine	W. J. Dodge	Syracuse, N. Y	Mar. 21, 1871	112, 790
Washing-machine	W. J. Dodge	Syracuse, N. Y	Oct. 31, 1871	120, 504
Washing-machine	L. A. Dole	Salem, Ohio	Mar. 1, 1859	23, 081
Washing-machine	L. A. Dole	Salem, Ohio	Dec. 27, 1859	26, 572
Washing-machine	J. H. Doll	Etna, Ill	Apr. 25, 1871	113, 987
Washing-machine	A. Doney	Saratoga Springs, N. Y	Aug. 27, 1872	130, 905
Washing-machine	H. Doolittle	East Cleveland, Ohio	Jan. 16, 1866	52, 035
Washing-machine	H. C. Dorman	North Bridgewater, Mass	Dec. 17, 1867	72, 175
Washing-machine	O. L. Dorr	South Walpole, Mass	Dec. 5, 1871	121, 598
Washing-machine	D. B. Dorsey	Chillicothe, Mo	Aug. 19, 1873	141, 924
Washing-machine	J. T. Dorton and S. G. Eubank	Wellington, Mo	Mar. 22, 1870	100, 991
Washing-machine	E. P. and E. Doty	Janesville, Wis	Jan. 28, 1868	73, 701
Washing-machine	J. and A. H. Doty	West Falls, N. Y	May 28, 1861	32, 417
Washing-machine	W. M. Doty	New York, N. Y	July 21, 1863	39, 279
Washing-machine	W. M. Doty	New York, N. Y	July 12, 1864	43, 483
Washing-machine	W. M. Doty	New York, N. Y	June 16, 1868	78, 940
Washing-machine	W. M., E. P., and E. Doty	Janesville, Wis	Aug. 7, 1866	56, 910
Washing-machine	B. Douglass	Appleton, Wis	Feb. 8, 1859	22, 858
Washing-machine	E. Douglass	Lowell, Mass	June 20, 1865	48, 263
Washing-machine	G. H. Dow	Freeport, Ill	Jan. 22, 1867	61, 327
Washing-machine	P. A. Downer	Baldwin, Iowa	Apr. 8, 1873	137, 661
Washing-machine	R. E. Downis and H. C. Johnson	Delavan, Wis	Apr. 2, 1867	63, 488
Washing-machine	J. H. Doyle	Williamsburgh, Ohio	Sept. 21, 1872	131, 606
Washing-machine	C. Draeger	Ladoga, Ind	July 16, 1867	66, 686
Washing-machine	A. L. Drake	Richmond, Me	July 31, 1866	56, 733
Washing-machine	N. Drew	Howell, Mich	Oct. 30, 1866	59, 195
Washing-machine	N. Drew	Howell, Mich	June 2, 1868	78, 440
Washing-machine	H. W. Driver	Havana, Ill	Oct. 29, 1867	70, 178
Washing-machine	J. H. Duck and E. S. Gould	Elgin, Ill	Apr. 4, 1865	47, 167
Washing-machine	J. K. Dugdale	Richmond, Ind	Nov. 14, 1865	50, 922
Washing-machine	J. K. Dugdale	White Water, Ind	July 21, 1868	80, 156
Washing-machine	T. A. Dugdale	Richmond, Ind	June 7, 1853	9, 762
Washing-machine	T. A. Dugdale	Richmond, Ind	Apr. 14, 1857	17, 030
Washing-machine	T. A. Dugdale	Richmond, Ind	Nov. 24, 1857	18, 720
Washing-machine	T. A. Dugdale	Richmond, Ind	Feb. 15, 1859	22, 998
Washing-machine	D. Duncan and E. R. Ridgeley	Olney, Ill	July 16, 1867	66, 815
Washing-machine	D. Dungan	Upperville, Va	May 23, 1811	....
Washing-machine	D. G. Dunham	New Brunswick, N. J	Dec. 7, 1826	....
Washing-machine	J. B. Dunkin	Union, Va	May 15, 1833	....
Washing-machine	A. Durant and H. Grissirn	Stockton, Cal	Aug. 7, 1866	56, 911
Washing-machine	J. C. Durbin and J. Montgomery	Eureka, Cal	Aug. 20, 1872	130, 704
Washing-machine	J. H. Dustan	Spartansburgh, Pa	Nov. 22, 1870	109, 501
Washing-machine	W. Eaton	Norwich, N. Y	Aug. 9, 1870	106, 144
Washing-machine	W. Eberhard	Akron, Ohio	Jan. 28, 1868	73, 785
Washing-machine	A. Eckerson and J. H. Reury	Pleasant Brook, N. Y	Jan. 7, 1862	34, 108
Washing-machine	J. Eckerson	Spring Valley, N. Y	Apr. 2, 1872	125, 184
Washing-machine	B. Edgar	Espy, Pa	Aug. 27, 1872	130, 848
Washing-machine	B. Edgar	Espy, Pa	Jan. 28, 1873	135, 211
Washing-machine	T. W. Edgar	Espy, Pa	Aug. 6, 1872	130, 202
Washing-machine	G. W. Edgcomb	Lima, Ind	Apr. 3, 1855	12, 658
Washing-machine	A. Edson	Cambridge, Ill	Oct. 28, 1862	36, 771
Washing-machine	N. T. Edson	New Orleans, La	Feb. 19, 1867	62, 122
Washing-machine	N. T. Edson	New Orleans, La	Apr. 7, 1868	76, 313
Washing-machine	J. and J. Ehart	Fort Madison, Iowa	Feb. 13, 1866	52, 550
Washing-machine	H., J. H., and H. H. Enrman	Annville, Pa	June 5, 1860	28, 566
Washing-machine	T. G. Eiswald	Providence, R. I	Oct. 26, 1858	21, 875
Washing-machine	F. Elder	Chester, S. C	May 7, 1867	64, 412
Washing-machine	D. Elicker	Mulberry, Pa	May 10, 1870	102, 928
Washing-machine	D. Elliot	Pembroke, N. H	Nov. 24, 1857	18, 721
Washing-machine	R. R. Elliot	Watertown, Mass	Feb. 28, 1807	....
Washing-machine	F. M. Ellis	Galva, Ill	June 13, 1871	115, 835
Washing-machine	F. M. Ellis	Galva, Ill	July 16, 1872	129, 011
Washing-machine	S. Ellis	New Britain, Conn	Nov. 6, 1860	30, 570
Washing-machine	F. M. English	Evansville, Ind	Mar. 8, 1870	100, 513
Washing-machine	H. L. Ennes	Birmingham, Ohio	Jan. 18, 1870	98, 939
Washing-machine	L. S. Enos	Almond, N. Y	Feb. 25, 1868	74, 902

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Washing-machine	S. Entwistle	Millbury, Mass	Apr. 9, 1872	125, 554
Washing-machine	J. B. Epstein and J. J. Braker	Philadelphia, Pa	Mar. 26, 1872	125, 035
Washing-machine	I. Erb	Lancaster, N. Y	Nov. 16, 1869	96, 786
Washing-machine	J. P. Eshleman	West Salem, Ohio	Sept. 26, 1871	119, 338
Washing-machine	D. Estes	Stockholm, N. Y	Nov. 3, 1868	83, 613
Washing-machine	S. Etter and R. B. Newman	Fayetteville, Pa	Aug. 19, 1862	36, 210
Washing-machine	S. G. Eubank	Girard, Ill	Apr. 23, 1872	126, 045
Washing-machine	E. L. Evans	Hartford, Conn	May 10, 1853	9, 707
Washing-machine	O. B. Evans	Titusville, Pa	Mar. 18, 1873	136, 825
Washing-machine	T. R. Evans	Blacksburgh, Va	Jan. 18, 1870	98, 941
Washing-machine	H. F. Everitt	Benton, Pa	Aug. 25, 1857	18, 041
Washing-machine	G. W. Fagaines	Shelby, Ohio	Apr. 29, 1873	138, 387
Washing-machine	J. Fanning	Detroit, Mich	May 18, 1869	90, 250
Washing-machine	F. A. Farley	Pine Meadow, Conn	Oct. 31, 1871	120, 373
Washing-machine	J. Farmer	Rockport, Ohio	May 10, 1870	102, 792
Washing-machine	W. N. Faucitt	Saint Louis, Mo	June 6, 1871	115, 721
Washing-machine	W. N. Faucitt	Brooklyn, N. Y	June 6, 1871	115, 723
Washing-machine	F. Feazel	Lacon, Ill	Oct. 11, 1870	108, 125
Washing-machine	B. F. Fellman	Sellersville, Pa	Feb. 8, 1870	99, 549
Washing-machine	B. F. Fellman	Sellersville, Pa	May 3, 1870	102, 672
Washing-machine	J. C. Fellows	South Adams, Mass	June 19, 1866	55, 634
Washing-machine	J. H. Fellows	Belvidere, Ill	June 7, 1864	43, 012
Washing-machine	M. S. Fellows	Livonia, N. Y	June 4, 1867	65, 362
Washing-machine	F. Fentriss	Greensborough, N. C	Dec. 12, 1842	2, 884
Washing-machine	R. E. Ferguson	Chicago, Ill	Oct. 20, 1868	83, 145
Washing-machine	R. E. Ferguson	Chicago, Ill	Aug. 15, 1871	118, 120
Washing-machine	T. R. Ferris	Monroe, Mich	Aug. 30, 1864	43, 982
Washing-machine	A. Filkins	Ypsilanti, Mich	May 20, 1873	139, 135
Washing-machine	E. Fiscus and S. Arney	Albion, Iowa	Apr. 26, 1870	102, 385
Washing-machine	A. Fisher	Leavenworth City, Kans	July 14, 1857	17, 784
Washing-machine	D. C. Fisher	Worcester, Mass	July 2, 1872	128, 540
Washing-machine	J. B. Fisher	Cincinnati, Ohio	Nov. 7, 1865	50, 810
Washing-machine	J. B. Fisher	Amsterdam, N. Y	Mar. 18, 1873	136, 909
Washing-machine	R. A. Fisher	Sunbury, Pa	Nov. 5, 1850	7, 753
Washing-machine	E. Fisk	Fayette, Me	May 25, 1832	....
Washing-machine	T. G. W. Fisk	Macon City, Mo	Aug. 27, 1867	68, 176
Washing-machine	M. P. Flanders	Jay, N. Y	July 19, 1870	105, 444
Washing-machine	C. F. Fleming	Belleville, Ill	Nov. 17, 1868	84, 102
Washing-machine	B. S. Fletcher	Cornish Flat, N. H	Oct. 3, 1865	50, 234
Washing-machine	J. A. Fletcher	Eyota, Minn	Sept. 20, 1870	107, 604
Washing-machine	W. K. Flietstra	Holland, Mich	July 8, 1873	140, 620
Washing-machine	E. E. Flint	Tonawanda, N. Y	Nov. 19, 1872	133, 148
Washing-machine	L. P. Follett	Clifton Springs, N. Y	Nov. 2, 1869	96, 413
Washing-machine	A. Foote	Granville, Ohio	Dec. 7, 1830	....
Washing-machine	C. Ford and F. C. Garbutt	Mason, Ill	Sept. 20, 1870	107, 470
Washing-machine	J. Fordyce	Morgantown, Va	Oct. 5, 1858	21, 665
Washing-machine	H. S. Forney	Baltimore, Md	Mar. 19, 1867	63, 030
Washing-machine	C. Fortin	Poultney, Vt	July 25, 1871	117, 400
Washing-machine	G. S. Foster	Sullivan, Me	July 3, 1866	56, 031
Washing-machine	W. Foster	Oswego, N. Y	Jan. 25, 1826	....
Washing-machine	J. Fox	Farmersville, Iowa	Nov. 7, 1871	120, 636
Washing-machine	J. Fox	Oskaloosa, Iowa	Sept. 3, 1872	131, 091
Washing-machine	J. B. Francis	Barnesville, Ohio	Aug. 13, 1867	67, 642
Washing-machine	W. L. Frazee	Saint Louis, Mo	May 24, 1870	103, 438
Washing-machine	J. W. Free	Richmond, Ind	Nov. 24, 1863	40, 682
Washing-machine	W. H. Freed	Sioux City, Iowa	Feb. 18, 1873	136, 050
Washing-machine	T. Freeman	Madison County, N. Y	June 30, 1809	....
Washing-machine	W. J. Freeman	Humboldt, Kans	Feb. 13, 1872	123, 560
Washing-machine	S. C. Frinck	Indianapolis, Ind	June 28, 1870	104, 725
Washing-machine	T. Q. Frost	Indian River, N. Y	Dec. 17, 1867	72, 281
Washing-machine	I. M. Furbish	Augusta, Me	May 31, 1870	103, 732
Washing-machine	W. Furbish	Hallowell, Me	Aug. 19, 1831	....
Washing-machine	L. Gail	Buffalo, N. Y	Mar. 19, 1872	124, 675
Washing-machine	R. and J. H. Gail	West Falls, N. Y	Apr. 26, 1859	23, 765
Washing-machine	T. D. Gail	Newport, Ill	Feb. 6, 1866	52, 408
Washing-machine	A. C. Gallahue	Dover Plains, N. Y	Dec. 5, 1865	51, 304
Washing-machine	S. Gambell	Otisco, N. Y	Jan. 24, 1865	45, 990
Washing-machine	D. R. Gamble	Newark, Ohio	June 25, 1861	32, 664
Washing-machine	A. A. Gardner	Savannah, Mo	Dec. 27, 1870	110, 453
Washing-machine	M. Gardner, sr	Carlisle, Pa	Dec. 12, 1865	51, 444
Washing-machine	W. B. Gardner	Almond, N. Y	Apr. 20, 1869	89, 140
Washing-machine	H. A. Gaston	San Francisco, Cal	Apr. 25, 1871	114, 126
Washing-machine	A. B. Gates	Connersville, Ind	Aug. 1, 1834	....
Washing-machine	C. Gates	Littleton, N. H	Mar. 26, 1872	124, 893
Washing-machine	J. M. Gates	Norwich, Conn	May 21, 1830	....
Washing-machine	G. Geer	Uniontown, Ill	May 31, 1859	24, 207
Washing-machine	J. O. Geer	Norwich, Conn	Oct. 10, 1835	....
Washing-machine	J. S. Geer	Norwich, Conn	Mar. 2, 1836	....
Washing-machine	D. W. George	Pulaski, Iowa	Jan. 9, 1872	122, 596
Washing-machine	R. W. George	Richmond, Me	Apr. 2, 1868	31, 882
Washing-machine	R. W. George	Richmond, Me	Apr. 8, 1862	34, 886
Washing-machine	B. F. Ghormley	New Frankfort, Ind	July 13, 1858	20, 872
Washing-machine	J. B. Ghormley	Bellefontaine, Ohio	Oct. 17, 1865	50, 464
Washing-machine	E. M. Gibbs	Chenango County, N. Y	May 1, 1828	....
Washing-machine	J. Gill	Williston, Pa	July 8, 1862	35, 816
Washing-machine	J. R. Gill	Charleston, Ill	May 10, 1864	42, 653
Washing-machine	J. R. Gill and W. E. Palmer	Alton, Ill	Feb. 25, 1862	34, 486
Washing-machine	M. Gillam	Alba, Pa	Jan. 4, 1859	22, 497
Washing-machine	R. P. Gillett	Sparta, Wis	July 9, 1872	128, 872
Washing-machine	E. Gillis	Battle Creek, Mich	Aug. 17, 1869	93, 702
Washing-machine	J. Gilman	Waterborough, Me	July 14, 1834	....
Washing-machine	R. Gipson	Shelby, Ohio	July 19, 1864	43, 580
Washing-machine	J. D. Givin	Washington County, Tenn	Oct. 3, 1834	....
Washing-machine	F. A. Gleason	Brooklyn, N. Y	May 22, 1866	54, 892
Washing-machine	A. Glendening	Butler County, Pa	Sept. 25, 1823	....
Washing-machine	A. Glendening	Loudoun County, Va	Sept. 9, 1824	....
Washing-machine	J. Glines	Postville, Iowa	July 22, 1873	141, 044
Washing-machine	J. S. Gochnauer	Goshen, Ind	Feb. 12, 1867	62, 026

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Washing-machine	J. S., E. J., and R. Godfrey	Leslie, Mich	Jan. 23, 1866	52, 160
Washing-machine	N. C. Goodloe	Okalona, Miss	Apr. 23, 1872	125, 950
Washing-machine	W. Goodman	Troy, Mich	July 16, 1867	66, 831
Washing-machine	W. F. Goodwin	Metuchen, N. J	Mar. 22, 1870	101, 005
Washing-machine	E. Gorden	Cedar Rapids, Iowa	July 4, 1865	48, 550
Washing-machine	E. Gore	Belvidere, Ill	June 4, 1861	32, 474
Washing-machine	F. Goucher	Philadelphia, Pa	June 15, 1822	....
Washing-machine	C. W. Gould	Hamburgh, Iowa	July 16, 1872	129, 127
Washing-machine	J. W. and P. W. Gould	Evans, N. Y	Apr. 30, 1861	32, 220
Washing-machine	W. Gowen	Wausau, Wis	July 17, 1860	29, 160
Washing-machine	W. Gowen	Warsaw, Wis	July 31, 1866	56, 744
Washing-machine	I. W. Graffam	New Bedford, Mass	July 12, 1870	105, 193
Washing-machine	J. C. Grahnan	Cincinnati, Ohio	Apr. 2, 1872	125, 190
Washing-machine	J. C. Grannan	Cincinnati, Ohio	Nov. 5, 1872	132, 760
Washing-machine	W. W. Grant	Bloomington, Ill	Oct. 15, 1872	132, 280
Washing-machine	D. Graves	Spring Valley, N. Y	Apr. 27, 1869	89, 401
Washing-machine	A. Gray	Naples, Me	May 24, 1859	24, 116
Washing-machine	J. Gray	Eaton, N. Y	Feb. 4, 1814	....
Washing-machine	J. Gray	Melrose, N. Y	Oct. 9, 1860	30, 375
Washing-machine	J. S. Gray	Hartford, Conn	Jan. 3, 1860	26, 735
Washing-machine	J. J. Green	Grand Rapids, Mich	Oct. 23, 1866	59, 005
Washing-machine	W. Green	Kinzua, Pa	July 30, 1867	67, 294
Washing-machine	W. H. Greer	Chicago, Ill	Feb. 13, 1866	52, 562
Washing-machine	J. Greenleaf	North Yarmouth, Me	July 24, 1846	4, 658
Washing-machine	J. T. Greenwood	Beloit, Wis	Sept. 21, 1869	94, 954
Washing-machine	J. T. Greenwood, sr	Beloit, Wis	Apr. 3, 1866	53, 604
Washing-machine	A. Gregg	Springborough, Ohio	Aug. 23, 1870	106, 576
Washing-machine	A. Gregg	Springborough, Ohio	June 17, 1873	139, 889
Washing-machine	G. W. Gregory	New York, N. Y	Feb. 6, 1872	123, 475
Washing-machine	W. Gregory	Richmond, Va	Sept. 9, 1831	....
Washing-machine	W. C. Grimes	Philadelphia, Pa	Apr. 5, 1859	23, 527
Washing-machine	W. D. Grimshaw	Newark, N. J	Oct. 14, 1862	36, 687
Washing-machine	J. W. Groat	Fremont, Ohio	Apr. 18, 1871	113, 762
Washing-machine	H. C. Grover	Nunda, N. Y	July 22, 1873	141, 136
Washing-machine	M. L. Grover	Duplainville, Wis	Dec. 23, 1862	37, 226
Washing-machine	R. Guenther	Oshkosh, Wis	Oct. 15, 1872	132, 154
Washing-machine	J. Habermehl	Allegheny, Pa	Jan. 11, 1870	98, 763
Washing-machine	J. Habermehl	Allegheny, Pa	Apr. 26, 1870	102, 255
Washing-machine	W. Hachenberg	White Pigeon, Mich	June 23, 1868	79, 068
Washing-machine	H. Hagans	Brandonville, Va	July 25, 1845	4, 101
Washing-machine	J. Haines	West Middleburgh, Ohio	Feb. 5, 1850	7, 070
Washing-machine	D. Haldeman	Morgantown, Va	Nov. 6, 1855	13, 751
Washing-machine	I. Haldeman	Bucyrus, Ohio	Apr. 28, 1863	38, 307
Washing-machine	I. R. and I. S. Haldeman	Bloomington, Ill	Jan. 11, 1859	22, 555
Washing-machine	C. H. Hale	Fayetteville, N. Y	June 7, 1864	43, 020
Washing-machine	C. H. Hale	Fayetteville, N. Y	Aug. 7, 1866	56, 932
Washing-machine	J. Hale	Hollis, N. H	Apr. 20, 1831	....
Washing-machine	L. Hale	Hollis, N. H	Oct. 4 1870	108, 019
Washing-machine	J. G. Haley, I. Wilson, and J. Lyon.	Cameron, Ill	Dec. 7, 1858	22, 236
Washing-machine	A. Hall	Dansville, N. Y	May 4, 1858	20, 154
Washing-machine	A. Hall	Dansville, N. Y	July 28, 1863	39, 343
Washing-machine	A. W. Hall	New York, N. Y	Apr. 2, 1867	63, 509
Washing-machine	E. A. Hall	Jacksonville, Ind	Aug. 20, 1861	33, 081
Washing-machine	J. Hall	Otisfield, Me	Nov. 6, 1847	5, 355
Washing-machine	J. A. Hall	Newburgh, Ontario, Canada	Apr. 12, 1870	101, 727
Washing-machine	S. V. Hall	McGrawville, N. Y	June 2, 1868	78, 593
Washing-machine	G. Hall and J. Fordyce	Morgantown, Va	Dec. 22, 1857	18, 898
Washing-machine	G. Hall and A. Scudder	Morris, N. Y	July 26, 1859	24, 871
Washing-machine	G. M. Hall and L. White	Oxford, Iowa	Apr. 2, 1872	125, 192
Washing-machine	J. C. Hallenbeck	Chatham Village, N. Y	Feb. 20, 1872	123, 893
Washing-machine	G. Hamel	De Soto, Mo	June 14, 1870	104, 144
Washing-machine	C. J. Hamilton	Holly, Mich	Oct. 8, 1872	132, 070
Washing-machine	W. M. Hammond	Jonesville, Mich	Aug. 25, 1857	18, 045
Washing-machine	J. W. Hampton	Mount Pleasant, Iowa	Oct. 10, 1871	119, 845
Washing-machine	J. Hanchette and J. R. Gill	Charleston, Ill	Nov. 24, 1863	40, 688
Washing-machine	J. Hancock	Maysville, Ky	May 24, 1828	....
Washing-machine	B. R. Hand	Lancaster, Pa	Apr. 26, 1870	102, 395
Washing-machine	M. B. Hand	Lockport, N. Y	Dec. 14, 1831	....
Washing-machine	A. C. Haniford	Northfield, N. H	Feb. 6, 1835	....
Washing-machine	I. Hann	Hope, N. J	Dec. 13, 1859	26, 430
Washing-machine	D. Hanna	Hornellsville, N. Y	Sept. 17, 1867	68, 981
Washing-machine	J. W. Hannah	Sticklerville, Mo	June 3, 1873	139, 576
Washing-machine	L. Hannum	Homer, N. Y	Mar. 16, 1858	19, 634
Washing-machine	W. H. Hanson	Albion, N. Y	May 28, 1867	65, 076
Washing machine	P. H. Hardy	Terre Haute, Ind	July 10, 1866	56, 215
Washing-machine	A. B. Harlan	Ercildown, Pa	July 17, 1860	29, 165
Washing-machine	D. C. Harlow	Hannibal, Mo	Dec. 13, 1870	110, 033
Washing-machine	E. S. Harper	Sutherland Springs, Tex	Sept. 27, 1870	107, 681
Washing-machine	W. F. Harper	Leesburgh, Tex	May 21, 1872	127, 052
Washing-machine	F. M. Harris	Winnamac, Ind	Jan. 21, 1868	73, 445
Washing-machine	G. M. Harris	Conesus Centre, N. Y	July 12, 1864	43, 496
Washing-machine	G. M. Harris	Elmira, N. Y	Dec. 5, 1865	51, 313
Washing-machine	T. Harris	Vestal, N. Y	Sept. 17, 1872	131, 498
Washing-machine	R. H. Harrison	Laurel, Md	July 6, 1858	20, 791
Washing-machine	W. S. Harrison	Germantown, Tenn	Nov. 17, 1868	84, 115
Washing-machine	M. S. Harsha	Sycamore, Ill	Aug. 27, 1861	33, 146
Washing-machine	M. S. Harsha	Batavia, Ill	Nov. 17, 1868	84, 058
Washing-machine	O. L. Hart	Millville, Wis	Aug. 17, 1869	93, 880
Washing-machine	L. B. Hartt	Detroit, Mich	Jan. 4, 1870	98, 591
Washing-machine	J. D. Hartzell	Ozawkie, Kans	May 13, 1873	138, 802
Washing-machine	T. Harvey	Wooster, Ohio	Nov. 29, 1859	26, 324
Washing-machine	J. H. Haskell	Lowell, Mass	Dec. 10, 1867	71, 874
Washing-machine	J. and R. Hathaway	Canandaigua, N. Y	Sept. 5, 1828	....
Washing-machine	S. Hathaway	Massillon, Ohio	Feb. 13, 1822	....
Washing-machine	A. Havens	Trenton, N. J	May 4, 1869	89, 761
Washing-machine	G. W. Havermale	La Harpe, Ill	Aug. 20, 1867	67, 989

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Washing-machine	S. Hawkins	Chillicothe, Mo	June 17, 1873	140,037
Washing-machine	M. L. Hawks	Kinderhook, Mich	July 8, 1873	140,625
Washing-machine	M. L. Hawks	Kinderhook, Mich	Dec. 23, 1873	145,799
Washing-machine	P. Hayden	Pittsburgh, Pa	Sept. 20, 1870	107,488
Washing-machine	A. Haynes	Jamestown, N. Y	Dec. 17, 1872	133,985
Washing-machine	J. Hebden	Medford, Mass	Feb. 1, 1859	22,801
Washing-machine	A. G. Heckrotte	New York, N. Y	June 10, 1862	35,518
Washing-machine	C. Hedges and C. S. Strayer	Bloomington, Ill	Nov. 9, 1869	96,696
Washing-machine	E. Heim	Pittsburgh, Pa	Dec. 14, 1869	97,917
Washing-machine	G. M. Heim	Brownsville, Ind	Oct. 9, 1866	58,642
Washing-machine	J. Heinlein	Galena, Ill	July 11, 1865	48,683
Washing-machine	F. W. Heins	New York, N. Y	Mar. 17, 1868	75,680
Washing-machine	D. W. Helfrich	Corry, Pa	Apr. 29, 1873	138,330
Washing-machine	H. Helm	Pittsburgh, Pa	Jan. 21, 1868	73,601
Washing-machine	T. Henry	Bloomfield, N. Y	July 11, 1808	....
Washing-machine	F. W. Henson	Philadelphia, Pa	Feb. 11, 1873	135,805
Washing-machine	C. W. Hermance	Schuylersville, N. Y	Mar. 30, 1869	88,478
Washing-machine	L. Hermance	Hudson, N. Y	Jan. 12, 1869	85,821
Washing-machine	R. Hermance	Schuylersville, N. Y	May 11, 1869	89,994
Washing-machine	J. I. Herrick	Horicon, Wis	Jan. 23, 1866	52,166
Washing-machine	P. Hibbs	Knobnoster, Mo	Dec. 30, 1873	146,071
Washing-machine	J. Highbarger	Sharpsburgh, Md	Sept. 10, 1867	68,626
Washing-machine	J. Hilborn	San Francisco, Cal	Feb. 10, 1863	37,623
Washing-machine	A. Hildebrand	Dubuque, Iowa	Apr. 17, 1866	53,978
Washing-machine	B. S. Hill	Wattsburgh, Pa	July 7, 1863	39,200
Washing-machine	C. Hill	Foxcroft, Me	Apr. 26, 1870	102,264
Washing-machine	E. F. Hill	Fabias, N. Y	Feb. 11, 1809	....
Washing-machine	J. H. Hill	Boone, Iowa	Sept. 16, 1873	142,850
Washing-machine	W. R. Hill	Detroit, Mich	June 27, 1865	48,402
Washing-machine	A. Hilton	Strathroy, Canada	Dec. 20, 1870	110,235
Washing-machine	J. Hindman	Olathe, Kans	Nov. 13, 1866	59,604
Washing-machine	S. Hinds	Montrose, Pa	May 29, 1830	....
Washing-machine	B. Hinkley	Fayette, Me	Jan. 31, 1831	....
Washing-machine	B. Hinkley	Fayette, Me	July 23, 1833	....
Washing-machine	S. Hitchcock	Vernon, N. Y	June 25, 1813	....
Washing-machine	J. S. Hittell	San Francisco, Cal	Jan. 8, 1867	61,067
Washing-machine	B. Hockabout	Antioch, Cal	July 19, 1870	105,453
Washing-machine	A. Hochweber	Troy, Ind	June 4, 1872	127,485
Washing-machine	E. Hodgkins	Carthage, N. Y	May 9, 1865	47,640
Washing-machine	E. M. Hodgson	Stanhope, N. J	May 27, 1873	139,313
Washing-machine	W. Hoeft	Fountain City, Wis	Aug. 18, 1868	81,273
Washing-machine	D. T. Hoffman	Smithville, Ohio	Nov. 5, 1872	132,832
Washing-machine	L. Holderman	New Paris, Ind	Dec. 30, 1873	145,946
Washing-machine	C. Hollingsworth	Liberty, Ind	May 4, 1852	8,921
Washing-machine	D. M. Holmes	West Chester Village, N. Y	Sept. 3, 1872	131,059
Washing-machine	S. R. Holmes	Salem, Oreg	Oct. 8, 1867	69,668
Washing-machine	G. G. Hood and J. D. Kelly	Providence, R. I	Apr. 21, 1868	77,041
Washing-machine	J. Hoover	Lancaster, Pa	June 10, 1873	139,790
Washing-machine	R. Hoover	Boonsborough, Iowa	Oct. 30, 1866	59,224
Washing-machine	B. Horn	Flemington, N. J	Nov. 18, 1862	36,978
Washing-machine	J. F. Horn	Boston, Mass	June 23, 1863	38,964
Washing-machine	J. M. Horner	San José Mission, Cal	June 16, 1863	38,900
Washing-machine	H. C. Horsey	Rome, Iowa	Aug. 15, 1871	118,014
Washing-machine	E. Horton	Avon, N. Y	June 17, 1830	....
Washing-machine	H. Hoskins	Scipio, N. Y	Aug. 26, 1845	4,164
Washing-machine	J. Hotchkiss	Woodbury, Conn	June 18, 1813	....
Washing-machine	C. Howard	Morris, N. Y	June 24, 1862	35,682
Washing-machine	N. D. Howe and J. McCollam	New Petersburgh, Ohio	June 30, 1832	....
Washing-machine	E. S. Howell	Hope, N. J	Jan. 11, 1859	22,556
Washing-machine	E. Hoyt	Stamford, Conn	Feb. 11, 1873	135,808
Washing-machine	J. H. Hubbard	Bloomfield, Conn	Jan. 6, 1836	....
Washing-machine	L. H. Hubbard	Canton, Ohio	Dec. 1, 1868	84,491
Washing-machine	R. Hubbard	Cadiz, Ind	Oct. 1, 1867	69,440
Washing-machine	C. H. Hudson	Ogdensburgh, N. Y	Feb. 16, 1864	41,623
Washing-machine	A. Huffer	Hagerstown, Md	May 26, 1857	17,377
Washing-machine	A. Huffer	Hagerstown, Md	Nov. 17, 1857	18,642
Washing-machine	G. R. Hughes	Centralia, Mo	May 21, 1867	64,876
Washing-machine	R. B. Hugunin	Cleveland Ohio	Apr. 19, 1864	42,376
Washing-machine	R. B. Hugunin and G. W. Whitney.	Cleveland and Berea, Ohio	Aug. 21, 1860	29,697
Washing-machine	M. Huiet	Miamisburgh, Ohio	Dec. 19, 1865	51,590
Washing-machine	M. Huiet	Miamisburgh, Ohio	Dec. 19, 1865	51,591
Washing-machine	F. Hulet	Berea, Ohio	Mar. 25, 1873	137,206
Washing-machine	E. B. Hull	Clinton, Ill	July 9, 1872	128,881
Washing-machine	S. Hull	Oxford, Conn	Apr. 22, 1862	35,025
Washing-machine	G. W. Hungerford	Chicago, Ill	Nov. 22, 1870	109,517
Washing-machine	J. Hunsberger	Skippack, Pa	July 16, 1872	129,021
Washing-machine	D. F. Hunt and F. S. Lyon	South Norwalk, Conn	Apr. 19, 1864	42,378
Washing-machine	E. Hunt	Shelburn, Ind	Dec. 3, 1867	71,760
Washing-machine	E. D. Hunt	New York, N. Y	Dec. 29, 1868	85,447
Washing-machine	F. A. Hunt	New York, N. Y	Nov. 28, 1865	51,185
Washing-machine	J. W. Hunt	Liberty, Mo	Apr. 30, 1872	126,211
Washing-machine	L. D. Hunt, G. R. Shippey, and B. B. Hawse.	Morrisville, Vt	Feb. 28, 1860	27,292
Washing-machine	P. Hunt	Litchfield, Conn	May 2, 1835	....
Washing-machine	S. Hunt	Danville, Ind	Aug. 28, 1860	29,791
Washing-machine	W. C. Hunter	Newport, Ky	Mar. 24, 1868	75,762
Washing-machine	A. L. Hurtt	Monticello, Ind	May 11, 1869	90,001
Washing-machine	L. Hutchings and J. D. Leach	Penobscot, Me	Apr. 2, 1861	31,889
Washing-machine	J. Hutchinson	Martinsburgh, Va	Oct. 28, 1843	3,321
Washing-machine	B. Illingworth	Freeport, Ill	Jan. 25, 1859	22,728
Washing-machine	B. Illingworth	Freeport, Ill	Oct. 11, 1870	108,206
Washing-machine	A. W. Ingalls	Buchanan, Mich	Aug. 25, 1863	39,656
Washing-machine	M. Ingalls	Muscatine, Iowa	Mar. 29, 1870	101,269
Washing-machine	C. L. Ingraham and E. Rounds	Berlin, Wis	May 8, 1860	28,180
Washing-machine	A. Irion	Femme Osage, Mo	June 26, 1866	55,873
Washing-machine	W. Irwin and E. Guest	North Coventry Township and Pottstown, Pa.	July 22, 1862	35,975

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Washing-machine	W. Jackman	Painesville, Ohio	Oct. 8, 1810	....
Washing-machine	W. Jackson and F. Robinson	New York, N. Y	Sept. 26, 1865	50, 131
Washing-machine	A. Jacobs	Ithaca, N. Y	Feb. 3, 1857	16, 567
Washing-machine	J. W. James and J. Streit	Centre Town, Mo	Sept. 5, 1871	118, 774
Washing-machine	E. Jaques	Newburyport, Mass	May 24, 1814	....
Washing-machine	J. D. Jenkins	Jacksonville, Ill	Nov. 24, 1857	18, 695
Washing-machine	J. H. Jenkins	Yorkville, N. Y	June 5, 1866	55, 306
Washing-machine	J. H. Jenkins	Smithville, Mo	Oct. 8, 1872	132, 009
Washing-machine	A. W. Jennings	Ravenna, Ohio	May 20, 1873	139, 159
Washing-machine	E. Jennings	Sherman, N. Y	Aug. 1, 1871	117, 636
Washing-machine	I. Jennings	New York	June 13, 1809	....
Washing-machine	M. V. Jennings	Centralia, Mo	Feb. 4, 1868	73, 978
Washing-machine	A. Jenny	New York, N. Y	Apr 8, 1862	34, 889
Washing-machine	S. Jinkham	Enfield, Mass	June 13, 1831	....
Washing-machine	H. W. Johnson	Athens, Pa	Dec. 10, 1861	33, 888
Washing-machine	J. Johnson	Washington, D. C	July 31, 1855	13, 356
Washing-machine	J. Johnson	New York, N. Y	Apr. 10, 1860	27, 809
Washing-machine	J. Johnson	New York, N. Y	Apr. 26, 1864	42, 490
Washing-machine	J. Johnson	New York, N. Y	Oct. 25, 1864	44, 804
Washing-machine	J. Johnson	New York, N. Y	June 6, 1865	48, 071
Washing-machine	J. Johnson	New York, N. Y	Aug. 3, 1869	93, 308
Washing-machine	J. Johnson	New York, N. Y	Aug. 3, 1869	93, 309
Washing-machine	J Johnson	Boston, Mass	May 24, 1870	103, 339
Washing-machine	P. Johnson	Des Moines, Iowa	Sept. 13, 1870	107, 267
Washing-machine	S. S. Johnson	Virden, Ill	Mar. 8, 1864	41, 847
Washing-machine	T. J. Jolly	Olean, Ind	Aug. 16, 1859	25, 123
Washing-machine	E. Jones	Alfred, Mass	July 24, 1807	....
Washing-machine	H. P. Jones	Davenport, Iowa	July 12, 1864	43, 508
Washing-machine	H. P. Jones	Davenport, Iowa	Jan. 16, 1866	52, 052
Washing-machine	J. Jones	Fairburgh, Ill	July 16, 1872	129, 236
Washing-machine	S. D. Jones	North Dighton, Mass	Aug. 20, 1861	33, 088
Washing-machine	S. L. Jones	Dennysville, Me	Feb. 27, 1872	123, 997
Washing-machine	W. G. Jones	Marshall, Tex	Feb. 14, 1871	111, 750
Washing-machine	G. F. Jordan	Gardiner, Me	May 16, 1871	114, 826
Washing-machine	W. A. Jordan	Thibodeaux, La	Aug. 24, 1858	21, 261
Washing-machine	A. Joyner	Elton, Wis	Aug. 7, 1866	56, 950
Washing-machine	E. Julier	McConnellsville, Ohio	Feb. 9, 1858	19, 299
Washing-machine	H. R. June	Millport, N. Y	Sept. 14, 1858	21, 565
Washing-machine	D. Kaufman	Mohicanville, Ohio	Aug. 21, 1844	3, 713
Washing-machine	J. Keane	New York, N. Y	Nov. 7, 1865	50, 873
Washing-machine	S. Kearney	New York, N. Y	Aug. 27, 1861	33, 150
Washing-machine	J. J. Kendall	Troy's Store, N. C	Sept. 28, 1869	95, 354
Washing-machine	W. Kenderline	Lumberville, Pa	Apr. 3, 1866	53, 626
Washing-machine	H. F. Keeney	West Salem, Ohio	Aug. 22, 1871	118, 247
Washing-machine	B. Kellar and J. Rogers	Sublette, Ill	Apr. 28, 1863	38, 310
Washing-machine	C. H. B. Kellogg	Arcadia, Ohio	Mar. 25, 1862	34, 756
Washing-machine	D. Kellogg	Jackson, Mich	Dec. 19, 1865	51, 595
Washing-machine	F. Kellsey	Middletown, Conn	Sept. 28, 1827	....
Washing-machine	J. S. Kelly	New York, N. Y	Oct. 6, 1868	82, 722
Washing-machine	W. Kelly	Saranac, Mich	June 5, 1866	55, 310
Washing-machine	W. and A. G. Kelsey	Delavan, Wis	July 31, 1866	56, 761
Washing-machine	L. Kennedy	Hartford, Conn	Apr. 26, 1808	....
Washing-machine	A. A. Kent	Owatonna, Minn	Sept. 13, 1864	44, 200
Washing-machine	J. J. Kenyon and H. P. Huntoon.	Boston and Cambridge, Mass.	Aug. 22, 1871	118, 248
Washing-machine	J. M. Kern	Morgantown, Va	Oct. 21, 1856	15, 949
Washing-machine	J. M. Kern	Morgantown, Va	Jan. 31, 1860	26, 996
Washing-machine	J. Key	Union City, Ind	Mar. 26, 1872	125, 054
Washing-machine	G. Keyes	Binghamton, N. Y	Mar. 12, 1867	62, 854
Washing-machine	T. W. S. Kidd	Springfield, Ill	Nov. 15, 1864	45, 049
Washing-machine	G. H. Kidney	Cleveland, Ohio	Sept. 30, 1862	36, 568
Washing-machine	G. H. Kidney	Cleveland, Ohio	Sept. 11, 1866	57, 922
Washing-machine	G. H. Kidney	Cleveland, Ohio	Oct. 22, 1867	70, 096
Washing-machine	G. H. Kidney	Cleveland, Ohio	June 30, 1868	79, 477
Washing-machine	T. F. Kiff	Cincinnati, Ohio	Aug. 26, 1873	142, 242
Washing-machine	P. Killin	Mount Healthy, Ohio	Dec. 12, 1865	51, 460
Washing-machine	J. Killinger	Lancaster, Pa	Apr. 23, 1872	125, 896
Washing-machine	J. J. Kimball	Naperville, Ill	Dec. 14, 1869	97, 931
Washing-machine	J. M. Kimball	Woodstock, Ill	May 2, 1871	114, 305
Washing-machine	S. Kimball	Rhinebeck, N. Y	Aug. 12, 1809	....
Washing-machine	A. and G. H. King	Painesville, Ohio	Aug. 24, 1869	94, 005
Washing-machine	E. King	Johnstown, N. Y	May 14, 1808	....
Washing-machine	J. King	North Vernon, Ind	Feb. 19, 1867	62, 275
Washing-machine	J. A. King	Hamburgh, Iowa	Oct. 22, 1872	132, 470
Washing-machine	J. B. King	New York, N. Y	Aug. 24, 1869	94, 004
Washing-machine	J. T. King	New York, N. Y	May 6, 1856	14, 818
Washing-machine	O. S. King	Painesville, Ohio	Mar. 14, 1871	112, 603
Washing-machine	T. King	Westchester County, N. Y	July 3, 1849	6, 574
Washing-machine	B. Kinne	Syracuse, N. Y	May 30, 1871	115, 325
Washing-machine	J. B. Kinney	Yellow Springs, Ohio	Jan. 1, 1867	60, 907
Washing-machine	A. Kirkpatrick	Urbana, Ohio	May 21, 1830	....
Washing-machine	A. S. Kirkpatrick and A. C. Bell	New Alexandria, Pa	Oct. 1, 1872	131, 881
Washing-machine	E. D. Kitchen	Pineville, Pa	July 25, 1871	117, 429
Washing-machine	J. Klein	Allentown, Pa	June 11, 1872	127, 895
Washing-machine	E. Knock	Vermont, Ill	Mar. 28, 1871	113, 064
Washing-machine	W. G. Knowles	Jamestown, R. I	May 7, 1872	126, 463
Washing-machine	R. Knowlton	Eureka, Ill	Apr. 1, 1862	34, 861
Washing-machine	C. H. Knox	Mount Pleasant, Iowa	Jan. 22, 1867	61, 343
Washing-machine	C. H. Knox	Mount Pleasant, Iowa	July 13, 1869	92, 459
Washing-machine	J. J. Koch	Republic, Ohio	Feb. 2, 1869	86, 555
Washing-machine	J. H. Kooser	Pekin, Ill	Aug. 5, 1873	141, 567
Washing-machine	J. O. Kopas	Washington, D. C	Mar. 29, 1870	101, 277
Washing-machine	C. W. T. Krausch	Saint Louis, Mo	Oct. 11, 1864	44, 639
Washing-machine	D. H. Krauser and G. N. Bowman.	Pottsville, Pa	Aug. 20, 1867	67, 990
Washing-machine	J. H. Kruse	New Melle, Mo	Mar. 25, 1873	137, 218
Washing-machine	A. F. Kuhlmann	Glen Haven, Wis	Aug. 7, 1866	56, 955
Washing-machine	A. F. Kuhlman	Dubuque, Iowa	Aug. 27, 1867	68, 211

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Washing-machine	D. Kunkel	Oregon, Mo	Oct. 30, 1866	59, 235
Washing-machine	W. Kyle	New York, N. Y	Feb. 23, 1864	41, 708
Washing-machine	J. La Burt	New York, N. Y	Apr. 30, 1872	126, 309
Washing-machine	A. Lamb	Jeffersonville, N. Y	Feb. 25, 1868	74, 919
Washing-machine	J. Lamb	Hubbardston, Mass	July 23, 1867	67, 125
Washing-machine	J. Lamb	Jeffersonville, N. Y	July 7, 1868	79, 662
Washing-machine	S. T. Lamb	New Washington, Ind	Oct. 16, 1860	30, 412
Washing-machine	S. T. Lamb	New Washington, Ind	Mar. 29, 1864	42, 089
Washing-machine	J. Lamph ar	Panama, N. Y	Nov. 27, 1866	60, 018
Washing-machine	S. E. Lamphear and O. D. Barrett.	Cleveland, Ohio	Oct. 18, 1859	25, 838
Washing-machine	D. Lampson	Beaver Dam, Wis	Jan. 2, 1866	51, 840
Washing-machine	D. Lampson	Lyons, Iowa	Feb. 4, 1868	73, 982
Washing-machine	W. Lancaster	Harmony Township, Ind	July 10, 1855	13, 222
Washing-machine	B. I. Lane	South Framingham, Mass	Feb. 2, 1864	41, 438
Washing-machine	J. Lane	Homer, N. Y	May 15, 1815	......
Washing-machine	A. C. Langworthy	Evanston, Ill	July 9, 1872	128, 892
Washing-machine	A. F. Lapham	New York, N. Y	Oct. 9, 1860	30, 331
Washing-machine	A. F. Lapham	New York, N. Y	Apr. 25, 1865	47, 433
Washing-machine	A. Larcom	Watervliet, N. Y	Jan. 16, 1829	......
Washing-machine	A. Larcum	Troy, N. Y	June 16, 1836	......
Washing-machine	G. W. Large	Yellow Springs, Ohio	Nov. 28, 1865	51, 197
Washing-machine	J. L. La Rose	Leavenworth, Kans	Aug. 16, 1870	106, 492
Washing-machine	C. Larrabee	Haywood, Cal	Dec. 5, 1871	121, 461
Washing-machine	J. S. Lash	Philadelphia, Pa	Mar. 20, 1866	53, 311
Washing-machine	A. Lavine and F. Oclair	Webster, Mass	June 18, 1872	128, 154
Washing-machine	E. Lawrence	Dublin, Ind	Sept. 9, 1851	8, 347
Washing-machine	H. Lawrence	Newark, Ohio	Mar. 9, 1858	19, 609
Washing-machine	B. C. Lawson	Yolo County, Cal	Dec. 27, 1870	110, 478
Washing-machine	J. Lawson	Humboldt, Kans	Aug. 29, 1871	118, 618
Washing-machine	F. H. Lawton	Fluvanna, N. Y	Oct. 26, 1869	96, 123
Washing-machine	H. E. Lea	Halfmoon Bay, Cal	Sept. 19, 1871	119, 089
Washing-machine	G. Leach	Union, N. Y	Oct. 24, 1871	120, 286
Washing-machine	O. Learned	Indianapolis, Ind	Sept. 26, 1848	5, 802
Washing-machine	I. Leavitt	Turner, Me	Aug. 12, 1823	......
Washing-machine	J. Lee	Galesburgh, Ill	Sept. 24, 1861	33, 352
Washing-machine	J. Lee	Galesburgh, Ill	Mar. 8, 1864	41, 849
Washing-machine	J. Lee	Galesburgh, Ill	June 14, 1864	43, 119
Washing-machine	J. Lee	Galesburgh, Ill	Jan. 7, 1868	73, 103
Washing-machine	J. H. Lee	Marshall, Tex	Oct. 10, 1871	119, 859
Washing-machine	M. Lee	New York	June 4, 1808	......
Washing-machine	M. Lee	Burlington, N. Y	June 8, 1809	......
Washing-machine	M. Lee and T. Barber	Oneida County, N. Y	Oct. 1, 1807	......
Washing-machine	J. K. Leedy	Tom's Brook, Va	May 21, 1872	127, 075
Washing-machine	J. Q. Leffingwell	Nevada, Iowa	Dec. 10, 1867	72, 052
Washing-machine	J. Leib	Akron, Ohio	Dec. 29, 1868	85, 315
Washing-machine	G. A. Leigh	Springfield, Ill	Sept. 28, 1869	95, 239
Washing-machine	A. Leightheiser	Reading, Pa	May 29, 1860	28, 494
Washing-machine	D. R. and J. T. Leighton	Cambridge, Mass	Nov. 28, 1865	51, 199
Washing-machine	W. Leighty	Ebensburgh, Pa	Jan. 19, 1869	85, 942
Washing-machine	W. Leighty	Ebensburgh, Pa	Oct. 19, 1869	95, 916
Washing-machine	M. R. Lemman	Wesson, Miss	Jan. 26, 1869	86, 236
Washing-machine	E. Lester	Killingworth, Conn	Dec. 20, 1830	......
Washing-machine	P. H. Lewis	Boston, Mass	Jan. 19, 1869	85, 943
Washing-machine	T. S. Lewis	Buxton, Me	Aug. 22, 1871	118, 374
Washing-machine	W. Lewis	Webster, N. Y	July 11, 1871	116, 971
Washing-machine	G. Lieb	Coeyman's Hollow, N. Y	Sept. 27, 1870	107, 793
Washing-machine	R. Lighthall	Brooklyn, N. Y	Dec. 10, 1867	71, 891
Washing-machine	R. Lighthall	Brooklyn, N. Y	Sept. 13, 1870	107, 390
Washing-machine	H. Lighty	Attica, Ind	Sept. 21, 1869	95, 119
Washing-machine	J. Lindsey	Canajoharie, N. Y	Dec. 28, 1832	......
Washing-machine	G. W. Linn	Lee Centre, Ill	Sept. 13, 1864	44, 204
Washing-machine	E. Lister	Killingworth, Conn	July 11, 1808	......
Washing-machine	J. H. Little	Skaneateles, N. Y	July 2, 1836	......
Washing-machine	I. A. Livingston	Hornellsville, N. Y	July 2, 1867	66, 363
Washing-machine	P. Lockie	Rochester, N. Y	Feb. 1, 1870	99, 450
Washing-machine	J. Lochridge	Danville, Ind	July 10, 1866	56, 238
Washing-machine	S. Lockwood	Holly, Mich	Oct. 8, 1867	69, 567
Washing-machine	W. N. Lockwood	Woodcock, Pa	Apr. 2, 1867	63, 402
Washing-machine	J. Lombard	Readfield, Me	Sept. 9, 1835	......
Washing-machine	I. Loofborrow	New York	June 26, 1810	......
Washing-machine	D. Loomis and I. Millington	Springfield, N. Y	July 11, 1808	......
Washing-machine	J. Loomis	De Ruyter, N. Y	Aug. 25, 1857	18, 050
Washing-machine	A. D. Lord	Bethany, N. Y	Nov. 24, 1834	......
Washing-machine	M. J. Lourrentz	Leavenworth, Kans	Sept. 4, 1866	57, 740
Washing-machine	O. Louval	Millbury, Mass	Nov. 26, 1872	133, 323
Washing-machine	C. Love	Peru, Ill	Oct. 16, 1855	13, 692
Washing-machine	M. N. Lovell	Erie, Pa	June 3, 1873	139, 511
Washing-machine	E. W. Lowe	Almond, N. Y	Oct. 29, 1867	70, 343
Washing-machine	G. Lowell	Nunda, N. Y	Nov. 6, 1830	......
Washing-machine	J. Lowth	Columbus, Wis	Sept. 10, 1872	131, 172
Washing-machine	E. A. Lucas	Bloomington, Ill	May 1, 1866	54, 378
Washing-machine	C. O. Luce	Brandon, Vt	May 14, 1861	32, 336
Washing-machine	E. Lukens	Baltimore, Md	Mar. 9, 1844	3, 472
Washing-machine	L. M. Lull and P. C. Bowen	Altoona, Ill	July 21, 1868	80, 193
Washing-machine	P. Lutes	Platte City, Mo	Apr. 10, 1866	53, 844
Washing-machine	C. M. Mack	Brooklyn, Pa	Jan. 29, 1867	61, 673
Washing-machine	J. R. Madison	Oneida, Ill	Aug. 21, 1866	57, 348
Washing-machine	G. B. Mallette	Millport, N. Y	May 27, 1862	35, 379
Washing-machine	J. H. Mallroy	South Bend, Ind	Aug. 11, 1863	39, 489
Washing-machine	A. J. Mapes	Independence, Mo	Apr. 23, 1867	64, 122
Washing-machine	J. D. Mar	Brooklyn, N. Y	July 9, 1872	128, 866
Washing-machine	E. Marble	Hanover, Wis	Apr. 9, 1867	63, 644
Washing-machine	L. Marble	Vassar, Mich	Mar. 7, 1865	46, 686
Washing-machine	H. H. Marcar and S. Mehaffey	Cambridge, Ohio	Aug. 26, 1873	142, 255
Washing-machine	R. Marean	Lawrenceville, Pa	Jan. 1, 1850	6, 989
Washing-machine	T. R. Markillie	Winchester, Ill	Sept. 23, 1862	36, 523
Washing-machine	T. R. Markillie	Winchester, Ill	Sept. 29, 1863	40, 110

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Washing-machine	W. C. Marr and J. S. Maughlin	Onawa City, Iowa	May 23, 1871	115, 076
Washing-machine	W. C. Marr. J. S. Maughlin, and G. A. Davis.	Onawa, Iowa	Aug. 29, 1871	118, 543
Washing-machine	M. S. Marshall	Somerville, Mass	Sept. 7, 1869	94, 499
Washing-machine	M. S. Marshall	Somerville, Mass	Dec. 27, 1870	110, 482
Washing-machine	M. S. Marshall	Somerville, Mass	July 4, 1871	116, 614
Washing-machine	S. Martin	Parshallville, Mich	July 1, 1873	140, 380
Washing-machine	W. Martin	Orford, Iowa	Oct. 3, 1871	119, 629
Washing-machine	H. B. Masser	Sunbury, Pa	Oct. 7, 1846	4, 799
Washing-machine	T. A. Massie	Plattsburgh, Mo	Aug. 8, 1871	117, 7[illegible]2
Washing-machine	G. J. Matson	Alma, Mich	Sept. 28, 1869	95, 247
Washing-machine	J. Matthias	New York, N. Y	Aug. 1, 1871	117, 554
Washing-machine	E. W. Maxson	Scranton, Pa	Feb. 21, 1871	111, 958
Washing-machine	J. Mayes	Cohoes, N. Y	Apr. 28, 1857	17, 166
Washing-machine	W. McAll, H. H. Higgins, and R. G. Rogers.	Athens, Ala	Feb. 15, 1832	....
Washing-machine	R. McCain	Rootstown, Ohio	Mar. 27, 1860	27, 643
Washing-machine	J. McChesney	Louisville, Ky	June 3, 1856	15, 043
Washing-machine	W. McCord	Sing Sing, N. Y	July 18, 1871	117, 188
Washing-machine	E. McCoy	Pontiac, Mich	June 18, 1872	128, 053
Washing-machine	I. McDaniel	Salem, Iowa	Feb. 25, 1862	34, 514
Washing-machine	S. T. McDougall	Brooklyn, N. Y	Oct. 8, 1861	33, 441
Washing-machine	S. T. McDougall	Brooklyn, N. Y	July 1, 1862	35, 770
Washing-machine	S. T. McDougall	Brooklyn, N. Y	Oct. 26, 1869	96, 247
Washing-machine	M. McEnerny	Birmingham, Conn	June 25, 1867	66, 162
Washing-machine	S. A. McGeorge	Alexander, N. Y	Mar. 24, 1835	....
Washing-machine	M. F. McIntyre	Girard, Pa	May 21, 1872	126, 893
Washing-machine	W. T. McKean	East Palestine, Ohio	Dec. 28, 1869	98, 395
Washing-machine	E. McKinley and W. Wilkie	Mayville, Wis	Dec. 6, 1864	45, 331
Washing-machine	J. McLaughlin	Goshen, Ohio	Jan. 20, 1852	8, 673
Washing-machine	J. McLaughlin	Monongahela City, Pa	June 14, 1864	43, 122
Washing-machine	S. McNamara	Chicago, Ill	May 8, 1866	54, 576
Washing-machine	J. McVicker	Greene County, Pa	Mar. 30, 1858	19, 788
Washing-machine	S. P. Mecay	Kilborn, Ohio	Jan. 5, 1858	19, 037
Washing-machine	S. P. Mecay	Kilborn, Ohio	July 4, 1865	48, 576
Washing-machine	J. F. Melcher	Bloomington, Ill	June 27, 1865	48, 424
Washing-machine	J. F. Melcher	Bloomington, Ill	Sept. 10, 1867	68, 769
Washing-machine	J. S. Merchant	Hopedale, Ohio	Dec. 14, 1869	97, 791
Washing-machine	L. Merrifield	La Grange Centre, Ind	Sept. 3, 1867	68, 378
Washing-machine	C. Merriman	Middletown, Conn	Apr. 21, 1836	....
Washing-machine	J. M. Meschutt	New York, N. Y	Feb. 20, 1866	52, 733
Washing-machine	S. S. Middlekauf	Hagerstown, Md	Dec. 6, 1870	109, 924
Washing-machine	W. H. Milhouse	Sugartown, Pa	Jan. 25, 1859	22, 741
Washing-machine	B. F. Miller	New York, N. Y	May 8, 1866	54, 578
Washing-machine	G. H. Miller	Belvidere, N. J	Dec. 12, 1871	121, 883
Washing-machine	J. Miller	Russellville, Ky	May 29, 1866	55, 141
Washing-machine	J. Miller	Youngstown, Ohio	Apr. 5, 1870	101, 643
Washing-machine	L. L. Miller	Jersey Shore, Pa	May 14, 1861	32, 342
Washing-machine	T. W. Miller	Montezuma, Ind	Oct. 24, 1871	120, 310
Washing-machine	W. Miller and E. Rogers	Connersville, Ind	Jan. 17, 1834	....
Washing-machine	W. E. Milligan	McKinney, Tex	Mar. 18, 1873	136, 929
Washing-machine	J. J. and E. C. Milliken	Winthrop, Me	Sept. 26, 1835	....
Washing-machine	L. R. Mills	Tekonsha, Mich	May 16, 1871	114, 840
Washing-machine	C. Milnor	Des Moines, Iowa	July 14, 1868	80, 000
Washing-machine	C. Milner	Des Moines, Iowa	Feb. 6, 1872	123, 354
Washing-machine	G. Minor and B. Beach	Bridgewater and West Meriden, Conn.	Sept. 3, 1861	33, 207
Washing-machine	S. Minton	Pendleton, S. C	Apr. 14, 1832	....
Washing-machine	A. Mitchell	Aberdeen, Ohio	Nov. 6, 1843	3, 329
Washing-machine	A. Mitchell	Fredericton, New Brunswick.	Jan. 23, 1866	52, 185
Washing-machine	J. Mitchell	Newark, Ohio	Dec. 17, 1867	72, 316
Washing-machine	O. M. Mitchell	Marathon, N. Y	July 20, 1869	92, 868
Washing-machine	G. W. Mollineaux	Marble Hill, Mo	Nov. 26, 1872	133, 379
Washing-machine	J. M. Monfort and A. J. Riley	Boone County, Ind	Sept. 24, 1872	131, 553
Washing-machine	J. H. Monsees	Smith City, Mo	Aug. 1, 1865	49, 135
Washing-machine	H. C. Moody	Fulton, N. Y	Apr. 3, 1866	53, 652
Washing-machine	A. L. D. Moore	La Grange, Tex	Sept. 13, 1870	107, 283
Washing-machine	J. S. Moore, jr., and C. H. Reynolds.	Brooklyn, N. Y	Oct. 12, 1869	95, 825
Washing-machine	C. Moorhead and I. Grier	Lewistown, Ill	Apr. 30, 1867	64, 243
Washing-machine	H. J. Moreland	White Hall, Ill	July 26, 1870	105, 831
Washing-machine	J. A. Morelock	Silver Run, Md	Aug. 2, 1870	105, 969
Washing-machine	E. Morgan	Morgantown, Va	Mar. 13, 1855	12, 518
Washing-machine	W. Morgan	Middlebrook, Va	Dec. 14, 1869	97, 793
Washing-machine	B. D. Morrell	Windham, Me	June 15, 1858	20, 574
Washing-machine	M. K. Morris	Louisville, Ky	June 20, 1871	116, 209
Washing-machine	J. R. Morrison	East Springfield, Ohio	Oct. 15, 1861	33, 490
Washing-machine	R. S. Morse	Wilton, Me	May 24, 1870	103, 357
Washing-machine	R. S. Morse	Chelsea, Mass	Aug. 30, 1870	106, 853
Washing-machine	S. A. Mort	Dayton, Ohio	Nov. 22, 1864	45, 167
Washing-machine	E. Morton	Boston, Mass	Jan. 14, 1873	134, 816
Washing-machine	P. Mosher	Ballston Spa, N. Y	Oct. 10, 1829	....
Washing-machine	R. Mosher	Galway, N. Y	Jan. 8, 1829	....
Washing-machine	V. Mott	Roslyn, N. Y	Apr. 1, 1862	34, 843
Washing-machine	D. T. Mudge	Cleveland, Ohio	Apr. 25, 1865	47, 445
Washing-machine	J. T. Mudge	Washington, D. C	Aug. 31, 1852	9, 235
Washing-machine	J. T. Mudge	Dayton, Ohio	Aug. 2, 1859	24, 948
Washing-machine	R. V. Mudge	Durham, N. Y	Apr. 12, 1826	....
Washing-machine	S. W. Mudge	Rome, N. Y	Sept. 18, 1860	30, 081
Washing-machine	C. Muhl	Bloomington, Ill	Oct. 5, 1869	95, 600
Washing-machine	L. F. Muhlinghaus	Brooklyn, N. Y	Aug. 10, 1869	93, 635
Washing-machine	L. N. Muir and A. J. Kline	Jersey Shore, Pa	May 27, 1862	35, 385
Washing-machine	M. D. Mulford	Bloomfield, N. Y	Apr. 5, 1831	....
Washing-machine	J. Mumford and J. W. Wilson	Clarksburgh, Ohio	Oct. 28, 1856	15, 981
Washing-machine	J. H. Mundy and R. P. McConaughy.	Washington, Iowa	Apr. 2, 1872	125, 211
Washing-machine	P. H. Munson	Franklin Township, Pa	Aug. 6, 1867	67, 565

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Washing-machine	S. Munson and W. H. Pratt	Tremont, Ill	May 8, 1849	6,426
Washing-machine	A. Mutersbaugh	Lewinsville, Va	Sept. 27, 1870	107,707
Washing-machine	D. B. Myers	Uricksville, Ohio	Sept. 23, 1873	143,177
Washing-machine	H. Myers	Highland, Kans	Mar. 18, 1873	136,855
Washing-machine	J. W. Myers	Lyons, Iowa	Aug. 31, 1869	94,332
Washing-machine	H. Nash	Cincinnati, Ohio	Jan. 9, 1867	51,958
Washing-machine	A. J. Nave	Columbus, Tex	Jan. 31, 1871	111,374
Washing-machine	W. W. Neal	Yellow Springs, Ohio	Feb. 2, 1858	19,257
Washing-machine	G. R. Nebinger	Philadelphia, Pa	Oct. 11, 1870	108,168
Washing-machine	D. F. Neffkirk and J. J. Koch	Republic, Ohio	Mar. 29, 1870	101,301
Washing-machine	T. B. Neill	Philadelphia, Pa	July 18, 1871	117,197
Washing-machine	A. Neilson	Allegheny City, Pa	Nov. 12, 1867	70,882
Washing-machine	J. K. Nelson	Mechanicstown, Md	Aug. 29, 1871	118,637
Washing-machine	W. Newbrough	Wooster, Ohio	Apr. 17, 1844	3,549
Washing-machine	I. A. Newhall	Crooked Creek, Pa	May 25, 1869	90,462
Washing-machine	M. Newland	Dayton, Ohio	Mar. 5, 1867	62,672
Washing-machine	G. J. Newman	Millville, Tex	July 16, 1872	129,046
Washing-machine	L. L. Newman	Jackson, Mich	Dec. 11, 1866	60,410
Washing-machine	G. S. Newsome	Eugefield, Tenn	Sept. 30, 1873	143,371
Washing-machine	D. Newton	Homer, Ohio	Oct. 30, 1847	5,349
Washing-machine	W. Newton	Warren County, Ohio	July 1, 1836	....
Washing-machine	P. Nichols	Troy, N. Y	July 18, 1871	117,102
Washing-machine	I. P. Nissen	Davenport, Iowa	July 16, 1867	66,731
Washing-machine	F. M. Nixon and E. N. Babcock	Lena, Ill	Oct. 14, 1873	143,709
Washing-machine	J. M. Noble	Delhi, Iowa	June 25, 1867	66,167
Washing-machine	J. M. Noble	Delhi, Iowa	Apr. 25, 1871	114,030
Washing-machine	S. Noble	Hoosick, N. Y	Feb. 1, 1810	....
Washing-machine	D. W. Norris	Normal, Ill	Jan. 23, 1872	123,041
Washing-machine	D. W. Norris and D. M. Cole	Normal and Elgin, Ill	Apr. 9, 1872	125,609
Washing-machine	J. E. North	Candor, N. Y	Feb. 23, 1864	41,716
Washing-machine	J. E. North	Owego, N. Y	Mar. 12, 1873	124,651
Washing-machine	F. E. North	McAllisterville, Pa	Oct. 6, 1863	40,180
Washing-machine	S. Nowlan	New York, N. Y	July 30, 1861	32,922
Washing-machine	J. M. Oakley	New York, N. Y	Sept. 17, 1861	33,311
Washing machine	J. Oaster	Amboy, Ill	July 21, 1863	39,307
Washing-machine	C. D. and S. M. Ober	Morrisville, Vt	Sept. 11, 1860	29,987
Washing-machine	A. O'Dell	Bucyrus, Ohio	Mar. 25, 1873	137,234
Washing-machine	S. Oedamer	Muscatine, Iowa	Apr. 20, 1869	89,234
Washing-machine	A. M. Olds	Greeley, Colo	Jan. 7, 1873	134,609
Washing-machine	N. Olin and E. L. Hopkins	Homer, Mich	July 17, 1866	56,442
Washing-machine	J. O'Neil	Xenia, Ohio	June 10, 1851	8,153
Washing-machine	E. F. O'Neill	Prairie du Chien, Wis	Oct. 27, 1868	83,535
Washing-machine	J. S. Ord	Soquel, Cal	Sept. 24, 1872	131,700
Washing machine	L. B. Osgood	Shelby, Mich	Dec. 6, 1870	109,836
Washing-machine	T. Osgood	Charlestown, Mass	July 11, 1808	....
Washing-machine	J. Osmun and J. Curl	Rockport, N. J	Apr. 4, 1871	113,444
Washing-machine	J. Osterhout	Rock Island, Ill	Sept. 1, 1868	81,674
Washing-machine	N. Otis	Chicago, Ill	Apr. 5, 1864	42,259
Washing-machine	T. Outwater	Olcott, N. Y	Jan. 29, 1867	61,558
Washing-machine	D. J. Owen and J. G. Brydges	Springville, Pa	Feb. 25, 1873	136,335
Washing-machine	J. P. Packer	Flemington, Pa	May 28, 1872	127,263
Washing-machine	J. B. Padon	Troy, Ill	May 24, 1870	103,491
Washing-machine	M. A. Page	La Crosse, Wis	July 13, 1869	92,540
Washing-machine	S. N. Page	Lamar Mills, Pa	Dec. 30, 1873	146,091
Washing-machine	A. Paine	Burrillville, R. I	Jan. 2, 1872	122,331
Washing-machine	A. E. Paine	Delhi, N. Y	July 1, 1808	....
Washing-machine	G. Palmer	Littlestown, Pa	Jan. 22, 1867	61,352
Washing-machine	G. N. Palmer	Greene, N. Y	Apr. 6, 1869	88,663
Washing-machine	J. H. Palmer	Yonkers, N. Y	Sept. 26, 1871	119,396
Washing-machine	N. Palmiter	Scott, N. Y	Aug. 6, 1867	67,575
Washing-machine	F. D. Paradis	Chicago, Ill	Mar. 23, 1869	88,201
Washing-machine	E. A. Park	Harpersfield, Ohio	Mar. 19, 1872	124,695
Washing-machine	J. Park	Joliet, Ill	Oct. 15, 1867	69,835
Washing-machine	J. W. Parker	Saint Charles, Ill	Dec. 13, 1864	45,431
Washing-machine	M. P. Parker	Lowville, N. Y	May 1, 1828	....
Washing-machine	W. Parker	Rolla, Mo	Nov. 12, 1872	133,049
Washing-machine	W. Parker	Rolla, Mo	Aug. 26, 1873	142,268
Washing-machine	P. P. Parkhurst	Milford, Mass	Nov. 5, 1861	36,661
Washing-machine	L. Parre	Mendota, Ill	Apr. 30, 1872	126,324
Washing-machine	N. Parrish	Rush, N. Y	Dec. 4, 1844	3,847
Washing-machine	A. B. Parsons	Dunton, Ill	Mar. 6, 1866	53,035
Washing-machine	M. J. Parsons	Hillsdale, Mich	Feb. 5, 1867	61,858
Washing-machine	N. J. Parsons	Cortland, N. Y	Oct. 21, 1873	143,779
Washing-machine	C. Parsons and B. S. Dane	Rome Centre, Mich	Oct. 24, 1865	50,621
Washing-machine	J. M. Patterson and J. F. Morell	Woodbury, N. J	Apr. 10, 1860	27,825
Washing-machine	N. A. Patterson and W. L. Ramsey.	Kingston, Tenn	Aug. 21, 1860	29,714
Washing-machine	J. Patton	Arcadia, Ind	Nov. 15, 1859	26,120
Washing-machine	A. M. Paullin	Atlanta, Ill	Nov. 1, 1870	108,934
Washing-machine	B. H. Pearson and D. B. Neal	Mount Gilead, Ohio	Oct. 13, 1857	18,407
Washing-machine	J. S. Peaslee	Providence, R. I	May 7, 1861	32,253
Washing-machine	L. L. Peck	Portland, Oreg	Aug. 30, 1870	106,957
Washing-machine	C. Pendleton	Galena, Ill	July 12, 1859	24,754
Washing-machine	C. Pendleton	Iowa City, Iowa	Feb. 19, 1867	62,220
Washing-machine	M. Perin	Lakeland, Minn	July 28, 1863	39,353
Washing-machine	W. H. Perry and W. Woodworth	Los Angeles, Cal	Mar. 21, 1865	46,935
Washing-machine	S. B. Peugh	Salem, Ind	Apr. 13, 1869	88,806
Washing-machine	S. B. Peugh	Salem, Ind	May 3, 1870	102,705
Washing-machine	C. C. Phelps	Janesville, Wis	Sept. 26, 1865	50,207
Washing-machine	J. Phelps	La Porte, Ind	Apr. 22, 1862	35,037
Washing-machine	W. Phelps and C. Wright	Sycamore, Ill	Oct. 2, 1860	30,244
Washing-machine	G. W. Phenix	New Brunswick, N. J	Mar. 6, 1860	27,380
Washing-machine	A. Philipp	Appleton, Wis	Nov. 22, 1864	45,172
Washing-machine	R. Philips	Otsego County, N. Y	Oct. 14, 1809	....
Washing-machine	J. Phillips, jr	Georgetown, Mo	July 21, 1868	80,211
Washing-machine	M. Pierce	Buffalo, Wis	May 7, 1867	64,445
Washing-machine	T. Pierce	Fishkill, N. Y	June 24, 1809	....
Washing-machine	M. Pike	North Leverett, Mass	Aug. 15, 1805	40,406

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Invention.	Inventor.	Residence.	Date.	No.
Washing-machine	B. Pine	New York, N. Y	Feb. 22, 1870	100, 062
Washing-machine	B. R. Platt and J. A. Gray	Holland, Mich	July 23, 1867	67, 069
Washing-machine	W. Polyblank	Cleveland, Ohio	Nov. 29, 1864	45, 271
Washing-machine	D. B. Pond	Woonsocket, R. I	July 26, 1870	105, 842
Washing-machine	D. B. Pond	Woonsocket, R. I	May 13, 1873	138, 928
Washing-machine	J. F. Pond	Cleveland, Ohio	Oct. 26, 1858	21, 903
Washing-machine	J. F. Pond	Cleveland, Ohio	May 22, 1860	28, 404
Washing-machine	J. F. Pond	Cleveland, Ohio	Feb. 4, 1868	73, 996
Washing-machine	J. F. and C. L. Pond	Cleveland, Ohio, and Buffalo, N. Y.	Apr. 21, 1857	17, 113
Washing-machine	J. S. Pond	Cleveland, Ohio	May 15, 1860	28, 302
Washing-machine	D. Porter	Cleveland, Ohio	Jan. 12, 1864	41, 264
Washing-machine	S. Porter	Geneva, N. Y	Mar. 21, 1848	5, 482
Washing-machine	S. Post and H. D. Martin	Ypsilanti, Mich	Dec. 6, 1870	109, 938
Washing-machine	E. Potts	Philadelphia, Pa	Jan. 14, 1873	134, 769
Washing-machine	G. Potts	Yocumtown, Pa	June 10, 1862	35, 568
Washing-machine	A. Powell	Coxsackie, N. Y	Sept. 3, 1867	68, 573
Washing-machine	C. M. Powers and T. S. Robinson	Flushing, N. Y	Oct. 4, 1870	107, 959
Washing-machine	F. B. Pratt and F. Tylee	Cleveland, Ohio	May 25, 1858	20, 365
Washing-machine	I. Pratt, jr	Greenleaf, Minn	July 16, 1872	129, 494
Washing-machine	J. W. Pratt	Edgefield, Tenn	Aug. 27, 1872	130, 821
Washing-machine	J. W. Pratt	Edgefield, Tenn	Dec. 24, 1872	134, 310
Washing-machine	H. Preble	Machias, Me	Oct. 20, 1863	40, 360
Washing-machine	J. Prehn	New York, N. Y	Aug. 20, 1870	106, 870
Washing-machine	M. S. Prentice	Rockford, Ill	Aug. 6, 1867	67, 581
Washing-machine	P. Prentiss	Chester, Mass	July 28, 1868	80, 501
Washing-machine	F. B. Preston	Fayette, Mo	July 8, 1873	140, 641
Washing-machine	T. J. Price	Industry, Ill	Oct. 27, 1857	18, 518
Washing-machine	T. J. Price	Macomb, Ill	Sept. 26, 1865	50, 162
Washing-machine	L. R. Prince	Beverly, Mass	May 14, 1836	......
Washing-machine	H. Prindle	Spafford, N. Y	Aug. 16, 1864	43, 865
Washing-machine	D. W. Prosser	Jamestown, N. Y	Sept. 17, 1872	131, 460
Washing-machine	J. Purkey	York, Pa	Oct. 14, 1856	15, 895
Washing-machine	C. C. and J. Purington	Bath, Me	Oct. 22, 1867	70, 118
Washing-machine	G. W. Putnam	South Glen's Falls, N. Y	Mar. 15, 1870	100, 923
Washing-machine	L. Putnam	Worcester, Mass	May 30, 1871	115, 355
Washing-machine	S. S. Putnam	Dorchester, Mass	Mar. 28, 1865	47, 038
Washing-machine	S. S. Putnam	Dorchester, Mass	July 11, 1865	48, 718
Washing-machine	A. P. Quackenbush	Brooklyn, N. Y	Oct. 8, 1861	33, 449
Washing-machine	J. H. Quackenbush	East Saginaw, Mich	Sept. 24, 1867	69, 246
Washing-machine	A. Quimby	Terre Haute, Ind	May 25, 1858	20, 369
Washing-machine	L. E. Ransom	Trenton, Mich	Sept. 12, 1865	49, 920
Washing-machine	S. Rawdon and L. T. Ethridge	Darlington, Wis	Aug. 13, 1867	67, 801
Washing-machine	J. G. Raymond	Rondout, N. Y	Dec. 6, 1870	109, 840
Washing-machine	J. B. Read	Philadelphia, Pa	Oct. 8, 1872	132, 105
Washing-machine	B. Reed	Pittsburgh, Pa	Sept. 24, 1861	33, 363
Washing-machine	L. Reed	Allegheny, Pa	June 10, 1873	139, 815
Washing-machine	N. F. Reed	North Wolcott, Vt	June 10, 1873	139, 736
Washing-machine	C. W. Reeder	Trenton, Mo	Oct. 18, 1870	108, 393
Washing-machine	C. W. Reeder	Chillicothe, Mo	Oct. 8, 1872	132, 106
Washing-machine	T. Rees	Judson, Minn	Jan. 25, 1870	99, 235
Washing-machine	O. Reeves	Greenport, N. Y	Feb. 7, 1865	46, 265
Washing-machine	O. Reeves	Greenport, N. Y	July 18, 1865	48, 837
Washing-machine	C. P. Remington	Smith's Mills, N. Y	May 23, 1871	115, 105
Washing-machine	C. P. Remington	Smith's Mills, N. Y	Feb. 27, 1872	124, 083
Washing-machine	G. Reneky and J. Keiss	Cedar Falls, Iowa	Dec. 17, 1867	72, 328
Washing-machine	I. Reynolds	Republic, Ohio	Nov. 11, 1856	16, 068
Washing-machine	H. Rice	Youngstown, Ohio	Nov. 15, 1864	45, 122
Washing-machine	S. G. Rice	Albany, N. Y	May 25, 1869	90, 391
Washing-machine	Z. B. Rice	Boston, Mass	May 31, 1864	42, 964
Washing-machine	J. C. Rich	Penfield, N. Y	Oct. 12, 1843	3, 299
Washing-machine	A. Richardson	Hopkinton, Iowa	Sept. 10, 1872	131, 227
Washing-machine	H. L. Richardson	Lyndon, Ill	June 27, 1871	116, 488
Washing-machine	M. Richardson	Philadelphia, Pa	May 22, 1860	28, 442
Washing-machine	M. A. Richardson	Sherman, N. Y	June 27, 1865	48, 442
Washing-machine	M. A. Richardson	Sherman, N. Y	July 16, 1867	66, 740
Washing-machine	M. A. Richardson	Sherman, N. Y	Sept. 7, 1869	94, 515
Washing-machine	W. R. Richardson	San Francisco, Cal	Mar. 31, 1863	38, 061
Washing-machine	J. W. Ricker	Chelsea, Mass	Mar. 7, 1871	112, 382
Washing-machine	J. W. Ricker	Chelsea, Mass	Aug. 29, 1871	118, 487
Washing-machine	O. J. Rider and J. C. Bryant	Wellington, Mo	Dec. 12, 1871	121, 814
Washing-machine	G. W. Ridgway	Garnett, Kans	Aug. 13, 1872	130, 533
Washing-machine	A. Riggs	Frostburgh, Md	Oct. 4, 1870	107, 054
Washing-machine	J. F. Riggs and W. M. Albin	Saint Joseph, Mo	Aug. 6, 1867	67, 453
Washing-machine	L. S. Riggs and A. B. Parsons	Highland, Kans	June 11, 1872	127, 709
Washing-machine	J. Riggsbee	Chappel Hill, N. C	May 20, 1873	139, 191
Washing-machine	M. W. Riker and D. T. Torrey	Hastings, Mich	May 25, 1869	90, 581
Washing-machine	W. Riley	Madison County, Miss	Apr. 5, 1870	101, 511
Washing-machine	W. Riley	Madison County, Miss	Feb. 13, 1872	123, 730
Washing-machine	J. Ringen	Saint Louis, Mo	Jan. 26, 1869	86, 250
Washing-machine	J. Ringeu	Saint Louis, Mo	Aug. 3, 1869	93, 346
Washing-machine	W. H. Roach	Harrisville, Ohio	Mar. 29, 1870	101, 408
Washing-machine	J. Robb	Lewistown, Pa	Mar. 16, 1858	19, 653
Washing-machine	C. Roberts	Winchester, Ill	May 22, 1860	28, 409
Washing-machine	C. Roberts	Lake Village, N. H	May 29, 1866	55, 161
Washing-machine	G. E. Roberts	Berkeley Springs, Va	Feb. 15, 1848	5, 448
Washing-machine	S. Roberts	Portland, Me	Jan. 16, 1835	....
Washing-machine	H. G. Robertson	Greeneville, Tenn	Oct. 11, 1853	10, 117
Washing-machine	C. Robinson	Boston, Mass	Apr. 9, 1872	125, 412
Washing-machine	D. Robinson	Franklin, N. Y	Dec. 15, 1810	....
Washing-machine	G. A. Robinson	Mount Pulaski, Ill	Feb. 19, 1867	62, 155
Washing-machine	J. Robinson	Lawrence, Kans	May 10, 1870	102, 972
Washing-machine	J. Robinson	Lawrence, Kans	May 9, 1871	114, 715
Washing-machine	J. Robinson	Seville, Ohio	Oct. 15, 1872	132, 322
Washing-machine	R. Robinson	Leesburgh, Va	Nov. 3, 1800	....
Washing-machine	L. C. Rodier	Detroit, Mich	Mar. 3, 1857	16, 751
Washing-machine	A. J. Rogers	Churchville, Va	Feb. 6, 1872	123, 512
Washing-machine	J. R. Rogers	Sacramento, Wis	May 17, 1859	24, 056

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Invention.	Inventor.	Residence.	Date.	No.
Washing-machine	D. E. Rohr	Charlestown, Va	May 11, 1858	20,244
Washing-machine	I. S. Roland	West Earl, Pa	Dec. 9, 1856	16,190
Washing-machine	D. C. Rood	Altona, Ill	Aug. 17, 1858	21,216
Washing-machine	R. Rooke	Empire City, Oreg	May 28, 1867	65,282
Washing-machine	C. L. Rose	Roseville, Ill	May 13, 1873	138,937
Washing-machine	J. S. Ross	Bloomington, Ill	May 18, 1869	90,309
Washing-machine	W. Ross and J. M. Adamson	Day's Store, Pa	Sept. 1, 1868	81,688
Washing-machine	P. W. Roto	Eudora, Kans	Sept. 3, 1872	131,119
Washing-machine	W. M. Rowland	Tyler, Tex	July 1, 1873	140,435
Washing-machine	J. L. Rowley	Angola, Ind	Mar. 15, 1859	23,268
Washing-machine	J. D. and J. Royse	Cane Valley, Ky	Apr. 12, 1870	101,768
Washing-machine	P. C. Rude	Morgantown, Va	June 29, 1858	20,732
Washing-machine	W. T. C. Runnells	Searsport, Me	Dec. 3, 1867	71,650
Washing-machine	W. T. C. Runnells	Searsport, Me	May 3, 1870	102,714
Washing-machine	H. W. Sabin	Rushville, N. Y	Aug. 16, 1845	4,153
Washing-machine	J. Sager	Harrisonburgh, Va	May 9, 1835	....
Washing-machine	M. J. Sanford	Fredonia, N. Y	July 6, 1869	92,213
Washing-machine	N. M. Sanford	Vienna, Ohio	Oct. 30, 1866	59,274
Washing-machine	W. H. Sargent	Weymouth, Mass	May 15, 1866	54,781
Washing-machine	S. Savage	East Machias, Me	Apr. 11, 1832	....
Washing-machine	C. H. Sawyer	Buxton, Me	July 23, 1872	129,684
Washing-machine	E. Sawyer	Millbridge, Me	May 22, 1866	54,965
Washing-machine	G. W. Sayre	Pisgah, Ohio	Jan. 17, 1865	45,940
Washing-machine	E. B. Scattergood	Saint John's, Mich	Mar. 15, 1870	100,808
Washing-machine	G. Schatz	Berlin, Canada	Feb. 13, 1872	123,646
Washing-machine	G. Schatz and J. Zimmerman	Gratis Ford, Pa	Dec. 3, 1872	133,670
Washing-machine	J. Schermerhorn	Spring Creek, Pa	Oct. 1, 1867	69,493
Washing-machine	J. Schermerhorn	Waterford, Pa	Aug. 29, 1871	118,558
Washing-machine	O. Schimmel	Chemnitz, Saxony	Nov. 10, 1868	84,005
Washing-machine	A. Schlingman	West Alexandria, Ohio	Mar. 30, 1869	88,418
Washing-machine	J. H. Schmidt	Stockertown, Pa	Sept. 26, 1871	119,244
Washing-machine	J. L. Schoomaker	Galupville, N. Y	Aug. 12, 1862	36,173
Washing-machine	J. J. Schoyer	Springfield, Ill	Nov. 21, 1871	121,203
Washing-machine	A. and D. Schultz	Reading, Pa	Jan. 10, 1860	26,790
Washing-machine	J. Scott	Charleston, Pa	Oct. 20, 1868	83,325
Washing-machine	J. Scott	Charleston, Pa	Jan. 4, 1870	98,525
Washing-machine	J. Scott	Charleston, Pa	Jan. 23, 1872	122,918
Washing-machine	J. Seaman	Andover, N. Y	Sept. 24, 1872	131,711
Washing-machine	A. Seamans	Bowmansville, N. Y	Nov. 20, 1860	30,705
Washing-machine	H. S. See	Evansburgh, Pa	Feb. 6, 1872	123,426
Washing-machine	C. Seebold	New Berlin, Pa	Feb. 1, 1816	....
Washing-machine	H. F. Sehnders	Buffalo, N. Y	Sept. 24, 1867	69,261
Washing-machine	G. C. Selfridge	Saratoga Springs, N. Y	Nov. 5, 1867	70,630
Washing-machine	I. A. Sergeant	Springfield, Ohio	Aug. 25, 1857	18,062
Washing-machine	G. Seymour	Boone, Iowa	Mar. 25, 1873	137,151
Washing-machine	C. T. Shadbolt	Attica, N. Y	July 25, 1871	117,472
Washing-machine	N. M. Shafer	New York, N. Y	Oct. 13, 1868	82,999
Washing-machine	W. Shafer	Ripon, Wis	Sept. 11, 1860	30,001
Washing-machine	D. P. Sharp and L. Mood	Ithaca, N. Y	Apr. 10, 1860	27,836
Washing-machine	D. P. Shaw and J. S. Clark	Elkhart, Ind	Aug. 17, 1869	93,912
Washing-machine	T. F. Shaw and J. Bringman	Tiffin, Ohio	Dec. 5, 1871	121,672
Washing-machine	D. H. Shearer	Drakesville, Iowa	July 12, 1864	43,528
Washing-machine	D. H. Shearer and C. Haynes	West Grove and Centreville, Iowa.	May 27, 1862	35,398
Washing-machine	J. Sheffler	Deselm, Ill	July 8, 1873	140,651
Washing-machine	E. T. Shepard	Gallipolis, Ohio	Apr. 23, 1861	32,150
Washing-machine	M. A. Shepard	Evansville, Ind	Aug. 9, 1870	106,220
Washing-machine	J. S. Shepler	Beaver, Pa	Aug. 19, 1856	15,580
Washing-machine	C. W. Sherer	Chicago, Ill	Sept. 9, 1873	142,742
Washing-machine	H. Shively, R. S. McEwen, and J. Lindsey.	Fredericksburgh, Ohio	Oct. 21, 1829	....
Washing-machine	P. B. Shoemaker	Plattsburgh, Mo	July 19, 1870	105,500
Washing-machine	D. P. Shope	Milesburgh, Pa	Dec. 18, 1860	31,004
Washing-machine	S. Short	Cincinnati, Ohio	Dec. 23, 1873	145,911
Washing-machine	W. K. Short, J. W. Allen, and J. Craig.	Mount Pleasant, Iowa	Feb. 19, 1867	62,229
Washing-machine	O. Shostrom	Altona, Ill	May 3, 1859	23,866
Washing-machine	P. Shondy	Canajoharie, N. Y	June 23, 1863	38,990
Washing-machine	J. M. Shuck	Oskaloosa, Iowa	May 25, 1869	90,467
Washing-machine	J. Shugert and E. and G. W. Porter.	Philadelphia, Pa	Apr. 3, 1847	5,048
Washing-machine	J. Shull	New Petersburgh, Ohio	Aug. 19, 1831	....
Washing-machine	H. Sidle	Minneapolis, Minn	Sept. 18, 1866	58,144
Washing-machine	H. Sidle	Minneapolis, Minn	Aug. 6, 1867	67,597
Washing-machine	J. S. Sills	Cedarville, Ill	Apr. 9, 1867	63,758
Washing-machine	J. P. Simmons	Schoolcraft, Mich	Mar. 23, 1869	88,089
Washing-machine	R. H. Sipes	Bloody Run, Pa	Oct. 26, 1869	96,154
Washing-machine	R. H. Sipes	Bloody Run, Pa	Feb. 27, 1872	124,168
Washing-machine	J. Sirrine	Trumansburgh, N. Y	May 31, 1870	103,671
Washing-machine	S. Skinner	Lowell, Mass	Oct. 20, 1857	18,489
Washing-machine	W. N. Slason	South Reading, Mass	Mar. 1, 1859	23,120
Washing-machine	D. Smallwood	Middletown, Ohio	Aug. 31, 1869	94,250
Washing-machine	A. and C. D. Smedley	Carthage, Ohio	July 19, 1864	43,610
Washing-machine	A. M. Smith	Pittsburgh, Pa	Mar. 29, 1870	101,321
Washing-machine	B. R. Smith	East Whiteland, Pa	Feb. 23, 1858	19,474
Washing-machine	C. W. Smith	Evans, N. Y	Aug. 26, 1862	36,307
Washing-machine	E. Smith	Whitestown, N. Y	Apr. 1, 1873	137,494
Washing-machine	G. W. Smith	Strasburgh, Ohio	Aug. 6, 1872	130,321
Washing-machine	H. C. Smith	Cleveland, Ohio	Apr. 10, 1860	27,870
Washing-machine	H. E. Smith	Philadelphia, Pa	Oct. 26, 1858	21,909
Washing-machine	H. E. Smith	Philadelphia, Pa	Mar. 6, 1860	27,391
Washing-machine	H. E. Smith	Philadelphia, Pa	Aug. 28, 1860	29,830
Washing-machine	H. E. Smith	Pittsburgh, Pa	July 28, 1863	39,360
Washing-machine	H. E. Smith	Pittsburgh, Pa	Dec. 1, 1863	40,774
Washing-machine	H. E. Smith	Pittsburgh, Pa	Mar. 29, 1864	42,119
Washing-machine	H. E. Smith	Cincinnati, Ohio	July 4, 1865	48,596
Washing-machine	H. E. Smith	Cincinnati, Ohio	Oct. 24, 1865	50,638
Washing-machine	H. E. Smith	New York, N. Y	Apr. 13, 1869	88,816
Washing-machine	H. E. Smith	Newark, N. J	Apr. 12, 1870	101 778

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Washing-machine	H. E. Smith and G. F. Spear	New York, N. Y	Nov. 15, 1870	109, 259
Washing-machine	I. E. Smith	York, Pa	Mar. 6, 1866	53, 052
Washing-machine	J. Smith	Saint Louis, Mo	Sept. 14, 1869	94, 786
Washing-machine	J. J. Smith and C. B. Camp	Middleburgh, Ind	June 18, 1872	128, 076
Washing-machine	J. Q. A. Smith	Lee's Summit, Mo	Sept. 2, 1873	142, 523
Washing-machine	L. Smith	Guilford County, N. C	Apr. 25, 1833	....
Washing-machine	L. Smith	Strongsville, Ohio	June 25, 1867	66, 181
Washing-machine	R. Smith	Towanda, Pa	Sept. 9, 1856	15, 711
Washing-machine	S. Smith	Bourbon, Ind	Aug. 15, 1871	118, 162
Washing-machine	S. M. Smith	Canal Dover, Ohio	Oct. 25, 1870	108, 646
Washing-machine	T. Smith	New York, N. Y	Dec. 3, 1867	71, 656
Washing-machine	O. and A. S. Snell	Williamsburgh, Ohio	June 18, 1872	128, 187
Washing-machine	C. P. Snow	Freeport, Ill	May 25, 1869	90, 598
Washing-machine	T. Snow	Social Circle, Ga	Nov. 15, 1870	109, 262
Washing-machine, &c	J. Snyder, jr	New York	May 2, 1835	....
Washing-machine	D. E. Somes	Washington, D. C	Feb. 25, 1868	74, 949
Washing-machine	H. Soudew	Strasburgh, Pa	Apr. 21, 1836	....
Washing-machine	A. W. Soule	Portland, Me	July 18, 1835	....
Washing-machine	W. Soule	Stafford, Conn	May 17, 1844	3, 586
Washing-machine	J. W. Spangler and B. F. Reich	York, Pa	Dec. 17, 1872	133, 956
Washing-machine	W. W. Spaulding	Galesburgh, Ill	Jan. 5, 1864	41, 104
Washing-machine	S. Spelman	Westfield, Mass	Jan. 16, 1866	52, 085
Washing-machine	I. Spicer	Norwich, Conn	Oct. 17, 1835	....
Washing-machine	A. J. Stafford and S. Crossman	Essex, N. Y	Jan. 9, 1866	51, 977
Washing-machine	E. Stair	Harrisonville, Mo	Mar. 17, 1868	75, 592
Washing-machine	N. H. Stallins	Windsor, N. C	June 6, 1871	115, 780
Washing-machine	O. W. Stanford and S. S. Scoville	Lebanon, Ohio	Apr. 28, 1868	77, 413
Washing-machine	A. C. Stannard	Rock County, Wis	June 18, 1867	65, 960
Washing-machine	A. C. Stannard	Wilton, Wis	Apr. 20, 1869	89, 251
Washing-machine	W. Stanton	Lynchburgh, Va	May 12, 1812	....
Washing-machine	H. H. Staples	Woburn, Mass	June 26, 1866	55, 928
Washing-machine	M. W. Staples	Saratoga Springs, N. Y	May 8, 1866	54, 622
Washing-machine	M. W. Staples	Richmond, Va	Aug. 20, 1872	130, 760
Washing-machine	M. W. Staples	Richmond, Va	Sept. 16, 1873	142, 958
Washing-machine	M. W. Staples	Richmond, Va	Nov. 4, 1873	144, 365
Washing-machine	J. M. Starr, jr	Fond du Lac, Wis	Aug. 3, 1869	93, 242
Washing-machine	L. S. Starrett	Newburyport, Mass	June 27, 1865	48, 458
Washing-machine	L. L. Stearns	Jersey Shore, Pa	Mar. 4, 1863	34, 598
Washing-machine	J. Stengel	Croton, Mich	Mar. 5, 1867	62, 571
Washing-machine	J. Stevens and L. H. Buell	New York, N. Y	May 28, 1861	32, 438
Washing-machine	H. C. Stevenson	Georgetown, Ky	July 18, 1854	11, 334
Washing-machine	J. C. Stewart	Eureka, Ill	Nov. 4, 1873	144, 237
Washing-machine	T. H. Stewart	Winona, Miss	June 20, 1871	116, 111
Washing-machine	V. R. Stewart	Weedsport, N. Y	June 24, 1856	15, 199
Washing-machine	I. B. Stillman	Almond, N. Y	Nov. 26, 1872	133, 389
Washing-machine	D. Stocking	Scott, N. Y	June 25, 1830	....
Washing-machine	G. A. Stocking	Aurelius, N. Y	Sept. 10, 1829	....
Washing-machine	C. Stone	Middlebury, Conn	Feb. 17, 1827	....
Washing-machine	T. B. Stout	Keyport, N. J	Oct. 1, 1867	69, 507
Washing-machine	B. F. Stover	Ladoga, Ind	Jan. 21, 1868	73, 667
Washing-machine	J. Strahl	Lee, Ohio	Feb. 11, 1873	135, 859
Washing-machine	G. W. Stranahan	Westport, N. Y	Jan. 18, 1870	99, 029
Washing-machine	S. Streetor	Smithland, Iowa	July 16, 1872	129, 184
Washing-machine	L. H. Strobridge	Naples, N. Y	July 1, 1873	140, 558
Washing-machine	J. Stubbs	Decatur, Ill	Oct. 16, 1866	58, 957
Washing-machine	H. Stuckman	Bourbon Township, Ind	Mar. 11, 1873	136, 787
Washing-machine	W. A. and J. F. Suddith	Charlestown, Va	Aug. 9, 1859	25, 058
Washing-machine	J. Sugert	Elizabeth, Pa	May 19, 1843	3, 096
Washing-machine	A. T. Sullivan	San José, Cal	Aug. 8, 1871	117, 940
Washing-machine	C. M. Swany	Richmond, Ind	Apr. 27, 1858	20, 099
Washing-machine	J. D. Swartz	Milton, Pa	Dec. 10, 1867	72, 112
Washing-machine	S. Sweet, jr	Readfield, Me	Sept. 18, 1833	....
Washing-machine	G. W. Swigert	Monmouth, Ill	Dec. 28, 1858	22, 461
Washing-machine	J. Taber	Wolfborough, N. H	Apr. 29, 1873	138, 296
Washing-machine	W. C. Taggart	Fayetteville, N. Y	Nov. 6, 1866	59, 477
Washing-machine	W. H. Tambling	Berlin, Wis	Feb. 9, 1858	19, 315
Washing-machine	W. H. Tambling	Berlin, Wis	Oct. 11, 1859	25, 774
Washing-machine	T. H. Tatlow, jr	Newark, Mo	Dec. 7, 1869	97, 725
Washing-machine	J. Taylor	Dunstable, N. H	Apr. 1, 1829	....
Washing-machine	J. Taylor	Philadelphia, Pa	Feb. 28, 1871	112, 297
Washing-machine	J. Taylor	Three Rivers, Mich	Mar. 26, 1872	125, 099
Washing-machine	J. C. Taylor	Ann Arbor, Mich	July 16, 1872	129, 621
Washing-machine	J. W. Taylor	Ashland, Va	July 29, 1873	141, 402
Washing-machine	S. J. Taylor	Rome, N. Y	May 27, 1873	139, 342
Washing-machine	J. R. Terbill	Chicago, Ill	July 12, 1864	43, 532
Washing-machine	T. Tebow	Lexington, Ky	May 23, 1871	115, 263
Washing-machine	W. A. Terry	Prairie du Chien, Wis	Apr. 2, 1867	63, 579
Washing-machine	E. Tharp	Cincinnati, Ohio	Apr. 27, 1858	20, 101
Washing-machine	J. Thatcher	Brooklyn, Ohio	Aug. 5, 1862	36, 129
Washing-machine	E. D. Thomas	Rochester, N. Y	May 8, 1860	28, 215
Washing-machine	H. Thompson	Wyocena, Wis	Sept. 24, 1867	69, 141
Washing-machine	H. N. Thompson	Auburn, N. Y	May 3, 1870	102, 621
Washing-machine	J. Thompson	Vevay, Ind	Mar. 5, 1867	62, 573
Washing-machine	J. M. Thompson	Dowagiac, Mich	Aug. 15, 1871	118, 071
Washing-machine	J. P. Thompson	Kirkville, Iowa	Mar. 24, 1868	76, 004
Washing-machine	A. Threlkeld	Boone County, Ind	Aug. 14, 1860	29, 638
Washing-machine	H. Thurber	Painted Post, N. Y	Apr. 22, 1830	....
Washing-machine	E. Thurston	Burlington, Vt	Mar. 8, 1826	....
Washing-machine	H. B. Tibbits	Vineland, N. J	Mar. 9, 1869	87, 731
Washing-machine	E. T. Tinch	Salem, Ind	Apr. 14, 1868	76, 650
Washing-machine	T. J. Tindall	New York, N. Y	Aug. 31, 1858	21, 385
Washing-machine	E. D. Tippett	Georgetown, D. C	Dec. 17, 1846	4, 893
Washing-machine	W. S. Todd	Mechanicsville, Iowa	Feb. 16, 1869	87, 013
Washing-machine	G. W. Tolhurst	Liverpool, Ohio	Mar. 15, 1859	23, 276
Washing-machine	G. W. Tolhurst	Liverpool, Ohio	Sept. 13, 1859	25, 455
Washing-machine	G. W. Tolhurst	Liverpool, Ohio	Dec. 6, 1859	26, 384
Washing-machine	G. W. Tolhurst	Liverpool, Ohio	Apr. 24, 1860	28, 021
Washing-machine	J. M. Tolley	Big Lick, Va	Apr. 30, 1861	32, 214

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Invention.	Inventor.	Residence.	Date.	No.
Washing-machine	M. L. Tompkins	Wataga, Ill	Nov. 7, 1871	120, 797
Washing-machine	C. E. Toop	New York, N. Y	Mar. 5, 1861	31, 636
Washing-machine	H. H. Torrey	Buffalo Grove, Ill	July 15, 1856	15, 353
Washing-machine	J. Tramblie	Sandwich, Ill	Aug. 10, 1869	93, 566
Washing-machine	E. Trescott	New Marlborough, Mass	July 11, 1808	......
Washing-machine	J. Trickett	Quincy, Ill	Nov. 18, 1873	144, 805
Washing-machine	N. Trowbridge	Tully, N. Y	Apr. 28, 1868	77, 417
Washing-machine	D. J. True and E. Fairfield	Portland, Me	July 6, 1869	92, 232
Washing-machine	H. N. Tucker	Stoughton, Mass	Aug. 20, 1872	130, 772
Washing-machine	J. W. Tull and J. W. Weston	Windsor, Ill	Dec. 16, 1873	145, 602
Washing-machine	L. Tupper	Genoa, N. Y	Mar. 28, 1848	5, 491
Washing-machine	M. Turley	Council Bluffs, Iowa	Mar. 29, 1864	42, 130
Washing-machine	E. A. Turnbull	Springfield, Ohio	Mar. 5, 1872	124, 234
Washing-machine	C. Turner	Triangle, N. Y	July 2, 1872	128, 567
Washing-machine	J. Turner	Oakdale Station, Pa	Nov. 19, 1872	133, 180
Washing-machine	W. B. Twiford	Chincoteague, Va	Jan. 25, 1859	22, 756
Washing-machine	C. N. Tyler	Washington, D. C	Oct. 21, 1856	15, 958
Washing-machine	J. R. Underwood	Parkersburgh, W. Va	Jan. 26, 1869	86, 330
Washing-machine	F. Utley	Chapel Hill, N. C	Apr. 18, 1871	113, 948
Washing-machine	G. Utley	Chapel Hill, N. C	Nov. 26, 1845	4, 291
Washing-machine	J. Vail	Yankee Jim's, Cal	Oct. 8, 1867	69, 726
Washing-machine	S. T. Vallet	Providence, R. I	July 3, 1860	29, 021
Washing-machine	A. Van Allen	Freeport, Ill	May 6, 1873	138, 597
Washing-machine	M. Van Auken	Chazy, N. Y	May 11, 1858	20, 230
Washing-machine	M. Van Auken	Utica, N. Y	July 18, 1871	117, 126
Washing-machine	P. Van Bussum	Henderson, N. Y	July 17, 1866	56, 469
Washing-machine	M. Van Debogert	Binghamton, N. Y	Apr. 19, 1859	23, 728
Washing-machine	J. D. Van Dusen	Auburn, N. Y	May 4, 1869	89, 711
Washing-machine	J. D. Van Dusen	Auburn, N. Y	Mar. 22, 1870	101, 190
Washing-machine	P. D. Van Hoesen	New York, N. Y	Dec. 11, 1860	30, 898
Washing-machine	A. L. Van Norman	Clinton, La	Sept. 20, 1870	107, 569
Washing-machine	W. Vanscoyoc	Oxford, Ohio	July 12, 1870	105, 403
Washing-machine	N. Van Zandt	Washington, D. C	May 21, 1809	......
Washing-machine	J. Varney	Batavia, Ill	Sept. 26, 1871	119, 432
Washing-machine	L. Vaughn	Rapids, Ohio	Dec. 10, 1867	72, 132
Washing-machine	S. Verntz	Strasburgh, Pa	Apr. 30, 1872	126, 359
Washing-machine	D. Vogt	Trenton, Mich	June 7, 1870	103, 945
Washing-machine	F. W. Vosmer	Cincinnati, Ohio	July 24, 1866	56, 644
Washing-machine	J. V. Wackerman	Buffalo, N. Y	Feb. 15, 1870	99, 984
Washing-machine	A. C. Wade	Paris, Ill	Aug. 7, 1866	57, 052
Washing-machine	G. E. Wade	Jefferson City, Mo	Dec. 10, 1867	72, 134
Washing-machine	W. Wadsworth	Hartford, Conn	Mar. 15, 1808	......
Washing-machine	G. W. Wageoner	Scotland County, Mo	May 20, 1873	139, 093
Washing-machine	J. Wagoner and A. Severson, jr	Guilderland Centre, N. Y	Aug. 16, 1859	25, 152
Washing-machine	C. E. Wahlgren	Knoxville, Ill	Feb. 18, 1868	74, 640
Washing-machine	A. Waldron	San José, Cal	Apr. 30, 1867	64, 265
Washing-machine	C. F. Walker	Benford's Store, Pa	Mar. 5, 1867	62, 708
Washing-machine	C. F. Walker	Benford's Store Post-Office, Pa.	Aug. 3, 1869	93, 255
Washing-machine	D. L. Walker	Roxbury, Mass	June 19, 1849	6, 532
Washing-machine	E. Walker	Woodbourne, Pa	May 29, 1830	......
Washing-machine	E. L. Walker	Jenniss Cross Roads, Pa	Apr. 30, 1867	64, 386
Washing-machine	F. C. Walker	New York, N. Y	Nov. 29, 1864	45, 283
Washing-machine	G. Walker	Springville, N. Y	Mar. 20, 1860	27, 584
Washing-machine	G. S. Walker	Erie, Pa	Mar. 28, 1871	113, 118
Washing-machine	G. S. Walker	Erie, Pa	Sept. 2, 1873	142, 535
Washing-machine	G. S. Walker and F. F. Adams	Erie, Pa	May 28, 1872	127, 204
Washing-machine	J. M. Walker	Plattsburgh, Mo	Mar. 26, 1872	125, 104
Washing-machine	M. Walker	Keeseville, N. Y	July 16, 1872	129, 073
Washing-machine	D. Walling	Garrettsville, N. Y	Nov. 22, 1859	26, 214
Washing-machine	M. P. Walton	Marlborough, Ohio	Nov. 26, 1867	71, 556
Washing-machine	W. R. Walton	Freeport, Ill	July 22, 1873	141, 022
Washing-machine	D. T. Ward	Cardington, Ohio	Aug. 28, 1866	57, 601
Washing-machine	D. T. Ward	Cardington, Ohio	Dec. 10, 1867	71, 931
Washing-machine	P. S. Ward	Millville, Iowa	Nov. 3, 1863	40, 521
Washing-machine	H. Warner	Lake City, Minn	Nov. 19, 1867	71, 090
Washing-machine	H. Warner	Ridgeway, Pa	Nov. 15, 1870	109, 279
Washing-machine	H. Warner	Ridgeway, Pa	May 23, 1871	115, 139
Washing-machine	D. Warren	Winthrop, Me	Aug. 27, 1835	......
Washing-machine	A. A. Washburn	Saint Johnsville, N. Y	Feb. 21, 1860	27, 249
Washing-machine	R. Washburne	Monsey, N. Y	Jan. 19, 1864	41, 332
Washing-machine	H. H. Waters	Atlanta, Ga	May 11, 1869	90, 061
Washing-machine	C. Watson	White Cloud, Kans	Mar. 4, 1873	136, 474
Washing-machine	D. Watson	Fayette, Me	Oct. 15, 1822	......
Washing-machine	D. Watson	Fayette, Me	Dec. 23, 1831	......
Washing-machine	E. Y. Watson	Albany, N. Y	Mar. 23, 1836	......
Washing-machine	P. B. Watson	Belvidere, N. J	May 13, 1873	138, 969
Washing-machine	M. and F. Way	Springfield, Ohio	Feb. 6, 1872	123, 431
Washing-machine	J. Weaver, jr	Pittsburgh, Pa	May 4, 1869	89, 838
Washing-machine	J. L. Weaver	Davis, Ill	Oct. 2, 1866	58, 515
Washing-machine	J. Webb	Spartansburgh, Pa	Feb. 11, 1868	74, 459
Washing-machine	M. D. Webber	Woodbury, Vt	Sept. 10, 1867	68, 817
Washing-machine	G. R. Weber	Springfield, Ill	Oct. 20, 1868	83, 230
Washing-machine	O. H. Weed	Boston, Mass	Jan. 11, 1870	98, 823
Washing-machine	W. H. Welch	Bloomington, Ill	Aug. 31, 1869	94, 459
Washing-machine	W. H. Welch	Bloomington, Ill	Aug. 9, 1870	106, 296
Washing-machine	C. J. Weld	Brattleborough, Vt	Aug. 22, 1871	118, 312
Washing-machine	J. Welding	Cincinnati, Ohio	Nov. 14, 1865	50, 973
Washing-machine	I. J. Wells	Spring Valley, N. Y	Jan. 16, 1872	122, 792
Washing-machine	M. D. Wells	Morgantown, Va	Sept. 26, 1854	11, 736
Washing-machine	M. D. Wells	Morgantown, Va	Oct. 28, 1856	15, 989
Washing-machine	M. D. Wells	Morgantown, Va	Nov. 22, 1859	26, 215
Washing-machine	D. Werst	South Bend, Ind	July 25, 1871	117, 353
Washing-machine	B. B. Wescott	Camden, Ind	Apr. 10, 1860	27, 849
Washing-machine	J. West	Middletown, Conn	Dec. 14, 1824	......
Washing-machine	J. W. Wetmore	Erie, Pa	Sept. 17, 1867	68, 921
Washing-machine	L. Wharton	Richland, Iowa	Feb. 1, 1870	99, 383
Washing-machine	E. Wheeler	Galway, N. Y	June 11, 1829	......

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Invention.	Inventor.	Residence.	Date.	No.
Washing-machine	E. F. Wheeler	Sag Harbor, N. Y	June 11, 1867	65, 713
Washing-machine	J. T. Wheeler	Saint Charles, Ill	Apr. 28, 1868	77, 340
Washing-machine	L. B. Wheeler	Madison, Wis	Dec. 1, 1868	84, 507
Washing-machine	L. D. Wheeler	Fitchburgh, Mass	Sept. 24, 1872	131, 582
Washing-machine	W. Wheeler	Acton, Mass	Nov. 28, 1854	12, 012
Washing-machine	J. F. Whipple	Easton, N. Y	June 10, 1813	....
Washing-machine	C. B. White	Candor, N. Y	July 9, 1867	66, 660
Washing-machine	H. W. White	Olney, Ill	June 25, 1867	66, 195
Washing-machine	L. White	Oxford, Iowa	Feb. 21, 1871	111, 999
Washing-machine	V. White	Corry, Pa	May 13, 1873	138, 970
Washing-machine	J. K. Whiteside	Rising Sun, Md	Sept. 30, 1862	36, 582
Washing-machine	E. Whitman	Winthrop, Me	Mar. 27, 1835	....
Washing-machine	I. Whitney	Dayton, Ohio	Jan. 22, 1867	61, 496
Washing-machine	L. H. Whitney	Washington, D. C	Mar. 31, 1868	76, 281
Washing-machine	L. H. Whitney	Washington, D. C	Nov. 29, 1870	109, 697
Washing-machine	A. C. Whittier	Lawrence, Mass	May 1, 1866	54, 458
Washing-machine	F. L. Wickham	Pavilion, Ill	June 15, 1869	91, 396
Washing-machine	F. M. Widerman	Calverton, Md	Sept. 23, 1873	143, 209
Washing-machine	O. B. Wight	Sturbridge, Mass	July 9, 1844	3, 654
Washing-machine	P. Wilbor	Milan, Ohio	May 17, 1870	103, 112
Washing-machine	E. Wilbur	Sullivan, N. Y	Jan. 11, 1833	....
Washing-machine	J. Wilbur	Chesterton, Ind	Feb. 18, 1873	135, 955
Washing-machine	A. J. Wilcox	Fall River, Mass	Jan. 11, 1870	98, 830
Washing-machine	N. O. Wilcox	Omaha, Nebr	Apr. 22, 1873	138, 110
Washing-machine	A. A. and J. Wilder	Detroit, Mich	Aug. 3, 1869	93, 382
Washing-machine	C. Wilgus	West Troy, N. Y	Apr. 12, 1853	9, 667
Washing-machine	A. G. Wilkins	Cooperstown, Pa	May 6, 1862	31, 166
Washing-machine	A. G. Wilkins	Cooperstown, Pa	Aug. 11, 1868	81, 050
Washing-machine	R. G. Wilkins	Burns, N. Y	Nov. 22, 1859	26, 217
Washing-machine	A. Wilkinson	Madison, Ind	Sept. 20, 1859	25, 542
Washing-machine	T. J. Wilkinson	Highland, Kans	July 23, 1872	129, 773
Washing-machine	R. B. Will	Mew Market, Va	July 23, 1867	67, 149
Washing-machine	S. Willard, jr	Hudson City, N. Y	Apr. 25, 1807	....
Washing-machine	S. Willard, jr	Cincinnati, Ohio	Aug. 2, 1828	....
Washing-machine	E. Willcox	Hamburgh, Iowa	May 21, 1872	127, 130
Washing-machine	B. A. Williams	Berea, Ohio	Mar. 25, 1873	137, 161
Washing-machine	C. Williams	Newark, N. J	Mar. 29, 1870	101, 335
Washing-machine	C. R. Williams	Haddonfield, N. J	Apr. 17, 1860	27, 942
Washing-machine	C. S. Williams	New Rochelle, N. Y	June 4, 1872	127, 444
Washing-machine	D. Williams	Rock County, Wis	Apr. 30, 1867	64, 268
Washing-machine	J. Williams	Ashfield, Mass	Nov. 22, 1859	26, 218
Washing-machine	S. Williams and H. McNeill	Philadelphia, Pa	Oct. 24, 1871	120, 175
Washing-machine	S. Williams and A. McNeill	Philadelphia, Pa	Nov. 7, 1871	120, 691
Washing-machine	A. T. Williamson	La Crosse, Wis	Sept. 10, 1867	68, 676
Washing-machine	A. M. Wilson	White Pigeon, Mich	Aug. 26, 1873	142, 313
Washing-machine	D. G. Wilson	Machias, Me	Apr. 6, 1832	....
Washing-machine	E. D. Wilson	Philippi, Va	Dec. 15, 1846	4, 891
Washing-machine	G. W. Wilson	Dunstable, N. H	Aug. 7, 1833	....
Washing-machine	G. W. Wilson and A. Johnson	Walnut Grove, Ill	Jan. 25, 1859	22, 761
Washing-machine	J. B. Wilson	Philadelphia, Pa	Oct. 19, 1869	96, 068
Washing-machine	J. B. Wilson	Philadelphia, Pa	Aug. 9, 1870	106, 301
Washing-machine	J. B. Wilson	Philadelphia, Pa	Dec. 19, 1871	122, 093
Washing-machine	J. N. Wilson	Mount Bethel, Pa	May 14, 1861	32, 325
Washing-machine	R. Wilson	Burdett, N. Y	Aug. 3, 1869	93, 263
Washing-machine	R. P. Wilson	Cleveland, Ohio	Feb. 11, 1862	34, 386
Washing-machine	W. W. Wilson	Geneva, Wis	Apr. 13, 1869	88, 935
Washing-machine	H. R. Winchell	Plainville, Wis	Nov. 3, 1863	40, 531
Washing-machine	J. B. Winchell	Chicago, Ill	Dec. 13, 1864	45, 448
Washing-machine	J. B. Winchell	Chicago, Ill	Aug. 29, 1865	49, 672
Washing-machine	C. P. Winslow	Westborough, Mass	May 24, 1870	103, 405
Washing-machine	J. C. Wismer	Doylestown, Pa	Sept. 12, 1871	118, 998
Washing-machine	J. Wisner	Aurora, N. Y	Nov. 8, 1853	10, 219
Washing-machine	J. Wisner	Aurora, N. Y	Sept. 26, 1854	11, 737
Washing-machine	J. Wisner	Aurora, N. Y	Oct. 20, 1857	18, 483
Washing-machine	S. Wiswall	Hyde Park, Vt	June 7, 1859	24, 347
Washing-machine	G. L. Witsil	Wilmington, Del	Jan. 25, 1859	22, 764
Washing-machine	G. L. Witsil	Philadelphia, Pa	Feb. 4, 1862	34, 340
Washing-machine	G. L. Witsil	Philadelphia, Pa	June 9, 1863	38, 867
Washing-machine	G. L. Witsil	Philadelphia, Pa	Dec. 22, 1863	41, 044
Washing-machine	G. L. Witsil	Philadelphia, Pa	Nov. 6, 1866	59, 532
Washing-machine	G. L. Witsil	Philadelphia, Pa	Nov. 5, 1867	70, 667
Washing-machine	G. L. Witsil	Philadelphia, Pa	Nov. 16, 1869	97, 018
Washing-machine	G. L. Witsil	Philadelphia, Pa	July 19, 1870	105, 616
Washing-machine	G. L. Witsil	Philadelphia, Pa	Dec. 13, 1870	110, 181
Washing-machine	G. L. Witsil	Beverly, N. J	June 27, 1871	116, 525
Washing-machine	G. L. Witsil	Philadelphia, Pa	Aug. 8, 1871	117, 846
Washing-machine	G. L. Witsil	Beverly, N. J	Mar. 26, 1872	125, 108
Washing-machine	G. L. Witsil	Beverly, N. J	Dec. 10, 1872	133, 736
Washing-machine	G. L. Witsil	Beverly, N. J	July 8, 1873	140, 753
Washing-machine	P. N. Woliston	Springfield, Ohio	Sept. 8, 1857	18, 168
Washing-machine	A. Wood	Camden, N. Y	Aug. 25, 1857	18, 067
Washing-machine	J. A. Wood	Chemung, Ill	May 2, 1871	114, 380
Washing-machine	J. A. Wood	Chemung, Ill	July 16, 1872	129, 262
Washing-machine	W. W. Woodburn	Greensburgh, N. C	July 18, 1832	....
Washing-machine	J. W. Woodruff	Watson, Ill	Sept. 17, 1867	69, 059
Washing-machine	L. Woodward	Medford, N. J	Apr. 4, 1844	3, 520
Washing-machine	S. W. Woodward	Buffalo, N. Y	May 29, 1860	28, 529
Washing-machine	J. B. Woolsey	Bloomfield, Iowa	May 25, 1869	90, 416
Washing-machine	J. B. Woolsey	Bloomfield, Iowa	Sept. 13, 1870	107, 431
Washing-machine	A. E. Worden	Smyrna, Del	Mar. 12, 1872	124, 549
Washing-machine	J. Worden	Normal, Ill	Aug. 27, 1867	68, 275
Washing-machine	N. T. Worthley	Brunswick, Me	May 21, 1872	127, 133
Washing-machine	B. Wright	Hudson, Mich	Mar. 28, 1865	47, 062
Washing-machine	C. D. Wright	East Haddon, Conn	Nov. 19, 1829	....
Washing-machine	G. Wright	Savannah, Mo	Oct. 4, 1870	107, 991
Washing-machine	G. Wright	Savannah, Mo	Aug. 20, 1872	130, 780
Washing-machine	I. S. Wright	Weedsport, N. Y	July 18, 1832	....
Washing-machine	L. C. Wright	Lockport, N. Y	Jan. 29, 1867	61, 647

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Invention.	Inventor.	Residence.	Date.	No.
Washing-machine	J. Yarwood	New Brunswick, N. J	Mar. 11, 1809	....
Washing-machine	R. M. Yorks	Schoolcraft, Mich	July 10, 1866	56,318
Washing-machine	H. Yost	Saint Louis, Mo	Apr. 27, 1858	20,123
Washing-machine	S. M. Yost	Connersville, Ind	July 31, 1855	13,372
Washing-machine	A. Z. Young	Liberty, Miss	Jan. 10, 1871	110,88[illegible]
Washing-machine	E. Young	Penataquit, N. Y	May 6, 1862	35,19[illegible]
Washing-machine	J. Young	West Galway, N. Y	Sept. 19, 1848	5,786
Washing-machine	J. Young	West Galway, N. Y	July 9, 1861	32,806
Washing-machine	J. Young	Amsterdam, N. Y	Apr. 13, 1869	89,060
Washing-machine	N. Young	Sunapee, N. H	June 4, 1872	127,668
Washing-machine	P. Young and N. Doll	Robertsville, Ohio	Sept. 19, 1871	119,069
Washing-machine	P. Young and N. Doll	Robertsville, Ohio	Sept. 19, 1871	119,070
Washing-machine	W. S. Young	Park's Corners, Ill	May 20, 1873	139,100
Washing-machine	W. Younger	Huntington, Tenn	Nov. 6, 1847	5,353
Washing-machine	H. D. Youry	Junius, N. Y	Apr. 28, 1857	17,180
Washing-machine	G. F. S. Zimmerman	Frederick, Md	Dec. 8, 1863	40,878
Washing-machine agitator	V. Vanderburgh	Bacon Hill, N. Y	Aug. 15, 1871	118,074
Washing-machine and boiler	J. Russell and T. T. McGrath	Fentonville, Mich	Apr. 19, 1870	102,046
Washing-machine and boiler, Combined	H. T. Lee	Jersey City, N. J	Jan. 5, 1869	85,679
Washing-machine and churn	O. H. Brooks	East Bethel, Vt	Mar. 11, 1833	....
Washing-machine and churn	Mitchel and Fairbanks	Readfield, Me	May 9, 1835	....
Washing-machine and churn	W. Orcutt	Cambridge, Ill	Nov. 6, 1866	59,444
Washing-machine and churn	N. Swett	Readfield, Me	Dec. 24, 1834	....
Washing-machine and churn power	W. M., E. P., and E. Doty	Janesville, Wis	Jan. 30, 1866	52,273
Washing-machine and press	A. Hosford and E. Kelsey	Berlin, Conn	June 27, 1809	....
Washing-machine and table	D. Arndt	Toledo, Ohio	Oct. 5, 1869	95,552
Washing-machine and wringer	J. T. Hagerty	Camp Point, Ill	Aug. 22, 1865	49,519
Washing-machine and wringer	W. H. Nichols	Chatham, Conn	Feb. 6, 1866	52,441
Washing-machine and wringer	N. B. Webber	Paoli, Ind	Aug. 29, 1869	49,684
Washing-machine, Boiler	J. Curtis	North Parma, N. Y	May 23, 1871	115,174
Washing-machine cylinder	W. J. Dodge	Syracuse, N. Y	Apr. 16, 1872	125,667
Washing-machine, Cylinder	W. Hovey	Worcester, Mass	Feb. 4, 1837	117
Washing-machine, Cylindrical	E. Nichols	Union Township, Ohio	Nov. 24, 1832	....
Washing-machine, Facilitating	J. Palmer	Brookfield, N. Y	Aug. 21, 1812	....
Washing-machine for cleaning cloth and clothes	J. Freeman	Senate, N. Y	Oct. 14, 1830	....
Washing-machine for cleaning rags	J. Phelps	West Sutton, Mass	Nov. 24, 1843	3,354
Washing-machine for clothes and scouring yarn	A. T. Tenny	New Woodstock, N. Y	Nov. 23, 1830	....
Washing-machine for clothes, wool, and scouring leather, Rolling	C. Moore	Guilford County, N. C	Oct. 30, 1832	....
Washing-machine for garments, Double cylinder	J. S. and E. Pulsifer	Ipswich, Mass	May 21, 1832	....
Washing-machine for waste, &c	W. F. Witte	White Marsh, Pa	Sept. 13, 1870	107,430
Washing-machine, Lever	R. Wheeler	Vergennes, Vt	Feb. 26, 1825	....
Washing-machine, Lever-power	W. C. Kniffin	Alexander, N. Y	Dec. 17, 1834	....
Washing-machine, Perpendicular	E. Jones	Alfred, Mass	June 20, 1808	....
Washing-machine, Power	J. Johnson	New York, N. Y	Feb. 8, 1870	99,685
Washing-machine, Revolving	P. Horney	Randolph County, N. C	Apr. 21, 1834	....
Washing-machine, Rocking	J. G. Phillip	Kinderhook, N. Y	Apr. 12, 1826	....
Washing-machine roller	J. Danner	Canton, Ohio	Nov. 7, 1865	50,802
Washing-machine roller	L. Guild	Dedham, Mass	Sept. 16, 1862	36,494
Washing-machine, Sand	D. L. Furnier	Rostraver, Pa	Oct. 8, 1867	69,650
Washing-machine, Steam	D. C. Kellam	Pontiac, Mich	Apr. 23, 1872	126,125
Washing-machine surface	G. M. Denison	New London, Conn	Nov. 27, 1866	59,979
Washing-machine, Swinging	J. Appleton	Richmond, Va	June 13, 1831	....
Washing machine, Table-furniture	J. Houghton	Ogden, N. Y	May 14, 1850	7,365
Washing-machine tub	R. H. Boyd	Londonderry, Ohio	Sept. 10, 1872	131,244
Washing-machine, Tub	J. Danner	Canton, Ohio	Sept. 13, 1864	44,165
Washing-machine, Universal-band	A. Glendening	Frankfort, Ind	Nov. 19, 1833	....
Washing-machine, Vibrating	S. Silliman	Saybrook, Conn	Feb. 3, 1830	....
Washing-machine, Wash-drum	E. Mayo	Hallowell, Me	May 26, 1832	....
Washing-machine with or without steam	N. Hocket	Snow Hill, Ohio	Aug. 6, 1831	....
Washing-machine, wringing clothes, and heating water.	J. Luckey	Troy, N. Y	Nov. 19, 1831	....
Washing-machines, Adjustable pitman for	A. McGinnes and B. J. Carter	Lancaster, Pa	Apr. 30, 1872	126,317
Washing-machines, Connecting-joint for	S. L. Egbert and S. W. Green	Willoughby, Ohio	Sept. 14, 1852	9,258
Washing-machines, Covering for rollers of	R. B. Hugunin	Cleveland, Ohio	Oct. 31, 1865	50,712
Washing-machines, Driving-attachment to	W. M. Johnston	Wilmot, Ohio	June 13, 1871	115,867
Washing-machines, Heater for	W. H. Pratt	Davenport, Iowa	Oct. 23, 1866	59,068
Washing-machines, Plug for	E. Doty	Janesville, Wis	May 15, 1866	54,701
Washing-machines, Spring connecting-rod for	J. W. Corey	Crawfordsville, Ind	Apr. 24, 1855	12,757
Washing-mitts, Elastic	M. Cadwell	Lansing, Mich	Sept. 12, 1871	118,790
Washing or grinding machine	J. Justin	Pittsburgh, Pa	Apr. 19, 1822	....
Washing-pan, Gold-miner's	T. Kendall, sr	San Francisco, Cal	Feb. 24, 1863	37,758
Washing-pounder	A. F. Dinwiddie	Columbia, Mo	Nov. 7, 1871	120,725
Washing-pounder	H. Benter	Pittsburgh, Pa	May 28, 1867	65,049
Washing-pounder	R. Gunther	Oshkosh, Wis	Dec. 24, 1872	134,139
Washing printed or bleached goods, Apparatus for	B. G. Brooks	Manchester, N. H	Feb. 4, 1873	135,518
Washing-roller	J. E. Atwood	Trenton, N. J	June 28, 1864	43,279
Washing-roller	J. E. Atwood	Lynn, Mass	Aug. 15, 1865	49,359
Washing-roller	H. L. Meservey	Boston, Mass	Aug. 8, 1865	49,288
Washing rubber, Hand	A. S. Mann	Pittsburgh, Pa	Oct. 28, 1873	144,118
Washing rubber, Hand	E. R. Norny	McDonough, Del	Feb. 14, 1871	111,769
Washing sand, Mode of	J. Tood and A. G. Downer	Fayette, Pa	Nov. 6, 1866	59,481
Washing, scouring, and churning machine	T. Beatty	....	Apr. 25, 1807	....
Washing-shield	C. E. F. Lewis	Washington, D. C	Feb. 5, 1867	61,841
Washing, wringing, and mangling machine	E. Chipman	New York, N. Y	Oct. 6, 1863	40,159
Washing, wringing, and mangling machine, Combined.	T. Farnsworth	Cleveland, Ohio	Jan. 20, 1863	37,439
Waste, fibrous material, &c., Machine for working	J. K. Proctor	Philadelphia, Pa	June 3, 1873	139,609
Waste-gate	J. R. Clarke	Cohoes, N. Y	May 5, 1868	77,586
Waste-gate	H. Yaw and T. P. How	Boston and Buffalo, N. Y	June 25, 1850	7,468
Waste-gate and sluice, Self-acting	A. Torrey	Boston, Mass	Oct. 2, 1849	6,751
Waste-gate for canals and mill-dams, Method of opening and closing.	R. Robinson	Greece, N. Y	Dec. 14, 1841	2,392
Waste-gate for mill-dam, Self-acting	S. Hudson	Milford, Mich	Sept. 4, 1860	29,887
Waste-gate, Self-acting	E. Eastlack and J. A. Miller	Greenwich, N. J	Apr. 21, 1842	2,578
Waste, Machinery for picking	J. Bailey	Cohoes, N. Y	July 3, 1849	6,579

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Waste-picker	R. Kitson	Lowell, Mass	July 11, 1871	116, 841
Waste-picker	C. G. Sargent and R. Thompson	Lowell, Mass	Sept. 16, 1851	8, 371
Waste-picker guard	C. I. Dean	Franklin, Mass	Jan. 4, 1870	98, 570
Waste-pipe for sinks	J. L. Oliver	Boston, Mass	Aug. 29, 1871	118, 548
Waste-pipe trap	T. Smith	New York, N. Y	June 18, 1872	128, 077
Waste-pipe trap	T. Smith	New York, N. Y	Oct. 22, 1872	132, 420
Waste-pipes, Foul-air escape for	J. Daniels	Washington, D. C	Mar. 19, 1872	124, 666
Waste-trap	W. A. Shaw and C. C. Tracy	New York, N. Y	June 10, 1873	139, 739
Waste-trap for wash-basins	H. H. Craigie	New York, N. Y	May 11, 1869	89, 858
Waste-water pipe	J. Conver and C. B. Koons	Philadelphia, Pa	June 11, 1872	127, 850
Waste-water pipes, Construction of	A. C. Smith	Philadelphia, Pa	Nov. 24, 1868	84, 442
Waste-way stopper	J. R. Gibson and J. Powell	Cincinnati, Ohio	July 25, 1871	117, 402
Watch	P. R. Bennett, jr	Urbana, Ohio	Sept. 15, 1868	82, 197
Watch	B. D. Bingham	Boston, Mass	Feb. 4, 1868	74, 041
Watch	F. B. Bouscatié	Paris, France	July 30, 1867	67, 259
Watch	G. A. Bowen	Trenton, N. J	Jan. 7, 1868	73, 161
Watch	M. Burt	Cleveland, Ohio	Sept. 13, 1864	44, 161
Watch	E. Châtelain	St. Imier, Switzerland	June 9, 1868	78, 720
Watch	S. Coon	Havre de Grace, Md	Oct. 11, 1864	44, 607
Watch	J. D. Custer	Norristown, Pa	Feb. 4, 1843	2, 939
Watch	A. L. Dennison	Waltham, Mass	Jan. 1, 1861	31, 009
Watch	E. G. Elliott	Elk Horn, Wis	Sept. 11, 1860	29, 959
Watch	S. D. Engle	Hazleton, Pa	Apr. 24, 1866	54, 135
Watch	C. W. Fogg	Waltham, Mass	Feb. 2, 1864	41, 461
Watch	C. W. Fogg	Waltham, Mass	Feb. 14, 1865	46, 343
Watch	A. Frankfeld	New York, N. Y	Nov. 4, 1873	144, 270
Watch	M. N. Frederick	Elgin, Ill	July 14, 1868	79, 968
Watch	H. Ganney	Louisville, Ky	June 4, 1867	65, 371
Watch	J. Gordon	New London, Conn	Feb. 28, 1860	27, 281
Watch	J. A. Hamann	New York, N. Y	Oct. 1, 1867	69, 427
Watch	A. J. Harrison	Rock County, Wis	July 28, 1868	80, 480
Watch	S. Hittel	Detroit, Mich	July 25, 1865	48, 942
Watch	J. Ives	Bristol, Conn	Oct. 25, 1859	25, 934
Watch	C. E. Jacot	New York, N. Y	Sept. 6, 1859	25, 364
Watch	H. B. James	Trenton, N. J	Dec. 27, 1859	26, 593
Watch	H. B. James	Trenton, N. J	May 5, 1863	38, 393
Watch	E. Jewell	Louisville, Ky	Aug. 20, 1867	67, 985
Watch	T. Johnson	Elmira, N. Y	Oct. 2, 1866	58, 427
Watch	F. A. Langs	Glashutte, Saxony	May 15, 1866	54, 831
Watch	C. Lehmann	Brienne, Switzerland	July 24, 1866	56, 683
Watch	G. C. Marten	Cleveland, Ohio	Apr. 4, 1865	47, 116
Watch	C. S. Moseley	Elgin, Ill	Apr. 21, 1868	77, 078
Watch	C. S. Moseley	Elgin, Ill	Sept. 21, 1869	95, 128
Watch	C. S. Moseley	Elgin, Ill	Apr. 27, 1869	89, 328
Watch	D. J. Mozart	New York, N. Y	Dec. 24, 1867	72, 528
Watch	R. L. Peabody	New York, N. Y	Apr. 15, 1862	34, 978
Watch	E. F. Perret	Locle, Switzerland	Oct. 20, 1863	40, 358
Watch	L. V. Piquet	New York, N. Y	May 26, 1868	78, 323
Watch	J. A. J. Redier	Paris, France	June 30, 1863	39, 066
Watch	C. W. Reed	Brooklyn, N. Y	Nov. 3, 1868	83, 729
Watch	G. P. Reed	Waltham, Mass	Apr. 14, 1857	17, 055
Watch	G. P. Reed	Roxbury, Mass	Oct. 2, 1860	30, 247
Watch	G. P. Reed	Boston, Mass	Aug. 18, 1868	81, 107
Watch	C. Reinhardt	New Haven, Conn	Jan. 23, 1872	122, 964
Watch	H. Rothfelder	New York, N. Y	July 16, 1867	66, 890
Watch	C. Springer	Newcastle, Pa	May 12, 1868	77, 848
Watch	H. Stauffer	Pontz Martel, Switzerland	June 14, 1870	104, 371
Watch	O. F. Stedman	Ravenna, Ohio	July 30, 1867	67, 223
Watch	O. F. Stedman	Ravenna, Ohio	Jan. 28, 1868	73, 937
Watch	N. P. Stratton	Waltham, Mass	Jan. 3, 1860	26, 715
Watch	A. Wadsworth	Newark, N. J	Jan. 23, 1866	52, 227
Watch	A. Wadsworth	Newark, N. J	June 19, 1866	55, 750
Watch	A. Wadsworth	Newark, N. J	Feb. 11, 1868	74, 457
Watch	E. R. Wait and J. W. Phelps	Ravenna, Ohio	Feb. 17, 1863	37, 714
Watch	N. B. Wallace	Fond du Lac, Wis	Sept. 10, 1867	68, 814
Watch	A. Watkins	London, England	June 30, 1863	39, 085
Watch	C. V. Woerd	Waltham, Mass	May 21, 1867	65, 034
Watch	C. V. Woerd	Waltham, Mass	Oct. 5, 1869	95, 547
Watch	C. V. Woerd	Waltham, Mass	Mar. 29, 1870	101, 398
Watch	O. H. Woodworth	Coffeeville, Miss	July 17, 1860	29, 210
Watch and chronometer	T. Nelson	Troy, N. Y	May 24, 1853	9, 749
Watch and clock winding device	E. H. Hull	Warren, Ohio	Apr. 27, 1869	89, 482
Watch and locket case	C. W. Clewley	Providence, R. I	Mar. 4, 1862	34, 564
Watch and locket case	J. G. Konvalinka	Astoria, N. Y	July 24, 1866	56, 575
Watch and locket cases, Constructing rim and field-piece for.	J. N. Allen	Providence, R. I	June 28, 1859	24, 528
Watch and locket cases, &c., Machine for engraving designs on.	C. H. Field	Providence, R. I	Apr. 28, 1857	17, 146
Watch and locket rims, Constructing	H. A. Phillips	Providence, R. I	June 9, 1857	17, 515
Watch and locket rims, Making	D. B. Waite	Providence, R. I	Apr. 23, 1861	32, 159
Watch and locket rims, Making	D. B. Waite	Providence, R. I	July 23, 1861	32, 905
Watch-backs, Manufacture of	C. H. Field	Providence, R. I	Apr. 24, 1866	54, 137
Watch balance-wheel	G. Ramsay	Clyde, Ohio	May 28, 1867	65, 116
Watch-balances, Attaching hair-springs to	J. Shaw	Shelby, Ohio	Jan. 28, 1873	135, 248
Watch-barrel	F. A. Giles	Jersey City, N. J	Dec. 30, 1873	145, 939
Watch-barrels, Attachment of main-springs to	A. Wadsworth	Newark, N. J	June 15, 1869	91, 388
Watch, Calendar	A. C. Ionais	Chaux-de-Fond, Switzerland.	June 27, 1871	116, 316
Watch, Calendar	D. J. Mozart	Ann Arbor, Mich	July 22, 1873	141, 161
Watch, Calendar	E. Oppenheimer	New York, N. Y	Feb. 13, 1866	52, 591
Watch cannon-pinion	E. H. Hull	Warren, Ohio	Apr. 5, 1870	101, 464
Watch-case	P. Bettle	London, England	Aug. 9, 1859	24, 986
Watch-case	E. Bliss	Newark, N. J	Apr. 13, 1858	19, 966
Watch-case	J. C. Dueber	Cincinnati, Ohio	June 10, 1873	139, 779
Watch-case	J. M. Durand	Newark, N. J	June 15, 1858	20, 554
Watch-case	F. S. Giles	New York, N. Y	July 12, 1864	43, 490
Watch-case	A. Lachat	New York, N. Y	Dec. 7, 1858	22, 254

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Watch-case	A. Lange	Glashütte, near Dresden, Saxony.	Jan. 20, 1863	37,449
Watch-case	L. Mabille	New York, N. Y	Feb. 22, 1859	23,035
Watch-case	O. F. Stedman	Ravenna, Ohio	Jan. 15, 1867	61,276
Watch-case	O. F. Stedman	Ravenna, Ohio	July 30, 1867	67,224
Watch-case	C. L. Thiery	Boston, Mass	Jan. 18, 1870	98,896
Watch-case	C. L. Thiery	Boston, Mass	Nov. 1, 1870	108,847
Watch-case	B. J. Warner	Brooklyn, N. Y	Jan. 8, 1867	61,127
Watch-case	J. F. Watson	Clerkenwell, England	Apr. 13, 1858	19,972
Watch-case	G. J. Willson	Reading, Pa	Mar. 10, 1868	75,505
Watch-case	A. A. Wood	Charlotte, Mich	Dec. 6, 1870	109,989
Watch-case calendar	J. D. Moore	Grinnell, Iowa	Oct. 22, 1867	70,104
Watch-case caps and backs, Die for making	S. C. Lewis	Brooklyn, N. Y	July 1, 1873	140,424
Watch-case centers, Device for making	B. Hilbert	New York, N. Y	July 16, 1867	66,838
Watch-case centers, Manufacture of	J. C. Dueber	Cincinnati, Ohio	Aug. 19, 1873	141,861
Watch-case cutter	J., J., and J. Fortenbach	Carlstadt, N. J	Mar. 24, 1868	75,892
Watch-case latch	J. C. Dueber	Cincinnati, Ohio	Sept. 9, 1873	142,684
Watch-case, Magic	E. A. Muckle	Philadelphia, Pa	Nov. 26, 1867	71,505
Watch-case spring	E. H. Buckland	Springfield, Mass	May 5, 1868	77,579
Watch-case spring	E. H. Buckland	Springfield, Mass	May 5, 1868	77,580
Watch-case spring	A. M. Church	Apple River, Ill	Aug. 20, 1872	130,699
Watch-case spring	B. P. Corban	Bristol, Conn	July 16, 1872	129,108
Watch-case spring	W. Fenimore	Philadelphia, Pa	May 30, 1871	115,453
Watch-case spring	U. A. Juvet	Glen's Falls, N. Y	Oct. 28, 1873	143,983
Watch-case spring	J. Laurent	New York, N. Y	July 9, 1872	128,893
Watch-case spring	J. Laurent and J. Menegay	New York and Brooklyn, N. Y.	Jan. 28, 1873	135,348
Watch-case spring	P. Maret	Belleville, Ill	Apr. 30, 1872	126,149
Watch-case spring	C. Tribby	Washington, D. C	Feb. 20, 1872	123,798
Watch-case spring	J. L. Wilson	Woodstock, Canada	July 2, 1872	128,573
Watch-case spring-attachment	G. H. Eason	Des Moines, Iowa	Sept. 24, 1872	131,670
Watch-case spring-joint	J. Gordon	San Francisco, Cal	July 22, 1873	141,045
Watch-case-swaging-up die	C. L. Thiery	Boston, Mass	Aug. 20, 1872	130,603
Watch-cases and lockets of hard rubber, Molding	W. H. Halsey	Hoboken, N. J	Aug. 18, 1868	81,082
Watch-cases for springing, Machine for drilling and preparing	J. Laurent	New York, N. Y	Dec. 7, 1869	97,527
Watch-cases, Machine for making	C. L. Thiery	Boston, Mass	Dec. 5, 1871	121,474
Watch-cases, Machine for manufacturing	T. B. Dill	Boston, Mass	Aug. 23, 1870	106,561
Watch-cases, Machine for turning	J. Laurent	New York, N. Y	Aug. 17, 1869	93,892
Watch-cases, Making	E. Field	Providence, R. I	July 20, 1858	20,942
Watch-cases, Manufacture of	J. Bass	Philadelphia, Pa	May 3, 1859	23,820
Watch-cases, Manufacture of	C. L. Thiery	Boston, Mass	Nov. 9, 1869	96,632
Watch-cases Method of making side-band of	G. W. Ladd	Providence, R. I	June 11, 1867	65,579
Watch-chain	C. B. Carpenter	North Attleborough, Mass	June 19, 1860	28,735
Watch-chain	G. W. Champit	Attleborough, Mass	Nov. 7, 1871	120,623
Watch-chain, &c	H. Epstein	New York, N. Y	Mar. 15, 1859	23,239
Watch-chain	P. Frontier and A. Bellemere	San Francisco, Cal	Dec. 16, 1873	145,642
Watch-chain catch	L. C. Thiery	Newark, N. J	Feb. 25, 1873	136,190
Watch-chain fastener	W. C. Edge	Newark, N. J	Jan. 23, 1872	122,940
Watch-chain fastening	H. Jahne	New York, N. Y	Dec. 18, 1866	60,522
Watch-chain fastening	D. F. Myers	New York, N. Y	July 11, 1871	116,858
Watch-chain guard or key	C. E. Green	Copenhagen, Denmark	Oct. 21, 1862	36,754
Watch-chain hook	C. Faas	North Attleborough, Mass	Aug. 25, 1868	81,354
Watch-chain hook	E. N. Foote	New York, N. Y	June 26, 1860	38,842
Watch-chain hook	J. R. Lounsberry	New England Village, Mass	July 10, 1860	29,088
Watch-chain hook	M. Pollak	New York, N. Y	Sept. 25, 1866	58,287
Watch-chain hook	A. Wallach	New York, N. Y	July 16, 1867	66,755
Watch-chain-link joint	C. B. Carpenter	North Attleborough, Mass	Nov. 14, 1871	120,854
Watch-chain lock	S. Pinover	New York, N. Y	June 21, 1870	104,640
Watch chain or guard safety-attachment	C. W. Mehrer	New York, N. Y	Sept. 12, 1871	118,960
Watch-chain safety-attachment	L. Mendel	Albany, N. Y	Sept. 10, 1867	68,640
Watch-chain safety-hook	G. Leigh	Providence, R. I	Mar. 19, 1872	124,832
Watch-chain safety-hook	A. Wallach	New York, N. Y	Dec. 3, 1867	71,824
Watch-chain swivel	S. Y. D. Arrowsmith	New York, N. Y	Feb. 10, 1852	8,715
Watch-chain swivel	E. Bliss	Newark, N. J	Mar. 20, 1855	12,538
Watch-chain swivel	W. B. Carpenter	New York, N. Y	May 25, 1852	8,965
Watch-chain swivel	N. F. Mathewson	Providence, R. I	June 20, 1854	11,133
Watch-chains and bracelets, Manufacture of	W. C. Edge	Newark, N. J	Oct. 7, 1873	143,503
Watch-chains, Apparatus for swaging the swivel-eyes of.	V. Draper	North Attleborough, Mass	Aug. 4, 1868	80,535
Watch-chains, &c., Double-clasp hook for	M. Pollak	Hoboken, N. J	Aug. 9, 1859	25,082
Watch-chains, Joining for	C. Croselmire	Newark, N. J	July 11, 1871	116,816
Watch-chains, Machine for making	J. Hatch	Baltimore, Md	June 5, 1820	......
Watch-chains, Machine for making	S. Keplinger	Baltimore, Md	May 4, 1820	......
Watch-chains, Safety-toggle for	P. C. Smith	Providence, R. I	Mar. 30, 1869	88,338
Watch, clock, and lock key	E. C. Kyer	Burlington, Vt	May 19, 1868	78,020
Watch-crystals, Machine for pressing	J. Metzger	East Cambridge, Mass	Oct. 18, 1864	44,734
Watch dial, Calendar	G. Maranville	Rutland, Vt	Mar. 19, 1872	124,691
Watch-die	G. Hastings	Waltham, Mass	May 8, 1866	54,539
Watch double-stop movement	A. Frankfeld	New York, N. Y	Oct. 14, 1873	143,619
Watch dust-cup	W. Fenimore	Philadelphia, Pa	Feb. 11, 1868	74,329
Watch dust-protector	P. M. Statzell	Philadelphia, Pa	May 21, 1872	126,908
Watch dust-ring	E. Howard	Boston, Mass	Mar. 3, 1868	75,018
Watch dust-ring	G. Hunt	Springfield, Mass	Oct. 10, 1871	119,768
Watch-escapement	L. Billon	Brooklyn, N. Y	Sept. 12, 1865	51,414
Watch-escapement	A. Coombs	Burlingame, Kans	Nov. 28, 1871	121,337
Watch-escapement	S. D. French	Wabash, Ind	Aug. 21, 1866	57,310
Watch-escapement	P. G. Giroud	New York, N. Y	Nov. 26, 1872	133,434
Watch-escapement	C. O. Guernsey	Cornwall, Vt	May 27, 1862	35,373
Watch-escapement	W. Hart	Kirksville, Mo	Aug. 30, 1870	106,815
Watch-escapement	J. and J. W. Hietel and J. L. Geissler.	Philadelphia, Pa	Nov. 17, 1868	84,060
Watch-escapement	W. H. Lamb	San Francisco, Cal	Nov. 12, 1867	70,724
Watch-escapement	D. J. Mozart	New York, N. Y	Nov. 28, 1871	121,401
Watch-escapement	D. J. Mozart	Ann Arbor, Mich	July 15, 1873	140,941
Watch-escapement	J. H. Mulford	Albany, N. Y	Feb. 21, 1842	2,465
Watch-escapement	J. Muma	Hanover, Pa	July 13, 1858	20,888
Watch-escapement	G. P. Reed	Roxbury, Mass	Apr. 9, 1861	31,990

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Watch-escapement	G. P. Reed	Roxbury, Mass	May 27, 1862	35, 389
Watch-escapement	G. P. Reed	Roxbury, Mass	Aug. 1, 1865	49, 155
Watch-face	S. Baldwin	Newark, N. J	Dec. 21, 1858	22, 397
Watch for canes, umbrella handles, &c	S. B. Simon	Washington, D. C	Mar. 31, 1868	76, 108
Watch-frame cover	A. Combs	Burlingame, Kans	Jan. 9, 1872	122, 571
Watch-frames, Dust-ring for	S. D. Engle	Hazleton, Pa	Jan. 11, 1870	98, 677
Watch-frames, Dust-ring for	J. H. Flynt	South Bend, Ind	May 3, 1870	102, 527
Watch-gear-cutting machine	A. Duri[illegible] i	New York, N. Y	Nov. 4, 1873	144, 266
Watch-guard or safety-chain	E. J. Morse	North Attleborough, Mass	Feb. 23, 1864	47, 745
Watch-guard, Safety	T. White	La Fayette, Ind	June 25, 1872	128, 443
Watch-hand	G. Hastings	Waltham, Mass	Feb. 27, 1866	52, 849
Watch, Hand-setting	F. A. Jones	Boston, Mass	July 8, 1873	140, 581
Watch-hand-swaging die	G. Hastings	Waltham, Mass	May 22, 1866	54, 898
Watch-hands, Block for polishing and glossing	G. Hastings	Waltham, Mass	May 29, 1866	65, 097
Watch-holder, Safety	H. M. Jewett	Roxbury, Mass	June 6, 1865	48, 132
Watch-jeweling tool	A. C. Crosby	Union, Pa	Dec. 11, 1866	60, 343
Watch-jeweling tool	A. Thoma, sr	Piqua, Ohio	Oct. 22, 1867	70, 049
Watch-jeweling tool	D. B. Tiffany	Xenia, Ohio	June 18, 1867	65, 965
Watch-key	F. E. Allen and S. G. Hall	Keene, N. H., and Winchendon, Mass.	May 13, 1873	138, 779
Watch-key	F. E. Allen and S. G. Hall	Keene, N. H	Oct. 14, 1873	143, 653
Watch-key	J. S. Davis	Providence, R. I	Apr. 3, 1827	....
Watch-key	R. H. Dilley	Regnier's Mills, Ohio	Mar. 24, 1868	75, 740
Watch-key	V. Draper	North Attleborough, Mass	Oct. 8, 1867	69, 547
Watch-key	M. Falkenan, M. Pollak, and S. Wiener.	New York, N. Y., and Hoboken, N. J.	Jan. 8, 1856	14, 056
Watch-key	H. Ganny	Louisville, Ky	Apr. 21, 1868	77, 028
Watch-key	C. E. Jacot	New York, N. Y	Oct. 26, 1852	9, 357
Watch-key	E. M. Kimball	Toledo, Ohio	Sept. 24, 1867	69, 103
Watch-key	O. P. Kingman	Bridgeport, Conn	Aug. 27, 1867	68, 208
Watch-key	B. A. Lewis	Plainville, Conn	Dec. 17, 1872	133, 945
Watch-key	W. Lindon	New Haven, Conn	May 26, 1868	78, 382
Watch-key	W. Lindon	New Haven, Conn	Dec. 1, 1868	84, 558
Watch-key	R. S. Mershon	Philadelphia, Pa	Nov. 24, 1863	40, 726
Watch-key	J. L. Moore	Bridgeport, Conn	July 11, 1871	116, 982
Watch-key	E. Paulus	Philadelphia, Pa	Nov. 5, 1867	70, 465
Watch-key	G. W. Remington	North Providence, R. I	Apr. 24, 1866	54, 257
Watch-key	J. F. Stirling	San Francisco, Cal	Dec. 13, 1859	26, 450
Watch-key	G. B. St. John	Boston, Mass	Mar. 3, 1868	75, 214
Watch-key, Adjustable	J. S. Birch	New York, N. Y	Nov. 12, 1867	70, 787
Watch-key, Adjustable	J. S. Birch	New York, N. Y	May 10, 1870	102, 753
Watch-key and calendar, Combined	H. C. Foote	Fredericktown, Ohio	Jan. 10, 1860	26, 817
Watch-key and cork-screw, Combined	L. J. Jenner	Chicopee Falls, Mass	Aug. 29, 1871	118, 456
Watch-key and guard-bar	D. F. Elmer	Haydenville, Mass	June 26, 1860	28, 846
Watch-key and key-ring, Combined	W. Patton and B. C. English	Springfield, Mass	Sept. 14, 1869	94, 766
Watch-key and screw-driver, Combined	G. P. Reed and H. B. Day	Malden, Mass	May 6, 1873	138, 528
Watch-key and toggle, Combined	R. Cross	Providence, R. I	Feb. 20, 1866	52, 686
Watch-key and tooth-pick, Combined	H. E. Graham and R. D. Child	Boston, Mass	Nov. 30, 1869	97, 391
Watch-key protector	A. J. Chase	Boston, Mass	Jan. 7, 1868	73, 077
Watch-key, Safety	P. Laflin	Warren, Mass	Feb. 9, 1869	86, 844
Watch-key, Self-adjusting	J. S. Birch	New York, N. Y	Apr. 13, 1869	88, 836
Watch-key swivel and hook, Combined	J. P. Allen and H. Croft	Springfield, Ohio	July 11, 1871	116, 913
Watch-key, Self-clearing	W. N. Martin	Providence, R. I	June 22, 1869	91, 650
Watch-key, tooth-pick, and toggle, Combined	R. Cross	Providence, R. I	Feb. 20, 1866	52, 687
Watch-key with finger-ring, Combination of	E. Bliss	Newark, N. J	Aug. 25, 1857	18, 033
Watch-keys and other articles, Receptacle for	M. Z. Crane	New York, N. Y	Nov. 3, 1868	83, 695
Watch-keys, Manufacture of	G. H. Fuller	Providence, R. I	June 14, 1864	43, 108
Watch-keys, Manufacturing	G. H. Fuller	Pawtucket, R. I	May 23, 1865	47, 811
Watch main-spring	J. Gardner, jr	Boston, Mass	Nov. 23, 1869	97, 186
Watch-main-spring attachment	S. S. Morrill	Fulton, N. Y	Apr. 1, 1873	137, 468
Watch-main-spring attachment	C. E. Rice	Jersey City, N. J	Nov. 14, 1871	121, 004
Watch-main-spring safety-attachment	R. Gove	Laconia, N. H	Apr. 1, 1873	137, 437
Watch main-springs, Contracting the barrels of	A. S. Clackner	Rochester, N. Y	Sept. 19, 1865	49, 978
Watchmaker's chain-clamp	C. E. Evard	Leesburgh, Va	Sept. 23, 1873	143, 131
Watchmakers, Combined instruments for	C. E. Collins	San Francisco	July 16, 1867	66, 798
Watchmaker's drill	A. Wirsching	Brooklyn, N. Y	Aug. 25, 1868	81, 450
Watchmaker's gage	T. Noel	Memphis, Tenn	May 23, 1871	115, 090
Watchmaker's staking-tool	J. Stark	Waltham, Mass	Oct. 21, 1873	143, 857
Watchmaker's tool	L. C. Butch and A. F. Thoma	Lancaster and Piqua, Ohio	Nov. 7, 1871	120, 618
Watchmaker's tool	J. M. Cayer	Franklin, Tenn	Oct. 22, 1867	70, 074
Watchmaker's tool	W. Hart	Mayville, Wis	June 10, 1856	15, 073
Watchmaker's tool	C. E. Murray	Lockhaven, Pa	Mar. 16, 1869	87, 868
Watch-making tool	M. D. Kelly	Cadiz, Ky	Aug. 16, 1870	106, 371
Watch-pallet	A. Wadsworth	Newark, N. J	May 2, 1871	114, 372
Watch-pendant	J. S. Birch	New York, N. Y	Jan. 29, 1867	61, 600
Watch-pendant key	J. A. Hamann	New York, N. Y	Apr. 2, 1867	63, 513
Watch-pinion, Reversible	F. Pickert	Concord, N. H	Apr. 22, 1873	138, 187
Watch-pocket, Safety	W. W. Covell, jr	New York, N. Y	July 3, 1866	56, 014
Watch-pocket, Safety	H. Fritsche	Newark, N. J	Jan. 23, 1872	122, 942
Watch-pocket, Safety	T. W. Terry	Baltimore, Md	Aug. 28, 1866	57, 645
Watch-protector	C. Baumann	Poughkeepsie, N. Y	Apr. 14, 1868	76, 699
Watch-regulating adjustment	F. G. Johnson	Port Richmond, N. Y	Sept. 8, 1868	81, 907
Watch-regulator	J. P. Allen and W. P. Banta	Springfield, Ohio	Mar. 1, 1870	100, 246
Watch-regulator	D. W. Eldredge	Boston, Mass	Feb. 22, 1870	100, 130
Watch-regulator	J. Elson	Boston, Mass	Mar. 8, 1870	100, 511
Watch-regulator	J. Elson	Boston, Mass	Apr. 4, 1871	113, 281
Watch-regulator	A. Hill	New York, N. Y	Nov. 6, 1866	59, 394
Watch-regulator	J. L. Hyde	New York, N. Y	Jan. 15, 1867	61, 204
Watch-regulator	A. Jewett	Boston, Mass	Apr. 2, 1867	63, 525
Watch-regulator	F. A. Jones	Boston, Mass	Feb. 2, 1869	86, 411
Watch-regulator	G. P. Reed	Roxbury, Mass	Aug. 1, 1865	49, 154
Watch-regulator	N. Staflin	Chicago, Ill	June 17, 1873	140, 090
Watch-regulator	W. B. Tucker	Hillsborough, Ohio	Aug. 27, 1867	68, 324
Watch-regulator	L. Walldorf	Rochester, N. Y	Apr. 16, 1872	125, 861
Watch-regulator	A. Warren	Waltham, Mass	Sept. 17, 1867	69, 053
Watch-regulator	F. Wilmot	New York, N. Y	July 16, 1872	129, 197
Watch-regulator	C. V. Woerd	Waltham, Mass	Dec. 27, 1870	110, 614
Watch-regulator	H. L. and E. J. Zahm	Lancaster, Pa	Oct. 1, 1867	69, 381

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Watch-regulator attachment	W. B. Tucker	Hillsborough, Ohio	Dec. 10, 1867	71, 924
Watch-regulator, Compensating	J. P. Clark	Philadelphia, Pa	May 9, 1871	114, 644
Watch-regulator, Compensating	W. H. Horton	Jersey City, N. J	May 17, 1870	103, 190
Watch-rejeweling tool	C. Hopkins	Philadelphia, Pa	June 9, 1868	78, 803
Watch-repairers, Tool for	E. M. Kimball	Toledo, Ohio	Nov. 8, 1864	44, 957
Watch, Repeating	F. A. Lange	Glashütte, Saxony	Aug. 14, 1866	57, 266
Watch-ribbon, Slide for	A. H. Hews	Cambridgeport, Mass	Dec. 18, 1860	30, 969
Watch-rims, &c., Machine for making	C. W. Clewley	Providence, R. I	Sept. 6, 1859	25, 318
Watch-rims, Manufacture of	C. H. Field	Providence, R. I	Apr. 24, 1866	54, 136
Watch-rims, Mode of constructing	C. W. Clewley	Providence, R. I	June 19, 1860	28, 737
Watch-safe	C. U. Devereux	New York, N. Y	Sept. 12, 1865	49, 863
Watch-safe guard	E. F. Badgley	Brooklyn, N. Y	Apr. 3, 1866	53, 554
Watch safety-attachment	J. Elson	Boston, Mass	Sept. 15, 1868	82, 097
Watch safety-hook	E. C. Harris and F. Imhorst	New York, N. Y	Dec. 3, 1872	133, 642
Watch-seal	S. Davis, H. P. Babbitt, and B. P. Grinnell.	Providence, R. I	Mar. 3, 1827	......
Watch, Self-winding	D. J. Mozart	Ann Arbor, Mich	July 29, 1873	141, 373
Watch, Self-winding	U. H. Ramuz	Chaux-de-Fond, Switzerland.	Apr. 28, 1868	77, 213
Watch, Self-winding	T. R. Theurer	Chaux-de-Fond, Switzerland.	Feb. 6, 1866	52, 505
Watch-springs, Device for equalizing the tension of.	J. J. Parker	Marietta, Ohio	Mar. 22, 1859	23, 308
Watch-springs, Instrument for measuring the strength of.	J. M. Bottum	New York, N. Y	June 14, 1859	24, 366
Watch-springs, Measuring the strength of	N. A. Plymton	Northborough, Mass	Mar. 12, 1867	62, 775
Watch-stand	W. F. Collier	Worcester, Mass	July 16, 1872	129, 105
Watch, Stem-setting	J. Jürgensen	Locle, Switzerland	Jan. 15, 1867	61, 207
Watch, Stem-winding	J. A. Borel and P. and J. Conovoisier.	Neufchatel, Switzerland	June 4, 1872	127, 452
Watch, Stem-winding	E. Bourquin	New York, N. Y	Nov. 30, 1869	97, 346
Watch, Stem-winding	W. H. Fitz Gerald	Carlstadt, N. J	Jan. 31, 1871	111, 334
Watch, Stem-winding	E. A. Giles	New York, N. Y	Aug. 28, 1866	57, 495
Watch, Stem-winding	F. S. Giles	New York, N. Y	May 28, 1867	65, 208
Watch, Stem-winding	V. Himmer	Brooklyn, N. Y	Feb. 9, 1869	86, 751
Watch, Stem-winding	E. B. Horn	Boston, Mass	June 11, 1867	65, 747
Watch, Stem-winding	E. B. Horn	Boston, Mass	Dec. 24, 1867	72, 641
Watch, Stem-winding	E. Howard	Boston, Mass	Feb. 4, 1868	74, 090
Watch, Stem-winding	S. Jaccard and J. J. Jaques	Saint Croix, Switzerland	Aug. 8, 1871	117, 782
Watch, Stem-winding	C. E. Jacot	New York, N. Y	Jan. 19, 1869	86, 075
Watch, Stem-winding	C. E. Jacot	Chaux-de-Fond, Switzerland.	Apr. 12, 1870	101, 881
Watch, Stem-winding	J. Laurent	New York, N. Y	Oct. 10, 1871	119, 858
Watch, Stem-winding	J. Mardin	Locle, Switzerland	Aug. 17, 1869	93, 735
Watch, Stem-winding	E. H. Perry	Boston, Mass	May 30, 1871	115, 351
Watch, Stem-winding	H. R. Smith and R. Folsom	Cincinnati, Ohio	Oct. 10, 1871	119, 889
Watch, Stem-winding	A. Wadsworth	Newark, N. J	Aug. 13, 1867	67, 823
Watch, Stem-winding	C. V. Woerd	Waltham, Mass	Aug. 22, 1871	118, 415
Watch, Stem winding and hand-setting	C. L. Kidder and F. A. Jones	Boston, Mass	June 28, 1870	104, 856
Watch, Stem winding and setting	E. C. Fitch	New York, N. Y	June 11, 1872	127, 753
Watch Stem winding and setting	C. A. Montandon	Locle, Switzerland	Jan. 28, 1873	135, 241
Watch, Stem winding and setting	U. Nardin	Locle, Switzerland	Dec. 2, 1873	145, 070
Watch, Stem winding and setting	E. J. Pacaud	Schaffhausen, Switzerland	Nov. 25, 1873	144, 859
Watch, Stem winding and setting	G. P. Reed	Malden, Mass	June 10, 1873	139, 735
Watch, Stem winding and setting	O. P. Rice and J. H. Gerry	Springfield, Mass	June 9, 1868	78, 693
Watch, Stem winding and setting	H. R. Smith and R. Folsom	Cincinnati, Ohio	Nov. 28, 1871	121, 260
Watch, Stem winding and setting	H. R. Smith and R. Folsom	Cincinnati, Ohio	Nov. 19, 1872	133, 264
Watch Stem winding and setting	C. V. Woerd	Waltham, Mass	Aug. 13, 1867	67, 692
Watch, Stem winding and setting attachment	V. Himmer	Brooklyn, N. Y	Sept. 14, 1869	94, 825
Watch, Stop	T. Baker	New York, N. Y	Aug. 13, 1867	67, 704
Watch, Stop	H. R. Ekegrén	Geneva, Switzerland	May 4, 1869	89, 747
Watch, Stop	C. E. Jacot	New York, N. Y	June 8, 1858	20, 491
Watch, Stop	G. P. Reed	Roxbury, Mass	May 12, 1863	38, 502
Watch, Stop	F. Rotig	Havre, France	May 24, 1870	103, 505
Watch-wheel holder	A. W. Kientoff	Oakland, Cal	July 20, 1869	92, 729
Watch-wheels, Lathe-rest for truing	S. G. Twambley	Biddeford, Me	Mar. 15, 1864	41, 966
Watch winding and setting attachment	C. Spiro	New York, N. Y	Nov. 16, 1869	96, 844
Watch-winding attachment	G. H. Wilson	London, England	Nov. 30, 1869	97, 466
Watch-winding click	E. Paulus	Philadelphia, Pa	Nov. 3, 1868	83, 788
Watch-winding device	I. Ickelheimer	New York, N. Y	May 4, 1869	89, 583
Watch-wood, Implement for sharpening	C. P. Carter	Poughkeepsie, N. Y	May 5, 1868	77, 455
Watch-works, Frame for protecting	W. B. Smith	Coventry, England	Nov. 24, 1868	84, 388
Watches, Adjustable dial for travelers'	E. J. Hulbert and N. Aubin	Portland, Conn., and Montreal, Canada.	Feb. 15, 1870	99, 902
Watches and clocks, Cleaning	W. W. Thompson	Smithville, Ga	Jan. 9, 1872	122, 681
Watches, Apparatus for rejeweling	C. Hopkins	Philadelphia, Pa	Aug. 31, 1869	94, 208
Watches, Attaching hair-spring to	C. W. Wadsworth and C. Gullberg.	Peekskill, N. Y	Mar. 14, 1871	112, 657
Watches, Attaching hands to	J. Elson	Boston, Mass	June 1, 1869	90, 647
Watches, Attaching mainsprings of	C. D. P. Gibson	Boston, Mass	Feb. 1, 1870	99, 428
Watches, Changeable escapement for	G. F. Roskopf	Chaux-de-Fond, Switzerland.	Mar. 10, 1868	75, 463
Watches, Combining keys with	A. Humbert	Philadelphia, Pa	Nov. 29, 1870	109, 620
Watches, Composition for cleaning	J. C. Frederick	Kahokia, Mo	July 16, 1872	128, 958
Watches, Construction of	D. G. Currier	Waltham, Mass	Oct. 18, 1870	108, 332
Watches, Device for setting the hands of	A. Lange	Glashütte, Saxony	May 4, 1869	89, 667
Watches, Device for winding mainsprings of	M. D. Kelly	Cadiz, Ky	Aug. 16, 1870	106, 372
Watches, Device to prevent injury from rupture of mainspring of.	D B. Fitts	Holliston, Mass	Nov. 30, 1858	22, 174
Watches, Duplex escapement in	C. E. Jacot des Combes	Baltimore, Md	Apr. 30, 1840	1, 570
Watches, &c., Hair-springs for	C. Cline	Brooklyn, N. Y	Dec. 6, 1870	109, 826
Watches, Hair-spring adjustment for	A. Brown	Dryden, N. Y	Dec. 21, 1869	98, 024
Watches, Hair-spring stud for	J. P. Adams	Ipswich, Mass	June 24, 1873	140, 231
Watches, Hair-spring-testing apparatus for	J. Logan	Boston, Mass	July 19, 1870	105, 467
Watches, Independent seconds movement for	G. P. Reed	Waltham, Mass	July 1, 1856	15, 251
Watches, Jeweling	A. C. Crosby	Piqua, Ohio	Jan. 21, 1868	73, 511
Watches, jewelry, &c., Mode of cleaning	J. Annin	Le Roy, N. Y	Apr. 30, 1867	64, 271
Watches, Lever-escapement for	J. Devlin	Philadelphia, Pa	Aug. 14, 1860	29, 575

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Watches, Lever-staff for	W. E. Banta	Springfield, Ohio	July 25, 1871	117, 242
Watches, Machines for finishing wheels for	J. L. Hathaway	Norfolk, Va	Oct. 4, 1870	107, 903
Watches, Mainspring-adjustment for	J. S. Taxis and H. B. James	Trenton, N. J	Jan. 2, 1872	122, 414
Watches, Mainspring-barrel attachment for	O. L. Eliason	Salt Lake City, Utah	May 3, 1870	102, 517
Watches, Mainspring-barrel for	J. P. Allen	Springfield, Ohio	Mar. 1, 1870	100, 245
Watches, Mainspring-barrel for	H. B. James	Trenton, N. J	Oct. 4, 1870	107, 916
Watches, Manufacture of push-top for	J. C. Dueber	Cincinnati, Ohio	July 22, 1873	141, 125
Watches, Manufacture of safety	L. O. P. Meyer	Newtown, Conn	Apr. 5, 1870	101, 641
Watches, Mechanism for stopping	J. K. Bigelow	Waltham, Mass	Feb. 8, 1859	22, 914
Watches, &c., Method of making balance-wheels for	E. Howard	Boston, Mass	May 21, 1867	64, 874
Watches, Method of operating independent second-hand of stop.	P. M. Statzell	Philadelphia, Pa	Sept. 27, 1859	25, 589
Watches, Method of operating the second-hand in stop.	A. Wadsworth	New York, N. Y	Mar. 26, 1861	31, 840
Watches, Method of securing the cylindrical balance-springs of.	A. L. Dennison	Waltham, Mass	Jan. 11, 1859	22, 550
Watches or time-pieces of aluminium compounds, Manufacture of springs for.	F. A. Lange	Glashütte, Saxony	June 10, 1873	139, 678
Watches, Regulating	A. L. Dennison	Waltham, Mass	Dec. 11, 1860	30, 873
Watches, Regulating	C. Fasoldt	Rome, N. Y	Apr. 5, 1864	42, 175
Watches, Regulating	H. Todd	Columbus, Ohio	Dec. 3, 1867	71, 666
Watches, Replaceable pivot for	S. B. Simon	New York, N. Y	Oct. 24, 1871	120, 335
Watches, Reversible center-pinion for	O. Gates	Columbus, Ohio	Nov. 25, 1873	144, 897
Watches, Reversible center-pinion for	J. V. Mathivet	Cleveland, Ohio	Sept. 13, 1870	107, 273
Watches, Reversible center-pinion for	A. Twing	Waltham, Mass	Aug. 16, 1870	106, 432
Watches, Reversible pinion for	J. K. Bigelow	Springfield, Ill	Sept. 10, 1872	131, 208
Watches, Reversible pinion for	G. Hunt	Chicago, Ill	Sept. 16, 1873	142, 789
Watches, Reversible pinion for	N. Staplin	Chicago, Ill	Nov. 12, 1872	133, 064
Watches, Reversible safety-pinion for	B. Bacon	Morrison, Ill	Nov. 16, 1869	96, 865
Watches, Safety-barrel for	S. F. Estell	Richmond, Ind	Mar. 16, 1869	87, 765
Watches, Safety-pinion for	C. S. Moseley	Elgin, Ill	June 28, 1870	104, 756
Watches, Safety-stop for	S. C. Smith	Boston, Mass	Jan. 25, 1870	99, 117
Watches, Securing the cannon-pinion of	E. Sandoz	Hudson City, N. J	Nov. 23, 1869	97, 123
Watches, Spring and duster for	J. H. Morse	Peoria, Ill	Aug. 11, 1868	80, 989
Watches, Stem winding and setting attachment for	F. R. Theurer	Chaux-de-Fond, Switzerland.	Sept. 27, 1870	107, 736
Watches to ascertain the time without looking at the watch, Attachment for.	M. W. Baldwin	Philadelphia, Pa	June 1, 1858	20, 403
Watches, Tool for closing or contracting the barrels of.	C. S. Moseley	Waltham, Mass	Dec. 20, 1864	45, 512
Watches, Winding	A. E. Guyot	Renau, Switzerland	Apr. 12, 1870	101, 859
Watches, Winding	C. E. Jacot	Chaux-de-Fond, Switzerland.	Nov. 26, 1867	71, 389
Watches, Winding	T. Noel	Memphis, Tenn	Dec. 2, 1851	8, 567
Watches, Winding	N. P. Stratton	Nashua, N. H	Nov. 27, 1860	30, 772
Watches, Winding	C. V. Woerd	Waltham, Mass	June 18, 1867	65, 985
Watches, Winding and setting	F. A. Giles	New York, N. Y	Apr. 25, 1865	47, 412
Watches, Winding and setting	F. A. Giles	New York, N. Y	Aug. 15, 1865	49, 397
Watches, Winding and setting	G. Gondelfinger and J. L. Bichet	Séboncourt and Besançon, France.	Apr. 18, 1865	47, 369
Watches, Winding and setting	C. E. Jacot	Chaux-de-Fond, Switzerland.	Sept. 27, 1864	44, 493
Watches, Winding and setting	C. E. Jacot	Chaux-de-Fond, Switzerland.	Feb. 4, 1873	135, 559
Watches, Winding and setting	C. E. Laederich	St. Amier, Switzerland	Nov. 10, 1863	40, 568
Watches, Winding and setting	C. E. Laederich	St. Amier, Switzerland	Apr. 18, 1865	47, 370
Watches, Winding and setting	H. Rothfelder	New York, N. Y	July 11, 1865	48, 725
Watches, Winding and setting	H. Rothfelder	New York, N. Y	June 11, 1867	65, 769
Watches, Winding and setting	H. Rothfelder	New York, N. Y	July 23, 1867	67, 138
Watches, Winding-click of	S. C. Smith	Boston, Mass	Apr. 29, 1873	138, 350
Watchman's register	P. L. Shmandt	Hoboken, N. J	Apr. 10, 1866	53, 889
Watchman's register	A. Witt	Cincinnati, Ohio	Oct. 1, 1867	69, 524
Water-accelerator	E. B. Meatyard	Chicago, Ill	May 14, 1872	126, 730
Water-alarm for steam-boilers	L. E. Lincoln	Lowell, Mass	Oct. 5, 1858	21, 686
Water-alarm gage	J. D. Hall	Philadelphia, Pa	Nov. 22, 1864	45, 203
Water and alarm gage for steam-boiler	F. A. Hoyt	Boston, Mass	July 26, 1859	24, 874
Water and animal power	J. A. Wiszt	Philadelphia, Pa	May 10, 1844	3, 583
Water and beer cooler	C. Hubing	Philadelphia, Pa	Mar. 11, 1873	136, 600
Water and drain pipe	T. J. Barron	Brooklyn, N. Y	May 16, 1871	114, 904
Water and gas mains, Machine for drilling and tapping.	J. and P. Riley	New York, N. Y	Jan. 31, 1871	111, 474
Water and gas, Manufacture of composition pipe for.	C. W. Hebard	Rochester, N. Y	Sept. 10, 1872	131, 272
Water and gas meter	N. L. Blanchard	Spuyten Duyvil, N. Y	Mar. 29, 1870	101, 347
Water and gas meter	A. and W. Guthrie	Chicago, Ill	May 21, 1872	126, 951
Water and gas meter	H. Q. Hawley	Albany, N. Y	Sept. 24, 1861	33, 348
Water and gas pipe	B. F. Smith	New Orleans, La	June 29, 1869	91, 920
Water and gas pipe and tube	H. M. Stow	San Francisco, Cal	Dec. 20, 1870	110, 399
Water and gas pipes, Compound tool for	W. Humphreys	Waterford, N. Y	Aug. 17, 1869	93, 824
Water and gas pipes, Machine for introducing	J. Fritz and W. C. Pooley	Memphis, Tenn	June 3, 1873	139, 566
Water and gas pipes, Manufacture of composition.	J. K. Griffin	Waterdown, Canada	July 11, 1871	116, 949
Water and gas pipes, Mode of connecting cement.	G. C. Nichols	Binghamton, N. Y	Apr. 8, 1873	137, 562
Water and gas service-pipes, Securing the covers on boxes for stop-cocks for.	F. A. Laforge	Waterbury, Conn	Feb. 11, 1873	135, 822
Water and liquor cooler	C. M. Fellows	Buffalo, N. Y	July 16, 1812	128, 956
Water and liquor cooler combined	W. A. Jones	Erie, Pa	Dec. 17, 1872	133, 990
Water and other liquids, Elevating and projecting.	C. R. Alsop	Middletown, Conn	Jan. 21, 1833	....
Water and paddle wheel	B. Howard	Worcester, Mass	June 11, 1829	....
Water and pressure indicator for steam-boilers, Electrical.	J. D. Coughlin	New York, N. Y	Aug. 6, 1872	130, 281
Water and sewer pipe	J. S. Pierson	New York, N. Y	Mar. 12, 1872	124, 624
Water and steam indicator	W. C. Grimes	Philadelphia, Pa	July 6, 1858	20, 847
Water and steam power applied to mills	J. W. Dart and W. Webster	Truxton, N. Y	Jan. 21, 1831	....
Water and tan-pits, Heating	C. Atwater	Genoa, N. Y	June 2, 1813	....
Water and tide wheel	T. B. Van Gaasbeck and D. Sands.	Kingston, N. Y	Dec. 24, 1824	....
Water and wind wheel	A. Folsom	Eastport, Me	Apr. 4, 1871	113, 284
Water and wine cooler	J. Dietschy	Alton, Ill	May 1, 1866	54, 306

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Invention.	Inventor.	Residence.	Date.	No.
Water, Apparatus for aërating and cooling distilled	G. W. Baird	Engineer Corps, United States Navy.	Aug. 17, 1869	93, 852
Water, Apparatus for discharging bilge	P. Pardee	New Haven, Conn	Apr. 28, 1868	77, 402
Water, Apparatus for drawing	D. E. Teal	Norwich, N. Y	Nov. 27, 1860	30, 776
Water, Apparatus for drawing	S. A. Wheat	Franklin, N. Y	Feb. 8, 1859	22, 909
Water, &c., Apparatus for producing a vacuum for raising.	P. Ravard	Paris, France	Dec. 17, 1840	1, 903
Water, Apparatus for raising	W. T. Barnes	Buffalo, N. Y	Mar. 20, 1849	6, 191
Water, &c., Apparatus for raising	A. Brear	Saugatuck, Conn	Oct. 25, 1864	44, 782
Water, Apparatus for raising	N. Colver	Chicago, Ill	June 9, 1863	38, 811
Water, Apparatus for raising	H. Schlotter	Köstritz, Germany	Aug. 11, 1868	81, 013
Water, Apparatus for raising	J. D. Squires	Cold Spring, N. Y	Dec. 11, 1860	30, 893
Water, Apparatus for raising and carrying	J. D. Willoughby	Scotland, Pa	Nov. 6, 1849	6, 857
Water, Apparatus for raising and carrying	J. D. Willoughby	Scotland, Pa	Feb. 18, 1851	7, 944
Water, Apparatus for raising and forcing	A. Brear	Saugatuck, Conn	Nov. 18, 1862	36, 939
Water, Apparatus for supplying the upper stories of houses with.	T. Hanson	New York, N. Y	Feb. 24, 1857	16, 686
Water, Apparatus for the circulation of hot	W. Beebe	New York, N. Y	Dec. 16, 1845	4, 311
Water, Apparatus for the manufacture and bottling of aërated.	O. Kropff	Nordhausen, Prussia	July 2, 1872	128, 494
Water, Apparatus for walking on the	H. R. Rowlands	Boston, Mass	Dec. 28, 1858	22, 457
Water-apparatus, Portable	J. F. Rochow	New York, N. Y	July 18, 1865	48, 839
Water, Applying	J. Hinds, M. B. Ball, and S. Pike.	Troy, N. Y	May 14, 1836	....
Water-back and tewel for smiths	O. Ames	Plymouth, Mass	June 24, 1809	....
Water-blast	J. Ruggles	New Milford, Conn	June 6, 1811	....
Water-boiler and steam-still	P. Bernard	Whitestown, N. Y	Jan. 16, 1811	....
Water-boiler and steam-still	T. Soper, jr., and C. Reynolds	Hartford, Conn	Dec. 2, 1813	....
Water-boiler and steam-still	S. Stillwell	Bainbridge, N. Y	June 26, 1821	....
Water-boiler and steam-still	B. Wilbor and T. Soper	Washington County, N. Y	Feb. 4, 1811	....
Water-boiler for cooking-stoves	C. Ollhaber	Cincinnati, Ohio	Nov. 19, 1867	71, 207
Water-boiler, Plumber's	A. R. Robb	Brooklyn, N. Y	May 2, 1871	114, 347
Water-boiling apparatus	H. W. Horton	Hamburgh, Mich	Oct. 24, 1865	50, 586
Water, Boring earth for	L. Disbrow	New York	Nov. 1, 1830	....
Water, Boring earth for	W. Morris and J. Spinks	Kanawha, Va	Oct. 22, 1830	....
Water by animal-power, Method of raising	Z. F. Wilder	Painted Post, N. Y	Sept. 27, 1859	25, 598
Water by atmospheric pressure, Machine for raising	S. McCune	Wilmington, Ohio	Aug. 25, 1829	....
Water by compressed air, Method of elevating	A. Thomson	Detroit, Mich	June 16, 1857	17, 593
Water by direct condensation of air, Apparatus for forcing.	J. M. Brooke	Lexington, Va	June 3, 1873	139, 538
Water by pneumatic pressure, Apparatus for forcing.	J. P. Gruber	New York, N. Y	Aug. 9, 1864	43, 770
Water by steam, Device for raising	A. Brear	Saugatuck, Conn	Apr. 1, 1862	34, 810
Water by steam, Device for raising	W. W. Marsh	Saint Louis, Mo	Oct. 14, 1862	36, 661
Water by steam, Means of raising	J. W. Stiles	New York, N. Y	Sept. 25, 1866	58, 317
Water by steam, Obtaining force from	S. Morey	....	Mar. 27, 1799	....
Water by steam, Raising	W. Baley	Nelson County, Ky	Feb. 4, 1817	....
Water by the aid of a triple sliding-valve, Mode of raising or forcing.	E. Vance	Wilmington, Ohio	June 7, 1838	770
Water by the combustion of volatilizable hydrocarbons, Device for elevating.	R. Nelson	New York, N. Y	Oct. 26, 1858	21, 898
Water by waves, Apparatus for raising	A. N. Shattuck	San Francisco, Cal	May 1, 1866	54, 418
Water by wind, Raising	S. Morey	....	Apr. 11, 1796	....
Water-cask gage	J. Marquart, jr	Reading, Pa	Mar. 12, 1850	7, 173
Water chemically and mechanically, System of purifying.	G. Demailly	Brussels, Belgium	Oct. 14, 1873	143, 676
Water-closet	J. Albee	Chelsea, Mass	Feb. 25, 1873	136, 199
Water-closet	F. H. Bartholomew	New York, N. Y	Feb. 14, 1854	10, 531
Water-closet	F. H. Bartholomew	New York, N. Y	Oct. 12, 1858	21, 734
Water-closet	F. H. Bartholomew	New York, N. Y	Nov. 5, 1861	33, 632
Water-closet	T. Birch and L. Bradley	Hartford, Conn	Jan. 11, 1859	22, 543
Water-closet	G. Blanchard	New York, N. Y	Sept. 7, 1858	21, 407
Water-closet	E. Bookhout and C. H. Hewlett	New York, N. Y	May 20, 1856	14, 902
Water-closet	W. S. Carr	New York, N. Y	Dec. 21, 1852	9, 480
Water-closet	W. S. Carr	New York, N. Y	Aug. 5, 1856	15, 474
Water-closet	W. S. Carr	New York, N. Y	May 4, 1858	20, 142
Water-closet	W. S. Carr	New York, N. Y	Aug. 16, 1859	25, 092
Water-closet	W. S. Carr	New York, N. Y	Aug. 20, 1861	33, 070
Water-closet	W. S. Carr	New York, N. Y	Apr. 7, 1868	76, 398
Water-closet	W. S. Carr	New York, N. Y	July 7, 1868	79, 728
Water-closet	W. S. Carr	New York, N. Y	Aug. 4, 1868	80, 708
Water-closet	W. S. Carr	New York, N. Y	Sept. 29, 1868	82, 595
Water-closet	W. S. Carr	New York, N. Y	May 28, 1872	127, 307
Water-closet	J. W. Chamberlain	Cambridgeport, Mass	Oct. 15, 1872	132, 138
Water-closet	B. R. Cole	Buffalo, N. Y	May 25, 1869	90, 502
Water-closet	G. Conron	New York, N. Y	May 5, 1868	77, 459
Water-closet	G. Conron	New York, N. Y	Sept. 21, 1869	95, 001
Water-closet	W. S. Cooper	Philadelphia, Pa	Mar. 10, 1868	75, 375
Water-closet	H. H. Craigie	New York, N. Y	Mar. 13, 1866	53, 119
Water-closet	H. H. Craigie	New York, N. Y	Feb. 5, 1867	61, 811
Water-closet	H. H. Craigie	New York, N. Y	Apr. 7, 1868	76, 403
Water-closet	H. H. Craigie	New York, N. Y	Nov. 24, 1868	84, 262
Water-closet	H. H. Craigie	New York, N. Y	May 11, 1869	89, 857
Water-closet	H. H. Craigie	New York, N. Y	May 11, 1869	89, 859
Water-closet	J. N. Davis	Cincinnati, Ohio	July 31, 1866	56, 794
Water-closet	J. N. Davis	Cincinnati, Ohio	July 26, 1870	105, 782
Water-closet	I. Edelman	Philadelphia, Pa	Aug. 24, 1858	21, 294
Water-closet	I. Edelman	Philadelphia, Pa	Jan. 24, 1860	26, 944
Water-closet	L. Fisher	Buffalo, N. Y	Aug. 11, 1857	17, 962
Water-closet	C. Frankish	Chicago, Ill	Jan. 24, 1871	111, 189
Water-closet	H. Goldsmith, jr	New York, N. Y	June 7, 1853	9, 770
Water-closet	T. Grundy	Boston, Mass	June 26, 1860	28, 853
Water-closet	J. B. Hannimann	Detroit, Mich	Oct. 8, 1867	69, 661
Water-closet	J. Hayden, jr	Haydenville, Mass	Apr. 27, 1869	89, 479
Water-closet	J. T. Henry and W. P. Campbell	Philadelphia, Pa	Dec. 29, 1857	18, 972
Water-closet	J. B. Hobson and J. Middleton, jr.	San Francisco, Cal	Dec. 7, 1869	97, 639
Water-closet	J. Ingram and J. Stuart	New York, N. Y	Jan. 13, 1847	4, 926

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Water-closet	H. James and E. Drewett	Weybridge, England	Mar. 30, 1860	88, 485
Water-closet	J. G. Jennings	Stangate, England	Mar. 25, 1873	137, 082
Water-closet	J. Keane	New York, N. Y	Jan. 31, 1860	26, 195
Water-closet	J. Keane	New York, N. Y	Sept. 6, 1870	107, 178
Water-closet	F. McGhan	Washington, D. C	Oct. 3, 1857	18, 550
Water-closet	F. McGhan	Washington, D. C	Feb. 16, 1858	19, 375
Water-closet	F. McGhan	Washington, D. C	Feb. 27, 1872	124, 003
Water-closet	G. R. Moore	Philadelphia, Pa	Nov. 23, 1869	97, 165
Water-closet	D. Morrison and J. D. Smith	New York, N. Y	Oct. 18, 1870	108, 378
Water-closet	P. W. Neefus	New York, N. Y	Jan. 7, 1862	34, 118
Water-closet	J. F. Nielson	New York, N. Y	Dec. 16, 1873	145, 586
Water-closet	W. I. Page	Boston, Mass	July 20, 1869	92, 745
Water-closet	C. Perks	Philadelphia, Pa	Apr. 2, 1872	125, 218
Water-closet	O. S. Pettit	Brooklyn, N. Y	May 15, 1866	54, 766
Water-closet	B. Pickering	Milton, Ohio	June 26, 1866	55, 900
Water-closet	A. Rankin	New York, N. Y	June 4, 1867	65, 505
Water-closet	P. C. Rowe	Boston, Mass	Apr. 29, 1873	138, 287
Water-closet	D. Ryan and J. Flanagan	New York, N. Y	Mar. 7, 1854	10, 620
Water-closet	D. Schilling	Brooklyn, N. Y	Oct. 20, 1868	83, 215
Water-closet	J. H. Seymour	Hagerstown, Md	Mar. 23, 1869	88, 220
Water-closet	W. Sprague	Lynn, Mass	May 19, 1868	78, 148
Water-closet	J. H. Stevens	Cambridge, Mass	July 15, 1873	140, 797
Water-closet	J. Stone	New York	Mar. 11, 1835	......
Water-closet	W. G. Stuart	Springfield, Mass	Aug. 9, 1870	106, 231
Water-closet	W. J. Warren	Philadelphia, Pa	Apr. 16, 1872	125, 864
Water-closet	D. Wellington	Boston, Mass	Mar. 22, 1859	23, 335
Water-closet	D. Wellington	Boston, Mass	June 26, 1866	55, 967
Water-closet	D. Wellington	Boston, Mass	Dec. 22, 1868	85, 192
Water-closet	D. Wellington	Boston, Mass	Apr. 25, 1871	114, 238
Water-closet and urinal, Ventilating	R. D. O. Smith	Washington, D. C	Feb. 18, 1873	136, 105
Water-closet apparatus	J. Keane	New York, N. Y	May 25, 1869	90, 453
Water-closet attachment	W. G. Rhoads	Philadelphia, Pa	July 9, 1872	128, 909
Water-closet automatic supply-regulator	G. Conron	New York, N. Y	June 30, 1868	79, 318
Water-closet basin	W. Boch, sr	Green Point, N. Y	Nov. 29, 1859	26, 243
Water-closet basin, Attachment of pipe to	W. S. Carr	New York, N. Y	June 15, 1858	20, 550
Water-closet bowl	D. Wellington	Boston, Mass	May 3, 1870	102, 738
Water-closet bowl, Ventilating	J. V. Mathivet	Cleveland, Ohio	Apr. 29, 1873	138, 267
Water-closet box	A. R. Murray	New York, N. Y	July 5, 1870	105, 116
Water-closet disinfecting and deodorizing apparatus.	J. M. B. Baker	Southsea, England	July 22, 1873	141, 100
Water-closet, Dry-earth	H. O. Reed and J. W. Fowle	Boston, Mass	June 1, 1869	90, 698
Water-closet for vessels	W. Bishop	Brooklyn, N. Y	Aug. 5, 1873	141, 482
Water-closet hopper	A. Ivers	New York, N. Y	Oct. 11, 1870	108, 146
Water-closet indicator	H. K. Taylor	London, England	Aug. 27, 1867	68, 129
Water-closet-lever pull	H. H. Craigie	New York, N. Y	Apr. 30, 1872	126, 268
Water-closet-operating device	B. R. Cole	Buffalo, N. Y	Dec. 21, 1869	98, 149
Water-closet or aposmia, Portable	J. G. Holmes	Charleston, S. C	May 14, 1867	64, 673
Water-closet pan	W. Smith	San Francisco, Cal	Nov. 30, 1869	97, 323
Water-closet pan, Automatically-operated	W. A. Butler	New York, N. Y	Dec. 29, 1868	85, 431
Water-closet pans and valves, Lever for operating.	G. R. Moore	Philadelphia, Pa	June 22, 1869	91, 761
Water-closet, Portable	T. Barrett	New York, N. Y	June 3, 1873	139, 531
Water-closet, Portable	P. Bergqvist	Austin, Minn	Feb. 21, 1871	112, 010
Water-closet, Portable	C. C. Bier	New York, N. Y	Nov. 13, 1849	6, 862
Water-closet, Portable	W. Chapman	Mount Vernon, N. Y	July 18, 1871	117, 045
Water-closet, Portable	J. Gilbert	Philadelphia, Pa	Jan. 18, 1870	98, 950
Water-closet, Portable	E. Hidden	New York, N. Y	July 24, 1860	29, 278
Water-closet, Portable	E. Hidden	New York, N. Y	July 12, 1864	43, 490
Water-closet, Portable	J. Robertson	New York, N. Y	Oct. 15, 1861	33, 494
Water-closet, Portable	E. Robinson	New York	Nov. 19, 1833	......
Water-closet, Portable	E. Robinson	New York, N. Y	Mar. 20, 1866	53, 343
Water-closet, Portable	G. R. Willmot	Meriden, Conn	Oct. 21, 1851	8, 402
Water-closet receiver	W. Smith	San Francisco, Cal	Aug. 2, 1870	106, 069
Water-closet, Railway-car	W. E. Marsh, jr	Plainfield, N. J	Oct. 5, 1869	95, 597
Water-closet seat	L. Alexander	New York, N. Y	May 8, 1866	54, 480
Water-closet seat	J. N. Davis	Georgetown, Ohio	Sept. 5, 1865	49, 731
Water-closet seat	B. G. Fitzhugh	Frederick, Md	Sept. 26, 1871	119, 342
Water-closet seat	D. L. Hawkins	Poughkeepsie, N. Y	Oct. 24, 1871	120, 276
Water-closet seat	G. C. Hinman	Portageville, N. Y	Nov. 6, 1860	30, 574
Water-closet seat	C. Ledwich	Fishkill Landing, N. Y	July 16, 1872	129, 039
Water-closet seat	K. Spencer	Minneapolis, Minn	Jan. 17, 1860	26, 806
Water-closet seat	E. Woodruff	Chicago, Ill	Sept. 19, 1865	50, 064
Water-closet seat, Automatically-operated	P. W. Davis	Portland, Oreg	Aug. 9, 1870	106, 132
Water-closet seat, Supplementary	L. H. Londheim	New York, N. Y	Feb. 13, 1866	52, 581
Water-closet, Ship's	P. W. Neefus	New York, N. Y	Feb. 10, 1863	37, 635
Water-closet trap	H. Boyd	New York, N. Y	Mar. 27, 1860	27, 612
Water-closet-trap-cleaning device	J. Wright	New York, N. Y	June 11, 1867	65, 715
Water-closet, urinal, &c., cistern	A. Ivers	New York, N. Y	Oct. 23, 1866	59, 029
Water-closet valvular apparatus	J. Keane	New York, N. Y	July 12, 1870	105, 217
Water-closet ventilator	F. Hainsworth	Chicago, Ill	Mar. 3, 1868	75, 010
Water-closet ventilator, Railway	F. H. Brown	Chicago, Ill	Mar. 16, 1869	87, 906
Water-closet, Water-supply for	H. H. Craigie	New York, N. Y	Dec. 31, 1867	72, 810
Water-colors, Preparing and packing	E. L. Molineux	Brooklyn, N. Y	May 13, 1873	138, 915
Water-conductor	J. W. Brown	Milton, Vt	Jan. 2, 1872	122, 355
Water-conductor bracket	L. B. Hill	Albany, N. Y	June 27, 1871	116, 309
Water, Conveying	S. Hant	Baltimore, Md	Mar. 31, 1836	......
Water-cooler, &c	G. R. Bowman	Hagerstown, Md	Aug. 9, 1870	107, 113
Water-cooler	I. Brach	Philadelphia, Pa	Sept. 23, 1873	142, 986
Water-cooler	J. W. Brady	Catonsville, Md	June 4, 1872	127, 556
Water-cooler	J. E. Cammeyer	Brooklyn, N. Y	Sept. 23, 1873	143, 058
Water-cooler	W. S. Cobb	Philadelphia, Pa	May 31, 1870	103, 718
Water-cooler	J. Eckert	Madison, Ind	Oct. 16, 1866	58, 793
Water-cooler	K. Goddard	Richmond, N. Y	June 25, 1872	128, 298
Water-cooler	J. L. Hadden	Philadelphia, Pa	Apr. 28, 1868	77, 280
Water-cooler	G. A. Higgins	New York, N. Y	Jan. 2, 1872	122, 384
Water-cooler	F. E. Hopkins	Philadelphia, Pa	Jan. 16, 1866	52, 047
Water-cooler	T. J. James	Petersburgh, Va	June 6, 1871	115, 736
Water-cooler	R. S. Jennings	Philadelphia, Pa	Apr. 30, 1872	126, 303
Water-cooler	W. S. Kimball	Philadelphia, Pa	July 8, 1873	140, 712

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Water-cooler	T. T. Markland, jr	Philadelphia, Pa	Apr. 17, 1866	53, 998
Water-cooler	G. T. Palmer	Brooklyn, N. Y	July 31, 1866	56, 792
Water-cooler	A. H. Phelps	Trenton, Mich	Apr. 12, 1859	23, 605
Water-cooler	A. Putnam, jr	Saratoga Springs, N. Y	Feb. 7, 1871	111, 680
Water-cooler	J. Rutter	West Chester, Pa	May 3, 1870	102, 595
Water-cooler	W. F. Rutter	Philadelphia, Pa	Dec. 30, 1873	146, 099
Water-cooler	J. C. Slo̶n	Camden, N. J	Nov. 8, 1864	44, 979
Water-cooler	T. Smith	Brooklyn, N. Y	Aug. 26, 1873	142, 178
Water-cooler	J. H. Stone	Philadelphia, Pa	Feb. 8, 1870	99, 725
Water cooler and filter	J. S. Gallaher, jr	Washington, D. C	Mar. 25, 1856	14, 498
Water cooler and filter, Combined	W. J. English	Providence, R. I	Sept. 9, 1873	142, 620
Water cooler and purifier	J. M. Baird	Wheeling, W. Va	May 29, 1866	55, 037
Water cooler and purifier	A. J. Gibson and G. Emerson	Cincinnati, Ohio, and Newport, Ky.	Feb. 28, 1865	46, 556
Water-cooler and refrigerator	L. R. Comstock	Keokuk, Iowa	Oct. 4, 1870	107, 880
Water-cooler and refrigerator	J. Hindemyer and C. C. Savery	Philadelphia, Pa	Aug. 3, 1869	93, 502
Water-cooler and refrigerator	A. Murden and H. L. Cooper	New Haven, Conn	Dec. 10, 1867	71, 899
Water-cooler and refrigerator	C. C. Savery	Philadelphia, Pa	Sept. 1, 1868	81, 827
Water-cooler and refrigerator	C. C. Savery	Philadelphia, Pa	Nov. 2, 1869	96, 486
Water-cooler and show-case, Combined	P. J. Hanour	Buffalo, N. Y	July 15, 1873	140, 777
Water-cooler, Enameled	C. C. Savery	Philadelphia, Pa	Apr. 21, 1868	77, 106
Water cooler, filter, and ice-chest, Combined	R. Long	Pittsburgh, Pa	Oct. 24, 1871	120, 294
Water-cooler for steam-engines	R. G. Eunson	New York, N. Y	Apr. 12, 1859	23, 668
Water-cooler stand	W. F. Nickels	Philadelphia, Pa	Feb. 6, 1872	123, 356
Water-coolers, &c., Composition for lining	A. Mahler	New York, N. Y	Jan. 9, 1872	122, 623
Water-coolers, False bottom for	J. F. Wood	Wilmington, Del	Nov. 11, 1873	144, 587
Water-coolers, Metallic lining for	T. Lavender	Philadelphia, Pa	Mar. 8, 1859	23, 177
Water-crane for supplying locomotives	L. Y. Ketcham	Port Jervis, N. Y	Feb. 12, 1867	61, 038
Water-current motor	J. Q. A. Schoonover	Lebanon, Ohio	Mar. 8, 1870	100, 673
Water, Device for raising	D. E. Teal	Norwich, N. Y	Mar. 15, 1859	23, 275
Water, Device for removing lime from hard	K. Frazer	Syracuse, N. Y	Aug. 23, 1870	106, 759
Water-door for furnaces	J. Rogers	Nashua, N. H	June 27, 1865	48, 446
Water-drawer	S. R. Boardman	New York, N. Y	July 17, 1866	56, 352
Water-drawer	H. P. Castle	Ashtabula, Ohio	Mar. 27, 1866	53, 411
Water-drawer	J. Daykin	Cleveland, Ohio	June 4, 1867	65, 353
Water-drawer	J. Daykin	Cleveland, Ohio	Dec. 31, 1867	72, 725
Water-drawer	A. A. Hotchkiss	Monroe City, Mo	Dec. 11, 1860	30, 879
Water-drawer	M. W. Jenks	Richmond, Ind	July 24, 1866	56, 568
Water-drawer	F. H. Jones	Attica, N. Y	May 8, 1866	54, 558
Water-drawer	L. King	East Cleveland, Ohio	Feb. 27, 1866	52, 858
Water-drawer	C. W. Saladee	Newark, Ohio	Oct. 23, 1866	59, 079
Water-drawer	J. W. Wheeler	Cleveland, Ohio	May 22, 1866	55, 025
Water-drawing apparatus	C. Broyles	Greene County, Tenn	Apr. 30, 1850	7, 319
Water-economizer	E. J. Stearns	Catonsville, Md	May 31, 1864	42, 969
Water-elevator	L. J. Adams	Cleveland, Ohio	Aug. 12, 1862	36, 189
Water-elevator	N. Adams	Iowa City, Iowa	June 18, 1872	128, 091
Water-elevator	J. Aldrich	Washington, D. C	Apr. 10, 1860	27, 765
Water-elevator	J. Altoffer and W. Bushnell	Harrisonburgh, Va	Aug. 30, 1821	... ...
Water-elevator	C. F. Anderson and S. Davis	Claremont, N. H	Mar. 26, 1861	31, 769
Water-elevator	P. Anderson	Norwich, N. Y	Feb. 12, 1861	31, 365
Water-elevator	P. Anderson	Norwich, N. Y	May 26, 1863	38, 711
Water-elevator	G. M. Atherton	Friendsville, Ill	Jan. 12, 1869	85, 778
Water-elevator	S. F. Atwood	Leavenworth City, Kans	July 30, 1872	129, 916
Water-elevator	E. R. Austin	Norwalk, Conn	Oct. 2, 1866	58, 368
Water-elevator	S. L. Avery	Norwich, N. Y	June 17, 1862	35, 578
Water-elevator	S. L. Avery	Norwich, N. Y	May 1, 1866	54, 276
Water-elevator	J. A. Ayres	Hartford, Conn	Apr. 25, 1871	114, 092
Water-elevator	J. A. Ayres	Mystic River, Conn	Apr. 15, 1873	137, 754
Water-elevator	A. S. Babbitt	Keeseville, N. Y	July 3, 1866	55, 977
Water-elevator	J. K. Babcock	Shortsville, N. Y	Dec. 28, 1869	98, 218
Water-elevator	W. E. Babcock	East Pembroke, N. Y	Oct. 30, 1866	59, 160
Water-elevator	W. E. Babcock	East Pembroke, N. Y	Jan. 15, 1867	61, 137
Water-elevator	W. H. Babcock	Homer, N. Y	Sept. 2, 1862	36, 330
Water-elevator	H. J. Bailey and S. S. Williams	Pittsburgh, Pa	Aug. 30, 1864	43, 966
Water-elevator	A. Balding	Wheeling, W. Va	Jan. 14, 1873	134, 835
Water-elevator	J. A. Ball	Grass Valley, Cal	Aug. 20, 1872	130, 688
Water-elevator	J. C. Barrett	Stamford, Conn	Jan. 26, 1864	41, 410
Water-elevator	J. C. Barrett	Stamford, Conn	July 3, 1866	55, 980
Water-elevator	R. Bartle	Independence, Iowa	Apr. 9, 1861	31, 942
Water-elevator	E. P. Barton	Windsor, N. Y	Sept. 27, 1864	44, 386
Water-elevator	T. Bell	Bellport, N. Y	Apr. 29, 1873	138, 312
Water-elevator	S. Bennett	New Orleans, La	July 15, 1873	140, 808
Water-elevator	J. H. Best	Schenectady, N. Y	Aug. 8, 1865	49, 217
Water-elevator	B. B. Bignall	Owego, N. Y	Feb. 23, 1864	41, 672
Water-elevator	M. C. Bignall	Seneca Falls, N. Y	Mar. 15, 1864	41, 901
Water-elevator	M. C. Bignall and R. F. Osgood	Seneca Falls and Rochester, N. Y.	Aug. 18, 1863	39, 611
Water-elevator	C. Bixler	Rogersville, Ohio	May 21, 1861	32, 348
Water-elevator	S. R. Boardman	Fort Wayne, Ind	Aug. 18, 1868	81, 245
Water-elevator	A. M. Bowles and H. Preston	Oxfordville, Wis	July 9, 1867	66, 451
Water-elevator	G. H. Bristol	Rome, Mich	July 28, 1868	80, 447
Water-elevator	J. S. Brown	Washington, D. C	May 20, 1862	35, 295
Water-elevator	J. S. Brown	Washington, D. C	Oct. 11, 1864	44, 597
Water-elevator	R. Brown	West Edmeston, N. Y	Mar. 19, 1867	63, 007
Water-elevator	J. L. Bunch	Franklin, Tenn	Mar. 5, 1872	124, 328
Water-elevator	W. Burdon	Brooklyn, N. Y	July 23, 1872	129, 648
Water-elevator	W. Burdon	Brooklyn, N. Y	July 23, 1872	129, 649
Water-elevator	C. O. Bush	Michigan Bluff, Cal	Jan. 27, 1863	37, 492
Water-elevator	G. C. Canfield	Mechanicsburgh, Ohio	May 3, 1870	102, 655
Water-elevator	G. W. Carpenter	Butler, Ind	Nov. 9, 1869	96, 547
Water-elevator	W. H. Castle	Washington, D. C	Apr. 14, 1868	76, 712
Water-elevator	J. Champlin	East Middlebury, Vt	June 26, 1860	28, 832
Water-elevator	D. B. Chatfield and J. M. Dutcher	La Grange, Wis	Oct. 15, 1861	33, 505
Water-elevator	J. D. Christie	Hackensack, N. J	Aug. 5, 1862	36, 071
Water-elevator	A. J. Clemmons	Aberdeen, Miss	Nov. 7, 1871	120, 714
Water-elevator	A. J. Clemmons	Aberdeen, Miss	Jan. 2, 1872	122, 440
Water-elevator	R. F. Clow and W. H. Down	New York, N. Y	June 20, 1871	116, 025
Water-elevator	J. R. Cole	Kenton Station, Tenn	Dec. 10, 1867	71, 985

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Water-elevator	J. M. Connel	Newark, Ohio	Jan. 1, 1861	31, 008
Water-elevator	J. W. Crannell	Yorkville, Mich	Sept. 10, 1867	68, 711
Water-elevator	J. E. Cronk	Poughkeepsie, N. Y	June 30, 1863	39, 036
Water-elevator	J. E. Cronk	Poughkeepsie, N. Y	Feb. 27, 1866	52, 824
Water-elevator	W. R. Cunningham	Brooklyn, Ohio	Apr. 22, 1862	35, 013
Water-elevator	P. K. Curll	Elkridge Landing, Md	Sept. 17, 1867	68, 847
Water-elevator	G. B. Curtis	Wolcott, N. Y	Sept. 11, 1866	58, 019
Water-elevator	J. Curts	Ottumwa, Iowa	Sept. 19, 1871	119, 119
Water-elevator	J. Curts	Ottumwa, Iowa	Nov. 19, 1872	133, 208
Water-elevator	W. Dabney	Richmond, Va	Nov. 20, 1824	....
Water-elevator	J. Daykin	Cleveland, Ohio	Mar. 17, 1863	37, 903
Water-elevator	J. Daykin	Cleveland, Ohio	Feb. 27, 1872	124, 038
Water-elevator	J. Dearborn	Seabrook, N. H	Oct. 25, 1864	44, 789
Water-elevator	E. Deaver	Rokeby, Ohio	June 11, 1872	127, 745
Water-elevator	I. Dekle	Thomasville, Ga	Oct. 11, 1870	108, 242
Water-elevator	N. N. Destrehan	Charles Parish, La	Dec. 13, 1821	....
Water-elevator	A. W. Dewey	Boston, Mass	June 25, 1861	32, 620
Water-elevator	G. W. Dickerson	Prairieton, Ind	June 15, 1869	91, 311
Water-elevator	G. W. Dickerson	Prairieton, Ind	Nov. 16, 1869	96, 785
Water-elevator	C. H. Dunbrack	Jacksonville, Ill	Feb. 12, 1861	31, 377
Water-elevator	D. A. Dunham	Pilatka, Fla	Sept. 7, 1869	94, 582
Water-elevator	O. D. Eckerson and C. Watson	Middleburgh, N. Y	Feb. 11, 1862	34, 354
Water-elevator	J. B. Erwin	Batavia, N. Y	July 29, 1873	141, 212
Water-elevator	J. B. Erwin and G. H. Shoulters	Batavia, N. Y	Mar. 4, 1873	136, 368
Water-elevator	L. F. Fischer	Fennimore, Wis	July 18, 1871	117, 164
Water-elevator	D. Flagg	Concord, N. H	Aug. 21, 1866	57, 306
Water-elevator	A. H. French	Pittsfield, Ill	July 23, 1861	32, 862
Water-elevator	A. H. French	Pittsfield, Ill	May 27, 1862	35, 369
Water-elevator	J. Freret	New Orleans, La	Sept. 18, 1866	58, 093
Water-elevator	F. T. Gilbert	Elgin, Ill	Feb. 5, 1867	61, 731
Water-elevator	J. W. Graham and J. M. Topliff	Pittsfield, Ill	July 9, 1861	32, 767
Water-elevator	A. F. Gray	Belleville, Ill	Mar. 11, 1862	34, 629
Water-elevator	M. D. Gray	Terre Haute, Ind	Jan. 18, 1870	98, 952
Water-elevator	J. Gruey	Kendallville, Ind	Aug. 25, 1868	81, 494
Water-elevator	J. J. Hamilton	Connersville, Ind	July 30, 1872	129, 887
Water-elevator	W. G. Hamilton	Milton, Wis	Mar. 2, 1869	87, 408
Water-elevator	W. G. Hamilton	Milton, Wis	Feb. 1, 1870	99, 313
Water-elevator	H. Hawkins	Lockhaven, Pa	May 26, 1863	38, 679
Water-elevator	J. Hayden	Columbus, Ohio	Jan. 14, 1862	34, 145
Water-elevator	J. Hayden	Haydenville, Mass	Aug. 26, 1862	36, 300
Water-elevator	M. Heady	Spencer County, Ky	May 31, 1870	103, 613
Water-elevator	S. Hemenway	Fond du Lac, Wis	Apr. 12, 1864	42, 289
Water-elevator	J. Herrick, jr	Albany, N. Y	Feb. 1, 1810	....
Water-elevator	T. Holmes	Bristol, R. I	June 18, 1867	65, 811
Water-elevator	E. Honeywell	Broadalbin, N. Y	July 10, 1830	....
Water-elevator	J. G. C. Horton	Gillespie, Ill	Aug. 11, 1868	80, 957
Water-elevator	C. Houghton	Boston, Mass	Mar. 5, 1872	124, 209
Water-elevator	E. Hoyt	Stamford, Conn	Apr. 3, 1866	53, 621
Water-elevator	H. H. Hudson and G. W. Billings.	Cleveland, Ohio	Apr. 30, 1861	32, 191
Water-elevator	A. D. Humphrey and T. Forbes.	Clyde, N. Y	Oct. 4, 1864	44, 531
Water-elevator	R. W. Hunt and M. Kennedy	Galesburgh, Ill	Apr. 2, 1861	31, 888
Water-elevator	J. M. Hunter	Greene, N. Y	Nov. 1, 1864	44, 867
Water-elevator	T. H. Hutchins	Gorham, N. H	Nov. 29, 1870	109, 622
Water-elevator	G. Illias	Dallastown, Pa	Sept. 20, 1864	44, 315
Water-elevator	A. Johnson	Putnam, Conn	Sept. 9, 1862	36, 409
Water-elevator	D. Jones	Machen Newport, Wales	June 8, 1869	91, 023
Water-elevator	S. F. Jones	Saint Paul, Ind	Apr. 19, 1864	42, 439
Water-elevator	S. F. Jones	Saint Paul, Ind	Sept. 20, 1864	44, 371
Water-elevator	S. F. Jones	Saint Paul, Ind	July 10, 1866	56, 228
Water-elevator	W. D. Jones	Hagaman Mills, N. Y	Sept. 22, 1863	40, 046
Water-elevator	P. H. Kimball	Prophetstown, Ill	July 30, 1867	67, 318
Water-elevator	C. King	East Cleveland, Ohio	Nov. 24, 1868	84, 282
Water-elevator	A. H. Knapp	Newton Centre, Mass	Sept. 10, 1867	68, 753
Water-elevator	L. M. Knowles	Owatonna, Minn	Apr. 27, 1869	89, 413
Water-elevator	C. H. Kock	Davenport, Iowa	June 29, 1869	91, 943
Water-elevator	J. F. Latimer	Detroit, Mich	June 21, 1870	104, 605
Water-elevator	J. Lee	Galesburgh, Ill	June 25, 1861	32, 632
Water-elevator	S. C. Lewis	Woodbridge, Mich	July 9, 1867	66, 600
Water-elevator	J. Lilly	Castle Creek, N. Y	Nov. 10, 1863	40, 569
Water-elevator	N. H. Lindley	Bridgeport, Conn	Apr. 23, 1872	126, 064
Water-elevator	Z. Lockwood	Saratoga Springs, N. Y	June 29, 1869	92, 067
Water-elevator	T. J. Lovegrove	Philadelphia, Pa	Dec. 5, 1871	121, 637
Water-elevator	C. W. L. Martine	Scotch Plains, N. J	Nov. 24, 1868	84, 293
Water-elevator	H. H. May	Galesburgh, Ill	Nov. 14, 1865	50, 944
Water-elevator	I. Mayfield	Mayfield, Ky	Sept. 26, 1871	119, 380
Water-elevator	M. S. McAtee	Chester, Ill	Apr. 5, 1870	101, 484
Water-elevator	J. McCloskey	New York, N. Y	June 4, 1872	127, 624
Water-elevator	F. B. McGregor	Commerce, Mich	June 18, 1861	32, 574
Water-elevator	J. B. McMillan	North Vernon, Ind	May 5, 1863	38, 401
Water-elevator	D. J. McMillan	Chillicothe, Mo	Dec. 30, 1873	146, 086
Water-elevator	A. A. and R. P. McPheeters	Arbor Hill, Va	Apr. 25, 1871	114, 176
Water-elevator	M. S. McSwain	Pole Grove, Wis	July 5, 1870	104, 976
Water-elevator	W. Meigs	Waynesville, Ohio	July 12, 1864	43, 517
Water-elevator	J. E. Moeller	Terre Haute, Ind	Aug. 28, 1866	57, 546
Water-elevator	T. L. Morris	Claypool, Ky	Aug. 9, 1870	106, 189
Water-elevator	H. Morse and D. Perry	Natick and Attleborough, Mass.	Mar. 11, 1862	34, 641
Water-elevator	E. Mosher	Flint, Mich	June 18, 1861	32, 580
Water-elevator	G. Mott	Big Run, Ohio	June 11, 1867	65, 763
Water-elevator	A. A. Moulton	Providence, R. I	Nov. 15, 1870	109, 236
Water-elevator	D. P. Monroe	Plympton Station, Mass	May 26, 1863	38, 698
Water-elevator	G. Murray	Cleveland, Ohio	May 14, 1861	32, 337
Water-elevator	H. Nash	Maysville, Ky	Aug. 7, 1860	29, 511
Water-elevator	H. Nash	Lockport, N. Y	May 27, 1862	35, 386
Water-elevator	H. Nash	Pittsfield, Mass	Nov. 17, 1863	40, 637
Water-elevator	J. Negly	Fairview, Ill	Sept. 20, 1864	44, 334

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Water-elevator	A. Norris	Spencer, N. Y	Dec. 3, 1867	71, 781
Water-elevator	W. Painter	Afton, Iowa	Dec. 6, 1864	45, 339
Water-elevator	W. M. Palmer	Middlebush, N. J	Feb. 25, 1868	74, 768
Water-elevator	W. M. Palmer	Middlebush, N. J	July 7, 1868	79, 772
Water-elevator	W. M. Palmer	Middlebush, N. J	Mar. 30, 1869	88, 506
Water-elevator	C. D. Palmiter	Oswego, N. Y	Mar. 23, 1869	88, 069
Water-elevator	J. M. Perkins	Cleveland, Ohio	Mar. 5, 1861	31, 618
Water-elevator	P. Perrine	Little Falls, N. Y	Sept. 12, 1865	49, 914
Water-elevator	D. Perry	Pawtucket, R. I	Aug. 16, 1864	43, 862
Water-elevator	I. A. Pinnell	Galva, Ill	Dec. 4, 1866	60, 239
Water-elevator	G. A. Poppy and C. H. Colegrove.	Rochester, Ohio	Oct. 28, 1862	36, 792
Water-elevator	W. E. Pratt	Iowa City, Iowa	Feb. 16, 1864	41, 639
Water-elevator	S. Puffer and A. J. Sands, 2d	Oxford, N. Y	July 14, 1863	39, 245
Water-elevator	G. Race	Norwich, N. Y	Jan. 25, 1861	32, 648
Water-elevator	G. Race	Norwich, N. Y	July 15, 1862	35, 891
Water-elevator	G. Race	Norwich, N. Y	Apr. 3, 1866	53, 676
Water-elevator	J. F. Raftery	Eldara, Ill	Dec. 29, 1868	85, 476
Water-elevator	J. S. Rand	North Providence, R. I	July 2, 1861	32, 713
Water-elevator	L. Raymond	Green, Ohio	Dec. 8, 1868	84, 841
Water-elevator	A. O. Remington and V. R. Stewart.	Weedsport, N. Y	Oct. 16, 1866	58, 888
Water-elevator	J. Rider	Newark, Ohio	Aug. 6, 1861	33, 007
Water-elevator	S. Rolph	Albany, N. Y	Nov. 16, 1822	....
Water-elevator	J. Rymond	Erwinna, Pa	July 10, 1866	56, 275
Water-elevator	P. W. Sawyer	Gray, Me	Apr. 25, 1871	114, 049
Water-elevator	T. Scholze and B. Bickel	Steuben County and Elkhart County, Ind.	Jan. 8, 1867	61, 024
Water-elevator	H. R. Scott	Plainwell, Mich	May 12, 1863	38, 506
Water-elevator	A. H. Seaman	Coxsackie, N. Y	Sept. 27, 1864	44, 463
Water-elevator	M. A. Shepard	Bridgeport, Conn	June 25, 1861	32, 655
Water-elevator	O. Shepard	Rochester, Ohio	Sept. 29, 1863	40, 125
Water-elevator	E. Shepherd	Chenango, N. Y	Apr. 23, 1861	32, 151
Water-elevator	I. Sherwood	Unadilla, N. Y	Apr. 29, 1862	35, 113
Water-elevator	H. M. Smith	Richmond, Va	Apr. 24, 1866	54, 225
Water-elevator	H. Spear	Cape Elizabeth, Me	May 24, 1870	103, 518
Water-elevator	J. E. Study	Augusta, Me	Jan. 6, 1863	37, 375
Water-elevator	A. Tarbox	Willimantic, Conn	Feb. 14, 1865	46, 403
Water-elevator	E. S. Taylor and H. S. Larned.	Cleveland, Ohio	Dec. 11, 1860	30, 894
Water-elevator	L. Taylor	Jordan, Wis	July 24, 1866	56, 634
Water-elevator	L. Taylor and J. C. Richardson	Jordan and Prairie du Chien, Wis.	Oct. 19, 1869	95, 953
Water-elevator	D. E. Teal	Norwich, N. Y	Mar. 31, 1863	38, 068
Water-elevator	D. E. Teale	Norwich, N. Y	June 30, 1863	39, 079
Water-elevator	S. H. Tift	Morrisville, Vt	Nov. 29, 1859	26, 305
Water-elevator	J. Tilley	West Troy, N. Y	Mar. 27, 1866	53, 5 5
Water-elevator	T. Fowlds, jr	Trevorton, Pa	Jan. 21, 1873	135, 104
Water-elevator	P. Van Dyk	The Hague, Holland	Aug. 3, 1869	93, 373
Water-elevator	B. Vater	New York, N. Y	Sept. 13, 1870	107, 426
Water-elevator	J. I. Vedder	Schenectady, N. Y	Oct. 24, 1848	5, 874
Water-elevator	T. J. Wadleigh	Sutton, N. H	Oct. 20, 1863	40, 374
Water-elevator	W. B. Wadsworth	Cleveland, Ohio	Jan. 27, 1863	37, 535
Water-elevator	W. B. Wadsworth	Cleveland, Ohio	June 9, 1863	38, 850
Water-elevator	A. Walker	Oswego, N. Y	June 2, 1868	78, 625
Water-elevator	W. P. Walling	Swartz Creek, Mich	July 7, 1868	79, 707
Water-elevator	M. Wappich	Sacramento, Cal	May 29, 1860	28, 526
Water-elevator	A. Warren and J. W. Martin.	Maquoketa, Iowa	July 1, 1862	35, 794
Water-elevator	S. M. Washburn	Poughkeepsie, N. Y	May 27, 1862	35, 405
Water-elevator	L. Wentworth	Burlington, Iowa	Dec. 4, 1860	30, 848
Water-elevator	W. P. Wentworth	Seneca Falls, N. Y	Aug. 29, 1871	118, 658
Water-elevator	J. W. Wheeler	Cleveland, Ohio	Feb. 11, 1862	34, 398
Water-elevator	J. W. Wheeler	Cleveland, Ohio	Oct. 5, 1869	95, 545
Water-elevator	B. Wieland and D. S. Young	Oneco, Ill., and Monroe, Wis.	Feb. 8, 1870	99, 734
Water-elevator	T. P. Wilcox	Hebron, Ind	Nov. 16, 1869	97, 011
Water-elevator	M. D. Wilder	La Porte, Ind	Aug. 27, 1861	33, 166
Water-elevator	S. S. Williams	Pittsburgh, Pa	Feb. 17, 1863	37, 715
Water-elevator	S. S. Williams	Pittsburgh, Pa	Apr. 21, 1863	38, 268
Water-elevator	S. S. Williams	Pittsburgh, Pa	May 24, 1864	42, 919
Water-elevator	C. F. Woodruff	Newbern, Tenn	Feb. 4, 1868	74, 186
Water-elevator	C. F. Woodruff	Newbern, Tenn	Sept. 15, 1868	82, 264
Water-elevator	C. F. Woodruff	Newbern, Tenn	Mar. 30, 1869	88, 428
Water-elevator	A. Woodworth	North White Creek, N. Y.	Sept. 4, 1866	57, 811
Water-elevator	G. W. Woodworth	Cleveland, Ohio	Aug. 26, 1862	36, 318
Water-elevator	E. L. Yorks	Honeoye Falls, N. Y	June 9, 1863	38, 856
Water-elevator	E. L. and W. R. Yorks	Honeoye Falls, N. Y	Apr. 2, 1867	63, 602
Water-elevator	G. M. Zell	Waynesville, Ohio	Mar. 4, 1862	34, 607
Water elevator and carrier	D. Johnston	Eddyville, Iowa	Nov. 13, 1860	30, 631
Water elevator and carrier	A. A. and R. P. McPheeters	Arbor Hill, Va	May 10, 1870	102, 955
Water elevator and conveyor	J. F. Keller	Greencastle, Pa	Dec. 11, 1860	30, 881
Water elevator and conveyor	D. C. Smith and W. P. Walling	Adrian, Mich	May 6, 1862	35, 183
Water elevator and dairy, Combined	H. N. Brooks	Bloomington, Ill	Nov. 10, 1868	83, 827
Water elevator and distributer for buildings	J. L. Smith	Passaic, N. J	Oct. 26, 1869	96, 280
Water elevator and ejector, Steam	A. W. Cram	Litchfield, Ill	Jan. 21, 1873	135, 091
Water-elevator, Archimedean-screw	W. H. Plumb	New York, N. Y	Sept. 21, 1869	94, 971
Water-elevator, Atmospheric	F. Baldwin	Janesville, Wis	June 4, 1872	127, 449
Water-elevator, Automatic	H. H. Craigie	New York, N. Y	July 5, 1870	104, 934
Water-elevator, Automatic steam	C. Houghton	Roxbury, (Boston,) Mass	Feb. 7, 1871	111, 542
Water-elevator, Balanced	W. L. Thomas	Wadsworth, Ohio	Mar. 8, 1870	100, 567
Water-elevator, Electro-magnetic	S. G. Randall	Providence, R. I	Oct. 17, 1871	119, 996
Water-elevator for cattle	N. Miller	Finley, Ohio	June 18, 1861	32, 576
Water-elevator for cattle	M. D. Wilder	La Porte, Ind	June 25, 1861	32, 661
Water-elevator for mills	W. Smith	Gloucester County, N. J	Aug. 12, 1808	....
Water-elevator for mills, Steam	J. Ambler	Berlin County, N. Y	May 29, 1819	....
Water-elevator for wells	C. Gullmann	Poughkeepsie, N. Y	July 24, 1866	56, 553
Water-elevator for wells	A. T. Jones	Stamford, Conn	May 8, 1866	54, 557
Water elevator, Hot	W. E. Prall	Washington, D. C	Apr. 21, 1868	77, 090
Water-elevator, Pneumatic	P. W. McKenzie	Blauveltville, N. Y	Dec. 5, 1871	121, 533

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Water-elevator, Pneumatic diaphragm	S. G. Randall	Providence, R. I	Oct. 26, 1869	96, 265
Water-elevator, Railway	W. H. Butler	Chicago, Ill	June 26, 1866	55, 816
Water-elevator, Railway	M. S. Collar	Marquette, Wis	Oct. 8, 1867	69, 631
Water-elevator, Railway	A. A. Stivender	Ocala, Fla	Feb. 1, 1870	99, 369
Water-elevator, Railway-station	J. J. Hamilton	Connersville, Ind	Aug. 6, 1872	130, 127
Water-elevator, Railway-tank	C. L. Stevens	Galesburgh, Ill	Jan. 1, 1867	60, 803
Water-elevator, Rotary	J. I. Shotwell	Garnett, Kans	July 16, 1872	129, 299
Water-elevator, Steam	W. Arthur	Newport, Ky	Apr. 30, 1872	126, 246
Water-elevator, Steam	J. B. Atwater	Chicago, Ill	Jan. 9, 1866	51, 908
Water-elevator, Steam	A. D. Brock	Washington, D. C	Feb. 11, 1873	135, 765
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Aug. 6, 1872	130, 276
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Oct. 1, 1872	131, 737
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 746
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 747
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 748
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 749
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 750
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 751
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 752
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 753
Water-elevator, Steam	W. Burdon	Brooklyn, N. Y	Dec. 10, 1872	133, 754
Water-elevator, Steam	M. Burton	Indianapolis, Ind	June 25, 1867	66, 000
Water-elevator, Steam	J. S. Fox	Otto, N. Y	Apr. 5, 1828	....
Water-elevator, Steam	S. F. Gates	Cambridge, Mass	June 4, 1872	127, 592
Water-elevator, Steam	W. L. Horne	Batavia, Ill	May 28, 1867	65, 082
Water-elevator, Steam	W. L. Horne	Batavia, Ill	Mar. 10, 1868	75, 424
Water-elevator, Steam	J. T. Milligan	Duquoin, Ill	July 30, 1872	129, 977
Water-elevator, Steam	D. Myers and S. H. Noble	Chicago, Ill	Mar. 27, 1866	53, 469
Water-elevator, Steam	W. E. Prall	Washington, D. C	July 6, 1869	92, 357
Water-elevator, Steam	W. E. Prall	Washington, D. C	Nov. 23, 1869	97, 225
Water-elevator, Steam	W. E. Prall	Washington, D. C	Nov. 23, 1869	97, 226
Water-elevator, Steam	E. Reese	Mahanoy City, Pa	Apr. 9, 1872	125, 408
Water-elevator, Steam	G. B. Roe	Payne's Point, Ill	Jan. 2, 1872	122, 332
Water-elevator, Steam	G. T. Snowden and I. V. Lynn	Pittsburgh, Pa	Feb. 9, 1869	86, 705
Water-elevator, Steam	C. L. Stevens	Galesburgh, Ill	Mar. 31, 1868	76, 264
Water-elevator, Steam	C. L. Stevens and A. A. Denton	Galesburgh, Ill	Jan. 12, 1869	85, 868
Water-elevator, Steam	J. D. Warner	Brooklyn, N. Y	Nov. 2, 1869	96, 368
Water-elevator, Steam	H. M. Wightman	Boston, Mass	Aug. 16, 1870	106, 525
Water-elevator, Steam	J. C. Wightman	Newton, Mass	Mar. 29, 1870	101, 334
Water-elevator, Steam and vacuum	J. C. Wightman	Newton, Mass	July 29, 1873	141, 249
Water-elevator, Tidal	P. Week	Brooklyn, N. Y	Dec. 17, 1867	72, 343
Water-elevator, Wind-wheel	G. W. Darby	New Vienna, Ohio	Mar. 9, 1869	87, 646
Water, Elevating	C. C. Bomberger	West Carlisle, Ohio	Oct. 25, 1859	25, 879
Water-elevating wheel, Floating	C. F. Fisher	New Orleans, La	Feb. 21, 1871	112, 025
Water-engine	A. Coates and M. V. Osborn	Watertown, N. Y	May 12, 1863	38, 531
Water-engine	J. H. Connell	Elizabeth, N. J	Nov. 26, 1872	133, 356
Water-engine	J. M. Dupuy	Woodford, Ky	Apr. 13, 1814	....
Water-engine	L. Eames	Kalamazoo, Mich	Sept. 9, 1862	36, 398
Water-engine	R. Francis	Woodstock, Wis	Nov. 15, 1870	109, 311
Water-engine	P. Lyon	....	Feb. 12, 1800	....
Water-engine	S. Morey	....	Apr. 24, 1799	....
Water-engine	C. Whipple	Detroit, Mich	May 24, 1864	42, 891
Water, Engine for elevating and throwing	T. A. Chandler	Norfolk, N. Y	Aug. 9, 1834	....
Water-engines in motion, Electro-magnetic apparatus for setting.	M. G. Farmer	Salem, Mass	Jan. 11, 1859	22, 602
Water-filter	P. Ball and B. Fitts	Worcester, Mass	May 6, 1873	138, 466
Water-filter	J. W. Dougherty	Chicago, Ill	Dec. 20, 1870	110, 217
Water-flow gage or regulator	E. A. Chameroy	Paris, France	Aug. 23, 1870	106, 658
Water for bathing, Heating	R. H. Hobbs	Hartford, Conn	Nov. 27, 1847	5, 377
Water for domestic purposes, Raising	L. Knap	Brighton, N. Y	May 22, 1826	....
Water for propelling machinery, Raising and conveying.	D. G. Colburn	Cayuga County, N. Y	May 12, 1834	....
Water for turning mills, Raising	W. Mead	Pittsburgh, Pa	Nov. 19, 1833	....
Water for use in steam-boilers, Purifying	M. Park	Madison, Ind	Oct. 4, 1836	39
Water-forcing apparatus	J. M. Rucker	Forest Depot, Va	Aug. 9, 1870	106, 287
Water from fountains, Raising	J. Manning	....	Apr. 10, 1798	....
Water from running streams, Machine for raising.	F. Lippart	Keetztown Post-Office, Pa	May 3, 1805	....
Water from wells, Apparatus for drawing	E. Andrus	Geneva, N. Y	Nov. 13, 1860	30, 608
Water from wells, Apparatus for drawing	G. D. Colton	Galesburgh, Ill	Nov. 13, 1860	30, 616
Water from wells, Apparatus for drawing	J. T. Farrand	Port Byron, N. Y	Mar. 20, 1849	6, 192
Water from wells, Apparatus for drawing	M. A. Mihills	Lodi, Ohio	Apr. 4, 1871	113, 440
Water from wells, Apparatus for drawing	H. F. Phillips	Seneca Falls, N. Y	Nov. 13, 1860	30, 657
Water from wells, Apparatus for drawing	H. W. Sabin	Reed's Corners, N. Y	Dec. 11, 1849	6, 946
Water from wells, Apparatus for drawing	S. R. Wilmot	New Haven, Conn	May 3, 1853	9, 702
Water from wells, Apparatus for elevating	G. W. Billings and W. M. Hutton.	Cleveland, Ohio	May 22, 1860	28, 342
Water from wells, Apparatus for elevating	L. Taylor	Jordan, Wis	Nov. 22, 1859	26, 211
Water from wells, Apparatus for raising	E. Puffer	Oxford, N. Y	Oct. 25, 1859	25, 912
Water from wells, Drawing	E. Willard	Egremont, Mass	Oct. 23, 1826	....
Water from wells, Machine for drawing	I. Willbur	Madison, N. Y	Dec. 28, 1826	....
Water from wells, Machine for raising	W. Harington	....	Aug. 28, 1804	....
Water from wells, Machinery for raising	J. T. Farrand and W. Heinman	Port Byron, N. Y	Oct. 2, 1849	6, 756
Water from wells, Method of drawing	H. B. Barber	Scott, N. Y	July 8, 1856	15, 273
Water from wells, Method of drawing	C. Winegar	Union Springs, N. Y	Aug. 14, 1855	13, 446
Water from wells, Method of elevating	J. McArthur	Aurora, Ill	Oct. 23, 1860	30, 490
Water from wells, Method of elevating and delivering.	J. Daykin	Cleveland, Ohio	Aug. 21, 1860	29, 677
Water from wells, Method of elevating and delivering.	J. W. Wheeler	Cleveland, Ohio	Jan. 17, 1860	26, 870
Water from wells, &c., Method of raising	J. Lee	Galesburgh, Ill	Sept. 18, 1860	30, 070
Water from wells, Mode of drawing	J. Turner and S. Woodward	Sunapee, N. H	Dec. 6, 1870	109, 972
Water from wells, Mode of drawing	E. Willard	Egremont, Mass	Nov. 2, 1825	....
Water from wells, Mode of raising	S. Smith	Mendon, N. Y	Aug. 20, 1828	....
Water from wells, Raising	J. I. Ferrand	Port Byron, N. Y	Jan. 7, 1846	4, 349
Water from wells, Raising	G. Patterson	Philadelphia, Pa	Feb. 6, 1813	....
Water from wells, springs, &c., Mode of raising	S. Smith	Mendon, N. Y	Mar. 17, 1829	....
Water-fountain, Aërated	J. C. Johnson	Louisville, Ky	May 28, 1872	127, 243
Water-gage	C. Delafield	Factoryville, N. Y	Feb. 11, 1868	74, 204

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Invention.	Inventor.	Residence.	Date.	No.
Water-gage	C. F. Henis	Cincinnati, Ohio	Oct. 24, 1865	50, 581
Water-gage	F. A. Hoyt	Buffalo, N. Y	July 5, 1864	43, 411
Water-gage	D. Lithgow	Philadelphia, Pa	July 27, 1869	92, 979
Water-gage	G. Murray, jr	Cambridgeport, Mass	Oct. 5, 1869	95, 503
Water-gage	J. E. Richard	Columbia, S. C	Dec. 5, 1861	121, 661
Water-gage	H. P. and H. H. Stafford	Decatur, Ill	Oct. 6, 1868	82, 762
Water-gage	R. and G. E. Tower	Ashtabula, Ohio	Jan. 24, 1860	26, 937
Water-gage, Alarm	W. R. Andrews and J. Oswald	Chicago, Ill	May 3, 1859	23, 816
Water gage and cock combined	T. and W. Todd	Schenectady, N. Y	Dec. 12, 1871	121, 914
Water-gage, alarm, and register, Electrical	C. Heisler	Saint Louis, Mo	Nov. 11, 1873	144, 540
Water-gage float	L. L. Lee	Milwaukee, Wis	Sept. 11, 1866	57, 929
Water-gage for boilers	N. H. Bundy	New York, N. Y	Dec. 31, 1867	72, 793
Water-gage for boilers, &c	B. Crawford	Allegheny City, Pa	Mar. 9, 1852	8, 787
Water-gage for boilers	C. G. and B. M. Martin	New York, N. Y	Nov. 18, 1873	144, 686
Water-gage for boilers	D. M. Swain	La Crosse, Wis	Aug. 6, 1867	67, 608
Water-gage for boilers, Magnetic	G. Faber	Canton, Ohio	Nov. 26, 1845	4, 288
Water-gage for steam-boilers	M. Doyle	Baltimore, Md	Oct. 3, 1871	119, 454
Water-gage for steam-boilers	J. Echols	Columbus, Ga	Dec. 11, 1855	13, 903
Water-gage for steam-boilers	J. C. Harris	Savannah, Ga	Nov. 11, 1856	16, 054
Water-gage for steam-boilers	R. S. Harris	Galena, Ill	Aug. 9, 1859	25, 012
Water-gage for steam-boilers	F. A. Hoyt	Boston, Mass	Dec. 9, 1856	16, 182
Water-gage for steam-boilers	F. A. Hoyt	Boston, Mass	Oct. 18, 1859	25, 828
Water-gage for steam-boilers	J. Johnson and R. Lapham	New York, N. Y	Oct. 19, 1858	21, 836
Water-gage for steam-boilers	W. B. Le Van	Philadelphia, Pa	July 9, 1861	32, 775
Water-gage for steam-boilers	A. S. Lyman	New York, N. Y	Aug. 12, 1851	8, 290
Water-gage for steam-boilers	G. Mann, jr	Ottawa, Ill	Oct. 13, 1863	40, 272
Water-gage for steam-boilers	R. H. Mathies	Boston, Mass	June 21, 1859	24, 519
Water-gage for steam-boilers	A. Miller	Cleveland, Ohio	Feb. 22, 1859	23, 037
Water-gage for steam-boilers	H. K. Moore	Malden, Mass	June 21, 1859	24, 520
Water-gage for steam-boilers	L. Paige	Cavendish, Vt	Aug. 26, 1856	15, 617
Water-gage for steam-boilers	W. Palmer	New York, N. Y	Jan. 31, 1854	10, 481
Water-gage for steam-boilers	C. L. Ridgway	Boston, Mass	May 26, 1868	78, 234
Water-gage for steam-boilers	D. E. Rugg	New York, N. Y	June 2, 1857	17, 472
Water-gage for steam-boilers	T. Scheffler	Paterson, N. J	May 10, 1864	42, 690
Water-gage for steam-boilers	H. Shlarbaum	New York, N. Y	Mar. 5, 1861	31, 632
Water-gage for steam-boilers	P. Stillman	New York, N. Y	July 31, 1855	13, 363
Water-gage for steam-boilers	T. Stubblefield	Columbus, Ga	Dec. 14, 1858	22, 313
Water-gage for steam-boilers	E. W. Vanduzen	Hamilton Township, Ohio	Jan. 27, 1863	37, 534
Water-gage for steam-boilers	E. W. Vanduzen	Cincinnati, Ohio	Feb. 13, 1872	123, 751
Water-gage for steam-boilers	E. Whiteley	Boston, Mass	Oct. 13, 1857	18, 420
Water-gage for steam-boilers, Alarm	C. T. Pangboon	Brooklyn, N. Y	July 24, 1860	29, 308
Water-gage for steam-generators	H. Belfield	Philadelphia, Pa	Aug. 15, 1865	49, 366
Water-gage for steam-generators	A. P. Brown	New York, N. Y	Aug. 27, 1867	68, 038
Water-gage for steam-generators	G. M. Githens	New York, N. Y	Aug. 14, 1866	57, 118
Water-gage for steam-generators	J. S. Hunter	Hartford, Conn	Jan. 14, 1868	73, 250
Water-gage for steam-generators	G. T. Parry	Philadelphia, Pa	Apr. 23, 1867	64, 025
Water-gage for the tonnage of vessels	W. O. Reim	Springfield, Ohio	Jan. 4, 1870	98, 630
Water-gage indicator for boilers, Steam	W. Hodgson	Cincinnati, Ohio	Aug. 17, 1869	93, 884
Water-gage, Magnetic	G. W. Smith and C. F. Henis	Cincinnati, Ohio	Sept. 6, 1864	44, 118
Water-gage, Maximum and minimum	G. J. Firmin	North Brixton, England	Aug. 30, 1870	106, 801
Water-gage with feeder attachment	M. N. Lynn	New Albany, Ind	July 4, 1871	116, 611
Water-gages, &c., Method of testing hollow sphere for.	G. W. Lane	Boston, Mass	Mar. 13, 1860	27, 455
Water, gas, and drain pipes, Composition for manufacturing.	W. P. Kirkland	San Francisco, Cal	Feb. 1, 1870	99, 324
Water, gas, and other pipes, Machine for making	G. H. Bailey	Jersey City, N. J	Apr. 30, 1867	64, 187
Water, gas, &c., pipe	A. K. Johnston	Brooklyn, N. Y	Apr. 18, 1871	113, 891
Water, gas, &c., pipe and tube	F. Chase	Philadelphia, Pa	Aug. 15, 1871	118, 106
Water-gate	M. Hays	Fostoria, Ohio	Mar. 8, 1870	100, 623
Water-gate	W. C. Hopwood	Fillmore, Ind	June 27, 1871	116, 445
Water-gate	W. P. Hubbard	Farmland, Ind	Aug. 8, 1871	117, 781
Water-gate	N. Jenkins	Boston, Mass	Aug. 21, 1866	57, 329
Water-gate	D. J. Moffitt	Thorntown, Ind	July 11, 1871	116, 854
Water-gate	H. Recher	Liberty, Ohio	Mar. 26, 1867	63, 302
Water-gate	V. E. Smith	Lancaster, N. H	July 6, 1869	92, 384
Water-gate, Automatic	H. Besse	Delaware, Ohio	Jan. 7, 1868	73, 159
Water-gate, Balance	W. Maker	Rome, N. Y	Nov. 12, 1811	....
Water-gate, Balance	E. N. Moore and I. H. Hanyan	Lenox, Pa., and Chester, N. Y.	July 24, 1855	13, 319
Water-gate for directing the flow upon tide-wheels	J. G. Ross	New York, N. Y	Nov. 6, 1860	30, 591
Water-gate for pen-stocks or flumes	H. Potes	Christiansburgh, Va	Jan. 9, 1827	....
Water-gate, Non-freezing	A. M. Bailey	Middlefield, Conn	June 18, 1867	65, 862
Water-gate, Self-regulating	G. N. Todd	Dundaff, Pa	Feb. 20, 1855	12, 421
Water-gates of mills, Mode of shutting	A. Bolton	Fauquier County, Va	June 19, 1812	....
Water-gates of mills, Opening and shutting	O. Packard	Wilmington, Vt	Feb. 12, 1827	....
Water-guard, Double-hinged	J. Burt	Tiverton, R. I	Apr. 3, 1849	6, 270
Water-heater	J. M. J. and J. Danner	Canton, Ohio	Dec. 27, 1859	26, 595
Water-heater	E. Duchamp	Saint Martinsville, La	Sept. 13, 1859	25, 399
Water-heater	J. Head	Andover, N. Y	July 25, 1871	117, 416
Water-heater	J. Kenfield, jr	Elmira, N. Y	Feb. 18, 1873	135, 921
Water-heater	J. McCloskey	New York, N. Y	Oct. 10, 1865	50, 422
Water-heater	J. M. McIntyre and R. Megennity.	Detroit, Mich	Oct. 4, 1864	44, 542
Water-heater	I. S. Mead	Blue Earth City, Minn	Aug. 19, 1873	142, 035
Water-heater	J. and T. A. Raisbeck	New York, N. Y	Oct. 4, 1870	108, 050
Water-heater	J. C. Ryan	Chicago, Ill	Oct. 27, 1868	83, 552
Water-heater	H. Sabin	Philadelphia, Pa	Nov. 3, 1868	83, 796
Water-heater	T. Shaw	Philadelphia, Pa	May 18, 1869	90, 127
Water-heater	D. Smith and J. Lynch	Boston, Mass	June 13, 1871	115, 901
Water-heater	A. Spence	Montreal, Canada	Dec. 9, 1873	145, 457
Water heater and purifier	P. Almy	Williamson, N. Y	Jan. 2, 1872	122, 346
Water-heater and steam-condenser	H. J. Phalen	Plantersville, Tex	Oct. 1, 1867	69, 477
Water-hehter and steam-generator	H. Howard	Springfield, Mass	Sept. 17, 1867	68, 987
Water-heater and steam-generator	G. M. Woodward	New York, N. Y	June 18, 1872	128, 086
Water-heater for baths, tubs, &c	W. H. Thomas	Sacramento, Cal	Feb. 18, 1868	74, 630
Water-heater for culinary purposes	R. E. Deane	Brooklyn, N. Y	Dec. 14, 1869	97, 766
Water-heater for domestic purposes, Portable	J. S. Woolsey	Gilroy, Cal	Dec. 17, 1872	134, 120
Water-heater for green-houses	S. E. Chubbuck	Boston, Mass	Feb. 22, 1870	100, 013

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Water-heater for green-houses, &c	J. A. Scollay	Brooklyn, N. Y	Sept. 17, 1872	131, 467
Water-heater for heating buildings	A. Marriott	Saint Louis, Mo	Jan. 21, 1873	135, 135
Water-heater for locomotive-engines	S. F. Allen	Chicago, Ill	Aug. 7, 1860	29, 452
Water-heater for scalding hogs and washing clothes	I. Thorn, jr	Bordentown, N. J	Feb. 11, 1834	....
Water-heater for steam-boilers	D. C. G. Field	Lowell, Mass	Feb. 7, 1871	111, 526
Water-heater for steam-boilers	W. A. Jones and J. L. Sherman	Dubuque, Iowa, and Cassville, Wis.	Nov. 24, 1868	84, 425
Water-heater for steam-boilers	A. H. Walker	Oswego, N. Y	June 30, 1868	79, 523
Water-heater for steam-boilers	H. N. Waters	Hartford, Conn	Apr. 5, 1864	42, 243
Water-heater for steam-boilers	R. Winans	Baltimore, Md	July 29, 1837	309
Water-heater for steam-engines	J. Speers	West Manchester, Pa	Nov. 29, 1859	26, 299
Water-heater for steam fire-engine boilers	E. A. Russell	Milwaukee, Wis	Oct. 8, 1872	132, 026
Water-heater for steaming vegetables, &c	J. S. Marsh and A. Munger	Auburn, N. Y	Apr. 2, 1841	2, 033
Water heater, Hot	W. H. Lungren	Baltimore, Md	July 4, 1871	116, 608
Water heater, Hot	N. Middleton and S. Morris	Philadelphia, Pa	July 4, 1871	116, 620
Water-heater, Laundry	J. Keane	New York, N. Y	July 4, 1865	48, 561
Water-heater, Petroleum-lamp	C. C. Taintor	Springfield, Ill	July 16, 1867	66, 752
Water-heater, Steam	H. S. Hindekoper	Meadville, Pa	Mar. 9, 1869	87, 567
Water-heater, Steam	W. B. Mack	Detroit, Mich	July 13, 1869	92, 622
Water-heater, Stove	G. L. Ingersoll	Cleveland, Ohio	Nov. 26, 1867	71, 490
Water-heater, Stove-pipe	J. Baumeister	Detroit, Mich	June 20, 1865	48, 253
Water, &c., Heating and boiling	G. J. Payne	Lockport, N. Y	Dec. 27, 1826	....
Water, Heating and boiling	B. Platt	....	Apr. 27, 1803	....
Water-heating apparatus	T. M. Carroll	Independence, Iowa	Oct. 28, 1873	144, 060
Water-heating apparatus	G. L. Ingersoll	Cleveland, Ohio	June 7, 1859	24, 353
Water-heating boiler	J. Ellis	White Plains, N. Y	Feb. 4, 1868	74, 061
Water-heating boiler	C. A. Harper	Rahway, N. J	July 2, 1867	66, 329
Water-heating boiler for culinary or other purposes.	D. L. Pickard	Hartland, N. Y	Oct. 14, 1840	1, 828
Water-heating device	E. R. Stilwell	Dayton, Ohio	Aug. 3, 1869	93, 244
Water-heating machine	D. B. Barnum	New Fairfield, Conn	June 25, 1836	....
Water in combustion with spirits of turpentine, Decomposing and recomposing.	S. Morey	Boston, Mass	Nov. 19, 1833	....
Water in pipes, Apparatus for regulating the pressure of.	J. Stratton	Brooklyn, N. Y	Nov. 22, 1859	26, 210
Water in pipes, Device for regulating the pressure of.	J. Stratton	Brooklyn, N. Y	June 5, 1860	28, 616
Water in steam-boilers, Apparatus for ascertaining by inspection the saltness of.	W. Sewell, jr	Williamsburgh, N. Y	Feb. 6, 1849	6, 104
Water in steam-boilers, Method of regulating the supply of.	G. B. Wright	Elmira, N. Y	Oct. 6, 1863	40, 206
Water in vats, Heating	J. L. Burdick	Norwich, N. Y	July 31, 1846	4, 679
Water-indicator	W. Butterfield	Madison, Wis	Sept. 12, 1871	118, 789
Water-indicator and alarm	T. Flinn	Brooklyn, N. Y	May 12, 1868	77, 809
Water-indicator and alarm	M. N. Lynn	New Albany, Ind	Oct. 4, 1870	107, 934
Water indicator, Combined high and low	G. Walton	Cincinnati, Ohio	Sept. 2, 1873	142, 5[illegible]6
Water-indicator for boilers	W. V. Du Bois	Covington, Ind	Dec. 29, 1868	85, 435
Water-indicator for boilers	W. R. England	Milwaukee, Wis	July 16, 1867	66, 694
Water-indicator for boilers	A. G. Fell	Brooklyn, N. Y	July 2, 1867	66, 230
Water-indicator for boilers	A. and W. Guthrie and T. L. Humes.	Chicago, Ill	Feb. 5, 1867	61, 826
Water-indicator for boilers	J. D. Linde	Philadelphia, Pa	Feb. 11, 1868	74, 389
Water-indicator for boilers	A. Vang	Chicago, Ill	Dec. 10, 1867	72, 130
Water-indicator for boilers	I. T. Woodward	Philadelphia, Pa	May 14, 1867	64, 730
Water-indicator for steam-boilers	C. H. Cary	Detroit, Mich	Feb. 9, 1864	41, 480
Water-indicator for steam-boilers	F. B. Fournier and D. Hinman	Berea, Ohio	Oct. 13, 1857	18, 425
Water-indicator for steam-boilers	J. L. Frisbie	Cincinnati, Ohio	May 17, 1859	24, 017
Water-indicator for steam-boilers	G. Lutz	Logan, Ohio	Sept. 20, 1859	25, 516
Water-indicator for steam-boilers	G. Lutz	Lancaster, Ohio	Sept. 8, 1863	39, 821
Water-indicator for steam-boilers	A. F. W. Neynaber	Philadelphia, Pa	Nov. 24, 1868	84, 298
Water-indicator for steam-boilers	A. P. Pitkin	Hartford, Conn	May 6, 1873	138, 524
Water-indicator for steam-boilers	M. Robbins and J. L. Frisbie	Cincinnati, Ohio	Oct. 5, 1858	21, 699
Water-indicator for steam-boilers	T. J. Sloan	New York, N. Y	May 16, 1854	10, 912
Water-indicator for steam-generators	W. G. Bell	Pittsburgh, Pa	Jan. 4, 1870	98, 464
Water-indicator for steam-generators	F. Chalfant	Lancaster, Pa	June 26, 1866	55, 819
Water-indicator for steam-generators	G. Lutz	Lancaster, Ohio	May 29, 1866	55, 130
Water indicator for steam-generators	W. Moore	Kokomo, Ind	June 16, 1868	78, 885
Water-leader, Automatic	H. Rensch	Quincy, Ill	May 21, 1867	65, 009
Water-leader, Automatic-valved and filtering	J. Muss	Quincy, Ill	Oct. 29, 1867	70, 248
Water-level detector for boilers	J. Maslin and D. Birdsall	Jersey City, N. J	Oct. 13, 1868	82, 967
Water-level indicator for boilers	B. Phillips	Philadelphia, Pa	June 21, 1834	....
Water-level indicator for boilers, Fusible alloy for.	A. Stillman	New York, N. Y	Mar. 20, 1847	5, 022
Water-level indicator for steam-boilers	P. Clark	Rahway, N. J	June 6, 1854	11, 030
Water-level indicator for steam-boilers	G. Faber	Canton, Ohio	May 13, 1851	8, 088
Water-level indicator for steam-boilers	A. H. Judd	Marinetown, Ill	Aug. 5, 1851	8, 273
Water-level indicator for steam-boilers	N. Thompson, jr	Williamsburgh, N. Y	Aug. 2, 1853	9, 905
Water-level gage for boilers	H. C. Worthington and W. H. Baker.	New York and Williamsburgh, N. Y.	Feb. 20, 1847	4, 972
Water lock-gate, Mortise	W. Martin	Windham County, Conn	Jan. 15, 1820	....
Water-main attachment, Stop for	W. Young	Easton, Pa	Apr. 1, 1873	137, 399
Water-mains, Stop-gate in	D. C. Cregier	Chicago, Ill	Aug. 5, 1873	141, 426
Water-mains, Apparatus for tapping	W. Young	Easton, Pa	Mar. 18, 1873	136, 950
Water, Machine for boring for	L. Disbrow	New Brunswick, N. J.	Mar. 24, 1825	....
Water, &c., Machine for cooling and filtering	D. McMullin and T. M. Corby	....	Nov. 6, 1804	....
Water, &c., Machine for cutting and removing obstructions under.	S. Cram	New York, N. Y	Oct. 26, 1838	989
Water, Machinery for lifting	I. C. Foster	Union City, Tenn	Dec. 15, 1857	18, 842
Water, Mechanism by which cattle raise	J. A. Ayres	Hartford, Conn	Apr. 15, 1856	14, 646
Water-meter	R. N. Allen	Pittsford, Vt	June 1, 1869	90, 717
Water-meter	A. W. Almqvist and F. W. Ofeldt.	New York, N. Y	Jan. 19, 1869	85, 985
Water-meter	A. W. Almqvist and F. W. Ofeldt.	New York, N. Y	Mar. 22, 1870	100, 964
Water-meter	N. Aubin	Canada	Aug. 19, 1862	36, 201
Water-meter	C. W. Baldwin	Boston, Mass	Dec. 31, 1867	72, 958
Water-meter	P. Ball	Worcester, Mass	Jan. 21, 1868	73, 430
Water-meter	J. S. Barden	New Haven, Conn	Jan. 16, 1855	12, 232
Water-meter	J. S. Barden	New Haven, Conn	May 22, 1855	12, 934

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Invention.	Inventor.	Residence.	Date.	No.
Water-meter	J. S. Barden	New Haven, Conn	Oct. 21, 1862	36, 698
Water-meter	J. S. Barden	Providence, R. I	July 18, 1871	117, 035
Water-meter	S. Barker and A. A. Smith	Hartford, Conn	Nov. 12, 1861	33, 690
Water-meter	H. M. Bartlett	South Dedham, Mass	Sept. 19, 1871	119, 003
Water-meter	H. M. Bartlett	South Dedham, Mass	Sept. 19, 1871	119, 004
Water-meter	H. M. Bartlett	South Dedham, Mass	Oct. 8, 1872	131, 929
Water-meter	J. B. Benton	New York, N. Y	Mar. 28, 1865	46, 990
Water-meter	G. F. Blake	Medford, Mass	Apr. 1, 1862	34, 857
Water-meter	G. F. Blake	Medford, Mass	May 23, 1865	47, 893
Water-meter	G. F. Blake	Boston, Mass	Sept. 12, 1865	51, 415
Water-meter	E. Blakeslee and J. S. Hunter	Plymouth and Hartford, Conn.	June 25, 1867	65, 994
Water-meter	J. A. Bradshaw and W. H. Brown.	Lowell, Mass	Jan. 19, 1869	85, 900
Water-meter	J. A. Bradshaw and W. H. Brown.	Lowell, Mass	Mar. 30, 1869	88, 362
Water-meter	J. Broughton	Brooklyn, N. Y	Aug. 15, 1871	117, 975
Water-meter	L. Burnell	Milwaukee, Wis	Nov. 1, 1859	25, 948
Water-meter	H. Burt	Newark, N. J	Feb. 10, 1863	37, 658
Water-meter	C. Campeaux	New York, N. Y	Nov. 14, 1871	120, 853
Water-meter	I. Carey	Warwick, N. Y	Dec. 1, 1868	84, 533
Water-meter	B. S. Church	Manhattanville, N. Y	Aug. 30, 1859	25, 245
Water-meter	B. S. Church	Manhattanville, N. Y	Nov. 8, 1859	26, 014
Water-meter	B. S. Church	New York, N. Y	Oct. 15, 1861	33, 475
Water-meter	E. E. P. Clausolles	Barcelona, Spain	Mar. 4, 1873	136, 363
Water-meter	J. W. Cremin	New York, N. Y	May 2, 1871	114, 415
Water-meter	J. W. Cremin	New York, N. Y	June 13, 1871	115, 937
Water-meter	J. Curtis and S. Hoard	Chicago, Ill	July 3, 1855	13, 198
Water-meter	W. Darker, jr	Philadelphia, Pa	July 6, 1858	20, 842
Water-meter	J. F. Nevarro and H. C. Sergeant.	New York, N. Y	Apr. 16, 1872	125, 793
Water-meter	B. Densmore	New York, N. Y	Aug. 30, 1870	106, 792
Water-meter	A. M. De Souchet	Evansville, Ind	June 13, 1871	115, 940
Water-meter	W. E. Desper	Worcester, Mass	Sept. 24, 1872	131, 604
Water-meter	W. B. Durant	Cambridge, Mass	July 7, 1868	79, 559
Water-meter	A. B. Edmands	Melrose, Mass	Aug. 4, 1868	80, 714
Water-meter	J. D. Elliot	Leicester, Mass	Oct. 17, 1854	11, 806
Water-meter	G. D. Emerson	Calumet, Mich	July 4, 1871	116, 576
Water-meter	J. Ericsson	New York, N. Y	Jan. 1, 1851	7, 869
Water-meter	J. Ericsson	New York, N. Y	Dec. 9, 1851	8, 579
Water-meter	E. P. Farrar and J. N. Farrar	New York, N. Y., and Pepperell, Mass.	Feb. 14, 1860	27, 118
Water-meter	W. M. Farris	Wheeling, W. Va	Feb. 23, 1858	19, 414
Water-meter	H. Flad	Saint Louis, Mo	June 9, 1868	78, 795
Water-meter	T. B. Fogarty	Brooklyn, N. Y	Feb. 7, 1871	111, 624
Water-meter	W. M. Fuller	New York, N. Y	July 5, 1870	104, 950
Water-meter	O. Gilmore	Raynham, Mass	Jan. 11, 1870	98, 626
Water-meter	O. Gilmore	Raynham, Mass	Oct. 18, 1870	108, 344
Water-meter	R. C. Gray and W. B. Brittingham.	La Fayette, Ind	Feb. 14, 1871	111, 838
Water-meter	R. C. Gray and W. B. Brittingham.	New York, N. Y	Nov. 26, 1872	133, 438
Water-meter	T. Green	Brooklyn, N. Y	Apr. 30, 1867	64, 310
Water-meter	O. B. Griggs and A. E. Barrows	Mansfield and Windham, Conn.	Feb. 23, 1869	87, 166
Water-meter	J. W. Groat	New York, N. Y	Oct. 4, 1870	107, 900
Water-meter	A. W. Hall	New York, N. Y	Mar. 9, 1869	87, 664
Water-meter	T. C. Hargrave	Boston, Mass	May 25, 1869	90, 535
Water-meter	T. C. Hargrave	Boston, Mass	June 1, 1869	90, 662
Water-meter	T. C. Hargrave	Boston, Mass	Mar. 28, 1871	113, 162
Water-meter	J. Hartin	New York, N. Y	May 24, 1853	9, 746
Water-meter	A. Heaton	Bridgeport, Conn	July 28, 1868	80, 409
Water-meter	F. G. Hesse	Oakland, Cal	Jan. 17, 1871	111, 060
Water-meter	S. Huse	Boston, Mass	Jan. 27, 1852	8, 686
Water-meter	H. J. Hyams	New York, N. Y	Mar. 5, 1867	62, 634
Water-meter	H. J. Hyams	Pittsburgh, Pa	Oct. 10, 1871	119, 709
Water-meter	H. Isham	New Britain, Conn	Jan. 7, 1862	34, 060
Water-meter	H. Isham	New Britain, Conn	Jan. 14, 1862	34, 147
Water-meter	H. Isham	New Britain, Conn	Nov. 21, 1865	51, 056
Water-meter	G. L. Jaeger	New York, N. Y	July 28, 1868	80, 488
Water-meter	L. P. Jenks	Boston, Mass	Feb. 26, 1867	62, 423
Water-meter	F. G. Johnson	Brooklyn, N. Y	Jan. 1, 1861	31, 055
Water-meter	F. G. Johnson	Brooklyn, N. Y	Nov. 3, 1863	40, 485
Water-meter	G. Kaber	New York, N. Y	July 23, 1861	32, 878
Water-meter	J. F. Kelley	Washington, D. C	Feb. 15, 1870	99, 909
Water-meter	H. J. King	Worcester, Mass	Sept. 27, 1864	44, 432
Water-meter	S. Krauser and C. Ritter	Reading, Pa	Nov. 13, 1855	13, 792
Water-meter	J. P. Lindsay	New York, N. Y	May 9, 1871	114, 694
Water-meter	W. H. Lindsay	New York, N. Y	Apr. 5, 1853	9, 647
Water-meter	W. Livingstone	New York, N. Y	Jan. 21, 1868	73, 537
Water-meter	N. B. Marsh	Cincinnati, Ohio	May 20, 1856	14, 921
Water-meter	N. B. Marsh	Cincinnati, Ohio	Apr. 26, 1859	23, 772
Water-meter	E. Marsland	Sing Sing, N. Y	May 21, 1872	126, 974
Water-meter	G. R. Moore	Lyons, Iowa	Oct. 6, 1868	82, 737
Water-meter	A. Morse	Skowhegan, Me	Aug. 30, 1870	106, 852
Water-meter	P. H. Niles	Boston, Mass	June 23, 1857	17, 654
Water-meter	A. O'Leary	Iowa City, Iowa	Oct. 10, 1871	119, 714
Water-meter	H. Olney	New York, N. Y	May 21, 1872	126, 981
Water-meter	W. Park	Norwich, Conn	Jan. 24, 1871	111, 143
Water-meter	W. Park	Norwich, Conn	Dec. 24, 1872	134, 306
Water-meter	W. Payton	London, England	Jan. 7, 1868	73, 194
Water-meter	J. Percy	Albany, N. Y	Feb. 3, 1863	37, 588
Water-meter	T. T. Prosser	Chicago, Ill	Sept. 9, 1873	142, 650
Water-meter	H. F. Read	Brooklyn, N. Y	July 20, 1869	92, 883
Water-meter	T. D. Read and L. M. Ellis	Aberdeen, Ind	Aug. 24, 1869	94, 132
Water-meter	I. Robbins	Hughesville, Pa	Mar. 2, 1869	87, 513
Water-meter	A. M. Rouse	Saint Louis, Mo	May 6, 1873	138, 697
Water-meter	A. M. Rouse	Saint Louis, Mo	July 8, 1873	147, 731

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Water-meter	H. C. Sergeant	New York, N. Y	June 22, 1869	91, 675
Water-meter	W. Sewell, jr	Williamsburgh, N. Y	Feb. 5, 1850	7, 075
Water-meter	L. Sexauer	New York, N. Y	Aug. 11, 1868	81, 015
Water-meter	J. S. Shaller and G. F. Folsom	Roxbury, Mass	Mar. 26, 1861	31, 830
Water-meter	J. Sheffield	Pultneyville, N. Y	May 23, 1865	47, 866
Water-meter	G. Sickels	Roxbury, Mass	July 24, 1860	29, 316
Water-meter	G. Sickels	Boston, Mass	Oct. 9, 1866	58, 735
Water-meter	G. Sickels	Boston, Mass	May 5, 1868	77, 542
Water-meter	G. Sickels	Boston, Mass	Mar. 23, 1869	88, 221
Water-meter	G. Sickels	Boston, Mass	May 10, 1870	102, 976
Water-meter	G. Sickels	Boston, Mass	May 24, 1870	103, 379
Water-meter	G. Sickels	Boston, Mass	Feb. 20, 1872	123, 946
Water-meter	J. C. Slaughter	New York, N. Y	July 27, 1871	116, 362
Water-meter	G. W. Smith	Norwich, Conn	Mar. 29, 1870	101, 323
Water-meter	M. Smith	New Haven, Conn	Sept. 19, 1854	11, 702
Water-meter	E. Spencer	Elizabeth, N. J	Mar. 17, 1868	75, 655
Water-meter	E. Spencer and E. L. Meyer	Elizabeth, N. J	June 12, 1866	55, 547
Water-meter	D. B. Spooner	Syracuse, N. Y	Oct. 22, 1872	132, 496
Water-meter	M. Stannard	Hartford, Conn	July 6, 1869	92, 222
Water-meter	J. D. Sumner	Lexington, Mass	Aug. 20, 1867	67, 9[illegible]8
Water-meter	A. J. Sweeney	Wheeling, Va	Mar. 25, 1856	14, 525
Water-meter	T. Sweeney	Boston, Mass	Mar. 22, 1870	101, 059
Water-meter	J. Taggart	Roxbury, Mass	Feb. 11, 1868	74, 254
Water-meter	F. A. Tenny	Concord, N. H	Aug. 24, 1858	21, 283
Water-meter	J. Thomas	New York, N. Y	Oct. 1, 1861	32, 406
Water-meter	I. P. Tice	New York, N. Y	Apr. 4, 1871	113, 366
Water-meter	T. R. Timby	Tarrytown, N. Y	Jan. 9, 1872	122, 683
Water-meter	D. L. Tower	New York, N. Y	Oct. 3, 1871	119, 671
Water-meter	W. Van Anden	Poughkeepsie, N. Y	Apr. 4, 1871	113, 597
Water-meter	W. Van Anden	Poughkeepsie, N. Y	June 25, 1872	128, 338
Water-meter	J. E. Van Winkle and J. Mason	Paterson, N. J	Jan. 14, 1862	34, 173
Water-meter	A. W. Von Schmidt	San Francisco, Cal	Mar. 1, 1859	23, 131
Water-meter	F. Wagner and L. Sexauer	New York, N. Y	Mar. 3, 1868	75, 225
Water-meter	W. O. Wakefield	Boston, Mass	May 21, 1872	127, 126
Water-meter	W. O. Wakefield	Boston, Mass	Aug. 20, 1872	130, 610
Water-meter	H. S. Walcott	Boston, Mass	Oct. 3, 1865	50, 307
Water-meter	C. Weed	Boston, Mass	Mar. 27, 1866	53, 509
Water-meter	H. F. Wheeler	Boston, Mass	Feb. 6, 1872	123, 530
Water-meter	H. F. Wheeler and T. W. Lane	Boston, Mass	June 11, 1872	127, 942
Water-meter	G. B. Wiggin	South New Market, N. H	June 21, 1870	104, 675
Water-meter	S. R. Wilmot	New Haven, Conn	Oct. 31, 1854	11, 881
Water-meter	H. R. Worthington	Brooklyn, N. Y	July 24, 1855	13, 320
Water-meter and force-pump, Combined	E. Spencer	Elizabeth, N. J	Aug. 27, 1867	68, 127
Water meter and motor	A. B. Lawther and G. F. Lotz	Chicago, Ill	Oct. 16, 1866	58, 843
Water-meter, Automatic	F. D. Bellido	New York, N. Y	Nov. 11, 1873	144, 498
Water meter or motor	C. Turner	Grand Rapids, Mich	Mar. 31, 1868	76, 274
Water-meter with stop-cock connections	J. F. De Navarro	New York, N. Y	May 2, 1871	114, 419
Water-meters, Manufacturing rubber diaphragms for.	D. B. Spooner	Syracuse, N. Y	Dec. 23, 1873	145, 762
Water-meters, Mold for casting the cylinders and dial-boxes of.	H. F. Read	Brooklyn, N. Y	July 27, 1869	93, 003
Water-meters, Molding propellers for	H. F. Read	Brooklyn, N. Y	July 20, 1869	92, 884
Water-meters, Valve-operating mechanism for	O. H. Langdon	Homer, N. Y	June 20, 1871	116, 200
Water, Method of cooling	T. Byrne	Baton Rouge, La	July 10, 1860	29, 056
Water, milk, and beer cooler	C. M. Vail	Elmira, N. Y	Oct. 22, 1867	70, 136
Water-mill	S. Brouwer	New York, N. Y	Nov. 27, 1812	....
Water-mill	J. Owings	Baltimore, Md	Jan. 25, 1814	....
Water-mill	J. Perkins	Newburyport, Mass	June 26, 1813	....
Water-mill, Portable	J. Heller	East Lampeter, Pa	Dec. 16, 1856	16, 235
Water, Mode of obtaining	T. Davis	Lawrence Township, Dearborn County, Ind.	Apr. 14, 1828	....
Water, Mode of obtaining	J. Dexter	Salisbury, Conn	Jan. 27, 1826	....
Water, Mode of obtaining salt	D. and J. Ruffner	Kanawha, Va	Jan. 18, 1817	....
Water, Mode of purifying	M. S. Bringier	Ascension Parish, La	Sept. 8, 1868	81, 979
Water, Mode of purifying	S. Griffith	Rensselear County, N. Y	Feb. 1, 1817	....
Water, Mode of removing obstacles under	J. K. Anderson	Hornellsville, N. Y	Sept. 8, 1863	39, 787
Water, Mode of supplying houses with	W. Bryant	Davidson County, Tenn	Oct. 25, 1832	....
Water-motor	S. W. Broadwell	Logan, Iowa	July 20, 1869	92, 789
Water-motor	D. Hunsicker	Laurelton, Pa	Dec. 16, 1862	37, 168
Water-motor	W. McGinniss	Auburn Township, Ohio	May 3, 1870	102, 571
Water-motor	C. Rider	Plymouth, Mass	Oct. 26, 1858	21, 928
Water-motor	H. B. Stiles	New Haven, Conn	Feb. 6, 1866	52, 459
Water-motor, Steam-injected	J. D. Whelpley	Boston, Mass	Mar. 6, 1866	53, 067
Water or gas pipes, Composition for preventing oxidation of.	G. A. Mariner and F. Dorsett	Chicago, Ill	Nov. 16, 1869	96, 936
Water or gas pipes, Device for thawing ice in	O. R. Mason	Binghamton, N. Y	Sept. 2, 1873	142, 488
Water-pipe	D. Allen	Bloomington, Ill	May 14, 1872	126, 769
Water-pipe	J. S. Patric	Victor, N. Y	Sept. 26, 1865	50, 154
Water-pipe	R. B. Stevenson	York Township, Ohio	Oct. 17, 1854	11, 814
Water-pipe	J. Trees	Greensburgh, Pa	Aug. 6, 1867	67, 614
Water-pipe	J. F. Ward	Jersey City, N. J	Sept. 27, 1870	107, 838
Water-pipe	A. Wyckoff	Elmira, N. Y	Apr. 16, 1861	32, 100
Water pipe and tube	A. Coffman	Shenandoah County, Va	Mar. 18, 1834	....
Water-pipe, Cement	E. Dayton	Meriden, Conn	May 5, 1868	77, 465
Water-pipe connection	R. Farr	Chesterfield, N. H	Mar. 28, 1865	47, 002
Water-pipe fish-guard	A. R. Young	Brooklyn, N. Y	Dec. 17, 1872	134, 122
Water-pipe machine	J. W. Stockwell	Portland, Me	Aug. 16, 1870	106, 424
Water-pipe mold	H. Knight	Brooklyn, N. Y	Aug. 2, 1870	105, 951
Water-pipe, Non-freezing	V. Fogerty	Boston, Mass	Apr. 4, 1871	113, 645
Water-pipe support	C. D. Woodruff	Toledo, Ohio	Aug. 16, 1870	106, 527
Water-pipes, Adjustable elbow-joint for	J. D. Field	Wataga, Ill	Apr. 5, 1870	101, 603
Water-pipes, Apparatus for preventing obstructions in.	T. D. Bond	New Laurel, Md	Apr. 7, 1863	38, 138
Water-pipes, Apparatus for venting and draining	H. English	Wilmington, Del	Aug. 27, 1872	130, 850
Water-pipes, Arrangements for cleansing	J. E. Marks and L. G. Eckels	Washington, D. C	Apr. 16, 1867	63, 913
Water-pipes, Branch-joint for wrought-iron	P. Ball	Worcester, Mass	Mar. 16, 1869	87, 900
Water-pipes, Clamp for joining cement-lined	P. Ball	Worcester, Mass	June 22, 1869	91, 594
Water-pipes, Coating	J. Ball	New York, N. Y	Dec. 15, 1843	3, 373

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Water-pipes, &c., Composition for	J. S. Chatham	Seneca Falls, N. Y	Jan. 27, 1863	37, 494
Water-pipes, Eel-trap for	J. J. Dutcher	New Haven, Conn	Apr. 4, 1871	113, 278
Water-pipes, Flexible joint for	M. C. Duffey	Washington, D. C	Jan. 25, 1870	99, 172
Water-pipes from bitumen, pitch, &c., Manufacture of.	F. Baschnagel	Wenham, Mass	May 26, 1863	38, 649
Water-pipes from bursting, Apparatus to prevent.	J. Bevan	New York, N. Y	Mar. 14, 1865	46, 773
Water-pipes from bursting, Device for preventing.	R. H. S. Thompson	Georgetown, D. C	Mar. 10, 1868	75, 315
Water-pipes, Hydraulic cushion for	W. Ricketts	Cincinnati, Ohio	Oct. 28, 1873	144, 141
Water-pipes, Lateral or diverging connection for cement.	E. Dayton	Meriden, Conn	Nov. 9, 1869	96, 555
Water-pipes, &c., Making	H. Knight	Brooklyn, N. Y	May 31, 1864	42, 952
Water-pipes, Manufacture of	R. Skinner	San Francisco, Cal	Dec. 19, 1865	51, 627
Water-pipes, Mode of connecting	J. Ball	New York, N. Y	July 11, 1854	11, 264
Water-pipes, Process of testing leaden	T. Backard	Shelburne, Mass	Apr. 29, 1828	....
Water-pipes to buildings, Attaching	W. Austin	Philadelphia, Pa	July 3, 1860	28, 954
Water-pipes under hydrostatic pressure, Machine for boring, tapping, and reaming.	H. Norris	New York	Sept. 30, 1842	2, 794
Water-pipes while under hydrostatic pressure, Boring and tapping.	H. A. Norris	New York	June 22, 1842	2, 681
Water-power	E. Bassford	Jay, Me	July 10, 1834	....
Water-power	A. S. Lineback	Stockton, Utah	Sept. 14, 1869	94, 759
Water-power	A. Thayer	Albany, N. Y	May 1, 1818	....
Water-power applied to a lever-beam or vibrating circle.	J. Abbot	Reading, Mass	Nov. 19, 1833	....
Water-power, Balance-gate for flumes in	D. Robinson	Lenoxville, Pa	July 1, 1856	15, 256
Water-power by a spiral wheel	A. Vansants	Jefferson County, Mo	Sept. 29, 1823	....
Water-power by atmospheric pressure, Increasing.	S. L. Holmes	Westchester County, N. Y.	Dec. 8, 1828	....
Water-power by means of a graduated spout, Economy of.	T. P. Anderson	Hardwick, Mass	Dec. 31, 1833	....
Water-power, Floating	C. Daniels	Fremont, Ohio	Nov. 5, 1867	70, 419
Water-power, Floating	A. B. Shepard	Sand Bank, N. Y	June 2, 1868	78, 488
Water-power for working mills, &c., Application of.	J. W. Newberry	Luzerne, Pa	June 28, 1815	....
Water-power mechanism	A. French	Central City, Iowa	May 24, 1870	103, 439
Water-power, Mode of applying eccentric wheels to	J. B. Hurt	Nottoway County, Va	May 1, 1855	12, 779
Water-power multiplied by applying water to a number of wheels.	H. Crenshaw	Anderson District, S. C	Dec. 28, 1832	....
Water-power, Portable	A. Rowe	Macomb, Ill	Jan. 22, 1867	61, 362
Water-power, Saving	A. Foot	Williamstown, Mass	Jan. 4, 1831	....
Water-power to machinery, Mode of applying	M. Mallory	Benton, N. Y	Mar. 3, 1817	....
Water-power to wheels, Mode of applying	R. and T. T. McCulloch	Albemarle County, Va	May 26, 1827	....
Water-power wheel	J. Nipp, jr	Raleigh, Ind	Aug. 23, 1870	106, 715
Water-pressure regulator	N. C. Lock	Salem, Mass	Nov. 22, 1870	109, 526
Water, Preventing sediment in mineral	A. R. Lawrence	Saratoga Springs, N. Y	Nov. 6, 1866	59, 418
Water-proof and water-repellent, Manufacture of	R. O. Lowrey	Salem, N. Y	Apr. 20, 1869	89, 055
Water-proof cement	C. White	Whitestown, N. Y	Feb. 1, 1820	....
Water-proof cement	C. White	Whitestown, N. Y	Feb. 17, 1821	....
Water-proof cloth	S. C. Bishop	New York, N. Y	Jan. 14, 1868	73, 288
Water-proof cloth	A. Paraf	New York, N. Y	Sept. 1, 1868	81, 815
Water-proof cloth for carriage-tops, &c	A. M. Whipple	North Adams, Mass	Mar. 19, 1872	124, 708
Water-proof coating for various purposes	E. V. Audibert	New Orleans, La	May 4, 1869	89, 727
Water-proof composition	C. Lyon	New York	Sept. 23, 1842	2, 788
Water-proof composition	S. B. B. Nowlan	New York, N. Y	Sept. 11, 1866	57, 956
Water-proof composition for harness, leather, &c.	J. Herrold	Omaha, Nebr	Apr. 5, 1870	101, 461
Water-proof, Composition for rendering cloth	N. Hatch	Eastport, Me	Mar. 23, 1842	2, 505
Water-proof compound	R. O. Lowrey	Salem, N. Y	Apr. 20, 1869	89, 056
Water-proof compound and varnish	E. L. Simpson	Bridgeport, Conn	Apr. 5, 1864	42, 231
Water-proof compound for boots and shoes	M. H. Bottger	Sacramento City, Cal	Apr. 19, 1870	101, 974
Water-proof compound for coating cloth, wood, metal, &c.	P. E. Minor	Schenectady, N. Y	Mar. 7, 1871	112, 370
Water-proof fabric	R. G. Allerton	New York, N. Y	Jan. 23, 1866	52, 124
Water-proof fabric	T. Bracher	Rahway, N. J	Mar. 8, 1870	100, 591
Water-proof fabric	T. M. Drown	Philadelphia, Pa	Jan. 25, 1870	99, 171
Water-proof fabric	J. F. Green	Warwick, R. I	July 8, 1862	35, 854
Water-proof fabric	J. F. Green	Warwick, R. I	July 8, 1862	35, 855
Water-proof fabric	T. A. Jenckes	Providence, R. I	Feb. 18, 1862	34, 428
Water-proof fabric	R. Liddell	Thompsonville, Conn	May 31, 1864	42, 953
Water-proof fabric	L. Simonet	New York, N. Y	Nov. 6, 1860	30, 593
Water-proof fabric	E. L. Simpson	Bridgeport, Conn	Feb. 28, 1865	46, 611
Water-proof fabric	J. Snare	New York, N. Y	July 24, 1866	56, 625
Water-proof fabric for hats, &c	W. C. Mahon	Covington, Ky	Sept. 5, 1865	49, 775
Water-proof fabric for the manufacture of collars, cuffs, &c.	C. Monestier and F. Bang	Paris, France	Feb. 23, 1869	87, 277
Water-proof fabric for the manufacture of hats, &c.	D. A. Connor	Milford, Conn	July 6, 1869	92, 269
Water-proof fabric for the manufacture of traveling bags, trunks, carriage-tops, &c.	W. H. Towers	Boston, Mass	Jan. 7, 1868	73, 139
Water-proof fabric from waste rubber, Manufacture of.	M. W. Beylikgy	New York, N. Y	Feb. 22, 1870	100, 005
Water-proof fabric, Manufacture of	T. Crossly	Bridgeport, Conn	May 30, 1865	48, 015
Water-proof fabric, Manufacture of	T. Crossly	Bridgeport, Conn	July 11, 1865	48, 762
Water-proof fabric, Manufacture of	R. O. Lowrey	Salem, N. Y	May 19, 1868	78, 108
Water-proof fabric, Manufacture of	A. Taylor	Philadelphia, Pa	Feb. 27, 1866	52, 906
Water-proof fabric, Manufacture of fibrous	J. Wilson	Chicago, Ill	Dec. 24, 1861	34, 021
Water-proof fabric, Manufacture of flocked	E. L. Simpson	Monroe, Conn	Mar. 24, 1833	38, 066
Water-proof furze fabric	S. H. Atkins	Melrose, Mass	Mar. 11, 1873	136, 636
Water-proof gum from flax-seed, &c., Preparing	D. M. Lamb	Strathroy, Canada	June 24, 1873	140, 283
Water-proof gum, Production of	D. M. Lamb	Strathroy, Canada	June 24, 1873	140, 281
Water-proof gum, Production of	D. M. Lamb	Strathroy, Canada	June 24, 1873	140, 282
Water-proof leather-cement	W. S. Loughborough	Rochester, N. Y	June 23, 1868	79, 240
Water-proof material	X. Karcheski	Belleville, N. J	Apr. 1, 1873	137, 451
Water-proof mittens for diver	F. I. Meryman	Boston, Mass	Aug. 25, 1863	39, 665
Water-proof paper, &c., Composition of matter for the manufacture of.	R. O. Lowrey	Salem, N. Y	Dec. 10, 1867	71, 893
Water-proof-paper fabric	L. M. Crane	Ballston Spa, N. Y	July 2, 1867	66, 302
Water-proof preparation	P. F. L. B. Him	Brussels, Belgium	July 26, 1864	43, 659
Water-proof, Process of rendering fibrous and textile materials.	X. Karcheski	Belleville, N. J	Apr. 1, 1873	137, 452
Water-proof, Process of treating articles to render them.	C. Toppan	Wakefield, Mass	July 16, 1872	129, 438

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Water-proof, Rendering fabric	G. J. Newbery	London, England	Mar. 3, 1841	1, 997
Water-proof, Rendering fabric	T. B. Rogers	New York	Nov. 3, 1841	2, 327
Water-proof stocking	F. Curtis	Boston, Mass	Feb. 1, 1870	99, 412
Water-proof textile fabrics, Manufacture of	A. Paraf	New York, N. Y	July 21, 1868	80, 207
Water-proof, Treating paper and other fabrics to make them.	C. Toppan	Wakefield, Mass	Apr. 20, 1869	89, 094
Water-proofing cloth, &c	M. J. Lieberman	New York, N. Y	Dec. 12, 1854	12, 085
Water-proofing cloth, leather, &c	W. Elmer	New York, N. Y	June 2, 1863	38, 784
Water-proofing cloth, leather, &c., Composition for	C. J. Smith	Mount Vernon, N. Y	May 27, 1862	35, 400
Water-proofing composition	J. D. Lee	Trenton, N. J	June 12, 1866	55, 507
Water-proofing compound for canvas and other fabrics.	P. H. Morgan	Baltimore, Md	May 20, 1873	139, 017
Water-proofing cork and other material	D. E. Breinig	New York, N. Y	May 1, 1866	54, 462
Water-proofing fabrics	J. Stenhouse	Pentonville, London, England.	Dec. 14, 1869	97, 983
Water-proofing fabrics, Composition for	E. L. Simpson	Monroe, Conn	Mar. 24, 1863	38, 005
Water-proofing fabrics, Compound for	P. V. Rondiez	Chicopee, Mass	Sept 24, 1872	131, 563
Water-proofing fabrics with gutta-percha, Apparatus for.	E. A. Schuette	New York, N. Y	Oct. 11, 1870	108, 192
Water-proofing leather, &c., Process and composition for.	W. Morris	Philadelphia, Pa	June 21, 1870	104, 629
Water-proofing paper, cloth, &c., Mode of	R. O. Lowrey	Salem, N. Y	Aug. 4, 1868	80, 640
Water-proofing textile fabrics	B. Weigert	New York, N. Y	Aug. 19, 1856	15, 585
Water-proofing woolen cloth, Mixture for	J. P. Wightman	Boston, Mass	Oct. 21, 1806	....
Water purifier and cooler	J. A. Casey	Maysville, Ky	May 18, 1869	90, 238
Water, Purifying and softening	S. De Jong	Paris, France	Oct. 16, 1866	58, 961
Water-purifying apparatus	T. Jacobs and N. I. Wilkinson	Saint Louis, Mo	Apr. 2, 1861	31, 891
Water, Raising	L. Disbrow and J. L. Sullivan	New York	Aug. 28, 1832	....
Water-raising	S. Fickett	New York	June 11, 1825	....
Water-raising	L. Gillette	North Colebrook, Conn	Jan. 17, 1860	26, 843
Water-raising	E. H. Holt	Fowler's Mills, Ohio	Sept. 26, 1848	5, 805
Water-raising	D. L. and S. Myers	Christiansburgh, Va	July 28, 1838	859
Water, Raising	L. Parmelee	Poughkeepsie, N. Y	Oct. 1, 1830	....
Water, Raising	J. Turner	Poland, Me	May 6, 1836	....
Water, Raising	P. Tusing	Brook's Gap, Va	Nov. 7, 1832	....
Water-raising	D. K. Winder	Cincinnati, Ohio	Feb. 17, 1857	16, 669
Water, Raising	J. C. Wood	Ephrata, N. Y	June 22, 1836	....
Water, Raising and conveying	J. J. and S. P. Cox	Shippensburgh, Pa	Apr. 3, 1849	6, 257
Water, &c., Raising and forcing	S. Findley and B. and S. E. Morse	Charlestown, Mass	Oct. 3, 1817	....
Water-raising and timber-sawing machinery	J. Winter	Brutus, N. Y	Nov. 15, 1825	....
Water-raising apparatus	L. Chase	Portland, Me	Oct. 21, 1873	143, 882
Water-raising apparatus	J. L. Garlington	Snapping Shoals, Ga	Feb. 1, 1870	99, 307
Water-raising apparatus	N. H. Lebby	Charleston, S. C	Apr. 20, 1852	8, 890
Water-raising apparatus	J. C. Morris	Cincinnati, Ohio	May 10, 1864	42, 679
Water-raising apparatus	D. Winder	Hagerstown, Md	June 26, 1847	5, 179
Water-raising by weights	D. Hess	Shepardstown, Va	July 1, 1836	....
Water-raising device	J. A. Ayres	Hartford, Conn	June 7, 1859	24, 273
Water-raising device	H. B. Barber	Scott, N. Y	Jan. 31, 1860	27, 027
Water-raising device	J. McKnight	Pomeroy, Ohio	Nov. 1, 1864	44, 876
Water-raising machine	J. B. Aveilhé	....	Oct. 14, 1802	....
Water-raising machine	W. Barker	Wilkesbarre, Pa	Aug. 26, 1808	....
Water-raising machine	S. Bellij	Baltimore, Md	Nov. 7, 1805	....
Water, &c., raising machine	A. Bower	Pekin, Ill	Aug. 2, 1859	24, 925
Water-raising machine	M. I. Brunel	....	Apr. 27, 1798	....
Water-raising machine	B. Cooley	....	Feb. 1, 1803	....
Water-raising machine	S. Currey	Williamson County, Tenn	Apr. 24, 1810	....
Water-raising machine	W. Faris	....	May 17, 1799	....
Water-raising machine	J. Hartman	Lampeter, Pa	Mar. 31, 1814	....
Water-raising machine	J. Huntley	....	Jan. 10, 1799	....
Water-raising machine	A. E. Lazel and D. Bloodgood	Poughkeepsie, N. Y	July 27, 1829	....
Water-raising machine	W. Palmer	....	Aug. 25, 1801	....
Water-raising machine	P. Shank	Jefferson Township, Ohio	June 7, 1859	24, 337
Water-ram	E. W. Ellsworth	East Windsor, Conn	Dec. 6, 1845	4, 296
Water-ram	J. L. Gatchel	Elkton, Md	Apr. 17, 1849	6, 368
Water-ram	C. Hodgkins	Marlborough, N. H	Oct. 10, 1871	119, 764
Water-ram	C. Hodgkins	Marlborough, N. H	Nov. 26, 1872	133, 368
Water-ram	F. Miller	Pittsburgh, Pa	Nov. 7, 1871	120, 761
Water-ram	A. D. Smith	Meredith, N. Y	Apr. 17, 1849	6, 346
Water-ram	K. W. Stetson	Kingston, Mass	Feb. 22, 1870	100, 084
Water-regulator	J. W. Bishop	New Haven, Conn	Apr. 11, 1865	47, 184
Water-regulator	J. P. Bolin	Orangeburgh County, S. C	Feb. 18, 1873	136, 024
Water-regulator	G. W. Darby and A. S. Moon	Blanchester, Ohio	Sept. 13, 1870	107, 341
Water-regulator and alarm	W. Wyatt	Nashville, Tenn	July 12, 1870	105, 289
Water-regulator and alarm, Boiler	R. Safley	Seneca Falls, N. Y	May 20, 1873	139, 194
Water-regulator and alarm, Boiler	L. Steigert	Cincinnati, Ohio	Oct. 5, 1869	95, 533
Water-regulator, Boiler	R. J. Jordan	Elkhart, Ind	Sept. 24, 1867	69, 218
Water-regulator, Boiler	C. J. Weld	Brattleborough, Vt	July 29, 1873	141, 392
Water-regulator, Steam-generator	H. P. Stafford and J. A. Leforgee.	Decatur, Ill	May 19, 1868	78, 150
Water-repellent and for fixing their colors, Composition for rendering fabrics.	R. O. Lowrey	Salem, N. Y	May 25, 1869	90, 564
Water-repellent, Compound for rendering fabrics	R. O. Lowrey	Salem, N. Y	July 27, 1869	93, 102
Water-repellent material	C. Toppan	Wakefield, Mass	Apr. 20, 1869	89, 095
Water-repellent, Mode of rendering brick, stone, clay, plaster, &c.	R. O. Lowrey	Salem, N. Y	Apr. 20, 1869	89, 053
Water-repellent, Mode of rendering fibrous fabrics	R. O. Lowrey	Salem, N. Y	Apr. 20, 1869	89, 054
Water-shoot and driving-wheel	L. and T. Waterbury	Malta, N. Y	Apr. 12, 1834	....
Water-spout fastening	G. A. Hein	Waterford, Pa	May 19, 1868	78, 087
Water-supply for cities, System of	B. Holly	Lockport, N. Y	Sept. 14, 1869	94, 746
Water-supply regulator	G. P. Nutting	Chicago, Ill	Dec. 22, 1868	85, 121
Water-supply regulator for water-works	B. Holly	Lockport, N. Y	Mar. 2, 1869	87, 413
Water-supplying apparatus	J. C. Hagan	Nashville, Tenn	June 7, 1870	104, 119
Water tank and warming closet, Combined	J. Tiffany	Albany, N. Y	Aug. 17, 1869	93, 771
Water-tank, Floating	W. Kearney and J. McArdle	Brooklyn, N. Y	Feb. 5, 1833	....
Water-tank, Hotel	J. H. Corey	New York, N. Y	Nov. 25, 1873	144, 834
Water-tank, Railway	J. Burnham	Batavia, Ill	July 27, 1869	93, 052
Water-tank, Railway	J. Morton	Winchester, Ind	Apr. 2, 1867	63, 418
Water-tank, Self-feeding	R. S. Pickett	New Haven, Conn	Apr. 17, 1866	54, 009

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Water-tank, Steam	S. H. Yocum and J. O. Byrne	Shelbyville, Ind	Oct. 5, 1858	21, 694
Water, &c., through pipes, Chamber to effect uniformity of flow of.	T. Clark	Philadelphia, Pa	July 7, 1857	17, 726
Water to assist in raising another, Method of applying one stream of.	C. J. P. Ariail	Roxbury, Conn	Aug. 26, 1856	15, 597
Water to boilers, Apparatus for supplying	J. N. Dennisson and T. Sealy	Newark, N. J	Mar. 2, 1858	19, 493
Water to buildings, Apparatus for supplying	T. Hanson	New York, N. Y	Feb. 21, 1860	27, 218
Water to buildings, Improved process and apparatus for supplying pure.	J. A. Thompson	Auburn, N. Y	Apr. 5, 1870	101, 544
Water to propel machinery, Mode of applying	W. Baker	Utica, N. Y	May 19, 1840	1, 614
Water to set machinery in motion, Raising	D. W. Hunt	Newburyport, Mass	June 12, 1835	....
Water to steam-boilers, Apparatus for regulating supply of.	T. J. Sloan	New York, N. Y	May 8, 1855	12, 835
Water to steam-boilers, Apparatus for supplying	G. Brodie	Little Rock, Ark	June 8, 1858	20, 477
Water to steam-boilers, Method of regulating the supply of.	W. S. Bartle	Newark, N. Y	Feb. 6, 1849	6, 105
Water-trap	J. A. Lowe	New York, N. Y	Dec. 20, 1859	26, 506
Water-traps, Casting	P. Naylor	New York, N. Y	June 11, 1872	127, 787
Water-traps, Device for forming	W. A. Butler	New York, N. Y	Oct. 14, 1873	143, 665
Water-traps, Device for forming	W. A. Butler	New York, N. Y	Oct. 28, 1873	144, 057
Water-traps, Device for making	R. Cunningham	Chicago, Ill	June 17, 1873	139, 946
Water-traps, Manufacture of	W. A. Butler	New York, N. Y	Sept. 30, 1873	143, 326
Water-traps, Mold for casting	W. A. Butler	New York, N. Y	Sept. 30, 1873	143, 327
Water-traps, Molding	J. A. Lowe	New York, N. Y	Sept. 27, 1859	25, 572
Water-tubes, Branch-attachment for	J. S. Clark	Philadelphia, Pa	Aug. 2, 1870	105, 907
Water, Valvular arrangement in apparatus for raising.	A. Nicol	Carbondale, Pa	May 19, 1857	17, 338
Water-wheel	J. Abell and A. D. Cole	Woodbridge and Toronto, Canada.	May 20, 1873	138, 979
Water-wheel	J. M. Abels	Cato, N. Y	Oct. 30, 1847	5, 350
Water-wheel	E. Adams	Orelewa, Cal	Jan. 19, 1869	85, 892
Water-wheel	I. J. W. Adams	Galestown, Md	May 15, 1866	54, 660
Water-wheel	T. J. Alcott	Mount Holly, N. J	June 10, 1873	139, 699
Water-wheel	A. Allen	Troy, Pa	Feb. 8, 1823	....
Water-wheel	H. Allen	Fayetteville, Tenn	June 2, 1836	....
Water-wheel	J. A. and A. Allen	Oakham, Mass	July 18, 1865	48, 781
Water-wheel	J. P. Allen	Springfield, Ohio	Feb. 7, 1871	111, 601
Water-wheel	J. S. Anderson	Oconomowoc, Wis	Oct. 26, 1869	96, 182
Water-wheel	A. Andrews	Bernville, Pa	Mar. 8, 1859	23, 144
Water-wheel	H. K. Annis	Enfield, N. H	Nov. 15, 1864	45, 114
Water-wheel	G. W. Armstrong	Clinton, N. C	Jan. 29, 1861	31, 217
Water-wheel	J. Armstrong and H. Herring	Lisbon, N. C	Feb. 9, 1847	4, 963
Water-wheel	G. Arrison	Trenton, N. J	Feb. 5, 1867	61, 792
Water-wheel	J. Atkinson	Amherst, Mass	Sept. 5, 1811	....
Water-wheel	C. Aylesworth	Bainbridge, N. Y	June 24, 1843	3, 152
Water-wheel	C. Aylesworth	Bainbridge, N. Y	Mar. 21, 1845	3, 959
Water-wheel	S. W. Ayres	Monticello, Ind	June 26, 1866	55, 803
Water-wheel	V. M. Baker	Elkland, Pa	Jan. 17, 1860	26, 826
Water-wheel	V. M. Baker	Preston, Minn	Sept. 8, 1868	81, 866
Water-wheel	V. M. Baker	Preston, Minn	Nov. 17, 1868	84, 158
Water-wheel	V. M. Baker	Preston, Minn	Oct. 12, 1869	95, 630
Water-wheel	V. M. Baker	Preston, Minn	Aug. 30, 1870	106, 766
Water-wheel	V. M. Baker	Preston, Minn	Mar. 12, 1872	124, 471
Water-wheel	V. M. Baker	Preston, Minn	Mar. 12, 1872	124, 472
Water-wheel	B. J. Barber	Ballston Spa, N. Y	Nov. 8, 1870	109, 099
Water-wheel	B. J. Barber	Ballston Spa, N. Y	Nov. 25, 1873	144, 944
Water-wheel	S. H. Barnes	Lanesborough, Pa	July 27, 1869	93, 037
Water-wheel	W. T. Barnes	Buffalo, N. Y	July 25, 1848	5, 679
Water-wheel	D. L. Bartlett	Rockford, Ill	Dec. 29, 1868	85, 421
Water-wheel	J. Bartoo	East Aurora, N. Y	May 11, 1858	20, 187
Water-wheel	J. Bastion	Canton, N. Y	July 12, 1870	105, 163
Water-wheel	W. Bayley and A. B. Crowell	Wilmington, Del	June 6, 1871	115, 681
Water-wheel	E. R. Beardsley	Aroma, Ill	Dec. 7, 1869	97, 591
Water-wheel	D. Beauchamp	Elizabethtown, Va	Oct. 10, 1820	....
Water-wheel	A. B. Beckwith	Bath, N. Y	July 2, 1842	2, 702
Water-wheel	A. B. Beckwith	Bath, N. Y	Oct. 20, 1843	3, 310
Water-wheel	J. L. Beers and S. Leonard	Fayette Township, Juniata County, Pa.	Feb. 25, 1862	34, 475
Water-wheel	J. Bell	Hamilton County, Ohio	May 9, 1828	....
Water-wheel	J. Bell	Carrollton, Mo	July 25, 1871	117, 244
Water-wheel	M. Bell	Sabbath Rest, Pa	Jan. 30, 1866	52, 259
Water-wheel	S. Bent	....	Mar. 7, 1803	....
Water-wheel	B. Billings	Macedon, N. Y	July 5, 1859	24, 608
Water-wheel	R. Bing	May's Landing, N. J	Jan. 12, 1869	85, 724
Water-wheel	W. C. Bishop	Ovid, N. Y	Sept. 5, 1839	1, 314
Water-wheel	W. H. Blackmer and E. R. Carpenter.	Clermont, Iowa	Sept. 25, 1866	58, 208
Water-wheel	L. W. and G. W. Blake	Pepperell, Mass	Apr. 21, 1842	2, 577
Water-wheel	W. Blake	Buchanan, Mich	Nov. 15, 1870	109, 170
Water-wheel	Z. Blakely	Wilkesville, Ohio	Dec. 31, 1833	....
Water-wheel	J. Blocher	Williamsville, N. Y	Aug. 7, 1860	29, 457
Water-wheel	L. W. and R. A. Blood	Springfield, N. H	Sept. 24, 1867	69, 169
Water-wheel	J. H. Bodine and T. A. Hill	Mount Morris, N. Y	Nov. 17, 1868	84, 047
Water-wheel	O. J. Bollinger	York, Pa	June 28, 1870	104, 697
Water-wheel	O. J. Bollinger	York, Pa	July 1, 1873	140, 401
Water-wheel	C. Bond	Richmond, Ind	June 26, 1860	28, 826
Water-wheel	J. W. Bookwalter	Springfield, Ohio	Dec. 27, 1870	110, 544
Water-wheel	N. Bowker	New York, N. Y	Jan. 16, 1866	52, 021
Water-wheel	D. Bowles	Maryville, Tenn	Oct. 22, 1872	132, 383
Water-wheel	U. A. Boyden	Boston, Mass	June 5, 1847	5, 144
Water-wheel	E. C. Boyles	New York, N. Y	Mar. 7, 1871	112, 412
Water-wheel	P. Boynton	Ogdensburgh, N. Y	Apr. 20, 1830	....
Water-wheel	H. P. Bradbury	Springfield, Ohio	Jan. 1, 1867	60, 854
Water-wheel	W. Braidwood and H. J. Hewitt	New York, N. Y	June 7, 1870	103, 972
Water-wheel	A. M. Braley and J. L. Dryer	Montgomery County, Ind	May 7, 1833	....
Water-wheel	S. J. Bridge and A. M. Craig	Portage City, Wis	Mar. 19, 1867	62, 929
Water-wheel	E. Briggs, sr	Fayette, Iowa	July 9, 1867	66, 456
Water-wheel	T. Bristol	Cheshire, Conn	May 10, 1870	102, 909

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Water-wheel	C. E. Brooks	Marshall, Mich	Feb. 6, 1872	123, 448
Water-wheel	E. B. Brooks	Michigan City, Ind	Oct. 4, 1864	44, 509
Water-wheel	M. A. Brooks	La Porte, Ind	Dec. 28, 1869	98, 223
Water-wheel	R. R. Brooks	Weedsport, N. Y	Feb. 9, 1864	41, 567
Water-wheel	D. H. Brown	Northfield, Vt	Nov. 6, 1866	59, 353
Water-wheel	H. Brown	Chalfant, Ohio	May 1, 1866	54, 288
Water-wheel	W. F. Brown	Augusta, Me	July 2, 1836	....
Water-wheel	W. F. Brown and A. J. Hoyt	Washington, D. C	Aug. 27, 1867	68, 039
Water-wheel	A. H. Brubaker	Brunnerville, Pa	Jan. 16, 1872	122, 809
Water-wheel	O. Bryant	Chesterfield, Mass	Oct. 3, 1871	119, 567
Water-wheel	J. D. Bryson	Newcastle, Pa	Sept. 17, 1867	68, 945
Water-wheel	J. D. Bryson and W. R. Dunlap	Newcastle, Pa	Jan. 4, 1870	98, 552
Water-wheel	J. D. Bryson and J. H. Hartsuff	Newcastle, Pa	Dec. 14, 1869	97, 869
Water-wheel	R. Buchanan	Winslow, Ill	June 20, 1871	116, 149
Water-wheel	E. M. Buckley	Amenia Union, N. Y	Jan. 11, 1870	98, 739
Water-wheel	E. J. Budd	Budd's Lake, N. J	June 11, 1867	65, 539
Water-wheel	N. F. Burnham	Laurel Factory, Md	Feb. 22, 1859	23, 011
Water-wheel	N. F. Burnham	York, Pa	Feb. 24, 1863	37, 733
Water-wheel	N. F. Burnham	York, Pa	Mar. 3, 1868	75, 121
Water-wheel	N. F. Burnham	York, Pa	May 9, 1871	114, 525
Water-wheel	N. F. Burnham	York, Pa	July 16, 1872	128, 947
Water-wheel	N. F. Burnham	York, Pa	Nov. 19, 1872	133, 079
Water-wheel	T. Burr	Burr Haven, Pa	Apr. 3, 1817	....
Water-wheel	E. Bushnell	Sodus, N. Y	Jan. 30, 1834	....
Water-wheel	H. Bushnell	New Haven, Conn	Feb. 28, 1871	112, 219
Water-wheel	J. Buzby	Crosswicks, N. J	Aug. 24, 1869	94, 074
Water-wheel	J. Buzby	Moorestown, N. J	Apr. 5, 1870	101, 579
Water-wheel	I. B. Caldwell	Chambersburgh, Pa	May 28, 1861	32, 409
Water-wheel	J. Caldwell	Northfield, Mass	Aug. 4, 1843	3, 205
Water-wheel	J. Campbell	Rochester, N. Y	July 12, 1870	105, 301
Water-wheel	T. L. Carley and A. Jackson	Marcellus, N. Y	July 8, 1862	35, 809
Water-wheel	M. Carpenter	Moscow, Iowa	Mar. 5, 1867	62, 605
Water-wheel	I. Carter	Champlain, N. Y	Feb. 8, 1870	99, 532
Water-wheel	D. W. Case	Garden City, Minn	July 21, 1868	80, 136
Water-wheel	D. W. Case	Garden City, Minn	Dec. 13, 1870	110, 009
Water-wheel	J. M. Case	Athens, Ohio	Jan. 2, 1872	122, 359
Water-wheel	J. T. Case	Barkhamsted, Conn	Nov. 30, 1869	97, 355
Water-wheel	J. T. Case	New Hartford, Conn	Nov. 1, 1870	108, 757
Water-wheel	J. T. Case	Bristol, Conn	Mar. 14, 1871	112, 545
Water-wheel	J. T. Case	Bristol, Conn	Sept. 26, 1871	119, 220
Water-wheel	J. T. Case	Terryville, Conn	Jan. 14, 1873	134, 731
Water-wheel	S. P. and O. H. Castle	Urbana, Ohio	May 14, 1872	126, 786
Water-wheel	M. Chandler	East Corinth, Me	Dec. 30, 1873	145, 987
Water-wheel	R. Chapman	Buchanan, Mich	Feb. 26, 1867	62, 473
Water-wheel	R. Chapman	Buchanan, Mich	Dec. 24, 1867	72, 454
Water-wheel	D. Chase	Orange, Mass	Nov. 16, 1869	96, 775
Water-wheel	J. D., D., and J. Chase	Orange, Mass	July 31, 1866	56, 848
Water-wheel	T. Chesher	West Middlebury, Ohio	May 14, 1872	126, 674
Water-wheel	J. Clark	Clarksville, Pa	Apr. 28, 1868	77, 256
Water-wheel	J. M. Clark	United States Army	Aug. 15, 1865	49, 380
Water-wheel	F. O. Clarke	Unadilla Forks, N. Y	Jan. 4, 1870	98, 561
Water-wheel	J. C. Clime	Philadelphia, Pa	Apr. 16, 1872	125, 662
Water-wheel	W. R. Close	Bangor, Me	Jan. 30, 1866	52, 358
Water-wheel	W. R. Close	Bangor, Me	Aug. 14, 1866	57, 089
Water-wheel	J. Closs and I. N. Pyle	Decatur, Ind	July 10, 1860	29, 060
Water-wheel	F. G. Coggin	Burlington, Vt	Nov. 8, 1870	108, 970
Water-wheel	M. J. Colbourn	Karthaus, Pa	Nov. 3, 1868	83, 604
Water-wheel	A. D. Cole	Toronto, Canada	June 6, 1871	115, 578
Water-wheel	E. E. Coleman	West Cummington, Mass	Mar. 7, 1871	112, 324
Water-wheel	J. P. Collins	Troy, N. Y	Dec. 6, 1859	26, 339
Water-wheel	J. P. Collins	Troy, N. Y	May 5, 1868	77, 588
Water-wheel	N. J. Colman	Railroad Flat, Cal	Feb. 18, 1873	135, 891
Water-wheel	B. D. Compton	Dowagiac, Mich	Feb. 18, 1868	74, 667
Water-wheel	A. P. Conant	Smithland, Ky	Apr. 10, 1866	53, 788
Water-wheel	M. Coney	Portland, N. Y	Apr. 12, 1831	....
Water-wheel	J. B. Conger	Jackson, Tenn	July 10, 1847	5, 184
Water-wheel	G. M. Conner	Charlton, N. Y	Apr. 18, 1854	10, 791
Water-wheel	G. M. Conner	Cohoes, N. Y	Dec. 17, 1867	72, 169
Water-wheel	J. M. Cook	Lake Village, N. H	July 7, 1868	79, 731
Water-wheel	J. M. Cook	Lake Village, N. H	Sept. 6, 1870	107, 007
Water-wheel	R. Cook	Elkland, Pa	Sept. 14, 1844	3, 740
Water-wheel	W. Cooper	Hancock, Md	Oct. 1, 1867	69, 410
Water-wheel	G. E. Corbin and J. W. Pugh	Grand Rapids, Mich	July 31, 1866	56, 719
Water-wheel	A. C. Corpe	Stafford, Conn	June 21, 1870	104, 428
Water-wheel	C. S. Corsett	Middleville, Mich	Aug. 18, 1868	81, 254
Water-wheel	W. Coutie	Troy, N. Y	Feb. 1, 1859	22, 783
Water-wheel	G. Cox	Pierrepont, N. Y	Oct. 13, 1868	83, 014
Water-wheel	G. Cox	Pierrepont, N. Y	June 29, 1869	92, 017
Water-wheel	G. Cox	Pierrepont, N. Y	Apr. 4, 1871	113, 400
Water-wheel	G. Cox	Pierrepont, N. Y	Jan. 7, 1873	134, 520
Water-wheel	K. and T. Cox	New York, N. Y	Nov. 22, 1870	109, 390
Water-wheel	D. Craik	Church Mills, Chateaugay, N. Y.	Aug. 29, 1871	118, 516
Water-wheel	J. M. and W. L. Cress	Taylorsville, Tenn	Sept. 26, 1871	119, 328
Water-wheel	G. W. Cressman, B. Pfleger, and N. Keely.	Barren Hill and Roxborough, Pa.	Dec. 14, 1869	97, 888
Water-wheel	J. Crissey	Chatfield, Minn	Dec. 18, 1860	30, 960
Water-wheel	W. A. Crowell	Salisbury, Conn	May 21, 1872	126, 877
Water-wheel	A. H. Crozier	Oswego, N. Y	Nov. 26, 1867	71, 461
Water-wheel	D. M. Cummings	Enfield, N. H	Dec. 2, 1862	37, 034
Water-wheel	G. Curtis	Ogdensburgh, N. Y	Nov. 4, 1873	144, 261
Water-wheel	S. Curtis	Eagle, N. Y	Sept. 28, 1837	419
Water-wheel	D. Cushman	Hartford, Conn	Apr. 24, 1866	54, 123
Water-wheel	D. Cushman	Hartford, Conn	Aug. 30, 1870	106, 787
Water-wheel	J. Custer	Finley, Ohio	May 25, 1858	20, 335
Water-wheel	J. F. Daniels	Foxborough, Mass	Oct. 3, 1871	119, 580
Water-wheel	R. Daniels	Woodstock, Vt	June 2, 1857	17, 426
Water-wheel	A. and B. Darling	Billingham, Mass	Apr. 3, 1835	....

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Invention.	Inventor.	Residence.	Date.	No.
Water-wheel	W. M. Davis	Carmel, Me	June 24, 1856	15,175
Water-wheel	M. Decamp	South Bend, Ind	Nov. 17, 1863	40,612
Water-wheel	J. Deniston	Lanier, Ohio	Apr. 25, 1846	4,471
Water-wheel	M. Devoe	Marysville, Kans	Apr. 24, 1866	54,128
Water-wheel	N. Dewey and G. W. Fosdick	Dowagiac, Mich	May 5, 1868	77,595
Water-wheel	S. G. Dewey	Westfield, Mass	Mar. 19, 1872	124,727
Water-wheel	P. Dickson	Utica, Minn	May 27, 1862	35,366
Water-wheel	S. Diehl	Menallen, Pa	May 4, 1842	2,606
Water-wheel	M. Dilts	Columbia City, Ind	Mar. 26, 1861	31,790
Water-wheel	E. Dohner and A. M. Bruckart	Lancaster and Brunnerville, Pa.	Jan. 6, 1863	37,337
Water-wheel	D. Doncaster	Punxatawney, Pa	June 16, 1863	38,887
Water-wheel	D. Doncaster	Punxatawney, Pa	Aug. 16, 1864	43,838
Water-wheel	F. C. Doran and B. F. Sortman	Knightstown, Ind	Aug. 1, 1871	117,522
Water-wheel	E. Dougherty	North Lewisburgh, Ohio	May 31, 1870	103,725
Water-wheel	E. Dougherty	Marion, Ohio	Dec. 17, 1872	134,040
Water-wheel	W. Dripps	Coatesville, Pa	Nov. 26, 1845	4,286
Water-wheel	W. Dripps	Coatesville, Pa	Apr. 9, 1861	31,961
Water-wheel	B. Dugdale	Trenton, N. J	May 15, 1834	....
Water-wheel	R. Dunbar	Buffalo, N. Y	July 30, 1867	67,174
Water-wheel	R. Dunbar	Buffalo, N. Y	July 30, 1867	67,175
Water-wheel	J. Durkee	Binghamton, N. Y	Aug. 25, 1842	2,737
Water-wheel	W. T. Duvall	Georgetown, D. C	May 17, 1870	103,162
Water-wheel	R. Eastman	Concord, N. H	Mar. 11, 1835	....
Water-wheel	A. A. Easton and A. J. Harrington.	Killingly and Plainfield, Conn.	Nov. 23, 1869	97,065
Water-wheel	W. C. Edwards	West Winsted, Conn	May 6, 1873	138,621
Water-wheel	D. Ehrhart	Bel Air, Md	July 11, 1871	116,937
Water-wheel	W. H. Elmer	Fair Water, Wis	Jan. 8, 1867	61,059
Water-wheel	W. H. Elmer	Berlin, Wis	Dec. 6, 1870	109,885
Water-wheel	W. H. Elmer	Berlin, Wis	Jan. 9, 1872	122,588
Water-wheel	J. Evens	Daviess County, Ind	Apr. 21, 1818	....
Water-wheel	J. Evered	Sodus, N. Y	July 30, 1845	4,126
Water-wheel	J. A. Fairbanks	Augusta, Me	Apr. 16, 1872	125,730
Water-wheel	J. H. Fairchild	Jericho, Vt	May 11, 1858	20,200
Water-wheel	J. H. Fairchild	Jericho, Vt	Dec. 14, 1858	22,282
Water-wheel	L. S. Fairchild	Newton Falls, Ohio	July 18, 1865	48,866
Water-wheel	H. Fellows	Bloomfield, Ind	July 24, 1860	29,261
Water-wheel	H. Ferguson	Richland, N. Y	Mar. 20, 1844	3,502
Water-wheel	F. R. Ferris	Dora, Ind	Feb. 25, 1868	74,903
Water-wheel	J. P. Fitch	New York, N. Y	Apr. 5, 1859	23,450
Water-wheel	M. Flanigan	Detroit, Mich	May 9, 1871	114,650
Water-wheel	W. W. Flenniken	Colony, Iowa	Jan. 14, 1862	34,139
Water-wheel	E. F. M. Fletcher	Georgia Plains, Vt	Dec. 11, 1860	30,916
Water-wheel	S. Fletcher	Skowhegan, Me	July 16, 1867	66,821
Water-wheel	D. A. Flummerfelt	Bridgeville, N. J	Sept. 5, 1871	118,708
Water-wheel	O. C. and J. O. Ford	Collinsville, Conn	May 17, 1859	24,019
Water-wheel	W. Forward	Battle Creek, Cal	June 4, 1872	127,471
Water-wheel	C. J. Fox	Charlotte, N. C	Feb. 21, 1871	112,028
Water-wheel	T. H. Fox	Hanover, Va	Sept. 1, 1868	81,618
Water-wheel	J. Frank	Chester, Ohio	July 23, 1872	129,807
Water-wheel	J. G. Fredenburr and W. V. Andrews.	Newcastle, Cal	Nov. 9, 1869	96,573
Water-wheel	J. G. Fredenburr and J. L. George.	Columbia, Cal	Feb. 25, 1862	34,485
Water-wheel	J. L. Frisbie	Hillsdale, Mich	Apr. 12, 1870	101,725
Water-wheel	O. Fuller	Bennington, Vt	June 28, 1870	104,726
Water-wheel	T. M. Fuller	Hainesville, N. J	June 15, 1869	91,430
Water-wheel	H. N. Gallagher	Geneva, N. Y	Sept. 23, 1862	36,514
Water-wheel	J. Gardner	South Lee, Mass	Jan. 16, 1845	3,886
Water-wheel	J. Gardner	South Lee, Mass	Feb. 7, 1871	111,630
Water-wheel	J. G. Garretson	Muhlenburgh, Ohio	Oct. 11, 1841	2,300
Water-wheel	J. G. Garretson	West Liberty, Ohio	Sept. 19, 1871	119,026
Water-wheel	S. Garrett	Loudonville, Ohio	July 2, 1836	....
Water-wheel	J. H. Gatiss	Franklindale, Pa	Dec. 4, 1855	13,895
Water-wheel	L. Gibson	Elmira, N. Y	May 1, 1860	28,073
Water-wheel	J. E. Gillespie and H. B. Weaver	Hartford, Conn	Mar. 29, 1870	101,255
Water-wheel	U. H. Goble	Dubuque, Iowa	Nov. 14, 1865	50,928
Water-wheel	L. D. Goodwin	Peruville, N. Y	Apr. 4, 1854	10,729
Water-wheel	D. H. Gould	Troy, N. Y	June 22, 1869	91,739
Water-wheel	C. Goulding	Mobile, Ala	Dec. 15, 1837	512
Water-wheel	A. Greenleaf	Kingston Township, Pa	May 16, 1854	10,916
Water-wheel	C. Greenawault	Seiberlingville, Pa	Apr. 23, 1861	32,131
Water-wheel	W. Greenwell	Ripley, Ill	June 21, 1870	104,579
Water-wheel	M. Gregg	Rochester, N. Y	Dec. 6, 1870	109,891
Water-wheel	W. L. Gregory	Amsterdam, N. Y	May 5, 1863	38,383
Water-wheel	I. Griswold	Granby, Conn	Apr. 16, 1817	....
Water-wheel	G. Gross	Buffalo, N. Y	Sept. 20, 1864	44,302
Water-wheel	M. D. Grow	Fort Dodge, Iowa	Mar. 3, 1868	75,009
Water-wheel	J. Haag and J. C. Smith	Bernville, Pa	Apr. 16, 1861	32,063
Water-wheel	J. Haag and J. C. Smith	Bernville, Pa	Apr. 1, 1862	34,832
Water-wheel	E. Hacket	Ulysses, Pa	Aug. 26, 1873	142,228
Water-wheel	R. S. Hadley	Anamosa, Iowa	Sept. 6, 1864	44,088
Water-wheel	E. Hale	Newark, N. J	Nov. 14, 1846	4,853
Water-wheel	A. J. Hall	Derry, N. H	May 5, 1868	77,609
Water-wheel	B. T. Hall	Seneca Falls, N. Y	July 25, 1854	11,373
Water-wheel	E. Hall	Baltimore, Md	July 5, 1820	....
Water-wheel	T. G. Hall	York, Pa	Apr. 30, 1867	64,395
Water-wheel	T. G. Hall	Beach Haven, Pa	May 18, 1869	90,167
Water-wheel	J. B. Hamilton	Loudon, Tenn	Dec. 30, 1873	146,068
Water-wheel	J. Hanchett	Cold Water, Mich	July 15, 1840	1,686
Water-wheel	C. Hand	Port Elizabeth, N. J	May 16, 1846	4,517
Water-wheel	P. M. Hannas	Easton, Pa	Oct. 29, 1861	33,584
Water-wheel	J. A. Hanson	Amsterdam, N. Y	May 8, 1866	54,645
Water-wheel	W. H. Harbaugh	Piqua, Ohio	Oct. 12, 1858	21,753
Water-wheel	O. Harkness	Providence, R. I	May 31, 1864	42,945
Water-wheel	B. Harnish	Pequea, Pa	May 13, 1862	35,233
Water-wheel	J. Harris	New Carlisle, Ind	Jan. 29, 1861	31,239

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Water-wheel	O. L. Hart	Millville, Wis	Mar. 30, 1869	88, 292
Water-wheel	J. Haseltine	Goffstown, N. H	Mar. 25, 1856	14, 535
Water-wheel	W. Haslup	Sidney, Ohio	May 4, 1869	89, 657
Water-wheel	W. Haslup	Sidney, Ohio	June 7, 1870	104, 026
Water-wheel	W. Hatfield	Zanesville, Ohio	Dec. 31, 1838	1, 053
Water-wheel	J. Hathaway	Woodstock, Vt	Sept. 1, 1868	81, 632
Water-wheel	J. Hathaway	Woodstock, Vt	Sept. 14, 1869	94, 821
Water-wheel	F. P. Haviland and E. Tuttle	Waterville, Me	May 28, 1846	4, 536
Water-wheel	I. Hayes	Philadelphia, Pa	July 8, 1862	35, 822
Water-wheel	J. Hemenway	Durfield, Mich	Jan. 8, 1867	61, 066
Water-wheel	F. M. Hemphill and R. H. Knox	Washington, Ohio	June 20, 1848	5, 645
Water-wheel	W. Henly	New Salem, N. C	Oct. 27, 1857	18, 507
Water-wheel	J. Hepperly	Peoria, Ill	Aug. 31, 1869	94, 314
Water-wheel	G. E. W. Herbert	Cohocton, N. Y	Oct. 28, 1856	15, 977
Water-wheel	G. W. Herring	Bangor, Me	Oct. 29, 1867	70, 211
Water-wheel	W. Heupcke	Black Creek, Pa	Dec. 22, 1868	85, 094
Water-wheel	M. H. Heylman	Oshkosh, Wis	Dec. 9, 1873	145, 346
Water-wheel	S. Hicks	Orangeville, Ind	Dec. 11, 1866	60, 373
Water-wheel	W. E. Hill	Renovo, Pa	Sept. 21, 1869	95, 020
Water-wheel	W. Hinds	Little Falls, N. Y	Aug. 16, 1864	43, 850
Water-wheel	W. Hitchcock	Spencer, N. Y	May 23, 1836	....
Water-wheel	O. J. Hodge	North Adams, Mass	Aug. 24, 1869	94, 111
Water-wheel	O. J. Hodge	North Adams, Mass	June 27, 1871	116, 443
Water-wheel	W. J. Hoffman	Croton Falls, N. Y	Feb. 4, 1868	74, 089
Water-wheel	G. W. Holden	Claremont, N. H	June 11, 1867	65, 572
Water-wheel	D. Holdiman and S. Goodwin	Waterloo, Iowa	Mar. 9, 1869	87, 673
Water-wheel	R. S. Holeton	Niles, Ohio	July 24, 1866	56, 560
Water-wheel	B. Holly	Lockport, N. Y	Feb. 9, 1864	41, 508
Water-wheel	D. O. Hollman	Adams, N. Y	Oct. 18, 1870	108, 482
Water-wheel	J. Holmes	Claysville, N. Y	Apr. 21, 1863	38, 226
Water-wheel	J. B. Holmes	Lawrence, Kans	June 8, 1869	91, 017
Water-wheel	S. Hopper	Lewistown, Pa	Mar. 21, 1843	3, 011
Water-wheel	W. W. Horton	Schuyler's Lake, N. Y	Mar. 13, 1860	27, 448
Water-wheel	G. A. Houston	Beloit, Wis	Feb. 8, 1870	99, 569
Water-wheel	D. S. Howard	Lyonsdale, N. Y	May 29, 1855	12, 949
Water-wheel	S. B. Howd	Geneva, N. Y	July 26, 1838	861
Water-wheel	S. B. Howd	Arcadia, N. Y	Apr. 30, 1842	2, 599
Water-wheel	F. Hoyt	Montpelier, Vt	Nov. 9, 1869	96, 592
Water-wheel	F. Hoyt and A. Denio	Montpelier, Vt	July 21, 1868	80, 178
Water-wheel	J. Hoyt	Hughsonville, N. Y	Sept. 15, 1868	82, 225
Water-wheel	J. P. and D. W. Hoyt	Lumber City, Pa	Oct. 12, 1858	21, 757
Water-wheel	W. H. Hubbard	New Haven, Conn	May 10, 1870	102. 939
Water-wheel	C. F. H. Huff	New York, N. Y	Apr. 18, 1871	113, 888
Water-wheel	J. P. Hughes	Spout Spring, Va	July 12, 1859	24, 740
Water-wheel	M. Hungerford	San Francisco, Cal	Apr. 30, 1872	126, 210
Water-wheel	R. Hunt	Orange, Mass	June 15, 1869	91, 338
Water-wheel	A. J. Jack and D. E. Brand	Des Moines, Iowa	Oct. 19, 1869	95, 905
Water-wheel	I. Jagger	Albany, N. Y	Oct. 19, 1852	9, 346
Water-wheel	A. Jamison	Taylorstown, Pa	Aug. 1, 1865	49, 114
Water-wheel	A. P. Johnson	Edwards, N. Y	Jan. 29, 1867	61, 667
Water-wheel	J. Johnson	Knox County, Ind	Mar. 21, 1808	....
Water-wheel	J. Johnson	Fairbanks Township, Ind	Oct. 1, 1830	....
Water-wheel	N. Johnson	Rathboneville, N. Y	Mar. 26, 1844	3, 510
Water-wheel	N. Johnson	Jasper, N. Y	Dec. 18, 1860	30, 971
Water-wheel	N. Johnson	Decatur, Mich	Dec. 22, 1868	85, 100
Water-wheel	G. H. Jones	Rose, N. Y	July 26, 1870	105, 694
Water-wheel	G. H. Jones and J. Brown	Rose, N. Y	May 1, 1860	28, 138
Water-wheel	J. O. Joyce	Dayton, Ohio	Mar. 24, 1868	75, 765
Water-wheel	J. C. Kelly	Groveland, N. Y	June 21, 1870	104, 600
Water-wheel	J. C. Kelly	Groveland, N. Y	Sept. 26, 1871	119, 274
Water-wheel	W. Kennedy	New London, Pa	July 21, 1868	80, 186
Water-wheel	B. B. Kenyon and I. S. Brown	Hopkinton, R. I	Apr. 30, 1861	32, 193
Water-wheel	C. Kenzie	Troy, N. Y	July 1, 1836	....
Water-wheel	J. J. Kimball	Naperville, Ill	Apr. 1, 1862	34, 839
Water-wheel	J. J. Kimball	Naperville, Ill	Sept. 13, 1864	44, 201
Water-wheel	J. J. Kimball	Naperville, Ill	Oct. 19, 1869	95, 910
Water-wheel	T. J. Kindleberger	Springfield, Ohio	Oct 28, 1862	36, 846
Water-wheel	T. J. Kindleberger	Springfield, Ohio	July 11, 1865	48, 694
Water-wheel	T. J. Kindleberger	Eaton, Ohio	July 24, 1866	56, 572
Water-wheel	T. J. Kindleberger	Eaton, Ohio	Mar. 19, 1867	63, 058
Water-wheel	T. J. Kindleberger	Eaton, Ohio	Aug. 4, 1868	80, 635
Water-wheel	J. F. Kirkhart and J. Ramsay	Long Creek Township, Iowa.	Oct. 28, 1873	143, 984
Water-wheel	A. Kneass	Northumberland, Pa	July 26, 1870	105, 698
Water-wheel	D. K. Kraatz	Ephrata, Pa	July 13, 1858	20, 921
Water-wheel	J. Krall	Hall, Pa	May 24, 1870	103, 475
Water-wheel	L. Kratzer	Baltimore, Md	June 26, 1866	55, 875
Water-wheel	J. Kunkle	Newton Falls, Ohio	Dec. 23, 1873	145, 740
Water-wheel	J. L. Kurtz	York, Pa	Apr. 25, 1871	114, 154
Water-wheel	T. D. Lakin	Hancock, N. H	Oct. 13, 1863	40, 268
Water-wheel	W. Lamb	Whitestown, N. Y	Apr. 11, 1842	2, 546
Water-wheel	W. Lamb	Rome, N. Y	Aug. 7, 1847	5, 230
Water-wheel	J. P. Lamoree	Mexico, N. Y	June 4, 1872	127, 490
Water-wheel	A. Lands	Georgetown, D. C	Aug. 28, 1811	....
Water-wheel	D. Lane	Montpelier, Vt	Feb. 2, 1869	86, 556
Water-wheel	D. Lane	Montpelier, Vt	Oct. 5, 1869	95, 593
Water-wheel	D. Lane	Montpelier, Vt	Sept. 27, 1870	107, 789
Water-wheel	J. Y. Lanfair	Queensbury, N. Y	Aug. 4, 1868	80, 638
Water-wheel	E. B. Lansing	Wheeling, Ind	July 16, 1842	2, 726
Water-wheel	L. M. Larsh	Richmond, Ind	Feb. 13, 1866	52, 578
Water-wheel	J. Leffel	Springfield, Ohio	May 21, 1845	4, 056
Water-wheel	J. Leffel	Springfield, Ohio	Jan. 14, 1862	34, 150
Water-wheel	T. Leffel	Springfield, Ohio	June 16, 1868	78, 879
Water-wheel	T. Leffel	Springfield, Ohio	May 9, 1871	114, 571
Water-wheel	G. W. Leonard	Middle Valley, Pa	June 20, 1871	116, 071
Water-wheel	A. C. Lesner	Fonda, N. Y	Sept. 5, 1871	118, 731
Water-wheel	A. C. Lesner	Fonda, N. Y	Oct. 15, 1872	132, 298
Water-wheel	E. A. Lester	Boston, Mass	Sept. 13, 1833	....

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Water-wheel	J. F. Letellier	Grand Rapids, Mich	Feb. 14, 1865	46,367
Water-wheel	C. Lewis	Syracuse, N. Y	July 16, 1841	2,171
Water-wheel	E. G. Libby	Medford, Mass	May 21, 1872	127,076
Water-wheel	A. Lind	San Francisco, Cal	Aug. 7, 1860	29,501
Water-wheel	A. Lind	San Francisco, Cal	Sept. 9, 1862	36,415
Water-wheel	A. Lind	San Francisco, Cal	Oct. 16, 1866	58,846
Water-wheel	C. V. Littlepage	Austin, Tex	Feb. 8, 1859	22,880
Water-wheel	A. W. Lloyd	North Adams, Mass	Dec. 7, 1869	97,658
Water-wheel	T. Lomis	Athens, Pa	Mar. 14, 1833	....
Water-wheel	T. Lowden	Boston, Mass	Dec. 28, 1869	98,392
Water-wheel	O. W. Ludlow	Dayton, Ohio	Aug. 20, 1867	67,994
Water-wheel	J. Luther	Walnut Fork, Iowa	Feb. 17, 1863	37,698
Water-wheel	L. Lyons	Bennington, Vt	July 28, 1868	80,359
Water-wheel	E. Mack	Sheffield, Mass	Nov. 2, 1811	....
Water-wheel	T. W. Mahler	Rome, N. Y	June 19, 1866	55,685
Water-wheel	T. W. Mahler	Rome, N. Y	Nov. 24, 1868	84,292
Water-wheel	W. March	Sand Bank, N. Y	July 14, 1846	4,629
Water-wheel	S. W. Marsh	Rochester, N. Y	July 7, 1868	79,585
Water-wheel	J. Martin	Florence, Ala	July 3, 1860	28,992
Water-wheel	S. Martin	York, Pa	Mar. 8, 1870	100,648
Water-wheel	J. Martineau	Eldridge, N. Y	Apr. 18, 1839	1,123
Water-wheel	W. G. Masterton	Amesbury, Mass	Oct. 9, 1849	6,773
Water-wheel	W. G. C. Mastersun	Proctorsville, Vt	Mar. 19, 1872	124,755
Water-wheel	M. H. Matson	Horseheads, N. Y	Apr. 28, 1868	77,302
Water-wheel	M. H. Matson	Horseheads, N. Y	Nov. 2, 1869	96,454
Water-wheel	A. M. Maynard	Savoy, Mass	Nov. 17, 1868	84,203
Water-wheel	H. W. McAuley	De Soto, Wis	Dec. 21, 1869	98,081
Water-wheel	T. McAuley	San Francisco, Cal	June 5, 1866	55,323
Water-wheel	G. W. McCann	Springfield, Ohio	Jan. 1, 1867	60,766
Water-wheel	J. McConnel	Shenango, Pa	Dec. 13, 1832	....
Water-wheel	W. G. McGargy	Kutztown, Pa	July 30, 1867	67,203
Water-wheel	E. W. McGuire	Eaton, Ohio	Jan. 5, 1869	85,683
Water-wheel	E. W. McGuire and J. Dowey, jr	Waterford, N. Y	Sept. 14, 1833	....
Water wheel	J. Mecay	Millsborough, Pa	Dec. 26, 1845	4,332
Water-wheel	F. Mehrmann	Fountain City, Wis	July 20, 1869	92,862
Water-wheel	C. S. Mercer	Franklin, Md	Mar. 30, 1836	....
Water-wheel	W. Merril	Randolph, Ohio	May 16, 1835	....
Water-wheel	A. H. Merriman	West Meriden, Conn	May 23, 1871	115,082
Water-wheel	C. M. Miles	Milford, Del	Aug. 29, 1871	118,546
Water-wheel	M. Millard	Franklin, Ohio	Dec. 6, 1870	109,925
Water-wheel	M. Millard	Franklin, Ohio	May 7, 1872	126,562
Water-wheel	G. Miller	Providence, R. I	July 26, 1870	105,712
Water-wheel	J. Miller	Saltpetre, Ohio	Mar. 20, 1860	27,557
Water-wheel	J. C. Miller	Amsterdam, N. Y	May 22, 1866	54,937
Water-wheel	J. M. Miller	Hamilton, Ohio	Jan. 6, 1863	37,355
Water-wheel	P. F. Millot	Paris, France	Sept. 4, 1866	57,831
Water-wheel	I. and D. J. Miner	Freehold, N. Y	May 8, 1866	54,579
Water-wheel	J. Moffit	Richmond, Ohio	Apr. 27, 1832	....
Water-wheel	J. W. Moon	Roxbury, N. Y	Feb. 15, 1838	608
Water-wheel	C. M. Mooney	Scotch Plains, N. J	July 18, 1871	117,193
Water-wheel	A. L. Moore and N. S. Parker	El Dorado, Oreg	Jan. 17, 1871	111,077
Water-wheel	A. Morehouse	Farmer, N. Y	June 12, 1860	28,682
Water-wheel	J. A. Morgan	Navasink, N. J	Nov. 15, 1870	109,335
Water-wheel	F. Morse	Hastings, N. Y	Nov. 24, 1863	40,704
Water-wheel	I. Morse	Henniker, N. H	Apr. 20, 1869	89,063
Water-wheel	J. and B. Mullica, jr	Waterford Works, N. J	Jan. 16, 1872	122,732
Water-wheel	G. Mulliken	Littleton, N. H	Nov. 3, 1863	40,494
Water-wheel	J. Mumma	West Alexandria, Ohio	Apr. 28, 1838	715
Water-wheel	J. Mumma	Middletown, Ohio	Oct. 1, 1867	69,360
Water-wheel	H. Munger	Chicopee, Mass	Nov. 10, 1846	4,844
Water-wheel	S. Munger	Shawangunk, N. Y	Feb. 10, 1843	2,949
Water-wheel	A. F. Murray and H. Green	Moline, Ill	Mar. 15, 1870	100,920
Water-wheel	H. G. Nelson	Lockport, N. Y	Aug. 28, 1860	29,810
Water-wheel	H. G. Nelson	Lockport, N. Y	Nov. 15, 1864	45,069
Water-wheel	H. G. Nelson	Lockport, N. Y	Dec. 11, 1866	60,408
Water-wheel	J. Nolan	Waddington, N. Y	Mar. 25, 1873	137,146
Water-wheel	J. B. Nott and W. S. Kelly	Guilderland and Princeton, N. Y.	Feb. 24, 1852	8,759
Water-wheel	E. Overton	Utica, N. Y	Sept. 16, 1873	142,862
Water-wheel	P. O. Palmer	Swoope's Depot, Va	Nov. 16, 1869	96,932
Water-wheel	R. H. Palmer	Deposit, N. Y	July 9, 1872	128,901
Water-wheel	J. B. Park	Omaha, Nebr	Mar. 16, 1869	88,001
Water-wheel	C. Parker and R. W. Engle	Wayne Township, Ohio	July 31, 1837	329
Water-wheel	C. W. Parker	Genesee Forks, N. Y	July 25, 1871	117,451
Water-wheel	E. Parker	Camden, S. C	July 24, 1847	5,201
Water-wheel	E. Parker	Beverly, Ohio	Sept. 27, 1870	107,835
Water-wheel	J. L. Parker	Shirley Village, Mass	Oct. 14, 1851	8,429
Water-wheel	D. H. Parsons	Chester, Ohio	July 12, 1843	3,172
Water-wheel	H. Parsons	Houston, Ill	Aug. 7, 1847	5,223
Water-wheel	T. Pattinson	Little York, Cal	July 2, 1867	66,382
Water-wheel	G. Peck	Whitestown, N. Y	Apr. 26, 1815	....
Water-wheel	E. R. Percy	Lawrence, Kans	July 22, 1873	141,074
Water-wheel	J. M. Perkins	Chicago, Ill	July 24, 1860	29,305
Water-wheel	D. Phillips	Shaftsbury, Vt	June 7, 1864	43,039
Water-wheel	O. M. Pike	North Leverett, Mass	Aug. 11, 1868	80,874
Water-wheel	P. D. Pike	Stowe, Vt	Oct. 15, 1867	69,932
Water-wheel	W. S. Place	Charleston, Me	Aug. 30, 1870	106,938
Water-wheel	J. Platt	Utica, N. Y	Sept. 8, 1863	39,831
Water-wheel	J. Platt	Utica, N. Y	Sept. 8, 1863	39,832
Water-wheel	J. Platt	Utica, N. Y	Sept. 8, 1863	39,833
Water-wheel	J. Platt	Utica, N. Y	Sept. 8, 1863	39,834
Water-wheel	E. Poole	Gouverneur, N. Y	July 4, 1871	116,749
Water-wheel	F. Post	Plano, Ill	July 16, 1867	66,735
Water-wheel	F. Post	Plano, Ill	Aug. 25, 1868	81,535
Water-wheel	I. Powell	Lawrence, N. Y	July 17, 1835	....
Water-wheel	T. H. Powers	Milwaukee, Wis	Mar. 22, 1870	101,036
Water-wheel	D. Putney	Red Bank, Pa	Aug. 12, 1844	3,703
Water-wheel	J. Raney	Newcastle, Pa	Dec. 24, 1867	72,680

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Invention.	Inventor.	Residence.	Date.	No.
Water-wheel	W. Read	Patterson, N. Y	Nov. 21, 1871	121, 195
Water-wheel	B. Redding	Kentville, Canada	Dec. 5, 1871	121, 472
Water-wheel	J. Reed	Newville, Ohio	Mar. 19, 1861	31, 739
Water-wheel	A. B. Reniff	Bingham's Mills, N. Y	May 13, 1873	138, 933
Water-wheel	J. B. Reyman	Springfield, Mo	Jan. 31, 1871	111, 381
Water-wheel	D. Reynolds	Napanock, N. Y	Nov. 29, 1870	109, 664
Water-wheel	S. Reynolds	Oswego, N. Y	Mar. 24, 1857	16, 881
Water-wheel	R. Rich	Albion, N. Y	July 8, 1842	2, 708
Water-wheel	R. Rich	Albion, N. Y	May 17, 1859	24, 054
Water-wheel	H. H. Richardson	Barre, Vt	Jan. 24, 1860	26, 928
Water-wheel	J. R. Richardson	Newcastle, Pa	Aug. 30, 1870	106, 962
Water-wheel	S. Richardson	Jericho, Vt	May 10, 1859	23, 945
Water-wheel	S. Richardson	Jericho, Vt	May 17, 1859	24, 055
Water-wheel	W. W. Richardson	Chicago, Ill	May 31, 1870	103, 657
Water-wheel	T. H. Risdon	Mount Holly, N. J	Sept. 20, 1870	107, 627
Water-wheel	N. C. Roberts	Waterville, N. Y	July 1, 1873	140, 544
Water-wheel	E. Robbins, jr., and W. Ashby	Bordentown, N. J	Mar. 25, 1840	1, 525
Water-wheel	J. D. Robinson	Peoria, Ill	Oct. 24, 1844	3, 804
Water-wheel	J. Rogers	Rogersville, Pa	Jan. 18, 1870	99, 004
Water-wheel	I. S. Roland	Reading, Pa	Aug. 4, 1868	80, 566
Water-wheel	I. S. Roland	Reading, Pa	July 8, 1873	140, 593
Water-wheel	P. H. Roots	Connersville, Ind	Mar. 15, 1859	23, 267
Water-wheel	P. H. Roots	Connersville, Ind	Feb. 21, 1860	27, 239
Water-wheel	N. Rose and E. W. Wright	Milford, N. Y	Mar. 3, 1868	75, 056
Water-wheel	T. Rose	Windsor, N. Y	Oct. 18, 1839	1, 376
Water-wheel	T. Rose	Cortlandville, N. Y	Sept. 24, 1850	7, 674
Water-wheel	T. Rose	Cortlandville, N. Y	May 17, 1859	24, 057
Water-wheel	T. Rose	Cortlandville, N. Y	July 11, 1865	48, 724
Water-wheel	R. Ross	Saint Albans, Vt	June 14, 1859	24, 435
Water-wheel	J. S. Rowell, D. C. Teller, and M. Lowth.	Beaver Dam, Wis	Apr. 12, 1859	23, 611
Water-wheel	R. R. Royer	Ephrata, Pa	Sept. 14, 1869	94, 777
Water-wheel	R. R. Royer	Ephrata, Pa	May 30, 1871	115, 362
Water-wheel	J. L. Rumrill	Hartford, Conn	Nov. 20, 1866	59, 863
Water-wheel	B. Ruof	Zoar, Ohio	Mar. 25, 1873	137, 242
Water-wheel	T. H. Russell	Northfield, Vt	Mar. 18, 1862	34, 696
Water-wheel	T. H. Russell	Northfield, Vt	Sept. 14, 1869	94, 916
Water-wheel	R. Safely	Cohoes, N. Y	Aug. 11, 1863	39, 498
Water-wheel	J. Sandford	Polo, Ill	Jan. 3, 1865	45, 755
Water-wheel	D. Sandoe	Orangeville, Ill	July 25, 1871	117, 469
Water-wheel	I. D. Seely	Milford, N. Y	Apr. 9, 1861	32, 004
Water-wheel	W. L. Selleck	Milwaukee, Wis	Mar. 22, 1870	101, 050
Water-wheel	W. L. Selleck	Beetown, Wis	July 19, 1870	105, 602
Water-wheel	L. M. Sharps	Alanthus Grove, Mo	May 14, 1872	126, 752
Water-wheel	L. D. B. Shaw	Boston, Mass	June 6, 1871	115, 774
Water-wheel	H. Shears	Merton, Wis	Oct. 3, 1871	119, 477
Water-wheel	D. Sheets	Dayton, Ohio	July 16, 1872	129, 601
Water-wheel	W. Shepard	Gibson, Pa	Feb. 12, 1834	....
Water-wheel	S. Sherman	Weston, Mo	Sept. 25, 1866	58, 309
Water-wheel	S. Sherwood	Independence, Iowa	Aug. 24, 1869	94, 139
Water-wheel	H. W. Shipley	Portland, Oreg	Nov. 26, 1867	71, 335
Water-wheel	H. W. Shipley	Portland, Oreg	Dec. 17, 1867	72, 331
Water-wheel	H. W. Shipley	Portland, Oreg	May 24, 1870	103, 513
Water-wheel	S. Shive	Forks, Pa	Oct. 1, 1867	69, 495
Water-wheel	J. C. Simonds and F. Godfrey	Grand Rapids, Mich	Sept. 13, 1864	44, 227
Water-wheel	W. Simpson and H. Adams	Langdon, N. H	Oct. 2, 1847	5, 312
Water-wheel	G. B. Skinner	Damascus Township, Wayne County, Pa.	Jan. 7, 1862	34, 073
Water-wheel	W. Slade, sr	Gum Creek, Ga	Dec. 28, 1869	98, 435
Water-wheel	E. L. Small	Urbana, Ohio	Apr. 25, 1871	114, 211
Water-wheel	A. Smith	Sauquoit, N. Y	Sept. 21, 1858	21, 578
Water-wheel	F. Smith	Pontiac, N. Y	Nov. 22, 1853	10, 253
Water-wheel	F. Smith	Buffalo, N. Y	Jan. 26, 1858	19, 214
Water-wheel	J. Smith	Westport, Conn	June 21, 1859	24, 497
Water-wheel	J. C. Smith	Mahanoy, Pa	May 25, 1869	90, 468
Water-wheel	J. L. Smith	Salina, N. Y	Dec. 10, 1841	2, 383
Water-wheel	J. W. Smith	Middletown, Conn	Oct. 6, 1863	40, 195
Water-wheel	W. Snodgrass	Cold Spring, Wis	Jan. 14, 1868	73, 400
Water-wheel	I. W. Snyder	Dryden, N. Y	Oct. 18, 1870	108, 529
Water-wheel	W. H. Snyder	Phelps, N. Y	May 25, 1869	90, 469
Water-wheel	H. Soggs	Columbus, Ohio	Feb. 20, 1866	52, 762
Water-wheel	J. Spaulding	Mount Holly, Vt	Sept. 13, 1864	44, 230
Water-wheel	C. D. Spears	Lisbon, Me	Aug. 26, 1862	36, 323
Water-wheel	F. Speck	Waynesborough, Pa	Oct. 16, 1866	58, 906
Water-wheel	J. J. Springsteen	Owego, N. Y	May 16, 1845	4, 055
Water-wheel	N. P. Stanton	Syracuse, N. Y	May 22, 1837	201
Water-wheel	J. H. Staples	Wells, Me	Apr. 4, 1871	113, 592
Water-wheel	J. Stear	Smicksburgh, Pa	Mar. 1, 1859	23, 121
Water-wheel	D. Stearns	Rome, N. Y	Sept. 14, 1843	3, 271
Water-wheel	D. S. Stephens	La Porte, Ind	Mar. 1, 1864	41, 821
Water-wheel	J. E. Stephenson	New York, N. Y	July 11, 1865	48, 737
Water-wheel	B. Stetson	Fitchburgh, Mass	Aug. 12, 1873	141, 826
Water-wheel	J. E. Stevenson	New York, N. Y	Mar. 30, 1869	88, 422
Water-wheel	S. Stevenson	Beloit, Wis	Oct. 6, 1863	40, 197
Water-wheel	A. Stewart	Mount Lebanon, N. Y	Nov. 22, 1864	45, 191
Water-wheel	R. Stewart	Fultonham, N. Y	Jan. 10, 1865	45, 875
Water-wheel	C. C. Stillman	Westerly, R. I	May 15, 1866	54, 792
Water-wheel	A. Stimpson	Rockingham, Vt	Apr. 25, 1844	3, 567
Water-wheel	R. Stinson	Whitesville, Mo	Dec. 13, 1870	110, 169
Water-wheel	A. Straub	Milton, Pa	Mar. 12, 1836	....
Water-wheel	S. Streeter	Detroit, Mich	June 13, 1848	5, 633
Water-wheel	R. Summers	Seneca Falls, N. Y	Apr. 25, 1846	4, 474
Water-wheel	B. Sutherland	Chicago, Ill	Sept. 1, 1868	81, 704
Water-wheel	A. M. Swain	Lowell, Mass	May 15, 1860	28, 314
Water-wheel	F. Swatzel	Germantown, Ohio	Jan. 23, 1866	52, 224
Water-wheel	T. Symonds	Cumberland, Me	Sept. 1, 1863	39, 783
Water-wheel	B. I. Talbott	Iowa Falls, Iowa	July 27, 1869	93, 136
Water-wheel	J. Taney	Bangor, Me	Sept. 23, 1873	143, 040

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Water-wheel	J. M. Tanner	Albert Lea, Minn	Jan. 28, 1868	73,850
Water-wheel	W. E. Tate	Cambridgeport, Mass	Nov. 24, 1868	84,393
Water-wheel	J. Taylor	Aurelius, N. Y	Sept. 11, 1841	2,249
Water-wheel	J. Taylor	Auburn, N. Y	July 20, 1842	2,732
Water-wheel	S. D. Taylor	Hazleton, Pa	Aug. 17, 1869	93,767
Water-wheel	S. D. Taylor	Hazleton, Pa	Oct. 24, 1871	120,345
Water-wheel	A. P. Teachout	Madison, Ohio	Oct. 11, 1870	108,209
Water-wheel	S. Teachout	Troy, N. Y	June 22, 1869	91,792
Water-wheel	S. T. Teachout	Troy, N. Y	May 27, 1873	139,344
Water-wheel	J. S. Teed	Guilford, N. Y	Dec. 5, 1871	121,555
Water-wheel	D. C. Teller	Fort Plains, N. Y	Nov. 21, 1871	121,137
Water-wheel	J. Temple	Middletown, Ohio	Feb. 8, 1859	22,902
Water-wheel	J. Temple, W. M. Mills, and A. L. Stout.	Middletown, Ohio	Mar. 3, 1863	37,833
Water-wheel	W. A. Terry	Bristol, Conn	Nov. 29, 1870	109,685
Water-wheel	W. A. Terry	Bristol, Conn	May 21, 1872	126,996
Water-wheel	A. Thayer	Albany, N. Y	July 7, 1817	....
Water-wheel	A. Thayer	Albany, N. Y	May 1, 1818	....
Water-wheel	B. Thomas	Washington, D. C	Mar. 20, 1817	....
Water-wheel	S. J. Thomas	Dawson, Ga	Nov. 24, 1868	84,394
Water-wheel	I. M. Thompson	Edinburgh, Ind	Mar. 24, 1868	76,003
Water-wheel	W. J. Thompson	Springfield, Mo	Dec. 21, 1869	98,125
Water-wheel	W. J. Thompson	Springfield, Mo	May 30, 1871	115,389
Water-wheel	T. R. Timby	Cato Four Corners, N. Y	Sept. 27, 1844	3,764
Water-wheel	T. R. Timby	Cato Four Corners, N. Y	June 7, 1845	4,074
Water-wheel	T. R. Timby	Cato Four Corners, N. Y	Nov. 10, 1846	4,845
Water-wheel	J. Todd	Bellefonte, Pa	July 9, 1867	66,651
Water-wheel	J. Torrey	Ravenna, Ohio	Feb. 20, 1828	....
Water-wheel	J. Tort	Mexico, Mexico	Oct. 19, 1869	95,954
Water-wheel	J. Trees	Salem, Pa	Feb. 13, 1849	6,115
Water-wheel	T. Tripp	Sandy Creek, N. Y	Feb. 20, 1855	12,420
Water-wheel	T. Tripp	Amsterdam, N. Y	Apr. 29, 1862	35,118
Water-wheel	J. W. Truax	Richford, Vt	July 24, 1860	29,333
Water-wheel	J. W. Truax	Essex Junction, Vt	Jan. 17, 1871	111,019
Water-wheel	R. W. Trude	Clearfield Bridge, Pa	Dec. 28, 1869	98,319
Water-wheel	J. C. Trullinger	Oswego, Oreg	Feb. 11, 1868	74,455
Water-wheel	J. Tucker	Adrian, Mich	July 31, 1866	56,835
Water-wheel	J. Tucker and A. B. Palmer	Adrian, Mich	Oct. 13, 1868	83,009
Water-wheel	B. W. Tuttle	Galena, Ill	Oct. 26, 1869	96,168
Water-wheel	B. W. Tuttle	Galena, Ill	Feb. 1, 1870	99,374
Water-wheel	E. Tuttle	Canaan, Me	Feb. 12, 1861	31,418
Water-wheel	E. Tuttle	Canaan, Me	June 25, 1867	66,189
Water-wheel	J. Tyler	West Lebanon, N. H	July 8, 1856	15,309
Water-wheel	J. Tyler	West Lebanon, N. H	June 1, 1858	20,456
Water-wheel	J. Tyler	West Lebanon, N. H	Sept. 13, 1864	44,240
Water-wheel	J. Tyler	Claremont, N. H	Aug. 20, 1872	130,608
Water-wheel	S. L. Valentine	Bangor, Me	July 23, 1842	2,736
Water-wheel	S. L. Valentine	Bangor, Me	Dec. 12, 1844	3,855
Water-wheel	S. L. Valentine	Bangor, Me	Dec. 31, 1842	2,898
Water-wheel	W. L. R. Valentine	Fort Edward, N. Y	Apr. 5, 1864	42,242
Water-wheel	W. T. Valentine	Ithaca, N. Y	Nov. 12, 1872	132,994
Water-wheel	H. Vandewater	Weedsport, N. Y	Sept. 3, 1861	33,220
Water-wheel	H. Van Dewater	Worcester, Mass	June 2, 1863	38,775
Water-wheel	H. Van Dewater	Buffalo, N. Y	Apr. 10, 1866	53,906
Water-wheel	H. Van De Water	Attica, N. Y	Aug. 31, 1869	94,259
Water-wheel	I. Van Gorder	Warren, Ohio	Dec. 16, 1833	....
Water-wheel	A. H. Wagner	Chicago, Ill	June 7, 1864	43,051
Water-wheel	P. Wagner	Buffalo, N. Y	Apr. 12, 1859	23,622
Water-wheel	P. H. Wait	Sandy Hill, N. Y	Aug. 17, 1869	93,774
Water-wheel	O. Waldo	Newark, N. Y	June 25, 1836	....
Water-wheel	W. Walker	Pontiac, Mich	May 3, 1859	23,874
Water-wheel	A. Warren	Boston, Mass	Nov. 16, 1869	96,853
Water-wheel	A. Warren and E. Damon, jr	Wareham, Mass	May 11, 1858	20,234
Water-wheel	J. S. Warren	Port Chester, N. Y	Sept. 11, 1866	58,008
Water-wheel	J. S. Warren	Fishkill on the Hudson, N. Y.	Apr. 18, 1871	113,823
Water-wheel	G. E. and E. W. Watson	McLean, N. Y	May 26, 1863	38,707
Water-wheel	J. J. Watson	Buffalo, N. Y	Oct. 2, 1860	30,274
Water-wheel	D. Weaver	McKeansburgh, Pa	June 10, 1844	3,625
Water-wheel	H. B. Weaver	Hartford, Conn	Apr. 8, 1873	137,580
Water-wheel	S. Webb	Joliet, Ill	Oct. 29, 1867	70,301
Water-wheel	C. Weed and W. C. Marr	El Dorado, Iowa	Nov. 15, 1864	45,101
Water-wheel	T. Welham	Philadelphia, Pa	Aug. 27, 1867	68,325
Water-wheel	C. Wells and W. Douglas	Monroeton and Bradford County, Pa.	Mar. 8, 1859	23,207
Water-wheel	P. Wells	Milford, Mich	Mar. 4, 1843	2,989
Water-wheel	H. Wenger	Farmersville, Pa	July 18, 1865	48,855
Water-wheel	G. W. Werntz	Auburn, Ind	Nov. 29, 1870	109,784
Water-wheel	L. Wertz	Chambersburgh, Pa	June 20, 1848	5,637
Water-wheel	G. W. Wesley	Troy, Pa	Nov. 10, 1868	84,035
Water-wheel	O. D. Wetmore	Claremont, N. H	July 16, 1872	129,075
Water-wheel	G. W. Wheeler and G. V. Allen	Hartford, Vt	Jan. 7, 1868	73,215
Water-wheel	J. R. Wheeler	Pittsford, N. Y	Mar. 15, 1830	....
Water-wheel	J. R. Wheeler	Seneca Falls, N. Y	Apr. 14, 1838	695
Water-wheel	W. M. Wheeler	Upton, Mass	July 17, 1855	13,280
Water-wheel	W. M. Wheeler	Bertin, Mass	Jan. 11, 1870	98,828
Water-wheel	W. N. Whipple	Niles, N. Y	Feb. 21, 1871	112,100
Water-wheel	G. W. White	Monroeton, Pa	Nov. 24, 1863	40,719
Water-wheel	H. J. White	Chatham, Iowa	July 19, 1870	105,532
Water-wheel	J. White	Cleveland, Ohio	Nov. 29, 1864	45,305
Water-wheel	T. N. and J. M. Whitcomb	Grafton, Vt	Dec. 31, 1838	1,055
Water-wheel	J. Whitelaw and J. Stirrat	Paisley, England	July 8, 1843	3,153
Water-wheel	T. Whitmore	Waterloo, Iowa	May 30, 1871	115,531
Water-wheel	W. Whitney	Manchester, N. H	May 10, 1864	42,708
Water-wheel	S. Willard, jr	Hudson, N. Y	Dec. 1, 1807	....
Water-wheel	J. M. Williams	Connersville, Ind	Oct. 30, 1866	59,304
Water-wheel	C. Willson	Swanzey, N. H	Oct. 1, 1830	....
Water-wheel	C. B. Wilson and A. S. Hough	Trenton, N. J	Jan. 7, 1868	73,150

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Water-wheel	T. D. Wilson	Corydon, Ind	June 7, 1827	....
Water-wheel	F. Wingate	Augusta, Me	Mar. 4, 1836	....
Water-wheel	A. Winton	Frederick County, Md	Jan. 27, 1863	37, 539
Water-wheel	I. Wisel	Newburgh, Minn	Aug. 23, 1859	25, 229
Water-wheel	A. N. Wolf	Allentown, Pa	Aug. 5, 1873	141, 616
Water-wheel	A. N. Wolf and J. Haag	Sheridan and Bernville, Pa	Oct. 27, 1868	83, 579
Water-wheel	A. N. Wolf and J. Haag	Mill Creek Township and Bernville, Pa.	Aug. 24, 1869	94, 162
Water-wheel	A. N. Wolf and J. Haag	Sheridan and Bernville, Pa	Mar. 22, 1870	101, 199
Water-wheel	D. C. Wolf	Pleasant Valley, S. C	Nov. 5, 1872	132, 886
Water-wheel	J. N. Wolfe	Lancaster, Ohio	July 24, 1866	56, 654
Water-wheel	A. T. Wood	Manlius, N. Y	Jan. 15, 1867	61, 299
Water-wheel	A. Woodard	Swanzey, N. H	May 12, 1842	2, 622
Water-wheel	D. and F. M. Woodsum	Harrison, Me	Aug. 22, 1871	118, 324
Water-wheel	J. H. Wooster	Strykersville, N. Y	Feb. 14, 1865	46, 429
Water-wheel	A. Wrealsh and W. Burns	Springfield, Ohio	Jan. 1, 1867	60, 983
Water-wheel	C. D. Wright	Leesville, Conn	Aug. 22, 1865	49, 578
Water-wheel	C. D. Wright	Leesville, Conn	July 19, 1870	105, 536
Water-wheel	G. F. Wright	Graniteville, Mass	July 4, 1865	48, 613
Water-wheel	L. M. Wright	Fort Edward, N. Y	Feb. 28, 1871	112, 202
Water-wheel	L. D. Wynkoop	Owassa, Mich	Jan. 30, 1866	52, 353
Water-wheel	L. D. Wynkoop	Owassa, Mich	Sept. 24, 1867	69, 294
Water-wheel	P. W. Yarrell	Littleton, N. C	Mar. 29, 1870	101, 402
Water-wheel	P. W. Yarrell	Littleton, N. C	Mar. 14, 1871	112, 667
Water-wheel and applying water thereto	J. Eastman	Bath, N. H	Sept. 28, 1831	....
Water-wheel and applying water thereto	R. Walker	Milton, N. H	Mar. 12, 1833	....
Water-wheel and casting the same	C. Wing	Gardiner, Me	Oct. 22, 1830	....
Water-wheel and chain-paddle for mills, boats, &c	D. Myers	Benton, Mo	Sept. 4, 1832	....
Water-wheel and chute	E. P. H. Capron	Hudson, N. Y	Apr. 18, 1871	113, 853
Water-wheel and chute	A. Whitman	Auburn, Me	Oct. 12, 1858	21, 791
Water-wheel and gate	P. H. Wait	Sandy Hill, N. Y	Aug. 22, 1871	118, 307
Water-wheel and horizontal current and inclined race-wheel.	J. Nuckolls and S. P. Wheeler	Bolivar, Tenn	June 22, 1832	....
Water-wheel and perpendicular pivot, Horizontal pedal.	J. J. Giraud	Baltimore, Md	Feb. 5, 1821	....
Water-wheel and saw-mill	C. Forse	Boonville, Miss	Aug. 24, 1832	....
Water-wheel and sewing-machine, Combined	J. Hyde	Oakland, Cal	Sept. 24, 1872	131, 616
Water-wheel, Anti-friction-bearing	B. Stetson	Uxbridge, Mass	Sept. 26, 1871	119, 424
Water-wheel bucket	W. M. Eldridge	Philadelphia, Pa	Mar. 20, 1834	....
Water-wheel bucket	C. C. Taylor	Delafield, Wis	July 31, 1855	13, 366
Water-wheel bucket, Turbine	S. L. Denney	Gap, Pa	Feb. 4, 1873	135, 412
Water-wheel by balance-gates, Spiral	B. Schoolfield and W. Stanton	Lynchburgh, Va	Apr. 25, 1811	....
Water-wheel case	W. Bayley and A. P. Crowell	Wilmington, Del	Sept. 12, 1871	118, 778
Water-wheel case	J. W. Bookwalter	Springfield, Ohio	Mar. 1, 1870	100, 362
Water-wheel case	J. Raney	Newcastle, Pa	Sept. 20, 1870	107, 624
Water-wheel case	W. H. Snyder	Phelps, N. Y	Sept. 19, 1871	119, 194
Water-wheel case and gate, Turbine	S. L. Denney and W. Mercer	Gap and Christiana, Pa	Oct. 22, 1872	132, 358
Water-wheel-case chute	J. T. Fanning	Norwich, Conn	Nov. 14, 1871	120, 954
Water-wheel case, Turbine	J. O. Joyce	Dayton, Ohio	July 26, 1870	105, 808
Water-wheel case, Turbine	J. O. Joyce	Dayton, Ohio	July 30, 1872	130, 055
Water-wheel case, Turbine	T. Leffel	Springfield, Ohio	Jan. 19, 1869	86, 085
Water-wheel casing	J. D. Bryson	Newcastle, Pa	Sept. 29, 1868	82, 486
Water-wheel, Center-vent	E. G. Cushing	Dryden, N. Y	Jan. 20, 1857	16, 432
Water-wheel, Centrifugal	H. Abbott	North Huron, Ind	Nov. 22, 1859	26, 224
Water-wheel, Centrifugal	E. E. Matteson	Nevada, Cal	May 26, 1863	38, 687
Water-wheel, Centrifugal	O. Willis	Dizardville, N. C	Mar. 20, 1855	12, 569
Water-wheel, Chain	W. M. Starr	Washington, D. C	Nov. 8, 1870	109, 069
Water-wheel, Co-acting	S. Reynolds	Pitcher, N. Y	Dec. 15, 1832	....
Water-wheel, Combination	J. and H. Fuller	Lockington, Ohio	Mar. 15, 1870	100, 746
Water-wheel, Combined	E. G. Covel	Glen's Falls, N. Y	Feb. 20, 1844	3, 449
Water-wheel, Conical	B. Wilcox	Franklin County, Ohio	Apr. 19, 1826	....
Water-wheel curb	J. D. Bryson and J. H. Hartsuff	Newcastle, Pa	Aug. 25, 1868	81, 474
Water-wheel curb	W. S. Davis	Warner, N. H	Feb. 28, 1871	112, 128
Water-wheel curb	J. H. Hartsuff	Newcastle, Pa	Nov. 5, 1867	70, 561
Water-wheel curb	J. Tyler	West Lebanon, N. H	May 22, 1855	12, 927
Water-wheel curb	P. H. Wait	Sandy Hill, N. Y	Aug. 25, 1868	81, 439
Water-wheel curb	A. Winton	Chambersburgh, Pa	Dec. 10, 1867	71, 936
Water-wheel, Current	W. Aitken	Newark, Ill	Aug. 26, 1862	36, 265
Water-wheel, Current	J. Carnegy	Tully, Mo	Apr. 10, 1844	3, 530
Water-wheel, Current	R. Deering, sr	Louisville, Ky	Feb. 6, 1855	12, 346
Water-wheel, Current	J. F. M. Doan	Niles, Mich	June 6, 1871	115, 718
Water-wheel, Current	J. B. Howe	Middleville, Mich	Mar. 1, 1864	41, 816
Water-wheel, Current	N. W. Hubbard	Bandolph, Ohio	Apr. 2, 1841	2, 027
Water-wheel, Current	J. S. Lightfoot	Hamilton County, Tenn	Mar. 29, 1870	101, 282
Water-wheel, Current	W. Miles	Boonsborough, Md	Oct. 26, 1842	2, 836
Water wheel, Current	H. B. Sinclair	Paw Paw, Mich	Apr. 4, 1871	113, 586
Water-wheel, Current	A. W. Sory	Prairie County, Ark	Jan. 18, 1870	98, 891
Water-wheel, Current	T. Stamp	Wetumpka, Ala	Apr. 21, 1857	17, 119
Water-wheel, Current	E. Stewart	Battle Creek, Mich	Aug. 5, 1862	36, 115
Water-wheel, Current	W. W. St. John	Pleasant Mount, Mo	Mar. 4, 1862	34, 600
Water-wheel, Direct-action	S. Hadley, jr	Lyman, N. H	Dec. 19, 1854	12, 097
Water-wheel, Double-power reaction	W. M. Eldridge	Philadelphia, Pa	Mar. 20, 1834	....
Water-wheel, Endless-chain	H. S. Stewart	Yreka, Cal	Nov. 9, 1869	96, 629
Water-wheel flume	J. B. Fletcher	Richmond, Me	Feb. 16, 1825	....
Water-wheel flume for large streams	W. Brewster	....	June 7, 1798	....
Water-wheel-flume rack	G. W. Russel	Lawrence, Mass	Jan. 16, 1872	122, 738
Water-wheel-flume gate	W. Buckminster	Framingham, Mass	Apr. 25, 1838	709
Water-wheel, Flutter	E. B. Pritchard	Scriven County, Ga	May 31, 1830	....
Water-wheel for increasing or diminishing its diameter.	T. R. Timby	Cato Four Corners, N. Y	June 25, 1850	7, 464
Water-wheel for mills	A. Greenleaf	Mexico, N. Y	June 5, 1828	....
Water-wheel for mills	E. Hubbel	Middlebury, Vt	May 1, 1806	....
Water-wheel for mills	J. Minor	Saratoga County, N. Y	Apr. 2, 1810	....
Water-wheel for mills	A. Reuck	Chillicothe, Ohio	Dec. 5, 1810	....
Water-wheel for mills, Horizontal	W. Cornwell	Onancock, Va	Dec. 15, 1814	....
Water-wheel for mills, Horizontal hollow	J. Macomb	....	Aug. 26, 1791	....
Water-wheel for propelling grist-mills, &c	H. Averill	Richland, N. Y	Oct. 21, 1830	....
Water-wheel for saw and grist mills	H. Averill	Richland, N. Y	June 18, 1834	....

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Invention.	Inventor.	Residence.	Date.	No.
Water-wheel for saw and grist mills	J. Deniston	Lanier Township, Ohio	Aug. 22, 1827	....
Water-wheel for saw-mills	T. Shute	Tennessee	Mar. 6, 1827	....
Water-wheel for steamboats	N. Dodge	New York	Feb. 25, 1835	....
Water-wheel for steamboats	R. L. Stevens	Hoboken, N. J	Apr. 10, 1827	....
Water-wheel for steamboats and mills	P. Boynton	Ogdensburgh, N. Y	Apr. 21, 1829	....
Water-wheel gate	C. D. Blakeslee	Grand Rapids, Mich	Sept. 10, 1867	68, 692
Water-wheel gate	J. M. Burghart	Great Barrington, Mass	Apr. 15, 1873	137, 822
Water-wheel gate	P. W. Davis and D. D. Bunnell	Portland, Oreg	May 9, 1871	114, 650
Water-wheel gate	J. L. Helmer	Rome, N. Y	Aug. 25, 1868	81, 368
Water-wheel gate	E. F. Hunt	Cornton, Vt	Mar. 5, 1872	124, 273
Water-wheel gate	T. W. Mahler	Rome, N. Y	May 4, 1869	89, 674
Water-wheel gate	A. Morehouse	Farmer, N. Y	Jan. 3, 1860	26, 696
Water-wheel gate	E. Roberts	Rochester, N. H	Apr. 4, 1854	10, 726
Water-wheel gate	G. Vliet	Milwaukee, Wis	May 28, 1867	65, 140
Water-wheel gate and chute	L. S. Fairchild and W. B. Sturges.	Cleveland, Ohio, and Troy, N. Y.	Sept. 10, 1861	33, 241
Water-wheel gate, Turbine	S. A. Prescott	Sutton, Mass	Mar. 21, 1871	112, 956
Water-wheel gate, Turbine	G. W. Russel and C. J. Bradbury.	Lawrence, Mass	Jan. 16, 1872	122, 739
Water-wheel gate, Turbine	L. S. Sweet and J. Graham	Vassar, Mich	Aug. 25, 1868	81, 557
Water-wheel gate, Adjustable link for	W. A. Parmele	New Haven, Conn	July 5, 1870	105, 122
Water-wheel gates, Apparatus for closing and opening annular series of.	J. W. Hill	Dayton, Ohio	Aug. 27, 1872	130, 918
Water-wheel gates, Device for operating	J. H. Bodine and T. A. Hill	Mount Morris, N. Y	June 2, 1868	78, 510
Water-wheel gates, Governor for	J. H. Wooster	Strykersville, N. Y	Feb. 14, 1865	46, 430
Water-wheel gates, Method of operating	J. C. Shorey	Rochester, N. Y	July 29, 1856	15, 463
Water-wheel guide	N. F. Burnham	York, Pa	Dec. 24, 1867	72, 450
Water-wheel head-gate	H. L. Turner	Strykersville, N. Y	June 27, 1854	11, 183
Water-wheel, Hinged	M. D. Brown	Mason County, Va	Dec. 19, 1828	....
Water-wheel, Horizontal	A. Andrews and H. Kalbach	Bernville, Pa	Aug. 30, 1859	25, 237
Water-wheel, Horizontal	D. Cooper	Jericho, N. Y	May 12, 1814	....
Water-wheel, Horizontal	S. Curtis	Eagle, N. Y	Dec. 15, 1837	518
Water-wheel, Horizontal	E. G. Cushing	Dryden, N. Y	Dec. 6, 1859	26, 342
Water-wheel, Horizontal	S. Dalie	Cumberland, Mass	May 28, 1816	....
Water-wheel, Horizontal	R. A. Donaldson and J. L. Wheeler.	Newark, N. J	Sept. 25, 1815	....
Water-wheel, Horizontal	A. M. Ford and C. W. Warner	Jericho, Vt	Dec. 13, 1859	26, 424
Water-wheel, Horizontal	H. Howard	Wooster, Ohio	Dec. 26, 1821	....
Water-wheel, Horizontal	O. Latham, L. Bennet, and J. Green.	Oneida County, N. Y	May 28, 1825	....
Water-wheel, Horizontal	A. Lippitt	Windsor, Ohio	Nov. 2, 1825	....
Water-wheel, Horizontal	J. McCarty	Catharine, N. Y	June 1, 1858	20, 437
Water-wheel, Horizontal	J. K. O'Neil	Kingston, N. Y	Sept. 20, 1859	25, 521
Water-wheel, Horizontal	J. Osborn, jr	Litchfield, Conn	May 29, 1811	....
Water-wheel, Horizontal	D. Parmelee	Redding, Conn	Nov. 20, 1809	....
Water-wheel, Horizontal	E. Reed	....	Feb. 14, 1799	....
Water-wheel, Horizontal	R. Ross	Saint Albans, Vt	Mar. 27, 1860	27, 673
Water-wheel, Horizontal	S. Stoddard	Jackson Township, Pa	May 28, 1832	....
Water-wheel, Horizontal	E. Thompson	Manchester, N. Y	Mar. 24, 1825	....
Water-wheel, Horizontal	C. Warner	Oxford, N. J	Sept. 22, 1837	404
Water-wheel, Horizontal	J. T. Wilder	Greensburgh, Ind	Oct. 18, 1859	25, 859
Water-wheel, Horizontal	J. Wood	Mount Pleasant, N. Y	June 19, 1815	....
Water-wheel, Horizontal and perpendicular	W. Pumell	Giles County, Tenn	Jan. 10, 1817	....
Water-wheel, Horizontal-curb cast-iron	J. Pilling	Waterford, N. Y	Feb. 3, 1834	....
Water-wheel, Horizontal reacting	J. Farnham	Oswego, N. Y	Nov. 23, 1808	....
Water-wheel, Impact	A. Greenleaf	Kingston, Pa	July 11, 1854	11, 296
Water-wheel, Impact	H. Morris, E. K. Gorton, and E. Saeger.	Crawford County, Pa	Oct. 16, 1855	13, 685
Water-wheel, Impact	A. Queal	Plymouth, N. Y	Dec. 11, 1855	13, 918
Water-wheel, Inclined	A. Baker	Dalton, Ohio	Sept. 23, 1843	3, 279
Water-wheel, Inclined	C. Foss	Perry, Ohio	Aug. 4, 1832	....
Water-wheel, Inclined	J. T. Gilmore	Fayetteville, N. C	Dec. 31, 1842	2, 900
Water-wheel, Inclined	W. H. Squires and C. C. White	Ledyard, N. Y	Feb. 5, 1831	....
Water-wheel, Inclined	O. Thompson	Jericho, Vt	Dec. 6, 1828	....
Water-wheel, Inclined	J. Wood	La Grange, Tenn	Feb. 26, 1833	....
Water-wheel, Inclined, floated, &c	T. Pierce	Hartwick, N. Y	May 2, 1835	....
Water-wheel, Inclosed tail-race	W. A. Cobb	Orange, Mass	Jan. 21, 1870	104, 427
Water-wheel, Iron	P. J. Schuyler and E. and D. Hitchcock.	Stillwater, N. Y	Dec. 20, 1823	....
Water-wheel joint	R. Daniels	Woodstock, Vt	Nov. 7, 1854	11, 888
Water-wheel, Mill	J. T. Towne	Mount Morris, N. Y	Apr. 11, 1836	....
Water-wheel, Oblique	R. Bulkley	New York	Aug. 7, 1821	....
Water-wheel, Open-screw	E. Skinner	Sandwich, N. H	Sept. 11, 1827	....
Water-wheel, Overshot	J. Green, sr	Virginia	Mar. 5, 1816	....
Water-wheel, Overshot	E. Sheetz	Campbelltown, Pa	Oct. 14, 1851	8, 430
Water-wheel, Overshot	J. E. Whitemore	Joliet, Ill	Dec. 6, 1853	10, 279
Water-wheel, Overshot strap or chain	R. Berrian	New York	Feb. 13, 1809	....
Water-wheel, Percussion and reaction	Z. and A. Parker	Ohio	June 27, 1840	1, 658
Water-wheel, Perpetual	J. Widdifield	Philadelphia, Pa	Apr. 21, 1817	....
Water-wheel, Power	I. Harrison	Middletown, Va	Jan. 31, 1834	....
Water-wheel, Pressure	W. Fields and S. Gerhard	Wilmington, Del	Aug. 21, 1855	13, 458
Water-wheel, Reacting	G. W. Henderson and J. Russell	Millburn, Me	Sept. 22, 1832	....
Water-wheel, Reacting	J. W. Henderson and J. E. Cayford.	Milburn, Me	Apr. 14, 1830	....
Water-wheel, Reacting	N. F. Hodges	Corning, N. Y	July 16, 1841	2, 173
Water-wheel, Reacting	G. Hotchkiss	Windsor, N. Y	Nov. 8, 1832	....
Water-wheel, Reacting	G. Hotchkiss	Windsor, N. Y	Jan. 9, 1837	110
Water-wheel, Reacting	N. Johnson	Irwin Centre, N. Y	May 30, 1838	759
Water-wheel, Reacting	J. B. McCard	Galena, Ill	May 16, 1835	....
Water-wheel, Reacting	A. Monroe	Worcester, Mass	July 22, 1856	15, 384
Water-wheel, Reacting	G. W. Pittock, J. B. Stott, and G. Richmond.	Troy, N. Y	May 13, 1856	14, 882
Water-wheel, Reacting	C. Wing	Gardiner, Me	Oct. 22, 1830	....
Water-wheel, Reaction	J. Ambler, jr	Waterford, N. Y	Feb. 2, 1833	....
Water-wheel, Reaction	J. Ambler, jr	Waterford, N. Y	June 29, 1833	....
Water-wheel, Reaction	A. Boyce	Campbelltown, N. Y	Oct. 16, 1840	1, 831
Water-wheel, Reaction	A. Chapman	Fort Miller Bridge, N. Y	July 30, 1845	4, 198
Water-wheel, Reaction	R. Lastman	Concord, N. H	Mar. 11, 1833	....

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Water-wheel, Reaction	N. Johnson	Irwin Centre, N. Y	Nov. 23, 1837	474
Water-wheel, Reaction	H. Lewis	Binghamton, N. Y	Jan. 7, 1833	....
Water-wheel, Reaction	I. S. Savage	Waterville, Me	Apr. 12, 1833	....
Water-wheel, Reaction	J. Smith	Mansfield, N. J	Apr. 3, 1849	6, 248
Water-wheel, Reaction	J. L. St. John	Canajoharie, N. Y	Sept. 16, 1834	....
Water-wheel, Reaction	J. C. Strode	Bradford, Pa	Feb. 8, 1831	....
Water-wheel, Reaction	I. True	Rochester, Ind	Apr. 25, 1854	10, 839
Water-wheel, Reaction	J. Turner	Augusta, Me	Jan. 18, 1831	....
Water-wheel, Reaction	E. and J. Whitney and W. F. Card.	Burns, N. Y	June 11, 1842	2, 665
Water-wheel, &c., regulator	J. Finlay	Cold Spring, N. Y	Nov. 13, 1849	6, 868
Water-wheel regulator	J. P. Sibley and A. Walsh	Bennington, Vt	Apr. 19, 1870	102, 056
Water-wheel regulator	H. D. Snow	Bennington, Vt	July 14, 1868	79, 870
Water-wheel regulator	H. D. Snow	Bennington, Vt	Mar. 15, 1870	100, 942
Water-wheel, Screw	E. Beard	Charlestown, Mass	Jan. 25, 1828	....
Water-wheel scroll	J. L. Beers	McAllisterville, Pa	July 14, 1868	79, 804
Water-wheel scroll	J. E. Huston	Hillsdale, Mich	Sept. 13, 1864	44, 195
Water-wheel scroll	W. H. Locke	Canton, Pa	Mar. 26, 1861	31, 810
Water-wheel scroll	T. Rose	Cortlandville, N. Y	Apr. 14, 1863	38, 180
Water-wheel scroll	T. Rose	Cortlandville, N. Y	Mar. 10, 1868	75, 298
Water-wheel scroll	S. G. Steves	Ashville, N. Y	Sept. 14, 1869	94, 788
Water-wheel-scroll case	J. Chase	Paterson, N. J	Jan. 11, 1870	98, 741
Water-wheel-scroll chute	H. H. Cummings	Enfield, N. H	Dec. 7, 1869	97, 610
Water-wheel-scroll gate	J. H. Jones	Charlton, Mass	July 13, 1869	92, 456
Water-wheel shafts, Adjustable bearing for	W. Bayley	Baltimore, Md	Mar. 22, 1870	101, 083
Water-wheel, Sheet-metal	R. Palmer	West Chester, Pa	July 3, 1866	56, 809
Water-wheel, Siphon	T. Welham	Brownsville, Nebr	Nov. 15, 1864	45, 102
Water-wheel, Sliding-geared	S. Guernsey	Fenner, N. Y	Apr. 12, 1824	....
Water-wheel sluice	J. Temple	Middletown, Ohio	Feb. 8, 1850	22, 901
Water-wheel, Spiral	J. Kelly	Jackson County, Ohio	Feb. 21, 1828	....
Water-wheel, Spiral-bucket	L. D. Adkins	Perry, Ohio	May 17, 1839	1, 154
Water-wheel, Spiral-bucket	J. C. Green	Fayette, Me	May 30, 1837	212
Water-wheel, Spiral current	J. Zimmerman	Owatonna, Minn	Jan. 25, 1870	99, 272
Water-wheel, Swing-bucket	A. Waters	Millbury, Mass	Dec. 22, 1818	....
Water-wheel, Tide	S. Betts		Mar. 18, 1797	....
Water-wheel, Tide	F. F. Myrick	Lynn, Mass	Mar. 20, 1849	6, 193
Water-wheel, Tide	P. W. Yarrell	Littleton, N. C	Aug. 3, 1869	93, 392
Water-wheel, Tide and current	A. Dingley and I. S. Savage	Waterville, Me	Apr. 16, 1833	....
Water-wheel, Tide and current	S. Morey	Oxford, N. H	Mar. 13, 1817	....
Water-wheel to propel machinery	G. G. Heermance	Coxsackie, N. Y	Sept. 30, 1834	....
Water-wheel, Tub	E. Newman	Stilesville, Ind	Nov. 26, 1835	....
Water-wheel, Tub	A. Woodard	Athol, Mass	May 8, 1840	1, 589
Water-wheel, Turbine	T. J. Alcott	Mount Holly, N. J	Nov. 26, 1872	133, 287
Water-wheel, Turbine	O. N. and A. J. Angell	Providence, R. I	Dec. 28, 1869	98, 330
Water-wheel, Turbine	J. N. and L. M. Asbury	Rockland Mills, Ky	Feb. 25, 1873	136, 298
Water-wheel, Turbine	J. Barney	Perry's Mills, N. Y	July 13, 1869	92, 510
Water-wheel, Turbine	W. Bayley and A. B. Crowell	Baltimore, Md	Mar. 22, 1870	101, 084
Water-wheel, Turbine	E. R. Beardsley	Aroma, Ill	Oct. 18, 1870	108, 436
Water-wheel, Turbine	A. Bee	Lancaster, Mass	Oct. 3, 1871	119, 558
Water-wheel, Turbine	S. A. Bell	Newtown, Ohio	July 6, 1869	92, 252
Water-wheel, Turbine	C. Boyd	Andover, N. Y	Mar. 29, 1870	101, 221
Water-wheel, Turbine	J. G. Boyland and G. Buchanan	Crawfordsville, Ind	June 27, 1871	116, 405
Water-wheel, Turbine	H. Boyle	Waterloo, Iowa	Jan. 18, 1870	98, 913
Water-wheel, Turbine	M. A. Brooks	La Porte, Ind	Apr. 4, 1871	113, 489
Water-wheel, Turbine	E. P. H. Capron	Hudson, N. Y	Aug. 12, 1873	141, 759
Water-wheel, Turbine	H. A. Chadwick	Burnet, Tex	Jan. 11, 1870	98, 665
Water-wheel, Turbine	J. E. Chapman	West Reading, Conn	Aug. 31, 1869	94, 281
Water-wheel, Turbine	J. Chase	Paterson, N. J	Aug. 3, 1869	93, 175
Water-wheel, Turbine	J. Chase	Paterson, N. J	Sept. 14, 1869	94, 868
Water-wheel, Turbine	E. F. Cooper	Mount Gilead, Ohio	Dec. 21, 1869	98, 150
Water-wheel, Turbine	J. Cumming	Ione City, Cal	Oct. 8, 1872	132, 059
Water-wheel, Turbine	R. Dunbar	Buffalo, N. Y	June 1, 1869	90, 826
Water-wheel, Turbine	W. H. Elmer	Berlin, Wis	Apr. 8, 1873	137, 666
Water-wheel, Turbine	E. Emerson	Smithport, Pa	Aug. 2, 1870	105, 929
Water-wheel, Turbine	J. J. Faulkner	McMinnville, Tenn	Feb. 8, 1870	99, 548
Water-wheel, Turbine	J. J. Faulkner	McMinnville, Tenn	Oct. 1, 1872	131, 865
Water-wheel, Turbine	N. T. Frary and E. T. Sherwin	Adrian, Mich	May 18, 1869	90, 251
Water-wheel, Turbine	D. W. Glendinning	Detroit, Mich	Apr. 19, 1870	101, 996
Water-wheel, Turbine	J. C. Green	Flanders, N. J	Apr. 15, 1873	137, 836
Water-wheel, Turbine	M. Gregg	Rochester, N. Y	July 13, 1869	92, 603
Water-wheel, Turbine	W. P. Hale	Lockhaven, Pa	Feb. 11, 1873	135, 707
Water-wheel, Turbine	A. M. Harding	Oregon City, Oreg	Nov. 23, 1869	97, 085
Water-wheel, Turbine	J. Harris	New Carlisle, Ind	Mar. 4, 1873	136, 372
Water-wheel, Turbine	A. A. Herriman	Greensborough, N. C	Sept. 9, 1873	142, 628
Water-wheel, Turbine	B. Holly	Lockport, N. Y	May 21, 1867	64, 977
Water-wheel, Turbine	D. O. Holman	Adams, N. Y	Nov. 2, 1869	96, 432
Water-wheel, Turbine	A. Hubbell	Salisbury, Conn	May 11, 1869	90, 000
Water-wheel, Turbine	J. H. Jones	Charlton, Mass	Dec. 14, 1869	97, 778
Water-wheel, Turbine	J. Jordan	East Windsor, Mass	Apr. 20, 1869	89, 050
Water-wheel, Turbine	J. J. Knowlton	Saccarappa, Me	May 23, 1871	115, 217
Water-wheel, Turbine	J. A. Kyle	Cedarville, Ohio	Nov. 12, 1872	133, 039
Water-wheel, Turbine	P. H. Lamey and A. J. Beachell	Port Treverton, Pa	Sept. 7, 1869	94, 614
Water-wheel, Turbine	J. Martin	Florence, Ala	Jan. 26, 1869	86, 238
Water-wheel, Turbine	W. V. Martin	Waverly, Ohio	Oct. 18, 1870	108, 372
Water-wheel, Turbine	J. McGrew	Ravenswood, W. Va	Nov. 26, 1872	133, 470
Water-wheel, Turbine	R. Monroe	Hendrick's Creek, Pa	Dec. 6, 1870	109, 926
Water-wheel, Turbine	J. Newlin	Philadelphia, Pa	Mar. 9, 1869	87, 585
Water-wheel, Turbine	J. Newman	Portland, Mich	June 29, 1869	92, 087
Water-wheel, Turbine	M. W. and J. T. Obenchain	Logansport, Ind	Dec. 26, 1871	122, 275
Water-wheel, Turbine	J. B. Park	North Platte, Nebr	Mar. 29, 1870	101, 378
Water-wheel, Turbine	T. H. Risdon and W. W. Tyler	Mount Holly, N. J	Jan. 28, 1873	135, 367
Water-wheel, Turbine	B. F. Sampson	West Brookfield, Mass	June 21, 1870	104, 500
Water-wheel, Turbine	J. C. Scribner	Ashland, N. H	Dec. 24, 1872	134, 171
Water-wheel, Turbine	I. Sherck	Fremont, Ohio	Nov. 4, 1873	144, 363
Water-wheel, Turbine	W. H. Snyder	Phelps, N. Y	Mar. 30, 1869	88, 341
Water-wheel, Turbine	B. Stetson	Uxbridge, Mass	Aug. 14, 1860	29, 654
Water-wheel, Turbine	B. Stetson	Uxbridge, Mass	May 31, 1870	103, 794

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Water-wheel, Turbine	G. C. and J. F. Stevens	West Townsend and Fitchburgh, Mass.	May 18, 1869	90,204
Water-wheel, Turbine	G. C. and J. F. Stevens	Ayer, Mass	Aug. 13, 1872	130,448
Water-wheel, Turbine	S. M. Stevens	Lancaster, Iowa	Mar. 11, 1873	136,784
Water-wheel, Turbine	S. Stevenson	Dansville, N. Y	Oct. 3, 1871	119,664
Water-wheel, Turbine	G. Storer	Crystal, Mich	Apr. 19, 1870	102,060
Water-wheel, Turbine	G. Talcot	New York, N. Y	Dec. 26, 1865	51,760
Water-wheel, Turbine	W. A. Terry	Bristol, Conn	Sept. 10, 1872	131,233
Water-wheel, Turbine	T. R. Timby	Saratoga, N. Y	June 22, 1869	91,580
Water-wheel, Turbine	J. Tyler	West Lebanon, N. H	Feb. 13, 1866	52,625
Water-wheel, Turbine	J. W. Upham	Worcester, Mass	June 22, 1869	91,691
Water-wheel, Turbine	H. Van De Water	Albany, N. Y	Oct. 4, 1853	10,080
Water-wheel, Turbine	H. Van De Water	Troy, N. Y	July 17, 1855	13,287
Water-wheel, Turbine	H. Van De Water	Rochester, N. Y	July 8, 1873	140,602
Water-wheel, Turbine	C. B. Walsh	Waupaca, Wis	Sept. 28, 1869	95,292
Water-wheel, Turbine	A. Warren	Suffolk County, Mass	Apr. 27, 1869	89,363
Water-wheel, Turbine	S. Whalen	Ballston Spa, N. Y	Dec. 15, 1863	40,986
Water-wheel, Turbine	J. E. Whiting	Harford, Pa	Sept. 30, 1873	143,312
Water-wheel, Turbine	A. Wrealsh	Springfield, Ohio	Feb. 4, 1873	135,503
Water-wheel, Turbine	P. W. Yarrell	Gariysburgh, N. C	Feb. 4, 1873	135,459
Water-wheel, Twain	W. L. Elgar	Winchester, N. H	Feb. 10, 1836	....
Water-wheel, Undershot	E. Cochran	Gibson County, Ind	June 15, 1835	....
Water-wheel, Vertical	J. Maze	Greenbrier County, Va	Jan. 10, 1823	....
Water-wheel, Vertical screw	D. K. Kraatz	Ephrata, Pa	Sept. 12, 1871	118,863
Water-wheel, Vertical tide	R. Seal	Delhi, N. Y	May 31, 1822	....
Water-wheel with floats working upon hinges	J. Eastman	Bath, N. H	Feb. 18, 1831	....
Water-wheel with folding ladle-boards	T. Winslow	Jay, Me	Oct. 25, 1832	....
Water-wheels, Adjustable chute for turbine	J. Abell	Woodbridge, Canada	May 20, 1873	138,978
Water-wheels and flumes, Constructing	A. Mercer	Providence, R. I	May 18, 1826	....
Water-wheels, Applying one head of water to any number of.	D. McKenzie, M. L. Barbor, S. Dean, and J. McNaughton.	Caledonia, N. Y	June 19, 1826	....
Water-wheels, Applying the water to	A. Jillson	Roxbury, Mass	July 17, 1815	....
Water-wheels at once, Machine for moving two	L. C. Hinman, L. Bissel, and M. Barnes.	Otsego County, N. Y	June 7, 1811	....
Water-wheels by raising and lowering them in a current or tide, Mode of working.	M. Andrews	Kennebec, Mass	May 4, 1811	....
Water-wheels, Casting	A. C. Emick	Columbus, Ohio	Dec. 22, 1863	40,998
Water-wheels, Casting	T. H. Risdon	Mount Holly, N. J	Dec. 2, 1862	37,055
Water-wheels, Construction of	N. Johnson	Triangle, N. Y	June 22, 1841	2,138
Water-wheels, Construction of and driving	D. H. Gilbert	Dorchester, Mass	Feb. 28, 1834	....
Water-wheels, Diffusers for	U. A. Boyden	Boston, Mass	May 1, 1847	5,090
Water-wheels, Directing water upon	M. B. Ashley	Watertown, N. Y	July 30, 1850	7,522
Water-wheels, Exterior casing for turbine	J. W. Bookwalter	Springfield, Ohio	Mar. 9, 1869	87,625
Water-wheels from back-water, Mode of relieving	J. Benedict	Fabius, N. Y	May 10, 1826	....
Water-wheels, Letting water on	J. Ammon	Rockingham County, Va	June 8, 1827	....
Water-wheels, Letting water on	M. Hildebrand	McMinn County, Tenn	Nov. 10, 1827	....
Water-wheels, Letting water on	T. Key	Henry County, Ga	July 18, 1826	....
Water-wheels, Letting water on	T. Ruble	Saint Mary's, Ind	Aug. 29, 1839	1,307
Water-wheels, Letting water on horizontal	A. Bacon	Windsor, N. Y	June 4, 1832	....
Water-wheels, Link for operating the annular series of gates for turbine.	F. Trump	Springfield, Ohio	Nov. 22, 1870	109,560
Water-wheels, Manner of drawing water from fore-bays and discharging it on.	J. P. Espy and A. Young	Philadelphia, Pa	Sept. 11, 1829	....
Water-wheels, Method of attaching adjustable buckets to the shafts of.	J. R. Howell	Alexandria, Va	Apr. 14, 1857	17,041
Water-wheels, Method of inserting the bucket in the shaft of direct horizontal.	T. Chesher	Middleburgh, Ohio	Jan. 27, 1857	16,465
Water-wheels, Method of stopping and starting	D. M. Tyler	Lisle, N. Y	Nov. 4, 1856	16,027
Water-wheels, Mode of molding for casting curved vent.	S. Parsons	Edgecombe, Me	Apr. 18, 1839	1,127
Water-wheels, Packing	E. Smith	Norwich, N. Y	Oct. 12, 1852	9,335
Water-wheels, Pen-stock for	N. Johnson	Triangle, N. Y	Apr. 15, 1843	3,046
Water-wheels, Raising and lowering current	C. T. Paine	Winslow, Me	June 29, 1833	....
Water-wheels, Regulating and directing water upon.	I. K. Millard	Town Hill, Pa	May 9, 1846	4,513
Water-wheels, Regulator for reaction	D. Phillips	Manchester, Vt	Nov. 27, 1866	60,052
Water-wheels, Spout for admitting water on the buckets of.	I. Stanbrough	Arcadia, N. Y	Nov. 25, 1841	2,375
Water-wheels, steam-engines, &c., Pendulum regulator for.	N. Scholfield	Montville, Conn	Feb. 11, 1833	....
Water-wheels, Supplying water to	J. Houghton	Greene County, Ga	Jan. 13, 1829	....
Water-wheels, Using water on	A. Danielson	Otsego, N. Y	May 16, 1815	....
Water-wheels, Volute chute for	W. W. Weaver	Rossie, N. Y	Oct. 8, 1872	132,126
Water with carbonic acid, Apparatus for charging	R. Grant	Brooklyn, N. Y	Jan. 28, 1868	73,712
Water with carbonic acid, Method of charging	J. S. Baldwin	New York, N. Y	May 29, 1866	55,040
Water with the assistance of steam, Obtaining force from.	S. Murray	....	Nov. 17, 1800	....
Water-works, Stand-pipe for	G. W. Pearsons	Ogdensburgh, N. Y	Oct. 14, 1873	143,711
Watering-pot sprinkler	J. Barrows	Hyde Park, Mass	Mar. 2, 1869	87,321
Wave-power	C. Buckner	San Francisco, Cal	May 16, 1873	138,474
Waving patterns, Machine for marking	A. Moffet	Bristol, Ohio	Sept. 4, 1860	29,901
Wax, &c., Apparatus for molding sealing	A. Smith and W. Stewart, sr	Cincinnati, Ohio	Oct. 15, 1872	132,329
Wax, Bleaching bayberry	B. Gomperts	New York	Feb. 14, 1832	....
Wax, Bleaching yellow bees	J. N. Shultz	New York	Apr. 30, 1832	....
Wax-ends, Apparatus for preparing	W. May	Binghamton, N. Y	Jan. 21, 1873	134,998
Wax-ends, Machine for twisting	D. H. Hovey	Killbourne, Ohio	June 28, 1853	9,817
Wax-ends, Machine for twisting	F. K. Way	Springfield, Ohio	Jan. 14, 1868	73,270
Wax flowers, fruits, &c., Composition for the production of.	E. W. Myers	Lincoln, Ill	June 1, 1869	90,675
Wax for sewing thread, Semi-liquid	I. Banister	Newark, N. J	Oct. 20, 1863	40,318
Wax from adhering to mold, Method of preventing sealing.	N. W. Kumler	Dayton, Ohio	July 24, 1866	56,576
Wax heater, Portable sealing	E. I. and F. Hyde	Baltimore, Md	Sept. 24, 1872	131,684
Wax, Igniting sealing	J. Fatman	Philadelphia, Pa	Apr. 17, 1844	3,544
Wax into sheets, Machine for cutting	W. F. Barnes	Rockford, Ill	July 26, 1870	105,627
Wax-pouring ladle	P. Loeb	Dayton, Ohio	Aug. 15, 1871	118,140
Wax, Purifying and bleaching	W. Van Wyck	New York, N. Y	May 12, 1863	38,540
Wax, Substitute for	C. Morfit	New York, N. Y	Jan. 3, 1860	26,697
Way-meter, Wheel-vehicle	J. A. Robinson	Fremont, N. H	Dec. 16, 1873	145,527

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Invention.	Inventor.	Residence.	Date.	No.
Weaning-bit	I. L. Baker	Prairie City, Kans	June 21, 1870	104, 408
Wearing-apparel clasp	F. Wood	Somerville, Mass	Feb. 7, 1865	46, 288
Wearing-apparel, Elastic gussets for	J. and J. Miller, jr	Peckham, England	Nov. 19, 1867	71, 038
Wearing-apparel, Stays, springs, and extensors in	J. L. Newton	Boston, Mass	July 17, 1866	56, 438
Weather-board gage	S. G. Bigelow	Silver Lake, Ind	Feb. 27, 1872	124, 028
Weather-board gage	H. Fellows	Bloomington, Ind	June 13, 1871	115, 945
Weather-board gage	J. M. Milhollin	Champlin, Minn	Oct. 18, 1870	108, 376
Weather-board gage	M. Newlove	Burlington, Iowa	Apr. 4, 1871	113, 554
Weather-board gage	W. E. Stoddard	Fort Edward, N. Y	Oct. 20, 1868	63, 337
Weather-board gage	W. E. Stoddard	Fort Edward, N. Y	Jan. 11, 1870	98, 813
Weather-board gage	G. W. Tinsley	Blakesburgh, Iowa	Sept. 19, 1871	119, 260
Weather-board gage and rest	I. Williams	Westfield, Ind	Aug. 4, 1868	80, 691
Weather-board scribe	A. Miller and U. Faris	Red Rock Township, Iowa	July 26, 1870	105, 826
Weather-boarding	J. C. Anderson	Webster, Pa	Nov. 2, 1869	96, 377
Weather-boarding	A. W. Murray	Dunkirk, N. Y	July 9, 1872	128, 896
Weather-boarding clamp and gage	D. M. Mourland	Little York, Ill	Nov. 13, 1866	59, 626
Weather-boarding gage	J. B. Pedrick	Columbus, Ind	Nov. 30, 1869	97, 436
Weather boarding gage	H. Preston	Orfordville, Wis	May 5, 1868	77, 662
Weather boarding gage	I. Williams	Westfield, Ind	Aug. 4, 1868	80, 692
Weather-boarding, Making	J. W. Bailey	New Orleans, La	Sept. 1, 1868	81, 579
Weather-boarding, Manufacture of	L. Postlewait	Russellville, Ohio	Oct. 15, 1872	132, 318
Weather-boarding, Scribe-hook for	J. Nester	Portland, Oreg	Dec. 31, 1867	72, 885
Weather-boarding stop-gage	W. F. Redding	Troy, N. Y	Mar. 1, 1864	41, 783
Weather-boarding stop-gage	W. E. Stoddard	Horicon, N. Y	May 17, 1859	24, 066
Weather-cock wheel	N. T. Davis	Wilmington, Vt	Jan. 9, 1834	......
Weather-guard	J. Pease	Westfield, Mass	Dec. 23, 1873	145, 750
Weather-guard for doors	C. A. Wood	Kentland, Ind	Sept. 2, 1873	142, 542
Weather-prophet	A. C. Rand	Union Mills, Pa	Dec. 12, 1865	51, 477
Weather-strip	B. F. Averill	Dunkirk, N. Y	June 9, 1863	38, 802
Weather-strip	B. F. Averill	Dunkirk, N. Y	July 7, 1868	79, 625
Weather-strip	J. and G. Bacon	Medina, Wis	Apr. 22, 1873	138, 065
Weather-strip	R. Bartley	Norwalk, Ohio	Sept. 11, 1866	57, 845
Weather-strip	C. Bean	Ionia, Mich	Dec. 29, 1868	85, 422
Weather-strip	J. T. Bliss and J. D. Davenport	North Providence, R. I	Jan. 4, 1870	98, 548
Weather-strip	O. W. Booth	Providence, R. I	Dec. 16, 1873	145, 616
Weather-strip	A. C. Brown	Chicago, Ill	Aug. 4, 1868	80, 591
Weather-strip	M. E. Brown and E. Brownell	Scranton, Pa	Apr. 23, 1872	126, 014
Weather-strip	J. W. Browne	Brooklyn, N. Y	Sept. 30, 1873	143, 324
Weather-strip	W. H. Burghardt	Curtisville, Mass	July 19, 1870	105, 420
Weather-strip	H. Bussman	Syracuse, N. Y	Jan. 16, 1872	122, 703
Weather-strip	C. E. Butler	Hudson, N. Y	June 4, 1867	65, 340
Weather-strip	H. W. Carew	Norwich, Conn	Sept. 7, 1869	94, 472
Weather-strip	E. Carpenter	Carbondale, Pa	Dec. 8, 1868	84, 680
Weather-strip	I. Case	Des Moines, Iowa	Feb. 11, 1873	135, 627
Weather-strip	S. J. Cilley	Rochester, N. Y	July 23, 1872	129, 650
Weather-strip	J. O. Clay	Hudson, Wis	Nov. 11, 1862	36, 931
Weather-strip	J. O. Clay	Hudson, Wis	Sept. 1, 1863	39, 718
Weather-strip	F. A. Coats	Kelloggsville, Ohio	Apr. 4, 1871	113, 500
Weather-strip	G. H. Collins	Wayne, Mich	July 5, 1864	43, 394
Weather-strip	A. M. Corbit	Bethlehem, Iowa	Oct. 12, 1869	95, 773
Weather-strip	T. Cowden	Norristown, Pa	Dec. 6, 1864	45, 320
Weather-strip	G. W. Cretors and E. Hoover	Clinton County, Ind	Nov. 9, 1869	96, 675
Weather-strip	G. W. Cretors and E. Hoover	Clinton County, Ind	Nov. 30, 1869	97, 302
Weather-strip	J. Cross	Adrian, Mich	June 9, 1868	78, 790
Weather-strip	H. Dierkes and H. Bussman	Syracuse, N. Y	Sept. 17, 1872	131, 430
Weather-strip	J. M. Dils	Oceola, Ind	Jan. 9, 1872	122, 580
Weather-strip	A. Dodder	Washington, Iowa	Oct. 11, 1864	44, 613
Weather-strip	L. H. Ellsworth, W. E. Wilcox, and S. Seabury.	Peoria, Ill	Apr. 25, 1871	114, 118
Weather-strip	E. C. Evans	Cabinet, Pa	Mar. 13, 1866	53, 120
Weather-strip	J. L. Faber, sr	South Hadley, Mass	Mar. 22, 1859	23, 296
Weather-strip	T. S. Fellows	Walnut Lake, Minn	Aug. 4, 1868	80, 538
Weather-strip	A. S. Fisher	Millville, N. Y	May 13, 1862	35, 224
Weather-strip	J. P. Force and W. W. Egnew	Jarvis, Ind	Apr. 2, 1867	63, 495
Weather-strip	E. P. Ford	Shipman, Ill	June 8, 1869	91, 006
Weather-strip	E. Garnsey	Watertown, Conn	Oct. 30, 1849	6, 828
Weather-strip	W. L. Gilroy	Philadelphia, Pa	Feb. 4, 1868	74, 077
Weather-strip	J. Haessel	Peoria, Ill	June 4, 1872	127, 599
Weather-strip	A. J. Harmon	Charlestown, Mass	Mar. 30, 1869	88, 473
Weather-strip	M. S. Harsha	Sycamore, Ill	Feb. 13, 1866	52, 567
Weather-strip	H. A. Hawkins	Virden, Ill	July 3, 1866	56, 046
Weather-strip	C. Hicks	Lancaster, Ky	Aug. 17, 1869	93, 883
Weather-strip	C. Hicks	Lancaster, Ky	Oct. 18, 1870	108, 480
Weather-strip	D. H. Horner	Battle Ground, Ind	Oct. 19, 1869	95, 902
Weather-strip	J. H. Hull	Irasburgh, Vt	May 3, 1870	102, 547
Weather-strip	W. R. S. Hunter	Blackberry Station, Ill	Oct. 25, 1864	44, 802
Weather-strip	J. Johnston	Chicago, Ill	Apr. 6, 1869	88, 572
Weather-strip	J. Johnston	Chicago, Ill	Nov. 30, 1869	97, 412
Weather-strip	C. A. Judd	Milwaukee, Wis	July 13, 1869	92, 613
Weather-strip	E. Kelley	Greensburgh, Ind	Aug. 20, 1872	130, 722
Weather-strip	J. E. Lindsley	Goshen, Ind	June 16, 1868	78, 980
Weather-strip	I. H. McOmber	El Paso, Ill	June 18, 1867	65, 929
Weather-strip	E. Mears	Battle Ground, Ind	Apr. 13, 1869	88, 892
Weather-strip	J. Miller	Alliance, Ohio	July 16, 1867	66, 727
Weather-strip	W. Miller	Chicopee, Mass	May 4, 1869	89, 785
Weather-strip	W. Miller	Boston, Mass	Feb. 15, 1870	99, 932
Weather-strip	W. Miller	Chicopee, Mass	July 12, 1870	105, 232
Weather-strip	J. R. Mills	Macon City, Mo	Apr. 14, 1868	76, 783
Weather-strip	J. H. Morris	Philadelphia, Pa	Apr. 6, 1869	88, 706
Weather-strip	H. Ogborn	Green's Fork, Ind	Dec. 15, 1863	40, 941
Weather-strip	R. L. Patton	Hamburgh, Iowa	Oct. 8, 1872	132, 008
Weather-strip	A. M. Peniston	Avon, Ill	Oct. 17, 1865	50, 490
Weather-strip	J. S. Peterson	Springdale, Ohio	Apr. 23, 1867	64, 031
Weather-strip	C. B. Rager	North Manchester, Ind	Dec. 2, 1873	145, 239
Weather-strip	H. O. Robinson	Cleveland, Ohio	July 6, 1869	92, 367
Weather-strip	H. A. Robison	Cleveland, Ohio	Dec. 24, 1867	72, 543
Weather-strip	H. A. Robison	Cleveland, Ohio	Feb. 22, 1870	100, 074
Weather-strip	J. Shaw	Clayton, Del	Aug. 10, 1869	93, 487

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Invention.	Inventor.	Residence.	Date.	No.
Weather-strip	F. Siering	New York, N. Y	July 22, 1873	141,176
Weather-strip	M. H. Skiff	Westfield, N. Y	May 31, 1870	103,788
Weather-strip	G. W. Smith	Strasburgh, Ohio	Apr. 23, 1867	64,042
Weather-strip	J. E. Smith and M. H. Dascnbrook.	Warrenville, Ill	June 16, 1868	78,900
Weather-strip	S. G. Spicer	Philadelphia, Pa	Nov. 22, 1864	45,189
Weather-strip	J. H. Thomas	Lynn, Mass	July 14, 1868	79,876
Weather-strip	J. Thomson	Aledo, Ill	Dec. 12, 1871	121,912
Weather-strip	E. P. and E. S. Torrey	New York, N. Y	Apr. 30, 1867	64,383
Weather-strip	E. S. Torrey	New York, N. Y	May 14, 1867	64,811
Weather-strip	E. S. Torrey	New York, N. Y	Aug. 18, 1868	81,228
Weather-strip	L. W. Turner	Yalesville, Conn	Mar. 26, 1867	63,187
Weather-strip	A. M. Ulmer	Philadelphia, Pa	May 30, 1871	115,545
Weather-strip	J. A. Vincent	Fairburgh, Ill	Nov. 6, 1866	59,486
Weather-strip	O. A. Vorce	Kentland, Ind	Dec. 23, 1873	145,820
Weather-strip	D. G. Walker	Oshkosh, Wis	Mar. 30, 1869	88,350
Weather-strip	J. B. Wardwell	Georgetown, D. C	June 11, 1867	65,781
Weather-strip	H. Waterman	Hudson, N. Y	Feb. 26, 1867	62,383
Weather-strip	J. R. Webler	Chicago, Ill	Oct. 26, 1869	96,176
Weather-strip	H. W. Wicker	Norwich, Conn	Aug. 23, 1870	106,757
Weather-strip	D. Young	Kingston, Mo	Aug. 22, 1871	118,418
Weather-strip, Adjustable	O. B. Scofield	East Stoughton, Mass	May 28, 1861	32,436
Weather-strip and door-alarm, Combined	G. W. Carpenter	Jarvis, Ind	Mar. 24, 1868	75,857
Weather-strip and fastener for doors	D. K. Fischel	Lancaster, Ohio	Nov. 5, 1861	33,640
Weather-strip and lock for window, &c	A. Speer	Passaic, N. J	Apr. 22, 1856	14,744
Weather-strip and stop	J. G. C. Horton	Litchfield, Ill	Nov. 21, 1865	51,049
Weather-strip for doors	J. H. Banta	Piermont, N. Y	Aug. 5, 1856	15,465
Weather-strip for doors	B. W. Boyce	Lansing, Mich	Sept. 15, 1863	39,878
Weather-strip for doors	J. Chadwick	Wheaton, Ill	Oct. 22, 1867	69,966
Weather-strip for doors	G. H. Collins	Wayne, Mich	Dec. 5, 1865	51,296
Weather-strip for doors	E. G. Covey and A. Birch	Marshall, Mich	May 24, 1870	103,302
Weather-strip for doors	M. Croke	New York, N. Y	June 26, 1855	13,121
Weather-strip for doors	L. Gifford	Syracuse, N. Y	May 2, 1846	4,492
Weather-strip for doors	J. M. Gray	Hamilton, N. Y	June 21, 1870	104,448
Weather-strip for doors	F. C. Gridley	Hudson, Wis	July 10, 1866	56,209
Weather-strip for doors	A. Hitchcock	Chicago, Ill	Feb. 13, 1855	12,388
Weather-strip for doors	H. C. Hunt	Amboy, Ill	Sept. 27, 1864	44,428
Weather-strip for doors	W. H. Hurlbut and J. W. Sharp	Elgin, Ill	Feb. 16, 1864	41,624
Weather-strip for doors	L. M. Lawless	Geneseo, Ill	Sept. 5, 1871	118,730
Weather-strip for doors, &c	P. Leach	Lewiston, Me	Mar. 20, 1860	27,549
Weather-strip for doors	I. F. A. A. Lynch	Roxbury, Mass	Sept. 19, 1865	50,016
Weather-strip for doors	J. I. Mabbett	Titusville, Pa	Jan. 26, 1869	86,310
Weather-strip for doors	E. C. Matthewson	Hartford, Conn	May 16, 1848	5,572
Weather-strip for doors	S. McFall	Blandinsville, Ill	June 6, 1871	115,625
Weather-strip for doors	C. Merritt	Rutland, Vt	May 27, 1862	35,424
Weather-strip for doors	J. H. Miller	Milwaukee, Wis	Sept. 17, 1867	69,010
Weather-strip for doors	Z. R. Moody	Bridgeport, Conn	May 9, 1848	5,559
Weather-strip for doors	W. Ottiwell and J. C. Kent	New Bedford, Mass	May 16, 1848	5,566
Weather-strip for doors	S. W. Perkins	Geneseo, Ill	Oct. 4, 1864	44,552
Weather-strip for doors	D. B. Robbins and H. Minuse	Milan, Ohio	June 11, 1872	127,924
Weather-strip for doors	M. M. Shellaberger	Joliet, Ill	June 15, 1858	20,590
Weather-strip for doors	J. A. Smith	Waupaca, Wis	July 31, 1866	56,813
Weather-strip for doors	A. E. Strobel	New York, N. Y	May 15, 1866	54,793
Weather-strip for doors	J. Tinney	Westfield, N. Y	Jan. 26, 1858	19,217
Weather-strip for doors	F. Whitmore and E. Conklin	Channahon, Ill	July 19, 1870	105,615
Weather-strip for doors	R. Wight	Westfield, N. Y	Nov. 11, 1856	16,077
Weather-strip for doors	J. Youngberg	Galva, Ill	Sept. 15, 1863	39,983
Weather-strip for doors, Operating	A. S. Pelton	Clinton, Conn	Dec. 16, 1845	4,312
Weather-strip for doors, windows, &c	J. T. Foster, J. J. Banta, and J. H. Banta.	Jersey City, N. J., and Piermont, N. Y.	Mar. 24, 1857	16,874
Weather-strip for doors, windows, &c	J. Smith	Cleveland, Ohio	Jan. 6, 1857	16,341
Weather-strip for window-sashes	R. A. Jackson	Pittsburgh, Pa	Apr. 23, 1872	125,958
Weather-strip for windows	A. J. Devoe	Hackensack, N. J	Feb. 16, 1869	86,975
Weather-strip for windows	J. Johnston	Chicago, Ill	Apr. 6, 1869	88,640
Weather-strip for windows	G. P. Potter	Coventry, R. I	July 8, 1873	140,640
Weather-strip molding	J. W. Browne	New York, N. Y	Feb. 18, 1862	34,458
Weather-strip, Roller	H. C. Brown	Xenia, Ohio	Jan. 30, 1849	6,078
Weather-strips, Mode of operating	J. B. Gray	Hudson, Wis	Feb. 24, 1863	37,749
Weather-strips to doors, Mode of attaching	I. D. Brower	New York, N. Y	July 29, 1837	313
Weather-threshold	J. W. Kramer	Bloomsburgh, Pa	Jan. 21, 1873	135,132
Weather-threshold	J. P. Stark	Morrisonville, Ill	Aug. 26, 1873	142,132
Weather tiling and siding nail	W. E. Worthen	New York, N. Y	Nov. 28, 1871	121,305
Weaver's beam	G. Williams	North Providence, R. I	Aug. 24, 1813	....
Weaver's cut-marks, Machine for producing	W. G. Perry	Manchester, N. H	Nov. 24, 1868	84,301
Weaver's eye-harness, Heddle-stuff for making	J. Thorpe and W. G. Angell	Providence, R. I	Feb. 26, 1840	1,498
Weaver's harness	J. Blackmar	Killingly, Conn	Aug. 7, 1834	....
Weaver's harness	J. Blackmar	Brooklyn, Conn	Oct. 20, 1836	....
Weaver's harness	J. Blackmar	Brooklyn, Conn	Oct. 20, 1836	....
Weaver's harness	M. Chandler and E. Brown	Cazenovia, N. Y	Jan. 26, 1821	....
Weaver's harness	J. Thorp and W. G. Angell	Providence, R. I	Dec. 31, 1838	1,051
Weaver's harness	K. Vogel	Lowell, Mass	Dec. 10, 1846	4,881
Weaver's harness, Machine for dressing	A. E. Bigelow	Lawrence, Mass	Sept. 17, 1867	68,832
Weaver's harness, Machine for dressing	J. and J. H. Kendrick	Providence, R. I	Aug. 9, 1864	43,777
Weaver's harness, Machine for making	J. H. Crowell	Providence, R. I	Nov. 4, 1873	144,320
Weaver's harness, Machine for making	J. H. Crowell	Providence, R. I	Dec. 9, 1873	145,282
Weaver's harness, Machine for making	J. S. Winsor	Providence, R. I	Jan. 2, 1855	12,175
Weaver's harness, Machinery for dressing	K. Vogel	Westbrook, Me	Aug. 6, 1850	7,553
Weaver's harness, Machinery for making	G. L. Jenks	Providence, R. I	Jan. 8, 1856	14,061
Weaver's harness, Machinery for making	K. Vogel	Lowell, Mass	Oct. 23, 1847	5,339
Weaver's harness, Metal eye for	J. Conger and L. Woodbury	Locke, N. Y	Nov. 15, 1825	....
Weaver's harness-wire	E. Brown	Cazenovia, N. Y	Apr. 12, 1826	....
Weaver's heddle	C. T. Judkins	Lowell, Mass	Feb. 18, 1851	7,939
Weaver's heddle	J. Senneff	Philadelphia, Pa	July 18, 1854	11,335
Weaver's lathe	J. Drummond	New York	July 24, 1813	....
Weaver's metallic reed	P. F. Herbin	Paterson, N. J	Nov. 15, 1821	....
Weaver's pickers, Riveting	B. A. Holbrook	Providence, R. I	May 9, 1846	4,514
Weaver's reed	J. A. Wilkinson	Otsego, N. Y	July 3, 1816	....
Weaver's reeds, Machine for polishing wire for	A. Wilkinson	Providence, R. I	Aug. 31, 1836	....

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Invention.	Inventor.	Residence.	Date.	No.
Weavers' reeds, Machine for shaving cane for	J. Church	Chester, Ohio	Aug. 11, 1863	39, 323
Weaver's shuttle	P. L. Dracut and A. H. Sherman.	Lowell, Mass	June 13, 1848	5, 628
Weaving	I. Draper	Weston, Mass	June 7, 1816	....
Weaving	N. and P. W. Miller	Franklin, Mass	Aug. 20, 1811	....
Weaving	J. H. Pierson and J. H. Simmons.	Hempstead, N. Y	Dec. 31, 1819	....
Weaving	J. Rood	Canterbury, Conn	Jan. 23, 1812	....
Weaving	C. Whipple	Douglass, Mass	June 11, 1836	....
Weaving and braiding machines, Threading and regulating tension of thread in.	J. Fewkes	Newton, Mass	Aug. 6, 1867	67, 519
Weaving corded fabric	W. Smith	New York, N. Y	Apr. 5, 1853	9, 653
Weaving cut-pile fabric	T. Crossley	Boston, Mass	June 6, 1854	11, 038
Weaving fabric, Method of	J. Owens	Salford, England	Nov. 30, 1869	97, 434
Weaving feather-cloth	J. and R. Sizer	New London, Conn	Oct. 21, 1812	....
Weaving figured cloth	G. Detlerich and J. Conger	Tompkins County, N. Y	Mar. 12, 1831	....
Weaving long warps	J. C. Smith	New Hartford, Conn	Nov. 4, 1856	16, 029
Weaving-machine	S. Blydenburgh	West Brookfield, Mass	Sept. 12, 1810	....
Weaving-machine	D. Grieve	Providence, R. I	Apr. 11, 1818	....
Weaving-machine	W. Janes	Ashford, Conn	Feb. 16, 1810	....
Weaving millinet, muslin, lace, &c	S. Steward	Cheshire, N. H	Dec. 31, 1813	....
Weaving, Mode of throwing shuttle in	J. Goulding	Dedham, Mass	Aug. 24, 1827	....
Weaving narrow stuffs without the use of shuttles	J. Therp	Providence, R. I	Dec. 22, 1829	....
Weaving pile fabrics, Pile-wire and pincher for	E. B. Bigelow	Clinton, Mass	Nov. 2, 1852	9, 363
Weaving seamless bag, Harness for	A. L. Cole	Windham, Me	July 29, 1856	15, 415
Weaving, spooling, and winding	E. Stowell	Middlebury, Vt	Feb. 28, 1815	....
Weaving straw with silk or thread	M. Kies	Killingly, Conn	May 5, 1809	....
Weaving three-ply fabrics, Jacquards for	J. S. Ferguson	Poughkeepsie, N. Y	Mar. 21, 1865	46, 892
Weaving, Tube-picker used in	B. Holbrook	Providence, R. I	Feb. 2, 1826	....
Weaving tubular fabric	G. Smith	South Windham, Conn	Feb. 14, 1871	111, 783
Weaving Tuscan and other braids, Machine for	E. Fitzerald	New York, N. Y	Nov. 13, 1844	3, 823
Webbing-cutting machine	W. A. Rice	Bristol, N. H	June 3, 1873	139, 616
Webbing, Elastic	L. Hull	Charlestown, Mass	Apr. 24, 1866	54, 167
Webbing, Manufacturing	J. C. Cooke	Middletown, Conn	Jan. 4, 1859	22, 528
Webbing, Self-fastening spring for	J. Flinn	Philadelphia, Pa	Dec. 10, 1867	72, 008
Wedge, Circular	S. Underwood	Hardwick, Vt	July 22, 1831	....
Wedge-cutting machine	N. Warner	Jasper County, Ind	Nov. 28, 1871	121, 264
Wedge for axe-helve	B. Butler	Saint Johnsburgh Centre, Vt.	Feb. 23, 1869	87, 141
Wedge, Iron	A. L. McIntyre	Toledo, Ohio	Nov. 12, 1872	132, 915
Wedge-machine	G. C. Jones and P. King	Alna and Whitefield, Me	Apr. 25, 1854	10, 826
Wedge-making machine	T. B. Brown and J. N. Dinsmore	Kendall's Mills, Me	Sept. 26, 1871	119, 306
Wedge-press for cloth, paper, spermaceti, &c., or raising ponderous bodies.	O. Perkins	Oxford, Me	Aug. 30, 1832	....
Weed-cutter	C. G. Lathrop	San José, Cal	Apr. 2, 1867	63, 534
Weed-cutter	E. W. Walton	San Leandro, Cal	July 19, 1870	105, 529
Weed-cutter, Railway	J. S. Boicourt	Boonesborough, Iowa	Dec. 17, 1867	72, 263
Weed-eradicator	G. W. Davey	Groton, N. Y	Oct. 18, 1864	44, 710
Weed-puller	D. M. Holmes	Watkins, N. Y	Nov. 30, 1869	97, 399
Weeder, Hand	A. F. Noyes and N. D. Beecroft	Bangor, Me	Sept. 7, 1869	94, 504
Weeder, Hand	H. B. Sherwood	Westport, Conn	Dec. 24, 1872	134, 224
Weeding-hoe	W. J. Wells	Sidney, Ohio	Sept. 4, 1866	57, 802
Weeding-hook	T. J. Secor and C. E. Shumway.	Phelps, N. Y	Nov. 9, 1869	96, 625
Weeding-implement	C. S. Jewell	Black's Mills, N. J	Feb. 11, 1868	74, 371
Weeding-implement	S. Springstead	West Chester, N. Y	Nov. 9, 1869	96, 740
Weeding implement, Garden	W. Jones	New Albany, Ind	Sept. 30, 1873	143, 354
Weeding-machine	N. and C. Carstens	New York, N. Y	Mar. 24, 1868	75, 858
Weeding-machine	G. H. Hess	Chicago, Ill	Dec. 31, 1867	72, 852
Weeding-machine	A. H. Sherwood	Southport, Conn	Feb. 20, 1872	123, 944
Weeding-machine for corn, &c	C. Hill	Essex County, Va	July 7, 1814	....
Weeding-tool	P. Michael	Frostburgh, Md	July 4, 1871	116, 736
Weeding-tool	N. Webster	Plainfield, N. J	Mar. 24, 1868	76, 011
Weevil, &c., Destroying	J. Lee	Maysville, Ky	Aug. 17, 1835	....
Weigher, Automatic grain	J. W. Hill	Dayton, Ohio	Apr. 15, 1873	137, 921
Weigher, Automatic grain	J. W. Hill	Dayton, Ohio	Nov. 11, 1873	144, 541
Weigher, Automatic grain	M. Robbins	Cincinnati, Ohio	Apr. 11, 1865	47, 247
Weigher, Grain	L. S. Chichester	Brooklyn, N. Y	Mar. 15, 1864	41, 906
Weigher, Grain	J. B. Stoner	Bennington, Ill	Feb. 8, 1859	22, 900
Weighing and bagging machine, Grain	J. M. Fish	Buffalo, N. Y	June 5, 1860	28, 568
Weighing and measuring, Combined	J. Decker	Sparta, N. J	Aug. 31, 1869	94, 292
Weighing and measuring cup	E. A. Goods	Philadelphia, Pa	Nov. 5, 1867	70, 546
Weighing and measuring grain	D. D. Armes	Decorah, Iowa	Apr. 3, 1866	53, 553
Weighing and registering machine, Grain	L. Reynolds	Owatonna, Minn	Dec. 22, 1868	85, 181
Weighing and registering machine, Grain	J. Scheitlen	Columbia, S. C	July 27, 1858	21, 028
Weighing and tallying machine, Grain	F. S. McWhorter	Saint George's, Del	Oct. 20, 1868	83, 298
Weighing-apparatus	G. and J. L. Babson	Rockport, Mass	Sept. 29, 1868	82, 477
Weighing-apparatus	O. S. Bliss	Fairfield, Vt	Sept. 12, 1865	51, 416
Weighing-apparatus	B. Churchill	Wareham, Mass	Aug. 15, 1865	49, 377
Weighing-apparatus	B. Churchill	Wareham, Mass	Jan. 1, 1867	60, 858
Weighing-apparatus	C. E. Dampier	Ware, England	Feb. 12, 1841	1, 974
Weighing-apparatus	S. Darling	Bangor, Me	Oct. 11, 1864	44, 611
Weighing-apparatus	A. B. Davis	Philadelphia, Pa	Feb. 26, 1861	31, 533
Weighing-apparatus	A. B. Davis	Philadelphia, Pa	Feb. 3, 1863	37, 569
Weighing-apparatus	T. Fairbanks	Saint Johnsbury, Vt	Feb. 11, 1862	34, 355
Weighing-apparatus	W. O. C. Fritschler	Brooklyn, N. Y	Aug. 26, 1862	36, 290
Weighing-apparatus	E. P. Furlong and T. Leavitt	Charlestown and Malden, Mass.	Jan. 10, 1860	26, 757
Weighing-apparatus	T. Morrison	Cincinnati, Ohio	June 29, 1869	92, 083
Weighing-apparatus	J. W. Neal and W. H. Startzman	Big Lick, Va	June 25, 1867	66, 165
Weighing-apparatus	M. Robbins	Hollidaysburgh, Pa	Jan. 23, 1841	1, 942
Weighing apparatus, Grain	R. S. Morison	Bangor, Me	June 19, 1866	55, 691
Weighing-apparatus, Hydraulic	L. Brauer	Memphis, Tenn	June 11, 1867	65, 720
Weighing-apparatus, Spring	A. Morse	Skowhegan, Me	May 31, 1870	103, 818
Weighing-attachment for wagons	J. W. Hill	Jefferson, Iowa	June 15, 1873	140, 826
Weighing-attachment to wagons	W. H. McCormick	Muncie, Ind	Apr. 4, 1871	113, 543
Weighing boat and cargo, called tonnage-meter	E. Cady	Canaan, N. Y	Jan. 6, 1830	....
Weighing-frame	C. Downer	Philadelphia, Pa	Mar. 19, 1850	7, 183
Weighing-frames, Platform of	C. Downer	Philadelphia, Pa	Apr. 21, 1863	38, 224

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Weighing grain, Self-acting machine for	I. D. Garlick	Lyons, N. Y	Dec. 20, 1853	10,352
Weighing hay, live cattle, &c	T. Armat	Philadelphia, Pa	May 10, 1811	....
Weighing heavy bodies	E. and T. Fairbanks	Saint Johnsbury, Vt	Mar. 6, 1834	....
Weighing heavy bodies	E. and T. Fairbanks	Saint Johnsbury, Vt	Mar. 6, 1834	....
Weighing heavy bodies	T. and E. Fairbanks	Saint Johnsbury, Vt	Feb. 21, 1832	....
Weighing-machine	A. H. Emery	New York, N. Y	Jan. 30, 1872	123,253
Weighing-machine	E. and T. Fairbanks	Saint Johnsbury, Vt	Feb. 10, 1837	118
Weighing-machine	E. and T. Fairbanks	Saint Johnsbury, Vt	Feb. 10, 1837	119
Weighing-machine	E. and T. Fairbanks	Saint Johnsbury, Vt	Feb. 10, 1837	122
Weighing-machine	E. and T. Fairbanks	Saint Johnsbury, Vt	Feb. 10, 1837	123
Weighing-machine	E. and T. Fairbanks	Saint Johnsbury, Vt	Feb. 10, 1837	124
Weighing-machine	G. Houston	Washington, N. C	Aug. 13, 1850	7,562
Weighing-machine	B. Maag	New York	Apr. 22, 1835	....
Weighing-machine	W. and T. Schnebly	New York, N. Y	Feb. 17, 1852	8,748
Weighing-machine	J. S. Seger	New York	July 20, 1831	....
Weighing-machine	E. Wadsworth	Hartford, Conn	Sept. 7, 1820	....
Weighing-machine, Automatic	J. G. Lettelier and F. White	Bloomington, Ill	Apr. 20, 1869	89,153
Weighing-machine, Automatic	J. G. Lettelier and F. White	Bloomington, Ill	Apr. 20, 1869	89,154
Weighing machine, Automatic grain	C. G. Case and J. M. Baker	Battle Creek, Mich	Feb. 25, 1862	34,478
Weighing machine, Automatic grain	L. Eames	Kalamazoo, Mich	May 15, 1860	28,262
Weighing machine, Automatic grain	W. and T. Schnebly	Hackensack, N. J	June 8, 1858	20,513
Weighing-machine bucket, Automatic grain	R. Porter	Washington, D. C	May 5, 1857	17,230
Weighing-machine, Electro-magnetic	H. Fairbanks	Saint Johnsbury, Vt	Jan. 17, 1871	110,963
Weighing-machine for canal-boats, loaded wagons, &c.	J. Coulter	Philadelphia, Pa	Oct. 13, 1831	....
Weighing-machine for canal boats, loaded wagons, &c.	D. Loring	Newark, N. J	Aug. 23, 1831	....
Weighing-machine for heavy bodies	T. and E. Fairbanks	Saint Johnsbury, Vt	June 13, 1831	....
Weighing machine, Grain	W. H. Bramble	Cincinnati, Ohio	Apr. 15, 1856	14,687
Weighing machine, Grain	L. S. Chichester	New York, N. Y	May 20, 1862	35,299
Weighing machine, Grain	E. F. Dunaway	Cincinnati, Ohio	Dec. 12, 1865	51,438
Weighing machine, Grain	A. G. Hamacher	Harrisburgh, Pa	July 16, 1872	129,222
Weighing machine, Grain	C. H. Hunter	Shelbyville, Ind	Aug. 23, 1859	25,260
Weighing machine, Grain	J. B. Mohler	Pekin, Ill	Oct. 23, 1860	30,491
Weighing machine, Grain	H. and H. Pooley, jr., T. Roberts, and L. Luc.	Liverpool, England	Feb. 18, 1868	74,719
Weighing machine, Grain	E. Sampson	Lansingburgh, N. Y	Oct. 17, 1865	50,540
Weighing machine, Grain	D. Squier, jr., and E. A. Preston	Battle Creek, Mich	Oct. 16, 1860	30,430
Weighing machine, Grain, &c	J. Van Horne	Magnolia, Ill	Sept. 13, 1859	25,458
Weighing machine, Grain	J. Williams	Kalamazoo, Mich	Apr. 10, 1860	27,851
Weighing machine, Grain	S. R. Wilmot	La Fayette, Ind	Dec. 24, 1850	7,864
Weighing machine, Grain self	W. Biddle	La Fayette, Ind	May 27, 1851	8,123
Weighing machine, Grain self	W. W. W. H. T. Bramble	La Fayette, Ind	July 16, 1850	7,503
Weighing-machine, Hydrostatic	F. E. Duckham	Millwall, England	Feb. 13, 1872	123,621
Weighing machine, Sack	H. Winter	Hackney, England	May 14, 1861	32,326
Weighing-mechanism for coal-carts, &c	J. Hartman, jr	Philadelphia, Pa	Feb. 23, 1858	19,466
Weighing-register	W. O. Strong	Detroit, Mich	Jan. 7, 1862	34,077
Weighing register, Grain	W. H. Baxter	Brixton Hill, England	Mar. 28, 1871	113,133
Weighing spirits and other liquids, Apparatus for automatically.	S. K. Hawkins	Lansingburgh, N. Y	Jan. 22, 1867	61,425
Weight	D. B. Lacy	Mott Haven, N. Y	Sept. 18, 1866	58,172
Weight, Cast-iron	A. Babcock	Boston, Mass	Nov. 6, 1815	....
Weight-lifting apparatus	D. P. Butler	Boston, Mass	June 6, 1865	48,050
Weight-lifting apparatus	D. P. Butler	Boston, Mass	June 6, 1865	48,051
Weight-lifting apparatus	F. W. Reilly	Chicago, Ill	May 18, 1869	90,304
Weight-lifting apparatus, Handle for	F. W. Reilly	Chicago, Ill	May 18, 1869	90,305
Weight-lowering apparatus	T. Wrightson	Stockton-on-Tees, England	Oct. 21, 1873	143,802
Weight raising and lowering apparatus	T. Moore	South Stockton-on-Tees, England.	Oct. 3, 1871	119,527
Weight raising and lowering apparatus	J. Pickering	Stockton-on-Tees, England	Jan. 25, 1870	99,231
Weight-raising apparatus	W. and W. T. Eads	Birmingham, England	Feb. 26, 1867	62,401
Weight-raising apparatus	J. Pickering	Stockton-on-Tees, England	Dec. 1, 1868	84,577
Weight raising and lowering machine	E. Morris	New York, N. Y	July 5, 1845	4,097
Weight raising and pressing machine	S. Cram	New York, N. Y	Mar. 9, 1844	3,464
Weight raising and pressing machine	T. Cumings	Mayville, N. Y	Feb. 19, 1829	....
Weight-raising machine	S. A. Hotchkiss	New Haven, Conn	Dec. 6, 1859	26,357
Weight-raising machine	H. Nold	Bucks County, Pa	Jan. 22, 1817	....
Weight raising or lifting	J. Heaton	Flushing, N. Y	Apr. 15, 1862	34,958
Weight-transporting machine	J. Cornell	Brookfield, Vt	Dec. 24, 1824	....
Weights, Apparatus for moving heavy	J. Quétil	New York, N. Y	Feb. 7, 1860	27,067
Weights, Apparatus for raising heavy	S. E. Tuttle	Genoa, Nev	Feb. 4, 1868	74,173
Weights, Giving power and motion to machinery by.	P. Obert	New York	Dec. 18, 1813	....
Weights, Machine for lifting heavy	T. J. Davis and J. B. Warner	Schroeppell and Volney, N. Y.	Oct. 19, 1858	21,822
Welded tube, Combined lap and butt	J. McCarty	Reading, Pa	Dec. 18, 1849	6,956
Welded tubes, Roller for scarfing the edges of skelps for lap.	J. McCarty	Reading, Pa	Jan. 31, 1854	10,478
Welding and brazing, Composition for	R. B. Smith	Mount Pleasant, Ohio	July 31, 1866	56,815
Welding and refining iron and steel, Compound for	J. Lehmann	Bloomington, Ill	Mar. 31, 1868	76,087
Welding and refining iron, Composition for	P. B. Laird	West Danville, Vt	Mar. 6, 1866	53,010
Welding and restoring steel, Compound for	G. W. Fox, H. H. Coe, and J. M. Kelley.	Ravenna, Ohio	Apr. 6, 1869	88,561
Welding-apparatus	W. A. Lewis	Chicago, Ill	Oct. 10, 1871	119,865
Welding brass or alloy of copper to iron or steel, Process of.	G. R. Meneely	West Troy, N. Y	May 21, 1872	126,894
Welding cast-iron to malleable iron or steel	M. Fisher and W. Martin, jr	Newport, Me	Oct. 16, 1847	5,331
Welding cast or Bessemer steel	J. Absterdam	New York, N. Y	Feb. 15, 1870	99,805
Welding cast-steel to iron, &c	D. Pettibone	Boston, Mass	Aug. 21, 1819	....
Welding cast-steel to iron, &c., Manner of	D. Pettibone, E. Chapman, and J. Nichols.	....	Dec. 22, 1802	....
Welding cast to wrought iron or steel, Process for	M. Fisher and W. Martin, jr	Newport, Me	Jan. 23, 1849	6,054
Welding, Composition for	G. Harpst	New Hamburgh, Pa	Oct. 10, 1865	50,355
Welding-compound	J. R. Tryon	La Crosse, Wis	July 14, 1868	80,036
Welding copper	C. L. Schurr and W. G. Rehbein	Baltimore, Md	Jan. 30, 1872	123,296
Welding-furnaces and steam-boilers, Arrangement of.	H. J. Davison	New York, N. Y	Oct. 24, 1865	50,562
Welding iron and steel	J. F. Beazel	Uniontown, Pa	Nov. 23, 1869	97,023

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Welding iron and steel	J. M. Cooper	New York, N. Y	Nov. 12, 1872	132, 900
Welding iron and steel	J. Popping	New York, N. Y	Dec. 9, 1873	145, 445
Welding iron and steel	J. H. Price	Philadelphia, Pa	Dec. 11, 1866	60, 420
Welding iron and steel, Composition for	J. B. Rand	Concord, N. H	Mar. 16, 1869	87, 968
Welding iron plate	W. Bertram	Woolwich, England	June 17, 1856	15, 159
Welding or brazing	A. J. Hindermeyer	Rohrertown, Pa	Oct. 30, 1866	59, 222
Welding or uniting scrap-iron, &c., Mode of	B. King	Washington, D. C	Nov. 15, 1811	....
Welding powder, Iron, &c	G. E. Rose	Philadelphia, Pa	Apr. 18, 1871	113, 933
Welding powder, Iron and steel	S. Bothwell	Philadelphia, Pa	May 24, 1870	103, 418
Welding, puddling, and bronzing metals, Composition for.	A. J. Hindemeyer	Philadelphia, Pa	Oct. 11, 1870	108, 138
Welding shanks to tools, Furnace employed in	J. White	Antrim, N. H	Oct. 14, 1851	8, 434
Welding steel	B. W. Nichols	Coxsackie, N. Y	July 18, 1871	117, 199
Welding steel, Composition for	A. Briggs	Lawrence, Mass	May 19, 1863	38, 554
Welding steel, Compound for	C. Sparks	Downer's Grove, Ill	May 14, 1867	64, 805
Welding steel of high and low grades, Flux for	J. Farrel	New York, N. Y	Jan. 24, 1871	111, 114
Welding steel, &c., to cast iron, Method of	M. Fisher and J. H. Norris	Trenton, N. J	Apr. 13, 1852	8, 871
Welding steel to iron, Mold for	G. Mock	New Monmouth, N. J	Nov. 2, 1869	96, 469
Welding steel to cast iron, Process of	J. H. Smith	Madison Run Station, Va	June 17, 1873	140, 087
Welding steel to malleable iron and tempering the steel by one operation.	A. R. Reynolds	Auburn, N. Y	Mar. 19, 1867	63, 097
Well	S. W. Barr and E. McGuire	Beloit, Wis	Jan. 7, 1868	72, 962
Well	W. M. Campbell	Evanston, Ill	July 16, 1872	129, 314
Well	A. Curtis	Bastrop, La	June 17, 1873	139, 947
Well-borer	G. W. Bowen	Fort Wayne, Ind	Mar. 10, 1868	75, 355
Well-borer	S. H. Dickerson	Hudson, Mich	Mar. 8, 1870	100, 609
Well-borer	F. Fohr	Rowlesburgh, W. Va	Apr. 10, 1866	53, 802
Well-borer	S. J. Goucher	Philadelphia, Pa	Feb. 13, 1866	52, 642
Well-borer	J. Grieves	Brooklyn, N. Y	July 18, 1865	48, 809
Well-borer	W. Hyde	New York, N. Y	Mar. 7, 1865	46, 673
Well-borer	R. R. Lewis	New York, N. Y	Feb. 6, 1866	52, 425
Well-borer	T. J. Lovegrove	Philadelphia, Pa	May 2, 1865	47, 599
Well-borer	T. J. Lovegrove	Philadelphia, Pa	May 2, 1865	47, 600
Well-borer	J. T. Parker	Farmington, Me	Oct. 9, 1866	58, 672
Well-borer	T. Sandbach and J. W. Fowler	South Bend, Ind	Apr. 12, 1870	101, 925
Well-borer	S. H. Whittlesey	Appleton, Wis	Feb. 13, 1866	52, 633
Well-borer	G. L. Witsil and E. Burke	Philadelphia, Pa	Feb. 21, 1865	46, 517
Well borer, Artesian	H. Howson	Philadelphia, Pa	May 27, 1864	45, 608
Well-boring	W. H. Bechtel	Philadelphia, Pa	May 30, 1865	48, 012
Well-boring	C. E. Foster	Philadelphia, Pa	Mar. 21, 1865	46, 968
Well-boring	W. Hide	New York, N. Y	May 16, 1865	47, 729
Well-boring	L. Holmes	Paterson, N. J	May 16, 1865	47, 724
Well-boring	H. Howson	Philadelphia, Pa	May 23, 1865	47, 897
Well boring	P. J. Hynes	Cooperstown, Pa	Dec. 19, 1865	51, 592
Well-boring	J. Y. Smith	Alexandria, Va	May 23, 1865	47, 868
Well-boring	G. W. Spear	New York, N. Y	Mar. 6, 1866	53, 054
Well-boring	W. W. Winter and S. Brewer	Cortlandville, N. Y	Jan. 9, 1866	51, 989
Well boring and drilling machine	C. W. Atkeson	Saint Louis, Mo	May 14, 1867	64, 620
Well boring apparatus	C. Batcheller	Keene, N. H	Dec. 12, 1865	51, 508
Well-boring apparatus	I. M. Butler	Oxford, Miss	Nov. 23, 1858	22, 151
Well-boring apparatus	N. E. Clark	Low Moor, Iowa	Feb. 18, 1868	74, 503
Well-boring apparatus	C. E. Foster	Philadelphia, Pa	Feb. 14, 1865	46, 420
Well-boring apparatus	C. E. Foster	Philadelphia, Pa	Mar. 14, 1865	46, 844
Well-boring apparatus	H. Howson	Philadelphia, Pa	Mar. 14, 1865	46, 849
Well-boring apparatus	N. H. Lindley	Bridgeport, Conn	Nov. 8, 1870	109, 028
Well-boring apparatus	D. Morris	Bartlett, Ohio	June 26, 1866	55, 884
Well-boring apparatus	T. J. Parke	Philadelphia, Pa	Nov. 7, 1865	50, 881
Well-boring apparatus	T. J. Parke	Philadelphia, Pa	Mar. 13, 1866	53, 232
Well-boring apparatus	W. Skiff	Camanche, Iowa	Aug. 4, 1868	80, 773
Well-boring apparatus	T. R. White and W. G. Bedford	Philadelphia, Pa	Apr. 9, 1867	63, 682
Well-boring apparatus	G. L. Witsil	Philadelphia, Pa	Jan. 16, 1866	52, 102
Well-boring apparatus, Artesian	J. N. Bolles	Philadelphia, Pa	Apr. 14, 1857	17, 064
Well-boring apparatus, Artesian	J. Taney	Austin, Tex	Apr. 17, 1860	27, 935
Well-boring apparatus, Artesian	J. Thacker	New Lexington, Ohio	Oct. 24, 1865	50, 643
Well-boring apparatus, Artesian	J. Thomson	Philadelphia, Pa	Mar. 30, 1852	8, 847
Well-boring apparatus, Artesian	C. Williams	Franklin, Mo	Aug. 19, 1856	15, 587
Well boring, Artesian	W. A. Fisher	Lower Merion, Pa	June 27, 1865	48, 388
Well boring, Artesian	A. Hamar	New York, N. Y	Apr. 24, 1866	54, 144
Well boring, Artesian	W. McPherson	Manchester, N. H	Apr. 22, 1873	138, 174
Well boring, Artesian	A. Saffer	New York, N. Y	Apr. 3, 1866	53, 686
Well boring, Artesian	D. Wheeler	Decorah, Iowa	Apr. 3, 1866	53, 715
Well-boring device	J. Donnell	Allegheny City, Pa	Apr. 25, 1865	47, 400
Well-boring device	O. P. Frantz	Saint Anthony, Minn	Apr. 26, 1870	102, 245
Well-boring device	V. H. Lyon	Plainfield, Ind	Feb. 27, 1866	52, 868
Well-boring device	A. A. Wilson	Green Point, N. Y	Apr. 11, 1865	47, 249
Well-boring drill	C. Bates	Kingston, Mass	July 25, 1865	48, 892
Well-boring drill	L. Klerity	Belgrade, Servia	Sept. 24, 1872	131, 548
Well-boring drill	O. B. Latham	Seneca Falls, N. Y	Aug. 1, 1865	49, 123
Well-boring drill	C. Mather	Manchester, England	Sept. 4, 1866	57, 828
Well-boring drill	T. Phillips and J. Golletz	Leavenworth, Kans	Nov. 11, 1873	144, 475
Well-boring drill	J. Sheffield	Pultneyville, N. Y	Jan. 10, 1865	45, 869
Well, &c., boring drill	D. H. Wiswell and G. W. Shaw	Buffalo, N. Y	May 30, 1865	48, 006
Well boring, Drill for artesian	C. G. Cross	Chicago, Ill	Sept. 23, 1873	142, 992
Well-boring, Expanding-drill for	G. F. Case	Brooklyn, N. Y	Sept. 5, 1865	49, 717
Well-boring implement	I. J. W. Adams	Sharptown, Md	Jan. 30, 1855	12, 303
Well-boring implement	J. M. Butler	Oxford, Miss	Feb. 28, 1860	27, 268
Well, &c., boring machine	M. Campbell and J. H. Cole	Philadelphia, Pa	July 4, 1865	48, 515
Well-boring machine	L. J. Crans	Philadelphia, Pa	Jan. 2, 1866	51, 806
Well-boring machine	J. A. King	Hamburgh, Iowa	Jan. 21, 1873	135, 129
Well-boring machine	C. Mather	Manchester, England	Sept. 4, 1866	57, 827
Well-boring machine	J. F. Rupp	Archbold, Ohio	June 11, 1872	127, 710
Well-boring machine	C. A. Saxe	Philadelphia, Pa	Apr. 11, 1865	47, 225
Well-boring machine, Artesian	T. J. Lovegrove	Philadelphia, Pa	June 20, 1865	48, 343
Well-boring machine, Artesian	G. W. Wicks	New York, N. Y	May 30, 1865	48, 004
Well-boring machinery	C. N. Briggs	Philadelphia, Pa	Feb. 20, 1866	52, 670
Well-boring machinery	J. F. Manahan	Lowell, Mass	Apr. 10, 1855	12, 688
Well boring, Oil	J. H. Clapham	New York, N. Y	May 8, 1866	54, 656
Well boring, Oil	D. R. Harder	North Chatham, N. Y	Apr. 24, 1866	54, 148

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Invention.	Inventor.	Residence.	Date.	No.
Well boring shaft, Coupling-joint for	L. H. Bell	Carmichael's, Pa	Sept. 4, 1866	57,664
Well-boring tool	W. B. Trunick	Pittsburgh, Pa	Nov. 6, 1866	59,482
Well-boring tool, Artesian	H. H. Daniels	Philadelphia, Pa	May 23, 1865	47,804
Well-boring tool, Oil	E. C. Dow	Brooklyn, N. Y	Feb. 27, 1866	52,831
Well-bottom	H. Smith	Southington, Conn	Oct. 24, 1871	120,216
Well-cleaner	W. E. Smith	Port Washington, Wis	Sept. 2, 1862	36,375
Well cleaner, Oil	J. Taylor	Petroleum Centre, Pa	Jan. 5, 1869	85,622
Well-cleaning device	W. F. Brown	Hardin County, Ky	Apr. 8, 1873	137,529
Well-cover	L. Kidder	New York, N. Y	Jan. 15, 1836	....
Well-crevice searcher and cleaner, Oil	W. Forker	Rockland, Pa	May 23, 1871	115,047
Well-curb	C. Gullmann	Poughkeepsie, N. Y	May 1, 1866	54,334
Well-curb	N. H. Lindley	Bridgeport, Conn	Apr. 8, 1873	137,555
Well-curbing	W. T. Huntington	Washington, D. C	Feb. 23, 1869	87,172
Well-curbing	C. W. Perry	Providence, R. I	Aug. 25, 1868	81,532
Well-curbing machine	J. A. Sutherland	Elmwood, Ill	Apr. 14, 1868	76,672
Well-drill	P. Ainsworth	Cape Vincent, N. Y	Nov. 20, 1866	59,740
Well-drill	A. G. Coles	Mamaroneck, N. Y	Jan. 9, 1866	51,925
Well-drill	A. Crandall	Great Bend, Pa	July 4, 1865	48,524
Well-drill	J. Grieves	Brooklyn, N. Y	Jan. 23, 1866	52,164
Well-drill	J. Hafner	Sterling, Ill	Aug. 22, 1865	49,587
Well-drill	G. Koch	Cass, Pa	Nov. 11, 1873	144,550
Well-drill	L. G. Peck	Rouseville, Pa	July 18, 1865	48,835
Well-drill	H. W. Safford	Philadelphia, Pa	Dec. 4, 1866	60,261
Well-drill	H. M. Stow	San Francisco, Cal	Mar. 17, 1868	75,708
Well-drill	J. H. L. Tuck	Cambridge, Ohio	Aug. 1, 1865	49,177
Well-drill adjuster	J. Gallagher	Shamburgh, Pa	Dec. 17, 1872	133,977
Well drill and reamer, Oil	J. Burns	Titusville, Pa	Nov. 28, 1865	51,138
Well drill, Artesian	J. Andrews	Winchester, Mass	Apr. 10, 1855	12,663
Well drill, Artesian	H. Palmer	San Francisco, Cal	Apr. 24, 1866	54,199
Well drill, Artesian	J. Shaw	Bridgeport, Conn	Sept. 5, 1865	49,798
Well-drill jar	W. W. Eastman and F. B. Marden	Meadville, Pa	July 5, 1870	104,945
Well drill, Oil	E. Baker	Pittsburgh, Pa	Aug. 1, 1865	49,065
Well drill, Oil, &c	H. Bateman and D. Cumming, jr	New York, N. Y	Feb. 27, 1866	52,816
Well drill, Oil	C. Forster	Pittsburgh, Pa	Oct. 16, 1866	58,803
Well drill, Oil, &c	W. G. Oliver	Buffalo, N. Y	May 30, 1867	48,026
Well drill, Oil	G. R. Platt	Brooklyn, N. Y	Apr. 17, 1866	54,011
Well drills, Mechanism for effecting rotary motion of oil	G. A. Hinckley	Pit Hole, Pa	Jan. 14, 1873	134,889
Well drills, Mechanism for operating and feeding oil	G. A. Hinckley	Pit Hole, Pa	Feb. 18, 1873	135,988
Well drills, Mechanism for rotating oil	G. A. Hinckley	Pit Hole, Pa	Dec. 24, 1872	134,280
Well-drilling apparatus	F. S. Ward and E. Cooper	Theresa, N. Y	Apr. 2, 1872	125,355
Well drilling, Artesian	S. J. Wadsworth	Buffalo, N. Y	July 4, 1865	48,605
Well-drilling machine	M. E. Abbott	Summit Hill, Pa	May 22, 1866	54,836
Well-drilling machine	G. Mott	Big Run, Ohio	June 19, 1866	55,693
Well-drilling machine, Oil	V. Gretter	Petroleum Centre, Pa	July 16, 1872	129,129
Well drilling, Oil	J. R. Hill	Rouseville, Pa	Mar. 14, 1871	112,596
Well, Drive	J. S. Armstrong	Delaware, Ohio	Nov. 10, 1868	83,901
Well, Drive	W. and G. H. Burditt	Boston, Mass	Dec. 29, 1868	85,428
Well, Drive	T. B. Conklin	Rockford, Ill	Apr. 28, 1868	77,171
Well, Driven	J. Edson	Boston, Mass	May 30, 1871	115,452
Well, Driven	O. C. Fox	Georgetown, D. C	Dec. 17, 1867	72,183
Well, Driven	J. Harter	Colfax, Iowa	Jan. 11, 1870	98,766
Well, Driven	J. Large	Gill Hall, Pa	Feb. 11, 1873	135,718
Well, Driven	G. W. Storer	Philadelphia, Pa	July 15, 1873	140,963
Well, Driven	I. Trump	San Francisco, Cal	Feb. 1, 1870	99,371
Well, Driven	A. Wilson	Plainfield, N. J	July 8, 1873	140,665
Well, Driven or bored	M. T. and M. C. Chapman	Aurora, Ill	Sept. 24, 1872	131,500
Well elevator, Deep	T. Byrne	New York, N. Y	Nov. 14, 1865	50,986
Well extractor, Oil	H. Harris	Tidioute, Pa	Feb. 28, 1871	112,142
Well grab, Oil	D. F. Mellen	New York, N. Y	Feb. 6, 1866	52,437
Well, Oil	T. M. Foster	Union Mills, Pa	Dec. 4, 1866	60,165
Well pipe	J. Budd	Pittsford, N. Y	Apr. 30, 1867	64,192
Well-pipe	A. Harrington	Warsaw, N. Y	Jan. 29, 1867	61,536
Well pipe or tube	S. Brewer and W. W. Winter	Cortlandville, N. Y	July 17, 1866	56,355
Well-point	H. G. Cady	Saint Louis, Mo	Oct. 15, 1867	62,762
Well-point	C. C. Jones	Portland, Me	Apr. 5, 1870	101,469
Well point, Drive	D. Weaver	Anamosa, Iowa	May 4, 1869	89,718
Well point, Driven	A. O. Brummell	Memphis, Tenn	Oct. 19, 1869	95,878
Well point, Tube	S. L. Bignall	Chicago, Ill	Aug. 27, 1872	130,837
Well points, Machine for perforating drive	C. L. Travis	Minneapolis, Minn	July 22, 1873	141,188
Well-reamer	A. J. Salisbury	San Buenaventura, Cal	June 30, 1868	79,409
Well reamer, Oil	W. Forker	Rockland, Pa	Aug. 1, 1871	117,615
Well reamer, Oil	J. Rigg, J. E. Hall, and C. F. Fenton	Cleveland, Ohio	Jan. 21, 1870	104,649
Well-sinking	T. Ruffner	Kanawha, Va	Dec. 22, 1818	....
Well-sinking device	E. Ashdown and G. W. Galpin	Homer, W. Y	Dec. 5, 1865	51,382
Well-tools, Grab for extracting	J. H. Luther	Petroleum Centre, Pa	May 28, 1872	127,176
Well-tube	H. Arnold	Gowanda, N. Y	Jan. 28, 1868	73,688
Well-tube	I. Ayres and D. C. Payne	Elkhart, Ind., and Delavan, Wis.	May 3, 1870	102,647
Well, Tube	S. S. Ayres	Plainfield, N. J	Aug. 2, 1870	105,882
Well-tube	D. Baker	Boston, Mass	Sept. 1, 1868	81,580
Well-tube	D. Baker	Boston, Mass	Sept. 1, 1868	81,581
Well-tube	D. Baker	Boston, Mass	Sept. 1, 1868	81,582
Well-tube	M. L. Bassett	West Haven, Conn	Dec. 17, 1867	72,359
Well, Tube	S. L. Bignall	Chicago, Ill	July 13, 1869	92,569
Well, Tube	A. S. Brown	Lebanon, Pa	Apr. 21, 1868	76,985
Well-tube	J. Chandler	Cold Water, Mich	Sept. 4, 1866	57,674
Well, Tube	O. D. Chapman	Chicago, Ill	May 19, 1868	77,957
Well, Tube	C. H. Colby	Lynn, Mass	Apr. 21, 1868	77,009
Well-tube	S. F. Craig	Eddyville, Iowa	June 11, 1867	65,648
Well-tube	D. A. Danforth	Elkhart, Ind	Feb. 9, 1869	86,821
Well, Tube	T. J. Dean	Saint Louis, Mo	Nov. 19, 1867	71,144
Well, Tube	W. R. Hamilton	Oakland, Pa	Apr. 12, 1870	101,871
Well-tube	A. E. Hebard	Homer, N. Y	June 11, 1867	65,570
Well-tube	P. J. Hershey	Clarence, N. Y	Apr. 2, 1867	64,387

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Well-tube	L. L. Himes	New Haven, Conn	Mar. 16, 1869	87, 775
Well, Tube	D. C. Holdridge	Lodi, Wis	Nov. 12, 1867	70, 844
Well-tube	W. T. Horner	Buffalo, N. Y	Jan. 21, 1868	73, 446
Well-tube	W. B. Hutchinson	New Berne, N. C	Dec. 31, 1867	72, 857
Well, Tube	J. D. Kellogg, jr	Northampton, Mass	Nov. 26, 1867	71, 496
Well-tube	H. Knapp and W. H. Pease	Goshen, Ind	Apr. 30, 1867	64, 332
Well, Tube	C. H. Latham	Randolph, N. Y	May 28, 1867	65, 241
Well-tube	T. S. Lewis	Chelsea, Mass	May 7, 1867	64, 546
Well-tube	L. Lovejoy	Malden, Mass	Sept. 1, 1868	81, 801
Well-tube	F. A. Mack	Niles, Mich	Sept. 11, 1866	57, 935
Well-tube	W. Martin	Tarr Farm, Pa	Apr. 7, 1868	76, 485
Well-tube	A. Y. McDonald	Dubuque, Iowa	May 7, 1867	64, 549
Well, Tube	J. McMillan	Fairport, N. Y	May 3, 1870	102, 572
Well-tube	S. Neff	Clymouth, Ind	May 3, 1870	102, 699
Well-tube	A. B. Parsons	Dunton, Ill	June 9, 1868	78, 689
Well-tube	E. A. and G. Platt	Bristol and East Hartford, Conn.	Aug. 11, 1868	80, 875
Well, Tube	R. Rich	Dorchester, Mass	Mar. 9, 1869	87, 592
Well, Tube	J. W. Ricker	Chelsea, Mass	May 28, 1867	65, 276
Well-tube	J. W. Ricker	Chelsea, Mass	Nov. 5, 1867	70, 617
Well-tube	R. R. Rouse	Indianapolis, Ind	Aug. 27, 1872	130, 871
Well-tube	J. T. Shattuck	Natick, Mass	Dec. 28, 1869	98, 429
Well-tube	A. J. Shirley	Plymouth, Ind	Oct. 11, 1870	108, 301
Well, Tube	S. E. Skilling	Benton Harbor, Mich	May 12, 1868	77, 772
Well-tube	J. Wagner	Newcastle, Pa	Nov. 12, 1867	70, 764
Well, Tube	A. Waters	Mobile, Ala	Nov. 16, 1869	96, 854
Well, Tube	B. Weirich and H. H. Shartle	Middlebury, Ind	Jan. 28, 1868	73, 854
Well, Tube	R. C. Welch and J. B. Miller	Buffalo, N. Y	Jan. 14, 1868	73, 414
Well, Tube	W. H. White	Lynn, Mass	May 12, 1868	77, 941
Well tube and point	I. A. Livingston	Hornellsville, N. Y	July 9, 1867	66, 506
Well-tube and pump	J. H. Bump	Unadilla, N. Y	Nov. 28, 1865	51, 136
Well tube, Artesian	H. W. Spooner	Erie, Pa	Feb. 26, 1861	31, 567
Well tube, Deep	H. R. Koon	Pittsfield, Mass	Aug. 15, 1865	49, 418
Well tube, Deep	A. Rhoades and J. Adams	Pontiac, Mich	July 28, 1868	80, 504
Well tube, Drive	D. A. Danforth	Elkhart, Ind	Feb. 15, 1870	99, 858
Well tube, Drive	D. R. Knight	Akron, Ohio	Dec. 21, 1869	98, 073
Well tube, Drive	C. E. Whelpley	Minneapolis, Minn	July 9, 1872	128, 935
Well tube, Driven	W. D. Andrews	Brookhaven, N. Y	Mar. 26, 1872	125, 000
Well-tube extractor, Oil	J. H. Luther	Petroleum Centre, Pa	Feb. 27, 1866	52, 866
Well tube, Oil	O. B. Latham	Seneca Falls, N. Y	July 10, 1866	56, 234
Well tubes and rods, Clamp for elevating	A. Good, jr	Titusville, Pa	Dec. 28, 1869	98, 459
Well-tubes, Clamp for elevating	D. Fisher	Oil City, Pa	Feb. 23, 1869	87, 097
Well tubes, Draw-point for driven	W. P. Smith	New Orleans, La	Jan. 21, 1873	135, 016
Well-tubes, Driving	D. R. Knight	Akron, Ohio	Aug. 24, 1869	94, 007
Well-tubes, Driving	E. M. Robords	Avoca, N. Y	Mar. 12, 1867	62, 891
Well-tubes, Driving	C. Shepard	Kattelville, N. Y	July 24, 1866	56, 623
Well-tubes, Driving or boring	E. D. Taylor and W. H. Ballou	Hornellsville, N. Y	Feb. 26, 1867	62, 508
Well-tubes from wells, Device for drawing	T. M. Gile and W. Cochran	Mansfield, Pa	Feb. 26, 1867	62, 404
Well-tubes, Receptacle for waste-water of	D. P. Chesbrough	Lansingburgh, N. Y	Sept. 18, 1866	58, 063
Well-tubes, Sinking	J., jr., and A. W. Gillmore	Utica, Pa	Oct. 16, 1866	58, 809
Well-tubes, Sinking	C. W. Kinne	Cortland, N. Y	Sept. 26, 1865	50, 142
Well tubes, Sinking deep	H. R. and M. T. Barnes	Watkins, N. Y	Aug. 15, 1865	49, 362
Well-tubing	J. Bailie and C. W. Bodey	Tarentum, Pa	Dec. 31, 1872	134, 453
Well-tubing	A. J. Edgett	Hornellsville, N. Y	Feb. 5, 1867	61, 726
Well-tubing	G. W. Hemenway	Elmira, N. Y	Dec. 13, 1870	110, 136
Well-tubing	L. F. Rider and J. W. Ferry	Hornellsville, N. Y	July 16, 1867	66, 887
Well-tubing	N. H. Sherburne and J. T. Whipple.	Elgin and Chicago, Ill	Dec. 18, 1866	60, 578
Well tubing-attachment, Oil	W. H. Dewey	Tidioute, Pa	Apr. 4, 1871	113, 638
Well tubing, Oil	J. D. Bryson	Petroleum Centre, Pa	Feb. 13, 1866	52, 523
Well tubing, Oil	J. Maloney	Oil City, Pa	Sept. 16, 1873	142, 861
Well-tubings, Adjustable clutch for lifting	W. A. Spring	Titusville, Pa	Aug. 17, 1869	93, 761
Well tubings, Coupling for pipe and oil	D. Jones	Boston, Mass	Sept. 16, 1873	142, 792
Well-tubings, Sinking	R. N. Bennett	Branchport, N. Y	Oct. 29, 1867	70, 154
Well-tubings, Sinking	R. F. Osgood	Rochester, N. Y	Feb. 20, 1866	52, 792
Well-tubings, Sinking	R. F. Osgood	Rochester, N. Y	Oct. 16, 1866	58, 953
Well tubings, Stop-water for oil	H. Kewley	Madison, Ohio	Oct. 16, 1866	58, 837
Well-tubings, Tongs for lifting and adjusting	D. Phillips	Oil City, Pa	Jan. 4, 1870	98, 625
Well, Tubular	J. Edson	Boston, Mass	Sept. 14, 1869	94, 727
Well, Tubular	J. Shaw	Bridgeport, Conn	Apr. 12, 1870	101, 774
Well, Tubular	W. G. Wright	Hornellsville, N. Y	July 3, 1866	56, 137
Wells and laying pipes, Boring	D. B. Tiffany	Xenia, Ohio	July 17, 1866	56, 502
Wells, Apparatus for cutting the casings or tubes of oil.	P. H. Lawrence	Petroleum Centre, Pa	July 5, 1870	105, 156
Wells, Apparatus for discovering the fissures in the sides of.	J. D. Dale	Rochester, N. Y	Jan. 21, 1868	73, 513
Wells, Apparatus for drawing pipes from	T. Lowry	Pittsburgh, Pa	Jan. 2, 1866	51, 842
Wells, Apparatus for forcing oil from	J. Molyneux	Bordentown, N. J	Apr. 5, 1864	42, 213
Wells, Apparatus for lowering pipes in	S. P. Okerlund	Omaha, Nebr	July 29, 1873	141, 233
Wells, Apparatus for obtaining oil from	W. Shoupe	Saltsburgh, Pa	Nov. 20, 1866	59, 782
Wells, Apparatus for steaming oil	W. Nevins	Titusville, Pa	Feb. 21, 1871	112, 069
Wells, Apparatus for testing deep	T. Burr and T. Wakelee	Battle Creek, Mich	Sept. 3, 1867	68, 350
Wells, Apparatus for withdrawing tubes from	W. H. Downing	Philadelphia, Pa	Apr. 11, 1865	47, 194
Wells as refrigerators, Apparatus for utilizing	J. J. Kiser	Sulphur Springs, Ind	Aug. 10, 1869	93, 452
Wells, Balance-beam for boring oil	J. B. Frazier and H. Wickes	Conneautville, Pa	Mar. 27, 1866	53, 434
Wells, &c., Blasting in oil	T. P. Shaffner	Louisville, Ky	Mar. 2, 1869	87, 372
Wells, Boring and pumping apparatus for oil	J. B. Root	New York, N. Y	Sept. 25, 1866	58, 299
Wells by compressed air, Operating oil	M. Lytle	Oil City, Pa	July 16, 1872	129, 353
Wells by electricity, Heating oil	G. T. Parry and W. S. Warner	Philadelphia, Pa	July 4, 1865	48, 584
Wells, Casing-cutter for oil	T. M. Patterson and R. H. Mitchell.	Tarr Farm and Oil City, Pa.	Dec. 24, 1872	134, 162
Wells, Casing-cutter for removing casings from artesian.	P. H. Lawrence and J. H. Luther.	Petroleum Centre, Pa	May 7, 1872	126, 403
Wells, Casing T's for oil	J. C. Dickey	Titusville, Pa	Dec. 6, 1870	109, 820
Wells, Casing T's for oil	J. C. Dickey	Titusville, Pa	July 23, 1872	129, 719
Wells, cisterns, &c., with grout, Apparatus for walling.	F. Wilford	Eagle, Wis	Feb. 19, 1861	31, 503

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Invention.	Inventor.	Residence.	Date.	No.
Wells, Cleaning oil	J. J. Looney	Saint Petersburgh, Pa	May 20, 1873	139,010
Wells, Collecting the light oil from oil	J. Johnson	Saco, Me	May 22, 1866	54,917
Wells, Constructing	E. S. Alvord	Milford, Del	Apr. 10, 1866	53,767
Wells, Constructing artesian	N. W. Green	Cortland, N. Y	Jan. 14, 1868	73,425
Wells, Construction of	G. G. Heermance	Claverack, N. Y	Aug. 21, 1866	57,322
Wells, Cutter for removing casings from oil	J. H. Luther and F. Stephenson	Petroleum Centre, Pa	Dec. 24, 1872	134,150
Wells, Device for elevating water from	S. and A. Aldrich	Washington, D. C	Oct. 23, 1860	30,449
Wells, Device for enlarging	T. Donnelly	Pittsburgh, Pa	Feb. 7, 1871	111,620
Wells, Device for extracting broken tools from	H. Harris	Tidioute, Pa	July 23, 1872	129,661
Wells, Device for oil	G. T. Parry	Philadelphia, Pa	July 25, 1865	48,994
Wells, Device for opening artesian	E. Huson	Ithaca, N. Y	Nov. 14, 1865	50,934
Wells, Device for steaming oil	T. B. Carothers	Oil City, Pa	June 10, 1873	139,656
Wells, Drill-feed for artesian	T. J. Lovegrove	Philadelphia, Pa	Mar. 27, 1866	53,536
Wells, Drilling oil and other	N. Pontious	Hallsville, Ohio	Apr. 2, 1867	63,557
Wells, Driven or bored	J. E. Morrison	Wilmington, Conn	May 20, 1873	139,018
Wells, Driving pipe for oil	G. L. King	Philadelphia, Pa	Oct. 9, 1866	58,650
Wells, Electro-magnet for oil	M. Knickerbocker	New Lenox, Ill	Dec. 26, 1865	51,729
Wells, Expelling oil from the veins of	I. Relf	Mina, N. Y	Sept. 12, 1865	49,922
Wells, Extracting tubular casings from oil	H. Harris	Tidioute, Pa	Mar. 18, 1873	136,992
Wells, Extractor of tubes, drills, &c., from oil	W. R. Hinsdale	Brooklyn, N. Y	Aug. 29, 1865	49,628
Wells, Filtering-section for tube	E. Holden	Hartford, Mich	Oct. 26, 1869	96,115
Wells, Filtering-tube for	C. C. Cole	Northfield, Vt	Jan. 22, 1867	61,400
Wells for the removal of paraffine, Method of treating oil.	J. Fraser	Buffalo, N. Y	Sept. 19, 1865	49,995
Wells, Formation of drive	E. S. Hovey	Independence, Iowa	Feb. 20, 1872	123,903
Wells, Grab-tool for oil	J. H. Luther	Petroleum Centre, Pa	Aug. 7, 1866	56,961
Wells, Grapnel for	J. R. Carr	Ellenville, N. Y	May 30, 1865	47,929
Wells, Grouting-form for	W. S. Follensbee	Janesville, Wis	Nov. 13, 1866	59,578
Wells, Hanger for walking-beams for oil	M. Herlings and W. J. Innis	Emlenton and Oil City, Pa	Jan. 14, 1873	134,807
Wells in alluvial soil, Apparatus for sinking	E. Rice	Salina, N. Y	Nov. 26, 1840	1,869
Wells in or under water, Sinking	P. Easton	Nantucket, Mass	Feb. 1, 1810	....
Wells, Joint of pipes for artesian	J. N. Bolles	Philadelphia, Pa	June 19, 1855	13,114
Wells, Machine for drilling oil	R. H. Lecky	Allegheny City, Pa	Sept. 24, 1861	33,351
Wells, Method of increasing capacity of oil	E. A. L. Roberts	New York, N. Y	Nov. 20, 1866	59,936
Wells, Method of removing obstructions from oil	W. C. Sherwood	Buffalo, N. Y	Sept. 11, 1866	57,962
Wells, Mode of cooling water in	D. E. Somes	Washington, D. C	Oct. 10, 1865	50,399
Wells, Mode of extracting drills from	J. Beyer	Buffalo, N. Y	July 4, 1865	48,615
Wells, Mode of making	W. Mason	Providence, R. I	Mar. 14, 1871	112,613
Wells, Mode of operating bored	S. B. Castle	Cortlandville, N. Y	Jan. 2, 1866	51,801
Wells, Mode of operating boring-tools for artesian	J. Ross	East Liberty, Pa	Oct. 31, 1865	50,777
Wells, Mode of operating oil	P. Casamajor	New York, N. Y	Nov. 14, 1865	50,902
Wells, Mode of operating oil	P. Casamajor	New York, N. Y	Nov. 14, 1865	50,903
Wells, Mode of securing pipes and bolts in oil	W. Parsons	Cleveland, Ohio	Feb. 13, 1866	52,594
Wells, Obtaining oil from	O. Rotton	Brooklyn, N. Y	Jan. 23, 1866	52,209
Wells, Oscillating-gland for flowing oil	G. Finton	Meadville, Pa	Sept. 30, 1873	143,280
Wells, Packing deep	A. H. Fowler and E. J. Morgan	Ithaca, N. Y	Nov. 28, 1865	51,167
Wells, Packing tube of oil	R. A. Wilder	Cressona, Pa	Sept. 26, 1865	50,194
Wells, Pipe and fixtures for	J. H. Duck and E. K. Whitcomb	Elgin, Ill	Oct. 9, 1866	58,721
Wells, Pipe or tube for	T. Dutton and T. Maguire	Port Jervis, N. Y	Oct. 10, 1865	50,343
Wells, Preventing the clogging of oil	E. A. L. Roberts	Titusville, Pa	Oct. 10, 1871	119,883
Wells, Preventing the clogging of oil	E. A. L. Roberts	Titusville, Pa	Oct. 10, 1871	119,884
Wells, Process of removing obstructions in oil	J. Dickey	Oil City, Pa	Oct. 24, 1871	120,186
Wells, Reamer for enlarging oil	M. Gillespie	Smith's Ferry, Pa	July 29, 1873	141,344
Wells, Refrigerating-attachment for	J. L. Wiley	Vermont, Ill	June 21, 1870	104,523
Wells, Removing deposits from oil	J. Dickey	Venango City, Pa	Aug. 30, 1870	106,793
Wells, Reservoir-drill for tube	C. Houghton and R. S. Lewis	Attica, N. Y	Nov. 21, 1865	51,051
Wells, Reservoir for	R. H. Dewey and E. N. Tillotson	Pittsfield, Mass	Apr. 3, 1866	53,584
Wells, Rope-socket for oil	H. Badcock	Pittsburgh, Pa	Nov. 26, 1872	133,290
Wells, Safety-guard for tubing artesian	A. S. Hill	Pleasantville, Pa	Mar. 19, 1872	124,742
Wells, Sand and air chamber for tubular	J. E. Robinson	Boston, Mass	May 17, 1870	103,239
Wells, Sand-screen for iron-tube	R. M. Morrill	Plymouth, Ind	Mar. 22, 1870	101,148
Wells, Side-scraper for	E. Beach	Titusville, Pa	Dec. 15, 1868	84,852
Wells, Sinking	J. C. and M. V. Campbell	Syracuse, N. Y	Jan. 9, 1866	51,919
Wells, Sinking	E. Hilyard	Philadelphia, Pa	Sept. 10, 1817	....
Wells, Sinking	B. J. C. Howe	Syracuse, N. Y	Feb. 27, 1866	52,853
Wells, Sinking	B. Mudge	Cortlandville, N. Y	Oct. 24, 1865	50,614
Wells, Sinking	R. H. St. John	Bellefontaine, Ohio	Nov. 14, 1865	50,967
Wells, Sinking	J. Suggett	Cortland, N. Y	Feb. 6, 1866	52,463
Wells, Sinking and tubing	J. H. Lruen	Elmira, N. Y	Oct. 16, 1866	58,769
Wells, Sinking and tubing	G. D. Pettingill and L. H. Mericle.	Cortland, N. Y	Nov. 14, 1865	50,949
Wells, Sinking tubular	M. V. Nobles	Rochester, N. Y	Jan. 23, 1866	52,249
Wells, Sinking tubular	M. V. Nobles	Rochester, N. Y	Feb. 27, 1866	52,931
Wells, Sinking tubular	O. Pratt	Athol, Mass	Nov. 27, 1866	60,057
Wells, Spring-bit for enlarging	J. H. Boyd	West Monterey, Pa	Dec. 26, 1871	122,149
Wells, Subterranean reservoir for	A. Palmer and J. Bean	Hudson, Mich	May 29, 1866	55,155
Wells, Sucker-rod drawer for deep	J. P. Smith	Pioneer, Pa	Nov. 22, 1870	109,464
Wells, Temper-screw for oil	R. B. Magee	Venango City, Pa	Dec. 29, 1868	85,461
Wells, Testing oil	J. C. Lyons	Auburn, N. Y	Jan. 31, 1865	46,124
Wells to remove obstructions to flow of oil, Treating oil.	B. G. Noble	Brooklyn, N. Y	July 19, 1870	105,590
Wells to remove paraffine, tar, &c., Mode of treating oil.	J. Frazer	Buffalo, N. Y	Apr. 25, 1865	47,410
Wells, Tool-extractor for	T. M. Patterson	Tarr Farm, Pa	Aug. 25, 1868	81,530
Wells, Tool for cutting off auger-stems in oil	J. H. Luther	Petroleum Centre, Pa	Jan. 24, 1871	111,221
Wells, Tool for cutting off pipes in oil	J. H. Luther	Petroleum Centre, Pa	Jan. 24, 1871	111,220
Wells, Tool for enlarging oil	C. Bullock	Meadville, Pa	Mar. 26, 1872	124,932
Wells, Tool for enlarging the bore of oil	W. Forker	Rockland, Pa	Sept. 10, 1872	131,263
Wells, Tool for removing obstructions in oil	W. Bowden	White's Corners, N. Y	Nov. 14, 1865	50,896
Wells, Topical heater for oil	E. Newberry	Titusville, Pa	Aug. 22, 1871	118,384
Wells, Tube-drawer for deep	J. P. Smith	Pioneer, Pa	Nov. 22, 1870	109,462
Wells, Tube-drawer for deep	J. P. Smith	Pioneer, Pa	Nov. 22, 1870	109,463
Wells, Tube for cave in oil or other	J. A. Patterson	Statelick, Pa	Mar. 14, 1865	46,818
Wells, Tubing and filtering arrangement for	M. C. Monson	Chicago, Ill	June 7, 1870	104,032
Wells, Tubular apparatus for deep	M. J. Dickerson and J. Stuber	Titusville, Pa., and Utica, N. Y.	Nov. 14, 1865	50,919
Wells, Walking-beam and sucker-rod connection for deep.	M. A. Morse	Titusville, Pa	Apr. 5, 1870	101,493

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Invention.	Inventor.	Residence.	Date.	No.
Wells, Wooden piston-rod for deep	R. N. Allen	Cleveland, Ohio	Jan. 30, 1866	52, 355
Welt and strap cutter	C. Keniston	Somerville, Mass	June 6, 1871	115, 741
Welt cutting and splitting machine	J. E. Tucker	Suffolk County, Mass	Nov. 20, 1849	6, 890
Welt-cutting device	L. N. Leland	Grafton, Mass	July 21, 1863	39, 294
Welt-cutting machine	S. Keen, jr	East Bridgewater, Mass	Sept. 4, 1849	6, 695
Welt-knife	M. J. Ferren	Stoneham, Mass	Mar. 23, 1869	88, 024
Welt-knife	E. May	Natick, Mass	Dec. 28, 1869	98, 286
Welt-machine	B. U. Lyon	Stamford, Conn	Aug. 8, 1865	49, 349
Welt-parer	A. V. Vrooman	Roxbury, N. Y	July 29, 1873	141, 406
Welt-splitting machine	J. Critcherson and E. S. Moulton	Boston, Mass	Sept. 27, 1859	25, 558
Welt-trimmer	J. Brooks	North Bridgewater, Mass	May 22, 1866	55, 002
Welt-trimmer	J. B. Reed	Warren, Mass	Dec. 12, 1865	51, 519
Welt-trimmer	J. H. Sanford	North Bridgewater, Mass	July 9, 1872	128, 756
Whale blubber, Machine for cutting	H. H. Ricketson	New Bedford, Mass	Dec. 14, 1852	9, 478
Whale-blubber, Machine for mincing	G. W. Soule and W. Carsley	New Bedford, Mass	Oct. 6, 1843	3, 290
Whales to the surface of the water, Machine for raising sunken.	T. W. Roys	Southampton, N. Y	June 3, 1862	35, 476
Whale-boat chock	M. Adams	Chilmark, Mass	Jan. 21, 1868	73, 484
Whalebone or rattan splitting machine	J. Taggart	Boston, Mass	Dec. 16, 1873	145, 539
Whalebone-splitting machine	N. Goddard	Boston, Mass	Nov. 5, 1867	70, 545
Whalebone-splitting machine	N. Goddard	Boston, Mass	Oct. 26, 1869	96, 220
Whalebone-splitting machine	J. A. Sevey	Boston, Mass	July 19, 1871	105, 498
Whalebone-splitting machine	D. Warner	Boston, Mass	Dec. 23, 1873	145, 770
Whalebone-splitting tool	J. A. Sevey	Boston, Mass	June 8, 1869	91, 047
Whalebones, Device for cutting	F. E. Hibbard	Boston, Mass	Dec. 5, 1871	121, 520
Whalebones for whip-handles, Machine for tapering	L. Hull	Charlestown, Mass	Apr. 8, 1856	14, 612
Whalebones, Manufacture of artificial	C. Poppenhusen	New York, N. Y	May 18, 1858	20, 299
Whaling-apparatus, Electric	A. Sonnenburg and P. Rechten	Bremen, Germany	Mar. 30, 1852	8, 843
Wharf boat	H. T. Dexter	Zanesville, Ohio	Feb. 13, 1855	12, 380
Wharf-boat	E. W. Halliday	Columbus, Ky	June 6, 1871	115, 729
Wharf, Floating revolving	H. Albro	Covington, Ky	June 22, 1858	20, 611
Wharf for catching fish, Floating	A. Bailey	Havre de Grace, Md	June 24, 1820	....
Wharf, pier, &c	J. G. Pray	Brooklyn, N. Y	Jan. 6, 1836	....
Wharf, pier, and warehouse, Combined	J. B. Hyde	Newark, N. J	Aug. 15, 1865	49, 475
Wharves, Constructing	J. Butler	Baltimore, Md	Sept. 9, 1872	....
Wharves, Constructing	A. Stevens	Baltimore, Md	Mar. 1, 1859	23, 122
Wharves, Safety-guard for ferry	E. F. Woodward	Brooklyn, N. Y	July 26, 1859	24, 890
What-not	D. Heald	Milford, N. H	Mar. 5, 1872	124, 354
Wheat and garlic, Machine for separating	S. Gantz	Beaver Creek, Md	Dec. 31, 1867	72, 834
Wheat-cleaner	E. Chipman	Baltimore, Md	July 4, 1871	116, 554
Wheat cleaning and scouring machine	E. Russell	Minneapolis, Minn	Feb. 14, 1871	111, 779
Wheat, &c., cleaning machine	W. Davis	Fairfield, Conn	Jan. 24, 1815	....
Wheat-cleaning machine	D. L. Ewing	Spruce Hill, Pa	July 17, 1849	6, 591
Wheat-cleaning machine	J. Gaw	Ellicott's Mills, Md	May 10, 1864	42, 725
Wheat-cleaning machine	J. Lantz and J. Russell	Wheeling, Va	Aug. 10, 1858	21, 139
Wheat-cleaning machine	S. Stilwell	....	July 9, 1802	....
Wheat-cleaning machine	J. Tallman	Oneida County, N. Y	May 8, 1822	....
Wheat-cleaning machine	B. Tyler	....	Apr. 15, 1796	....
Wheat-cleaning machine	E. W. and W. B. Young	Parkham, Ohio	July 2, 1839	1, 216
Wheat, &c., Cutting	W. P. Claiborne	King William County, Va	Nov. 8, 1811	....
Wheat, &c., Cutting and cradling	B. Jackson	Brown County, Ohio	June 14, 1834	....
Wheat-dampener	J. Eslaman	Bellville, Ill	May 28, 1867	65, 189
Wheat-drill	A. Armstrong	Gillespie, Ill	Sept. 11, 1866	57, 842
Wheat-drill	H. and R. C. Blunt	Bath, Ill	Sept. 21, 1869	95, 073
Wheat-drill	E. O. Bryden	La Fayette, Ind	July 27, 1858	21, 018
Wheat-drill	R. W. Campbell	Spurgeon, Ind	July 6, 1869	92, 160
Wheat-drill	J. B. Crowell	Greencastle, Pa	June 20, 1865	48, 262
Wheat-drill	J. W. Davidson	Mount Auburn, Ill	May 12, 1868	77, 802
Wheat-drill	J. Dillier	Greensburgh, Ind	Apr. 12, 1870	101, 836
Wheat-drill	G. W. Doolittle	Lincoln, Ill	Jan. 22, 1867	61, 326
Wheat-drill	D. S. Fisher	Cedar Spring, Ind	May 28, 1867	65, 195
Wheat-drill	J. F. Fisher	Greencastle, Pa	Apr. 19, 1870	101, 990
Wheat-drill	J. F. Harcourt	Moscow, Ind	Nov. 13, 1866	59, 595
Wheat-drill	J. F. Keller	Greencastle, Pa	Sept. 26, 1865	50, 140
Wheat-drill	G. King	Eminence, Ky	Mar. 28, 1865	47, 024
Wheat-drill	D. E. McSherry	Dayton, Ohio	Dec. 15, 1868	84, 865
Wheat-drill	C. W. Patton	Exeter, Ill	Nov. 13, 1866	59, 638
Wheat-drill	C. W. Patton	Exeter, Ill	Sept. 8, 1868	82, 026
Wheat-drill	W. Rice	Concord, Ill	June 27, 1865	48, 441
Wheat-drill	M. S. and J. S. Rickle	Geneseo, Ill	Oct. 23, 1866	59, 077
Wheat-drill	J. Slawder	Osborn, Ohio	Feb. 12, 1867	62, 079
Wheat-drill	G. Zorger	Greensburgh, Ind	July 24, 1866	56, 664
Wheat-drill axle	J. F. Fisher	Greencastle, Pa	Apr. 19, 1870	101, 991
Wheat for food, Preparation of	I. S. Curtis and J. W. Smith	Rochester, N. Y	July 4, 1871	116, 691
Wheat for grinding, Process for preparing	J. W. Carpenter	Pontiac, Mich	Sept. 17, 1850	7, 647
Wheat from cockle, Machine for separating	G. H. Rich	Geneva, Ill	May 18, 1869	90, 306
Wheat, &c., from smut, Machine for cleaning	E. Tisdale	Warren County, N. Y	July 31, 1819	....
Wheat hulling and scouring machine	N. M. Burr and W. Martyn	Pawtucket, R. I	Oct. 22, 1867	70, 073
Wheat, &c., hulling and scouring machine	J. Weber	Braysville, Ind	Mar. 3, 1857	16, 764
Wheat-hulling machine	E. P. Barrabé	Paris, France	Dec. 18, 1866	60, 460
Wheat, Machine for rubbing and separating garlic, &c., from.	Z. Duval, A. Callegan, and J. W. Miller.	Ellicott's Mills, Md	Nov. 3, 1858	996
Wheat, Machine for separating cockle from	W. G. and H. T. Douglas and J. M. Reed.	Warrenton, Va., and Omaha, Nebr.	Dec. 13, 1870	110, 124
Wheat, Machine for separating garlic from	J. F. Barrett	North Granville, N. Y	Oct. 31, 1840	1, 845
Wheat, Machine for washing, drying, and screening	S. Martin and Z. Chapin	Ontario County, N. Y	Jan. 18, 1820	....
Wheat preparatory to grinding, Hulling	S. Bentz	Boonsborough, Md	Sept. 19, 1848	5, 777
Wheat, Process for purifying and cleansing	C. Campbell	California	May 1, 1855	12, 777
Wheat, Process of debranning	J. G. Moxey	Philadelphia, Pa	Sept. 15, 1868	82, 238
Wheat, rice, &c., Rubbing and hulling machine for.	A. and W. I. Duvall	Baltimore, Md	Jan. 9, 1838	567
Wheat, Roasted	G. W. Waitt	Philadelphia, Pa	May 16, 1871	114, 891
Wheat-roaster	G. W. Waitt	Philadelphia, Pa	Mar. 7, 1871	112, 518
Wheat, Roller for extracting cockle from	W. G. Douglass	Warrenton, Va	Mar. 23, 1869	88, 019
Wheat-rubber	J. Deneale	Dumfries, Va	July 1, 1809	....
Wheat-rubber	D. Narracong	Skaneateles, N. Y	Aug. 18, 1831	....
Wheat, &c., Rubbing	S., N. H., and W. Ellicott	Ellicott's Mills, Md	July 31, 1833	....
Wheat, &c., rubbing machine	J. D. Richards	Middleburgh, Va	Feb. 27, 1812	....
Wheat-separator	W. H. Angel and M. Coffeen	Watertown, N. Y	Aug. 3, 1858	21, 057

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Invention.	Inventor.	Residence.	Date.	No.
Wheat with sulphate of copper, Apparatus for coating seed.	D. Best	Marysville, Cal	Nov. 19, 1872	133,129
Wheel:				
See Abrading and polishing wheel. Anti-friction wheel. Balance-wheel. Blower-wheel. Brush-wheel. Buffing-wheel. Car-wheel. Car-brake wheel. Carbureting-wheel. Carriage-wheel. Caster-wheel. Chilled wheel. Clay-tempering wheel. Corundum wheel. Current-wheel. Driving-gear wheel. Emery-wheel. Fan-wheel. Feed-wheel. Fifth-wheel. Floating-wheel. Flutter-wheel. Fly-wheel. Friction-wheel. Gage-wheel. Gear-wheel. Gear-cutting wheel. Grooved wheel. Harvester-wheel. Harvester driving-wheel. Harvester guiding-wheel. Harvester scroll wheel. Helm wheel. Horizontal wheel. Horse wheel. Hydraulic wheel. Inclined wheel. Iron wheel. Locomotive-wheel. Locomotive driving-wheel. Loose wheel. Lubricating-wheel. Master-wheel. Measuring-wheel. Metal wheel. Mill-wheel. Oracular wheel. Over-shot-bucket wheel. Paddle-wheel. Planing-wheel. Plow-wheel. Polishing-wheel. Printing-wheel. Propeller-wheel. Propelling-wheel. Pulley-wheel. Railway-wheel. Road-steamer wheel. Sewing-machine driving-wheel. Sheet-metal wheel. Spinning-wheel. Spiral wheel. Spur-wheel. Steamboat-wheel. Steel-tired cast-wheel. Steering wheel. Tanners' rinsing-wheel. Thread-wheel. Tide-wheel. Tiller-wheel. Toothed wheel. Traction-wheel. Traction-engine wheel. Transmission-wheel. Tub-wheel. Turbine-wheel. Vehicle-wheel. Velocipede-wheel. Wagon-wheel. Water-wheel. Water-power wheel. Weather-cock wheel. Wheelbarrow-wheel. Wind-wheel. Wrought-iron wheel. Wrought-metal wheel.				
Wheel	J. M. Bailey	Indianapolis, Ind	Dec. 3, 1867	71,676
Wheel	J. Carlin	Cincinnati, Ohio	Aug. 7, 1866	56,901
Wheel	H. Poth	Pittsburgh, Pa	June 2, 1868	78,4[illegible]0
Wheel	J. Stoliker	Pine Run, Mich	Oct. 10, 1865	50,425
Wheel	E. Swasey	Milford, Mass	Nov. 2, 1869	96,502
Wheel	J. C. Welch and M. A. Ammeden	Edgerton, Ohio	Mar. 9, 1869	87,738
Wheel	P. Wright	Dudley, England	Dec. 10, 1861	33,916
Wheel and axle	T. A. Lane	Cincinnati, Ohio	Feb. 6, 1866	52,422
Wheel and axle, Compound	B. F. Leet	Dayton, Nev	Nov. 2, 1869	96,449
Wheel and axle connection	H. S. Cook	Boston, Mass	Jan. 22, 1867	61,402
Wheel and axle connection	J. F. Welch	Hingham, Mass	Sept. 10, 1867	68,820
Wheel and axle-tree	A. Hale	Boston, Mass	Apr. 2, 1835	....
Wheel and axle-tree	A. Hale	Boston, Mass	Apr. 2, 1835	....
Wheel and journal box and sleeve	R. V. Laney	Cumberland, Md	Mar. 12, 1872	124,597
Wheel and pulley	W. D. Grimshaw	Ansonia, Conn	Jan. 2, 1872	122,456
"Wheel and rest" machine	I. Johnson, jr	Moriah, N. Y	May 1, 1829	....
Wheel-axle, Lubricating	J. H. Calkin	Troy, Pa	May 6, 1862	35,137
Wheel-axles, Apparatus for setting	S. Woodhull	Linden, Mich	Aug. 11, 1868	80,848
Wheelbarrow	H. Alter	Lakeport, Cal	Feb. 22, 1870	100,698
Wheelbarrow-wheel	G. Harris	Weedsport, N. Y	Aug. 2, 1870	105,939
Wheelbarrow-wheel	W. E. Jacobs	Columbus, Ohio	Oct. 7, 1873	143,511
Wheelbarrow-wheel	G. Withington	Ione City, Cal	Feb. 7, 1871	111,708
Wheel-bearings, Casting iron	C. Taylor	Little Falls, N. Y	Sept. 1, 1857	18,111
Wheel-borer and key-way cutter	B. F. Copp	West Cumberland, Me	June 13, 1871	115,824
Wheel-boxes, Setting	J. Chaney	Chesterville, Me	Oct. 25, 1832	....
Wheel-casting flask	F. Nishwitz	Brooklyn, N. Y	Feb. 2, 1858	19,258
Wheel-feed	J. B. Merritt	Abington, Mass	July 19, 1870	105,476
Wheel for locomotive land-conveyance and coal-hoisting apparatus.	J. S. French	Alexandria, Va	Apr. 19, 1870	102,107
Wheel-head	E. Church	Homer, N. Y	Mar. 18, 1813	....
Wheel-head	D. Lee	Guilford, Conn	May 6, 1816	....
Wheel-head	D. Loring	Canandaigua, N. Y	Dec. 31, 1813	....
Wheel-head	W. H. Peabody	Woodbury, Conn	Dec. 14, 1812	....
Wheel-head	E. Russell	Long Meadow, Mass	Apr. 18, 1814	....
Wheel head, Linen	B. Smith and C. Stewart	Truxton, N. Y	Dec. 8, 1814	....
Wheel heads, Accelerating	A. Putnam	Philadelphia, Pa	July 20, 1811	....
Wheel, &c., lubricator	J. C. Fish	Barnstable, Mass	May 21, 1867	64,961
Wheel lubricator, Loose	S. E. Peart	McKeesport, Pa	Aug. 23, 1870	106,614
Wheel-making machine	J. Coon	Granville, N. Y	Aug. 6, 1808	....
Wheel-making machine	H. Haag	Bernville, Pa	Aug. 4, 1868	80,726
Wheel-making machine	M. Hunt and C. White	Sunderland and Hartford, Mass.	June 15, 1813	....
Wheel-making machine	T. C. Marshall and H. W. Hawkins.	Akron, Ohio	June 22, 1869	91,649
Wheel-making machine	T. Place	Alfred Centre, N. Y	Nov. 23, 1869	97,115
Wheel-manufacture	E. A. Archibald	Methuen, Mass	Aug. 16, 1870	106,4[illegible]9
Wheel, &c., operated on by steam	J. Rumsey	Kentucky	Nov. 15, 1816	....
Wheel or pulley lubricator	R. V. Laney	Cumberland, Md	Mar. 12, 1872	124,596

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Invention.	Inventor.	Residence.	Date.	No.
Wheel-polishing	F. W. Gesswein	Jersey City, N. J	Dec. 17, 1872	133, 978
Wheel-power for pumping ships, &c.	S. Town and R. W. Oliphant	North Granville, N. Y	Apr. 8, 1826	....
Wheel-press	H. Betts		Sept. 13, 1803	....
Wheel-press	C. Sellers	Philadelphia, Pa	Apr. 29, 1862	35, 127
Wheel, pulley, and journal lubricator	E. Dowden	Lykens, Pa	Feb. 21, 1871	111, 918
Wheel-quartering machine	W. Sellers	Philadelphia, Pa	June 3, 1873	139, 482
Wheel-regulator and spare gear	J. L. Sullivan	Boston	Feb. 28, 1818	....
Wheel-rim	D. A. Johnson	Boston, Mass	May 9, 1871	114, 565
Wheel-teeth, Apparatus for cutting	E. Roberts	Philadelphia, Pa	June 16, 1868	78, 896
Wheel-teeth, Machine for cutting	J. Underwood	Muscatine, Iowa	Oct. 29, 1867	70, 293
Wheel-tightener	E. Swain	Lewistown, Pa	Jan. 21, 1868	73, 668
Wheels and axles, Connecting and disconnecting	S. Heywood	Claremont, N. H	Apr. 1, 1851	8, 015
Wheels and pinions, Mode of casting	F. R. Wheeldon	Wolverhampton, England	Sept. 17, 1872	131, 486
Wheels and shafts for communicating power, Arrangement of.	J. Leffel	Springfield, Ohio	Aug. 20, 1845	4, 158
Wheels, axles, and friction-rollers, Arrangement of	G. A. Prentiss	Cheshire County, N. H	Mar. 20, 1855	12, 572
Wheels, Fitting boxes to	J. and C. Putnam	Hallowell, Me	Apr. 28, 1836	....
Wheels from falling when axles break, Apparatus to prevent.	W. Zollickoffer	Middlebury, Md	Apr. 30, 1833	....
Wheels, Grinding and polishing	R. J. Edwards	Shoreditch, England	Dec. 24, 1872	134, 134
Wheels, Machine for cutting the teeth of	H. Belfield	Philadelphia, Pa	Oct. 17, 1871	120, 023
Wheels, &c., Machine for dressing	J. W. Cole	Brooklyn, N. Y	June 10, 1873	139, 774
Wheels, Machine for dressing	H. S. Jacobs	Portland, Oreg	Sept. 15, 1863	40, 004
Wheels, Machine for forming cutters for cutting teeth of.	W. Sellers	Philadelphia, Pa	Feb. 18, 1873	136, 101
Wheels, Machine for making	E. A. Archibald	Methuen, Mass	Jan. 2, 1872	122, 349
Wheels, Machine for setting boxes in	J. A. Newell	Kalamazoo, Mich	Dec. 17, 1872	134, 091
Wheels, &c., Machine for shaping or dressing	J. W. Cole	Brooklyn, N. Y	June 10, 1873	139, 775
Wheels, Machine for turning	J. W. Hill	Dayton, Ohio	Sept. 16, 1873	142, 912
Wheels, Machinery for putting together and tiring	W. F. Waters	Dunkirk, N. Y	May 24, 1870	103, 531
Wheels, Method of applying anti-friction rollers to	W. B. Scott	New York, N. Y	Jan. 11, 1870	98, 804
Wheels, Mode of balancing	J. Andrews	Litchfield, N. Y	May 27, 1814	....
Wheels, Mode of expanding	D. Hitchings	Litchfield, N. Y	June 6, 1871	115, 611
Wheels on axles, Mode of securing	J. Miller, jr	Baltimore, Md	Nov. 5, 1867	70, 594
Wheels on axles, Mode of setting	M. S. Wilcox	Union Mills, Ind	Mar. 31, 1868	76, 126
Wheels on shafts, Tightening and loosening	L. H. Olmstead	Newark, N. J	June 4, 1867	65, 420
Wheels to axles, Attaching	F. Alger	Boston, Mass	Aug. 15, 1871	117, 958
Wheels to axles, Attaching	J. W. Beal	South Scituate, Mass	Nov. 28, 1871	121, 270
Wheels to axles, Attaching	G. W. Swain	Nashua, N. H	Apr. 28, 1868	77, 220
Wheels to axles, Device for attaching	D. A. Johnson	Boston, Mass	June 4, 1872	127, 607
Wheels to axles, Securing	J. Foster and D. Marsh	Green Point, N. Y., and Bridgeport, Conn.	Sept. 2, 1851	8, 331
Wheels to axles, Securing	W. Hamilton	West Pittsburgh, Pa	Feb. 25, 1862	34, 490
Wheels to axles, Securing	R. J. Lessor and J. B. Shambo	Brandon, Vt	Aug. 5, 1873	141, 570
Wheels within cylinders, Giving motion to	J. Sharples		Sept. 15, 1801	....
Wheelwright's assistant	C. W. Beach	Schoharie, N. Y	Mar. 16, 1827	....
Wheelwright's assistant	J. Sitton	Pendleton, S. C	Feb. 15, 1827	....
Wheelwright's labor-saving machine	M. Battle	New York State	Apr. 4, 1810	....
Wheelwright's machine	O. O. Chapman	Seneca, Wis	Feb. 19, 1867	62, 182
Wheelwright's machine	C. W. Corr	Carlinville, Ill	Apr. 30, 1867	64, 201
Wheelwright's machine	E. Dougherty	Cedarville, Ohio	Oct. 11, 1859	25, 727
Wheelwright's machine	N. T. Edson	New Orleans, La	Feb. 2, 1858	19, 243
Wheelwright's machine	N. T. Edson	New Orleans, La	May 14, 1861	32, 277
Wheelwright's machine	C. H. Guard	Brownville, N. Y	Feb. 26, 1856	14, 337
Wheelwright's machine	C. H. Guard	Brownville, N. Y	Oct. 20, 1857	18, 448
Wheelwright's machine	T. L. Hawkins	Sturgeon, Mo	May 3, 1859	23, 840
Wheelwright's machine	W. Hinds	Otsego, N. Y	July 27, 1858	21, 002
Wheelwright's machine	S. Holl	Reading, Pa	Apr. 13, 1858	19, 928
Wheelwright's machine	E. N. Kilpatrick	Byhalia, Miss	June 9, 1857	17, 509
Wheelwright's machine	C. Luther	Newbury, Ohio	Apr. 16, 1861	32, 072
Wheelwright's machine	S. Mills and J. R. McIrvin	Clinton, Ill	June 25, 1867	66, 163
Wheelwright's machine	J. O'Connor	Jackson, Mo	Apr. 13, 1869	88, 802
Wheelwright's machine	J. Sitton	Williamston, S. C	Apr. 1, 1856	14, 577
Wheelwright's machine	J. Sitton	Williamston, S. C	Oct. 14, 1856	15, 901
Wheelwright's machine	A. D. Stowell	Fulton, N. Y	Aug. 19, 1856	15, 593
Wheelwright's machine	G. Sweet	Dansville, N. Y	June 17, 1873	140, 094
Wheelwright's machine	D. S. Trout	Arcola, Ill	Nov. 13, 1866	59, 683
Wheelwright's machinery	A. A. Macomber	Bennington, Vt	June 10, 1856	15, 079
Whey from curd, Apparatus for separating	P. Coombes	Liverpool, England	Feb. 27, 1866	52, 939
Whiffletree	J. J. Adair	Portland, Ind	May 17, 1870	103, 118
Whiffletree	H. Agar	Batavia, N. Y	Dec. 23, 1873	145, 826
Whiffletree	J. R. Ames	Chest. Township, Pa	June 20, 1871	116, 005
Whiffletree	S. H. Anderson	Hannibal, Mo	Jan. 5, 1869	85, 631
Whiffletree	D. Austin	Underhill, Vt	Feb. 11, 1868	74, 273
Whiffletree	A. Bailey and D. L. Allard	Blue Rock and Rokeby, Ohio.	July 24, 1855	13, 297
Whiffletree	F. A. Balch	Hingham, Wis	Sept. 11, 1866	57, 844
Whiffletree	L. Barnes	Waterford, Mich	Oct. 30, 1866	59, 164
Whiffletree	O. C. and O. J. Barnes	Stockbridge, Vt	Aug. 14, 1855	13, 418
Whiffletree	G. C. Barney	Brookline, Mass	Nov. 6, 1855	13, 744
Whiffletree	A. M. Beebe	West Bloomfield, N. Y	Oct. 14, 1862	36, 638
Whiffletree	A. Bell	Washington, D. C	Oct. 16, 1866	58, 759
Whiffletree	L. G. Binkley	Fairview, Ohio	Feb. 11, 1868	74, 287
Whiffletree	W. S. Brown	Thorntown, Ind	May 16, 1871	114, 913
Whiffletree	H. Buck	Chardon, Ohio	Aug. 3, 1869	93, 169
Whiffletree	G. G. Burgess	Rawsonville, Ohio	Jan. 23, 1872	122, 992
Whiffletree	N. Campbell	Brooklyn, N. Y	Mar. 19, 1872	124, 664
Whiffletree	M. C. Chamberlin	Plain View, Minn	Mar. 12, 1867	62, 814
Whiffletree	F. Clemans	La Fayette, Ind	Sept. 11, 1866	57, 867
Whiffletree	P. B. Curtis	Amesbury, Mass	Aug. 14, 1866	57, 248
Whiffletree	J. L. Darden	Cotton Plant, Miss	Sept. 3, 1872	131, 053
Whiffletree	E. N. Dodge	Plain View, Minn	Apr. 30, 1867	64, 290
Whiffletree	J. Elder	Carthage, Ill	June 13, 1865	48, 163
Whiffletree	F. M. English	Hopkinsville, Ky	June 6, 1854	11, 023
Whiffletree	I. D. Flanagin	Ceresco, Mich	Oct. 10, 1865	50, 347
Whiffletree	A. Gibson and W. M. Newcomb	River Falls and Clifton, Wis.	Mar. 27, 1866	53, 436

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Invention.	Inventor.	Residence.	Date.	No.
Whiffletree	E. C. Gordon	Salem, N. H	July 9, 1872	128,723
Whiffletree	D. A. Gorham	Lawrence, Mass	Aug. 28, 1866	57,497
Whiffletree	A. Greenman	East Kendall, N. Y	July 5, 1870	105,065
Whiffletree	I. C. Hall	Sanbornton Bridge, N. H	July 27, 1869	92,963
Whiffletree	T. Hardman and A. Vose	Pittsfield, Vt	Sept. 26, 1854	11,727
Whiffletree	W. A. Horrall	Washington, Ind	Sept. 4, 1866	57,820
Whiffletree	J. M. Isenberg	Huntingdon, Pa	Aug. 27, 1872	130,854
Whiffletree	D. A. Johnson	Boston, Mass	June 24, 1873	140,276
Whiffletree	D. W. Johnson	Bloomsburgh, Pa	Feb. 25, 1868	74,761
Whiffletree	N. Johnson	Ripon, Wis	May 29, 1866	55,112
Whiffletree	J. W. Kelley	Cleveland, Ohio	Aug. 4, 1868	80,551
Whiffletree	G. Kenny	Milford, N. H	July 29, 1856	15,460
Whiffletree	G. Kenny	Milford, N. H	July 29, 1856	15,461
Whiffletree	I. Krebs	Winchester, Va	May 22, 1855	12,911
Whiffletree	J. A. Lannert	Cleveland, Ohio	Sept. 26, 1871	119,371
Whiffletree	J. W. Larmore	Harrison, Ohio	Sept. 24, 1867	69,105
Whiffletree	J. Laughlin	Gettysburgh, Pa	Aug. 7, 1847	5,221
Whiffletree	J. H. Littlefield	Cambridge, Mass	June 27, 1865	48,416
Whiffletree	T. R. Markillie	Winchester, Ill	Aug. 8, 1865	49,285
Whiffletree	R. W. McClelland	Springfield, Ill	May 23, 1871	115,078
Whiffletree	C. B. McClymond	Elderton, Pa	Jan. 14, 1873	134,758
Whiffletree	J. V. Norton	Plainville, N. Y	Feb. 15, 1870	99,936
Whiffletree	J. Parker	Pontiac, Mich	Nov. 18, 1873	144,786
Whiffletree	A. W. Payne	Maine, N. Y	Nov. 9, 1869	96,610
Whiffletree	S. L. and J. W. Reynolds	Pittsburgh, Pa	Apr. 4, 1871	113,696
Whiffletree	J. H. Riggs	Chelsea, Mass	Apr. 4, 1871	113,568
Whiffletree	R. Rolph	Coventry, N. Y	Sept. 1, 1863	39,753
Whiffletree	D. S. Sloan	Rockville, Conn	Nov. 25, 1873	144,873
Whiffletree	J. B. Small	Boston, Mass	July 9, 1872	128,820
Whiffletree	E. A. Smead	Tioga, Pa	Jan. 5, 1869	85,541
Whiffletree	D. A. Smith	Washington, D. C	July 7, 1857	17,752
Whiffletree	A. J. Sprague	Binghamton, N. Y	June 24, 1873	140,170
Whiffletree	A. Vail	Henry, Ill	June 15, 1869	91,500
Whiffletree	J. Ward	Honeoye Falls, N. Y	Feb. 21, 1871	112,098
Whiffletree	G. Watt	Richmond, Va	Sept. 4, 1866	57,801
Whiffletree	G. Watt	Richmond, Va	Dec. 17, 1867	72,248
Whiffletree	J. D. Weaver	Penfield, N. Y	Aug. 25, 1863	39,692
Whiffletree	O. N. Weaver	Dover, Ky	Feb. 5, 1867	61, 81
Whiffletree	H. Webster	Cambridge, Vt	May 19, 1868	78,034
Whiffletree	H. and A. Webster	Montpelier, Vt	May 29, 1855	12,976
Whiffletree	B. S. Wescott	Corning, N. Y	June 24, 1873	140,327
Whiffletree	N. Westcott	Morrisville, N. Y	June 1, 1869	90,901
Whiffletree	D. C. Williams	Madison, Ohio	Nov. 23, 1852	9,427
Whiffletree	G. Woeber	Davenport, Iowa	Oct. 31, 1865	50,763
Whiffletree	G. H. Yard	Trenton, N. J	Oct. 23, 1855	13,712
Whiffletree and trace	R. R. R. Stewart	River Vale, Ind	Dec. 24, 1872	134,227
Whiffletree-attachment	J. C. Garner	Ashland, Pa	Dec. 26, 1865	51,712
Whiffletree-attachment	L. Mancy	Saint Morgan, Ill	Dec. 29, 1868	85,462
Whiffletree attachment	C. Marquardt	Rhinebeck, N. Y	Dec. 24, 1861	34,027
Whiffletree-attachment	E. Soper	New York, N. Y	Jan. 19, 1864	41,329
Whiffletree-attachment	J. T. Williams	San Francisco, Cal	June 11, 1872	127,725
Whiffletree-bolt	F. B. Morse	Plantsville, Conn	Oct. 26, 1869	96,255
Whiffletree, Carriage	J. Jorey	Stafford, Conn	June 17, 1840	1,642
Whiffletree-clevis, Revolving	W. Beers	Milan, Ohio	Jan. 30, 1872	123,218
Whiffletree-clip	S. J. Foreman	Nottawa, Mich	July 9, 1872	128,729
Whiffletree-clip	W. J. McMaster	Dixmont, Pa	Nov. 28, 1871	121,393
Whiffletree-coupler	F. B. Morse	New Haven, Conn	July 30, 1867	67,208
Whiffletree-coupling	D. J. Brady	Greenwich Township, Ohio	June 8, 1869	90,989
Whiffletree-coupling	H. Crocker, jr	Montrose, Pa	May 2, 1871	114,269
Whiffletree-coupling	J. Hyde	Troy, N. Y	Nov. 6, 1866	59,398
Whiffletree-coupling	J. Ives	Mount Carmel, Conn	Oct. 18, 1870	108,357
Whiffletree-coupling	H. Killam	New Haven, Conn	Jan. 11, 1870	98,779
Whiffletree-coupling	M. J. Palmer	Homer, N. Y	Nov. 8, 1864	44,968
Whiffletree-coupling	M. J. Palmer	Syracuse, N. Y	Dec. 31, 1867	72,888
Whiffletree-coupling	W. C. Shipherd	Cleveland, Ohio	May 6, 1873	138,701
Whiffletree, Detachable	J. W. Melcher	Oshkosh, Wis	Oct. 29, 1867	70,348
Whiffletree draft-eyes	E. E. Tompkins	Sing Sing, N. Y	July 9, 1872	128,828
Whiffletree, Equalizing	H. W. Austin	Portage, Mich	Oct. 6, 1868	82,785
Whiffletree-evener	F. N. Corbin	Champlain, N. Y	May 19, 1868	78,064
Whiffletree-evener	M. Gally	Marion, N. Y	Mar. 26, 1867	63,238
Whiffletree-evener	M. Gally	Marion, N. Y	Sept. 10, 1867	68,729
Whiffletree-fastening	C. Aherenbeck	Navasota, Tex	June 11, 1872	127,822
Whiffletree for detaching horses from carriages	N. N. Selby	Fairview, Pa	Sept. 2, 1856	15,670
Whiffletree for detaching horses from vehicles	A. H. McAllister	Cotton Plant, Miss	Oct. 29, 1872	132,592
Whiffletree for vehicles, Detachable	I. Ramminger	New York, N. Y	July 17, 1860	29,193
Whiffletree for vehicles, Self-detachable	M. C. Chamberlin	Johnsonsburgh, N. Y	Sept. 11, 1860	29,952
Whiffletree, Harness	C. T. Beecher	Bethany, Conn	Dec. 2, 1873	145,043
Whiffletree hitching-device	H. and J. M. Saunders	Oxford, Ohio	Oct. 1, 1867	69,369
Whiffletree-hook	C. A. Babcock	Frankfort, N. Y	Apr. 7, 1868	76,377
Whiffletree-hook	F. W. Beckwith	Westmoreland, N. Y	Apr. 21, 1868	76,978
Whiffletree-hook	C. Bentz	Mindenville, N. Y	July 2, 1861	32,678
Whiffletree-hook	S. Botterill	Westmoreland, N. Y	July 5, 1859	24,610
Whiffletree-hook	A. Cooley	Paw Paw, Mich	June 30, 1857	17,668
Whiffletree-hook	J. Fink	Baldwinsville, N. Y	Sept. 13, 1864	44,173
Whiffletree-hook	S. J. Foreman	Mendon, Mich	Apr. 30, 1872	126,281
Whiffletree-hook	A. N. Gray	Cleveland, Ohio	July 24, 1849	6,601
Whiffletree-hook	A. J. Griggs	Pittsburgh, Pa	May 30, 1871	115,307
Whiffletree-hook	J. A. Hammon	Franconia, Minn	June 15, 1869	91,230
Whiffletree-hook	W. H. Hawley	Utica, N. Y	Feb. 11, 1868	74,222
Whiffletree-hook	W. H. Hawley	Utica, N. Y	Feb. 11, 1868	74,223
Whiffletree-hook	J. Knight	Newark, N. J	Sept. 27, 1870	107,785
Whiffletree-hook	M. Matson	Quincy, Ill	Aug. 12, 1873	141,721
Whiffletree-hook	M. Newman, 2d, N. C. Whitcomb, and G. C. Cole	Lanesborough, Pa., and Hartford, Conn.	Feb. 21, 1854	10,551
Whiffletree-hook	R. Owen	Parkersburgh, Iowa	June 25, 1872	128,244
Whiffletree-hook	E. A. Palmer and A. I. Simmons	Clayville, N. Y	Sept. 7, 1852	9,252
Whiffletree-hook	S. M. Perkins	Albany, Ill	Nov. 29, 1859	26,291

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Whiffletree-hook	S. M. Perkins	Morrison, Ill	Apr. 23, 1867	64, 030
Whiffletree-hook	D. D. Robinson	Niles, Mich	Jan. 7, 1868	73, 047
Whiffletree-hook	L. C. Terry	Chenango, N. Y	Jan. 14, 1859	24, 417
Whiffletree-hook	A. Verbeck	Sterling, Ill	Feb. 21, 1871	112, 096
Whiffletree-hook	J. Wood	Utica, N. Y	Sept. 22, 1868	82, 469
Whiffletree-iron	W. M. Bryant	Washington, D. C	May 23, 1865	47, 894
Whiffletree-iron	F. B. Morse	New Haven, Conn	Sept. 3, 1867	68, 570
Whiffletree-iron	W. W. Urquhart	Bay City, Mich	June 20, 1871	116, 239
Whiffletree-plate	J. B. Clark	Plantsville, Conn	June 23, 1868	79, 205
Whiffletree-plate	J. B. Clark	Meriden, Conn	Feb. 9, 1869	86, 811
Whiffletree-plate	F. B. Morse	Plantsville, Conn	Feb. 14, 1871	111, 866
Whiffletree, Rotating	C. C. Lee	Washington, D. C	Dec. 19, 1865	51, 597
Whiffletree, Safety	I. and T. Byrd, jr	Calvin Township, Mich	Aug. 15, 1871	118, 103
Whiffletree, Safety	A. H. McAllister	Cotton Plant, Miss	Jan. 2, 1872	122, 394
Whiffletree, Safety	G. F. Outten	Norfolk County, Va	Aug. 3, 1858	21, 081
Whiffletree, Safety	M. Stone	Vermillion, Ohio	May 31, 1870	103, 679
Whiffletree safety-hitching device	J. S. Ewan	North Vernon, Ind	Aug. 20, 1872	130, 628
Whiffletree, Self-detaching	S. D. Bowker	Geneva, Ohio	Apr. 17, 1860	27, 884
Whiffletree, Self-detaching	W. G. Russell	Winchester, Va	July 12, 1859	24, 760
Whiffletree, Self-releasing	E. Duchamp	Saint Martinsville, La	Aug. 16, 1859	25, 102
Whiffletree snap-hook	C. W. Saladee	Pittsburgh, Pa	May 6, 1873	138, 699
Whiffletree, Spring	G. N. Compton	Canton, Ohio	May 25, 1869	90, 503
Whiffletree-stub	W. C. Shipherd	Cleveland, Ohio	Oct. 1, 1872	131, 792
Whiffletree-swivel	M. F. Lanning	White House, N. J	Sept. 15, 1868	82, 233
Whiffletree-T-bolt die	F. B. Morse	Plantsville, Conn	Mar. 22, 1870	101, 149
Whiffletree trace-catch or cock-eye	W. W. Gordon	Delhi, N. Y	Oct. 29, 1867	70, 197
Whiffletree, Trace-detaching	R. P. Sims	Mexico, Mo	June 25, 1872	128, 331
Whiffletree trace-hook	C. C. Bradley and B. F. Upson	Brodhead, Wis., and Rockford, Ill.	Aug. 2, 1870	105, 899
Whiffletree trace-lock	S. P. Williams	Rutland, Vt	Dec. 7, 1869	97, 578
Whiffletree-tug	D. Austin	Underhill, Vt	Feb. 11, 1868	74, 274
Whiffletrees and neck-yokes, Manufacture of irons for.	J. Wood	Lockport, N. Y	June 25, 1872	128, 347
Whiffletrees, Attaching and detaching	J. Laughlin	Gettysburgh, Pa	Oct. 28, 1862	36, 786
Whiffletrees, Attaching traces to	S. Smith	Plain View, Minn	Mar. 24, 1868	75, 803
Whiffletrees, Attaching tugs to	C. H. Nye	Elizabethport, N. J	Mar. 16, 1869	87, 870
Whiffletrees, &c., Draft-hook for	J. T. Dodson	Kane, Ill	May 6, 1873	138, 619
Whiffletrees to sleighs, Attaching	A. P. Hutchinson	Pembroke, N. H	June 26, 1860	28, 866
Whiffletrees to the tow-line of canal-boats, Means for attaching.	A. Seaman	Amsterdam, N. Y	Sept. 1, 1857	18, 107
Whiffletrees to vehicles, Attaching	H. Clough	Factoryville, Pa	Oct. 1, 1872	131, 850
Whiffletrees to vehicles, Attaching	A. J. Gibson	Clinton, Mass	Aug. 1, 1854	11, 425
Whiffletrees to vehicles, Attaching	K. J. Guilfoyle	New York, N. Y	Aug. 6, 1872	130, 217
Whiffletrees to vehicles, Attaching	L. S. Taylor	Lamoille, Ill	Jan. 24, 1860	26, 936
Whiffletrees, Tug for fastening	L. A. Johnson	Candor, N. Y	Apr. 12, 1870	101, 738
Whiffletrees with carriages, Connecting	J. Barnes	Franklin, N. Y	June 11, 1850	7, 422
Whip	D. Avery	Westfield, Mass	June 30, 1868	79, 299
Whip	J. R. Cannon	New Albany, Ind	Feb. 12, 1861	31, 370
Whip	J. S. Cook	West Groton, Mass	Jan. 7, 1868	73, 165
Whip	F. P. Couse	Westfield, Mass	Sept. 23, 1873	143, 065
Whip	E. Easton	Ashland, Ill	Mar. 30, 1869	88, 375
Whip	J. R. Gillett	Westfield, Mass	May 5, 1868	77, 477
Whip	L. Hull	Charlestown, Mass	Apr. 19, 1870	102, 007
Whip	L. Hull	Charlestown, Mass	May 24, 1870	103, 467
Whip	A. B. Kiersted	New Haven, Conn	May 28, 1872	127, 246
Whip	G. King	Westfield, Mass	Apr. 27, 1869	89, 487
Whip	A. C. Rand	Westfield, Mass	Apr. 20, 1869	89, 168
Whip	A. C. Rand	Westfield, Mass	Apr. 12, 1870	101, 912
Whip	A. C. Rand	Westfield, Mass	Apr. 12, 1870	101, 913
Whip	A. C. Rand	Westfield, Mass	Apr. 12, 1870	101, 914
Whip	A. C. Rand	Westfield, Mass	Apr. 12, 1870	101, 915
Whip	A. C. Rand	Westfield, Mass	May 10, 1870	102, 863
Whip	A. Scharff	Philadelphia, Pa	July 6, 1869	92, 372
Whip	A. Scharff	Philadelphia, Pa	Aug. 27, 1872	130, 944
Whip	E. F. Woodbury	Rochester, N. Y	Dec. 18, 1866	60, 606
Whip and line holder for guiding horses without the use of the hands.	L. Leavenworth	Trumansburgh, N. Y	June 21, 1859	24, 470
Whip-braiding machine	E. Sizer	Westfield, Mass	Nov. 7, 1871	120, 782
Whip, Carriage and riding	R. V. Salada and G. A. Pearson	Philadelphia, Pa	July 7, 1868	79, 691
Whip-covering	V. W. Crowson	Westfield, Mass	Dec. 12, 1871	121, 761
Whip-covering	D. Holmes	Westfield, Mass	Apr. 2, 1872	125, 134
Whip-covering	M. D. Knowles	Westfield, Mass	Feb. 23, 1869	87, 268
Whip, Detachable-tipped	P. Boyden	Amsterdam, N. Y	Oct. 25, 1870	108, 679
Whip-goad	F. Flanders	Franklin, N. H	Sept. 22, 1868	82, 302
Whip-handle	L. Hull	Charlestown, Mass	Oct. 6, 1868	82, 840
Whip-handle caps, Manufacture of	G. A. Burr	Florence, Mass	May 20, 1873	138, 991
Whip-handles, Machine for weaving covering for	L. Hull	Charlestown, Mass	Feb. 20, 1866	52, 718
Whip-handles, Method of stitching covers on	D. N. Goff	Westfield, Mass	May 14, 1872	126, 631
Whip-hanger	P. F. Cooley	Pittsfield, Mass	Sept. 1, 1868	81, 754
Whip-hanger	S. S. Merriam	New York, N. Y	Dec. 31, 1867	72, 748
Whip-holder	N. Hanchott	Leslie, Mich	Sept. 6, 1870	107, 175
Whip-holder	A. W. Johnson	New York, N. Y	Sept. 1, 1868	81, 786
Whip-holder	A. W. Johnson	New York, N. Y	Oct. 5, 1869	95, 482
Whip-holder	C. L. Pierce	Buffalo, N. Y	Sept. 13, 1864	44, 218
Whip-holder	A. C. Rand	Westfield, Mass	July 7, 1868	79, 776
Whip-holder	J. Thornton and E. G. Latta	Genesee, N. Y	Oct. 31, 1871	120, 551
Whip-holder	A. Warden	Ypsilanti, Mich	Apr. 28, 1868	77, 233
Whip-holder, Self-adjusting	H. M. Curtis and A. Worden	Ypsilanti, Mich	Oct. 22, 1867	70, 075
Whip-lash	H. J. Bush	Westfield, Mass	Apr. 1, 1873	137, 341
Whip-lash	D. N. and E. B. Day	Westfield, Mass	Feb. 5, 1850	7, 068
Whip-lash	E. B. Light	Westfield, Mass	Feb. 27, 1872	124, 070
Whip-lash	J. C. Schmidt	Westfield, Mass	Oct. 8, 1872	131, 975
Whip lash and snap	E. B. Light	Westfield, Mass	Dec. 17, 1872	133, 946
Whip-lash braiding machine	P. L. Slayton	New York, N. Y	Jan. 7, 1868	73, 131
Whip-lock	F. M. Gifford	Erie, Pa	Mar. 10, 1868	75, 409
Whip-making clamp	J. P. Luther and S. K. Buck	Berlin, Wis	July 5, 1870	104, 970
Whip-mounting	J. R. Gillett	Westfield, Mass	Mar. 16, 1869	87, 836
Whip, Percussion-pistol	J. Shaw	Philadelphia, Pa	Mar. 17, 1834	......

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Whip-rack	R. J. Anderson	New York, N. Y	Apr. 18, 1871	113,719
Whip-rack	J. A. Marshall	Mechanicsburgh, Pa	Dec. 31, 1867	72,875
Whip-rack	J. M. Mitchell	Cincinnati, Ohio	May 6, 1873	138,676
Whip-rack	E. Richmond	Brooklyn, N. Y	Oct. 2, 1866	58,480
Whip-rack	E. Richmond	Brooklyn, N. Y	Apr. 30, 1867	64,365
Whip-rack	C. A. Smith	Philadelphia, Pa	Dec. 10, 1867	71,918
Whip-rack	E. P. Willets	North Hempstead, N. Y	May 7, 1867	64,610
Whip-rolling machine	H. Axtell	Huntington, Mass	Nov. 5, 1867	70,501
Whip-rolling machine	J. P. Luther	Berlin, Wis	Sept. 3, 1867	68,762
Whip-socket	F. Adams	Middlebury, Ohio	Dec. 5, 1871	121,568
Whip-socket	W. R. Allen	Stockton, N. J	June 6, 1871	115,556
Whip-socket	S. W. Beach	Ypsilanti, Mich	Apr. 23, 1872	126,008
Whip-socket	S. W. Beach	Ypsilanti, Mich	July 30, 1872	130,006
Whip-socket	L. D. Benner	Boston, Mass	Apr. 15, 1873	137,880
Whip-socket	W. Bloodgood	New York, N. Y	Apr. 2, 1872	125,258
Whip-socket	J. F. Brewer and E. E. Stow	Plantsville, Conn	Apr. 18, 1865	47,277
Whip-socket	J. A. Caldwell and C. S. Bugbee	Springfield, Mass	Apr. 27, 1869	89,465
Whip-socket	E. Chamberlin	Lansingburgh, N. Y	Apr. 26, 1870	102,221
Whip-socket	E. Chamberlin	Lansingburgh, N. Y	Sept. 6, 1870	106,998
Whip-socket	C. Christian	Sheboygan, Wis	July 28, 1868	80,389
Whip-socket	L. C. Clark	Plantsville, Conn	Feb. 20, 1872	123,769
Whip-socket	J. W. Coe and D. Merritt	Williamsburgh, N. Y	Mar. 4, 1873	136,417
Whip-socket	G. P. Cole	Hudson, Mich	Feb. 2, 1869	86,507
Whip-socket	H. W. Comstock	Columbus, Ohio	June 18, 1872	128,019
Whip-socket	G. F. De Vine	Hamilton, Canada	Mar. 26, 1872	124,889
Whip-socket	J. W. H. Doubler	Alden, N. Y	Oct. 28, 1873	144,072
Whip-socket	J. W. H. Doubler	Alden, N. Y	Oct. 28, 1873	144,073
Whip-socket	M. Flanigan	Detroit, Mich	May 21, 1872	127,040
Whip-socket	C. A. Flesche	New Haven, Conn	May 21, 1872	127,135
Whip-socket	G. H. Gregory	North Wilton, Conn	May 4, 1869	89,576
Whip-socket	S. C. Hamlin	Ypsilanti, Mich	May 14, 1872	126,697
Whip-socket	S. C. Hamlin	Ypsilanti, Mich	Aug. 20, 1872	130,714
Whip-socket	J. Heberling	Mount Pleasant, Ohio	Oct. 31, 1871	120,381
Whip-socket	J. Heberling	Mount Pleasant, Ohio	Oct. 28, 1873	144,093
Whip-socket	W. S. Hill	Manchester, N. H	Sept. 28, 1869	95,228
Whip-socket	G. H. Jewett	Saline, Mich	Mar. 11, 1873	136,732
Whip-socket	G. W. Johnson	Fenton, Mich	Dec. 31, 1872	134,431
Whip-socket	J. Julien	Christiansburgh, Ohio	Oct. 20, 1868	83,287
Whip-socket	C. P. Kimball	Portland, Me	Dec. 21, 1869	98,070
Whip-socket	J. Lake	Haydenville, Mass	Mar. 7, 1865	46,680
Whip-socket	C. Lang	Ypsilanti, Mich	Sept. 2, 1873	142,346
Whip-socket	W. H. Lyman	Newark, N. J	Apr. 15, 1856	14,669
Whip-socket	C. B. Morehouse	New Castle, Ind	Aug. 16, 1864	43,858
Whip-socket	C. B. Morehouse	New Castle, Ind	Feb. 6, 1866	52,439
Whip-socket	F. B. Munroe	Malden, Mass	Oct. 7, 1873	143,417
Whip-socket	J. Nellis	Ypsilanti, Mich	May 16, 1871	114,845
Whip-socket	L. J. Parsons	New Bedford, Mass	Sept. 1, 1868	81,675
Whip-socket	L. J. Parsons	New Bedford, Mass	Oct. 20, 1868	83,203
Whip-socket	G. M. Peters	Columbus, Ohio	Dec. 19, 1871	121,959
Whip-socket	H. Sayler	Saint Paris, Ohio	Oct. 30, 1866	59,278
Whip-socket	E. W. Scott	Wauregan, Conn	Nov. 5, 1867	70,627
Whip-socket	A. Searls	Newark, N. J	May 20, 1873	139,026
Whip-socket	F. Selle	Detroit, Mich	Sept. 12, 1871	118,820
Whip-socket	J. Steger	New York, N. Y	Feb. 26, 1867	62,506
Whip-socket	J. Thornton and E. G. Latta	Genesee, N. Y	Oct. 15, 1872	131,335
Whip-socket	J. Twamley	New York, N. Y	Nov. 9, 1869	96,745
Whip-socket	T. Weaver	Harrisburgh, Pa	Aug. 28, 1866	57,603
Whip-socket	T. Weaver	Harrisburgh, Pa	July 30, 1867	67,237
Whip-socket	A. M. Whipple	North Adams, Mass	July 12, 1864	43,540
Whip-socket	J. H. Young	Newburgh, N. Y	June 17, 1873	139,989
Whip-socket and rein-holder	J. R. Finney	Youngstown, Ohio	Mar. 29, 1870	101,247
Whip-socket and rein-holder, Combined	J. R. Finney	Youngstown, Ohio	Mar. 16, 1869	87,921
Whip-socket attachment	R. Dods	Southington, (Milldale Post-Office.) Conn.	June 3, 1873	139,498
Whip-socket clasp	A. Worden	Ypsilanti, Mich	Sept. 27, 1870	107,845
Whip-socket fastener	S. W. Beach	Ypsilanti, Mich	July 30, 1872	130,007
Whip-socket fastener	W. W. Richardson	Ypsilanti, Mich	Aug. 19, 1873	141,952
Whip-socket fastener	O. W. Swift	New Haven, Conn	Aug. 17, 1869	93,766
Whip-socket fastening	H. W. Catlin	Burlington, Vt	Feb. 7, 1865	46,215
Whip-socket fastening	E. Chamberlin	Lansingburgh, N. Y	Aug. 23, 1864	43,896
Whip-socket fastening	W. W. Richardson	Ypsilanti, Mich	Aug. 19, 1873	141,953
Whip-socket fastening	B. N. Shelley	Newark, N. J	Dec. 1, 1868	84,513
Whip-socket, India-rubber	L. Elliott, jr	New Haven, Conn	Feb. 19, 1867	62,261
Whip-socket, India-rubber	C. Goodyear, jr	New York, N. Y	June 16, 1863	38,807
Whip-socket ring	J. J. Hillman	Boston, Mass	July 19, 1870	105,574
Whip-sockets, Mode of attaching	J. W. Kelley	Cleveland, Ohio	Apr. 21, 1868	77,049
Whip-sockets to carriages, Securing	F. Wood	Bridgeport, Conn	Sept. 24, 1867	69,291
Whip-sockets to dash-boards, Clasp for securing	Z. A. F. Lefébere and J. H. Davis.	Plattsburgh, N. Y	Feb. 22, 1870	100,046
Whip-stock	H. W. Avery	Westfield, Mass	Sept. 26, 1871	119,296
Whip-stock	J. J. Bohler	Westfield, Mass	Mar. 21, 1871	112,891
Whip-stock	L. Heywood	Gardner, Mass	Jan. 14, 1873	134,802
Whip-stock	L. Hull	Charlestown, Mass	Jan. 8, 1867	61,070
Whip-stock	W. H. Milliken	Baltimore, Md	Dec. 19, 1871	121,954
Whip-stocks, Mode of constructing	D. C. Hull	Westfield, Mass	Nov. 12, 1872	132,9[illegible]9
Whip-tip	C. R. Shelton	New Haven, Conn	Feb. 11, 1868	74,435
Whips, Clamp for suspending	A. C. Mason	Boston, Mass	July 2, 1867	66,367
Whips, Finishing raw-hide	C. Baeder	Philadelphia, Pa	Dec. 28, 1846	4,911
Whips from India rubber, Manufacture of	L. Hull	Charlestown, Mass	Aug. 25, 1868	81,507
Whips, Machine for polishing raw-hide	C. Baeder	New York, N. Y	May 21, 1850	7,373
Whips, Machine for polishing raw-hide	E. Blattner	Philadelphia, Pa	June 23, 1857	17,617
Whips, Manufacture of	G. P. Overin	New York, N. Y	May 7, 1872	126,411
Whips, Manufacture of raw-hide	T. J. Barnes	Lowell, Mass	Aug. 6, 1850	7,542
Whips, Method of covering	V. W. Crowsen	Westfield, Mass	June 21, 1870	104,433
Whips, Method of covering	G. King	Westfield, Mass	June 18, 1867	65,917
Whips, Method of holding	J. Gibson, jr	Albany, N. Y	Sept. 3, 1867	68,360
Whips, Method of manufacturing raw-hide	C. Baeder	Brooklyn, N. Y	Apr. 28, 1857	17,133
Whips, Plaiting-machine for covering	S. Halladay	Westfield, Mass	Apr. 4, 1838	672

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Invention.	Inventor.	Residence.	Date.	No.
Whips, Preparing and making twisted whalebone	J. Reeve	Newburgh, N. Y	Apr. 25, 1808	......
Whips, Process of covering	A. C. Rand	Westfield, Mass	May 19, 1868	78,129
Whips, Repairing	C. R. Shelton	New Haven, Conn	Dec. 15, 1868	85,032
Whips, Safety-socket for	W. D. Putnam	Chicago, Ill	May 24, 1870	103,368
Whips, umbrellas, billiard-cues, &c., Safety-socket for.	J. W. Whiteman	Christiana, Del	May 3, 1870	102,635
Whirligig	W. H. Lansing	Troy, N. Y	May 28, 1872	127,174
Whisky and other alcoholic spirits	J. C. Crossman and O. Marland	Boston, Mass	Dec. 14, 1869	97,889
Whisky and other alcoholic spirits, Apparatus for purifying.	L. A. De Lime	Saint Louis, Mo	Aug. 3, 1869	93,286
Whisky and other spirits, Treating	O. Marland	Boston, Mass	Jan. 11, 1870	98,784
Whisky, Apparatus for manufacturing	H. Vaughn, T. Chadwell, E. H. Childress, and G. A. Webber.	Nashville, Tenn	July 14, 1868	79,926
Whisky, &c., Apparatus for purifying and deodorizing.	E. F. Prentiss and C. C. Parsons.	Philadelphia, Pa., and Boston, Mass.	July 31, 1866	56,797
Whisky, Apparatus for purifying and deodorizing	E. F. Prentiss and R. A. Robertson.	Philadelphia, Pa	July 31, 1866	56,864
Whisky, Flavoring	S. Gross	Dover Township, Pa	May 9, 1871	114,552
Whisky, Making	S. Smith	Genesee, N. Y	May 23, 1815	......
Whisky, Process for purifying and deodorizing	E. F. Prentiss and R. A. Robertson.	Philadelphia, Pa	July 31, 1866	56,863
Whistle	P., J., and F. Slevin	New York, N. Y	Apr. 28, 1868	77,328
Whistle, Air	C. H. Parshall	Detroit, Mich	Jan. 21, 1868	73,639
Whistle, Alarm	P. Killin	Mount Healthy, Ohio	May 22, 1866	54,922
Whistle, Alarm	N. D. Lamb	Norwich, Conn	Oct. 8, 1861	33,437
Whistle, Alarm	W. J. McLea	Buffalo, N. Y	July 30, 1867	67,329
Whistle and bird-call	S. McClain	Philadelphia, Pa	Feb. 5, 1867	61,846
Whistle, Atmospheric alarm	S. G. Cabell	Quincy, Ill	July 9, 1867	66,459
Whistle drain-valve device, Steam	T. Windell and J. H. Dorst	New Albany, Ind	Jan. 26, 1869	86,195
Whistle for steam and other engines	J. Murray	New York, N. Y	Dec. 18, 1866	60,541
Whistle for steam-engines	J. Murray	New York, N. Y	Oct. 16, 1866	58,875
Whistle, Locomotive automatic steam	J. Harrison, jr	Milwaukee, Wis	Apr. 1, 1856	14,562
Whistle, Signal	T. C. Banks	New York, N. Y	Sept. 15, 1863	39,873
Whistle, Signal	T. C. Banks	New York, N. Y	Mar. 29, 1864	42,137
Whistle, Signal	P. S. Burditt and O. Preston	Haskinville, N. Y	May 7, 1867	64,483
Whistle, Steam	W. C. Cooper	Philadelphia, Pa	Nov. 22, 1870	109,388
Whistle, Steam	A. Fitts	Worcester, Mass	July 25, 1865	48,921
Whistle, Steam	O. Kromer	Sandusky, Ohio	July 29, 1873	141,280
Whistle, Steam	O. Kromer	Sandusky, Ohio	Aug. 26, 1873	142,166
Whistle, Steam	C. Kupferle and J. H. Ward	Cincinnati, Ohio	Mar. 21, 1865	46,910
Whistle, Steam	L. E. Lincoln	Lowell, Mass	Aug. 30, 1864	44,006
Whistle, Steam	G. S. Nevius	Bushnell, Ill	Sept. 10, 1872	131,176
Whistle, Steam	T. Shaw	Philadelphia, Pa	May 14, 1867	64,716
Whistle, Steam	S. W. Warren	Brooklyn, N. Y	June 23, 1857	17,656
Whistle, Steam	B. Weinman	Cincinnati, Ohio	Nov. 17, 1868	84,239
Whistle, Steam and air	T. Brown	Chicago, Ill	Oct. 19, 1869	95,981
Whistles for fog-signals, Mode of sounding	R. Porter	Washington, D. C	June 10, 1856	15,085
Whistles, Mechanism for operating steam or air signal.	M. G. Farmer	Salem, Mass	May 3, 1859	23,883
Whistles, Mold for casting	E. Clator	Wheeling, W. Va	June 18, 1872	127,956
Whistles, Steam and other	A. S. Bird	Buffalo, N. Y	June 22, 1869	91,704
Whistles with boilers, Combining steam	M. W. Baldwin	Philadelphia, Pa	May 28, 1846	4,541
White and whiting, Manufacture of Paris	W. W. Chipman	New York, N. Y	Dec. 4, 1866	60,142
White-lead can	A. Randol	Allegheny City, Pa	May 14, 1867	64,705
Whiting and Paris white, Manufacture of	W. W. Chipman	Brooklyn, N. Y	Mar. 24, 1868	75,861
Whiting, Method of utilizing waste	H. W. Gray	Camden, N. J	Aug. 22, 1865	49,518
Whitewashing-apparatus	M. H. Wiley	Bucksport, Me	May 15, 1866	54,802
Whitewashing, Composition for	J. Baker	Ijamsville, Md	Sept. 7, 1869	94,465
Wick-mover	E. Beeman	Owego, N. Y	Oct. 13, 1863	40,234
Wick-raiser	J. G. Hallas and W. N. Weeden	Waterbury, Conn	Sept. 23, 1873	143,143
Wick-raiser	J. Straszer	Saint Louis, Mo	Aug. 12, 1873	141,673
Wick-regulator	E. J. Toof	Fort Madison, Iowa	Mar. 10, 1868	75,318
Wick-scraper	C. W. Cahoon	Portland, Me	Apr. 11, 1865	47,254
Wick-trimmer	W. R. Brooks	Boston, Mass	Mar. 27, 1866	53,403
Wick-trimmer	C. L. Topliff	New York, N. Y	July 11, 1865	48,743
Wick-trimmer	A. R. Turner	Malden, Mass	Apr. 2, 1861	31,915
Wick-tube	W. H. Smith	New York, N. Y	Mar. 29, 1864	42,123
Wick-tubes in lamp-caps, Method of fastening	W. W. Wade	Long Meadow, Mass	June 29, 1858	20,748
Wicks incombustible, Mode of rendering	E. P. Furlong and E. M. Lang	Westbrook, Me	Apr. 4, 1865	47,100
Wicks, Mode of making	A. Meucci	Richmond, N. Y	Feb. 28, 1865	46,607
Wig	F. Deville	Baltimore, Md	Sept. 17, 1842	2,781
Wig	W. Dowell	Philadelphia, Pa	Dec. 12, 1842	2,883
Wig	D. C. Warner	Wilkesbarre, Pa	Apr. 15, 1856	14,683
Wig, Metallic	F. Bourquet	New York, N. Y	May 8, 1840	1,585
Wigs, Manufacture of	T. C. Weildon	Hartford, Conn	July 19, 1853	9,868
Wigs, Manufacturing	C. Bourgard	New York, N. Y	Jan. 25, 1853	9,554
Willow-peeler	J. M. Wood	Seneca, N. Y	Aug. 7, 1860	29,535
Willow-peeling machine	G. S. Anderson	Jeffersonville, Ind	Oct. 16, 1866	58,747
Willow-peeling machine	G. J. Colby	Waterbury, Vt	Oct. 12, 1858	21,740
Willow-peeling machine	M. Easterbrook, jr., and E. A. Bronson.	Geneva, N. Y	Oct. 13, 1863	40,252
Willow-peeling machine	M. Easterbrook and J. M. Wood.	Geneva, N. Y	Jan. 21, 1862	34,201
Willow-peeling machine	G. Healey	East Woburn, Mass	Mar. 5, 1867	62,629
Willow-stripping machine	J. Swan	Paterson, N. J	Oct. 29, 1867	70,288
Willowers, Feed-motion of	F. A. Calvert	Lowell, Mass	Apr. 19, 1853	9,670
Winch	R. D. Rogers	Cape Elizabeth, Me	Sept. 10, 1867	68,792
Winch, Direct and counter motion	C. Perley	New York, N. Y	May 29, 1849	6,480
Winch for ship-board, Hoisting	J. Bryant	Brooklyn, N. Y	Apr. 7, 1857	16,965
Winch or capstan	J. L. Heald	Boston, Mass	June 4, 1867	65,486
Winch, Safety	W. Riker	Penn Yan, N. Y	Feb. 2, 1858	19,263
Winch, Ship's	T. G. Boone	Brooklyn, N. Y	Oct. 21, 1851	8,442
Winch, Ship's	P. H. Jackson	New York, N. Y	Aug. 7, 1855	13,393
Wind and tide alarm	G. M. Hoffman and P. Hermas, jr.	Rahway, N. J	Oct. 26, 1869	96,235
Wind and water mill	M. Pennock	Kennett's Square, Pa	Feb. 18, 1812	......
Wind and water wheel	A. Nash	Addison, Me	Apr. 27, 1832	......
Wind and water wheel	J. Reynolds	Dutchess, N. Y	June 24, 1815	......

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Invention.	Inventor.	Residence.	Date.	No.
Wind-elevator for grain	G. Morgan	Newport, N. H	Nov. 3, 1868	83, 782
Wind-engine	H. W. Bowen	Providence, R. I	July 5, 1859	24, 611
Wind instruments, Mouth-piece for	C. L. Meech	Preston, Conn	Oct. 21, 1851	8, 449
Wind or water mill, Double-centered	B. Dearborn		Apr. 30, 1799	
Wind or water wheel	W. L. Bakewell	New Haven, Conn	Aug. 18, 1809	
Wind or water wheel for propelling machinery, mills, &c.	J. Staples, jr		Feb. 17, 1804	
Wind-power	M. Depue	Mattoon, Ill	June 5, 1866	55, 250
Wind-power applied to mills, factories, &c	J. Y. Van Tuyl	Rahway, N. J	Sept. 28, 1831	
Wind, water, and tide mill	P. Quidor, jr	New York	Mar. 21, 1822	
Wind-wheel	J. Beach	De Ruyter, N. Y	Jan. 5, 1869	85, 508
Wind-wheel	W. H. Benson	Wetumpka, Ala	Jan. 25, 1859	22, 696
Wind-wheel	C. C. Bomberger	West Carlisle, Ohio	Mar. 13, 1860	27, 423
Wind-wheel	P. Brand, J. Barrows, and A. Armstrong.	Jacksonville, Ill	Dec. 23, 1873	145, 782
Wind-wheel	J. T. Braun	Randolph Centre, Wis	June 16, 1868	78, 921
Wind-wheel	H. C. Briggs	Fisherville, N. H	July 20, 1869	92, 697
Wind-wheel	A. P. Brown	Syracuse, N. Y	Mar. 9, 1869	87, 628
Wind-wheel	B. F. Burnett and T. Vandevort.	Phelps, N. Y	Feb. 6, 1866	52, 383
Wind-wheel	J. P. Burnham	Chicago, Ill	Apr. 5, 1864	42, 164
Wind-wheel	A. L. Butterfield	West Dummerston, Vt	Jan. 18, 1859	22, 623
Wind-wheel	H. J. Campbell	Virginia, Ill	June 4, 1872	127, 460
Wind-wheel	W. C. Chambers and T. S. Hargraves.	Brooklyn, N. Y	Aug. 26, 1856	15, 599
Wind-wheel	C. P. Chapman	Madison, Wis	Nov. 10, 1868	83, 928
Wind-wheel	J. C. Colman and G. Strayer	Clinton, Kans	Aug. 2, 1870	105, 915
Wind-wheel	H. O. Cook	London, England	Aug. 15, 1865	49, 485
Wind-wheel	W. H. Derrick	Stockton, Cal	May 25, 1858	20, 336
Wind-wheel	J. C. Fay	New York, N. Y	Nov. 20, 1866	59, 828
Wind-wheel	T. B. Field	Nantucket, Mass	Aug. 2, 1864	43, 675
Wind-wheel	L. Fischer	Sonora, Cal	Dec. 7, 1869	97, 492
Wind-wheel	F. G. Fowler	Mechanicsburgh, Ill	Aug. 16, 1864	43, 843
Wind-wheel	H. Glover	Oxford, Mass	Oct. 7, 1862	36, 610
Wind-wheel	L. M. Godfrey	Colon, Mich	Nov. 16, 1869	96, 796
Wind-wheel	B. H. Goodale	Newburyport, Mass	Sept. 22, 1868	82, 307
Wind-wheel	W. L. Gregory	Theresa, N. Y	June 7, 1859	24, 298
Wind-wheel	E. J. Hall	Indianapolis, Ind	Mar. 24, 1868	75, 752
Wind-wheel	D. Halladay	Batavia, Ill	May 6, 1873	138, 648
Wind-wheel	A. M. Hausen	Stockton, Cal	Oct. 31, 1865	50, 705
Wind-wheel	P. Heald	Troy, Me	May 31, 1870	103, 742
Wind-wheel	J. O. Heyworth	Chicago, Ill	Sept. 13, 1870	107, 372
Wind-wheel	J. O. Heyworth and H. E. Fessel.	Chicago, Ill	Oct. 25, 1870	108, 593
Wind-wheel	J. Hidden	Lawrence, Kans	Feb. 18, 1868	74, 687
Wind-wheel	W. Hopper	Onion Grove, Iowa	May 13, 1862	35, 236
Wind-wheel	J. J. Hosey	Cape Girardeau, Mo	June 11, 1872	127, 771
Wind-wheel	E. F. Hough	Martinez, Cal	Nov. 7, 1865	50, 825
Wind-wheel	J. A. Hubbard	West Moulton, Me	Sept. 19, 1865	50, 003
Wind-wheel	M. Isaacs	Philadelphia, Pa	May 28, 1818	
Wind-wheel	J. B. Johnson	San Francisco, Cal	May 25, 1858	20, 350
Wind-wheel	C. W. Kline	Beloit, Wis	Dec. 2, 1873	145, 214
Wind-wheel	J. W. Koehler and F. Reichardt	Decatur, Ill	Oct. 14, 1862	36, 655
Wind-wheel	T. S. Lines	Newcastle, Ind	June 15, 1869	91, 457
Wind-wheel	J. Maag	Milwaukee, Wis	May 28, 1861	32, 428
Wind-wheel	G. Mabie	Dixon, Ill	Nov. 28, 1871	121, 392
Wind-wheel	G. Mabie and T. C. Little	Dixon, Ill	Apr. 2, 1872	125, 313
Wind-wheel	C. Mahler	San Francisco, Cal	Mar. 8, 1870	100, 538
Wind-wheel	A. I. Maxwell	Morrison, Ill	Sept. 7, 1869	94, 624
Wind-wheel	H. P. McCleave	Tomales, Cal	Dec. 7, 1869	97, 665
Wind-wheel	J. J. McDill	Des Moines, Iowa	Nov. 5, 1872	132, 768
Wind-wheel	J. L. McPherson and J. S. Harbison.	Sacramento, Cal	Mar. 26, 1861	31, 817
Wind-wheel	G. Metcalf	Somonauk, Ill	Aug. 26, 1873	142, 256
Wind-wheel	E. W. Mills	Syracuse, N. Y	Oct. 15, 1867	69, 828
Wind-wheel	J. Mitchell	Woodsfield, Ohio	May 26, 1857	17, 384
Wind-wheel	N. P. Mix	Columbus, Ohio	May 28, 1872	127, 261
Wind-wheel	J. H. Morse	Peoria, Ill	Oct. 30, 1866	59, 249
Wind-wheel	A. Murray	Athens, Pa	July 8, 1828	
Wind-wheel	C. Nickerson	Chenoa, Ill	July 24, 1866	56, 598
Wind-wheel	C. W. Palmer	Riga, N. Y	Mar. 30, 1869	88, 407
Wind-wheel	F. Peabody	Salem, Mass	Apr. 1, 1856	14, 572
Wind-wheel	W. Peck	Rockford, Ill	May 25, 1869	90, 385
Wind-wheel	W. M. Piper	Blue Earth City, Minn	Sept. 7, 1869	94, 641
Wind-wheel	A. Raymond	Waupun, Wis	May 20, 1873	139, 189
Wind-wheel	G. and A. Raymond	Waupun, Wis	July 30, 1872	130, 071
Wind-wheel	L. Reese	Rolling Prairie, Ind	Mar. 28, 1865	47, 039
Wind-wheel	G. H. Reister	Washington, Iowa	Nov. 29, 1864	45, 273
Wind-wheel	G. H. Reister	Washington, Iowa	June 29, 1869	91, 868
Wind-wheel	J. R. Remington	Aberfoil, Ala	June 18, 1842	2, 675
Wind-wheel	J. S. Risdon	Genoa, Ill	Oct. 29, 1872	132, 602
Wind-wheel	G. A. Roland	Wasioja, Minn	Sept. 11, 1866	57, 973
Wind-wheel	W. N. Santee	Dixon, Ill	Aug. 30, 1864	44, 018
Wind-wheel	N. and D. Sheplar	Murrayville, Ill	Sept. 23, 1873	143, 100
Wind-wheel	E. S. Smith	Macomb, Ill	Feb. 1, 1870	99, 363
Wind-wheel	R. L. Smith	Stockport, N. Y	Dec. 20, 1864	45, 530
Wind-wheel	C. H. St. Clair	New Orleans, La	June 28, 1870	104, 918
Wind-wheel	I. H. Sutton	Coon Rapids, Iowa	Nov. 9, 1869	96, 631
Wind-wheel	B. C. Terry	Key Port, N. J	Sept. 20, 1870	107, 563
Wind-wheel	H. C. Thrall	Springfield, Mass	Feb. 20, 1866	52, 773
Wind-wheel	J. Tomlinson	Racine, Wis	Aug. 25, 1863	39, 600
Wind-wheel	A. Trim	Iconium, Iowa	June 7, 1864	43, 049
Wind-wheel	J. Troop	Erie, Pa.	May 31, 1864	42, 973
Wind-wheel	N. Trull	Shaker Village, N. H	Oct. 4, 1864	44, 564
Wind-wheel	W. I. Tustin	San Francisco, Cal	June 11, 1872	127, 717
Wind-wheel	W. B. Wadsworth	Cleveland, Ohio	June 9, 1863	38, 851
Wind-wheel	R. Waite	Blue Earth City, Minn	Nov. 17, 1868	84, 237
Wind-wheel	J. C. Wate	Wilton Junction, Iowa	July 10, 1866	56, 297

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Wind-wheel	H. S. Wentworth	Norvell, Mich	Nov. 3, 1863	40, 525
Wind-wheel	L. H. Wheeler	Beloit, Wis	Sept. 10, 1867	68, 674
Wind-wheel	J. Winnek	Lake Mills, Wis	June 25, 1872	128, 346
Wind-wheel	H. Woodruff	Sandwich, Ill	May 2, 1871	114, 381
Wind-wheel	M. W. Woodruff	Belle Isle, N. Y	Sept. 3, 1867	68, 404
Wind-wheel	W. Zimmerman	Quincy, Ill	Oct. 6, 1857	18, 368
Wind-wheel and gearing	G. S. Oberdorff	Lower Windsor, Pa	June 11, 1872	127, 704
Wind-wheel brake	D. W. Hunt	San Francisco, Cal	Aug. 19, 1862	36, 217
Wind-wheel, Horizontal	S. Deming	Brunswick, Ohio	Mar. 8, 1833	......
Wind-wheel, Horizontal	D. Dennett	Centreville, La	Nov. 13, 1844	3, 822
Wind-wheel, Horizontal	J. A. Vaughn	Downieville, Cal	Feb. 15, 1870	99, 980
Wind-wheel, Horizontal bellows	D. Van Voorhis	Long Island, N. Y	Mar. 21, 1811	......
Wind-wheel power	I. Straub	Kenton County, Ky	May 6, 1873	138, 593
Wind-wheel regulator, Automatic	S. Dunkley	Carrollton, Mo	Jan. 13, 1857	16, 378
Wind-wheel, Self-adjusting	E. A. Tuttle	Brooklyn, N. Y	Feb. 10, 1857	16, 616
Wind-wheel, Self-regulating	A. Lempche	Pleasant Mount, Pa	Mar. 18, 1856	14, 459
Wind-wheel, Self-regulating	F. Peabody	Salem, Mass	June 24, 1856	15, 193
Wind-wheel, Self-regulating	A. P. Wilson	Solon, Ill	Mar. 10, 1857	16, 818
Wind-wheels, Arrangement and combination of machinery for regulating velocity of.	J. Burnite	Puseyville, Pa	Dec. 18, 1855	13, 969
Wind-wheels in self-revolving adjusting-frame, Method of suspending.	J. De Sendzimir	South Oyster Bay, N. Y	Mar. 3, 1857	16, 723
Wind-wheels, Method of furling sails of	G. W. Shaw	Thompson, Conn	Feb. 16, 1858	19, 383
Wind-wheels, Method of regulating	M. S. Johnson	Palatine, Ill	May 20, 1856	14, 918
Wind-wheels, Method of regulating	W. D. Walker	Livonia, N. Y	Feb. 28, 1860	27, 325
Wind-wheels, Method of regulating velocity of	F. Peabody	Salem, Mass	Jan. 22, 1856	14, 143
Wind-wheels, Method of regulating velocity of	F. Peabody	Salem, Mass	Sept. 15, 1857	18, 210
Wind-wheels, Method of regulating velocity of	A. W. Wood	Milwaukee, Wis	Mar. 24, 1857	16, 895
Wind-wheels, Method of regulating velocity and furling sails of.	F. W. Witting	Twelve Mile Colett's Gin, Tex.	Mar. 24, 1857	16, 893
Wind-wheels, Vane for	J. M. Clock	Atlanticville, N. Y	Oct. 20, 1857	18, 440
Winding and spooling machinery, Traverse motion for.	J. E. Atwood	Mansfield, Conn	Nov. 29, 1870	109, 708
Winding-apparatus for inclined planes	J. E. Wootten	Philadelphia, Pa	Aug. 21, 1866	57, 428
Winding button-hole twist, &c., Machine for	J. Lovatt	Tarrytown, N. Y	Mar. 24, 1868	75, 938
Winding-frame stop-motion	T. Unsworth and E. Whalley	Manchester, England	Mar. 26, 1872	124, 989
Winding-frames, Cone-tube for	J. McCrone	Thompsonville, Conn	Mar. 18, 1856	14, 463
Winding gimp, silk, or cord	A. Brooks	South Scituate, Mass	June 20, 1836	......
Winding laps, Machinery for	J. L. Cheney	Lowell, Mass	May 15, 1860	28, 256
Winding-machine	S. Eccles	Philadelphia, Pa	Nov. 22, 1870	109, 502
Winding-machine	F. C. and T. Ehrenberg	New York, N. Y	Jan. 30, 1872	123, 251
Winding-machine guide	D. W. C. Hill	Windham, Conn	Jan. 14, 1873	134, 888
Winding-machine guide and cleaner	J. Fullan	New York, N. Y	Jan. 2, 1872	122, 450
Winding-machine quill	F. Jones	New York	May 23, 1821	......
Winding-machine thread-guide	D. M. Church	Holyoke, Mass	Mar. 21, 1871	112, 901
Winding thread on bobbins, Machine for	L. J. Knowles	Warren, Mass	Nov. 23, 1869	97, 095
Winding up lines, twist, or cord, Machinery for	B. Boardman and G. C. Sweett	Norwich, Conn	Apr. 10, 1855	12, 668
Winding woolen rovings, Machine for	J. A. Chapman	Poquetanuck, Conn	Dec. 18, 1860	30, 958
Windlass	S. L. Avery	Norwich, N. Y	May 8, 1860	28, 141
Windlass	S. V. Badger and R. Walker	Portsmouth, N. H	June 17, 1834	......
Windlass	M. Bockman	Brooklyn, N. Y	Sept. 20, 1864	44, 276
Windlass	N. B. Brown	Antwerp, N. Y	Aug. 25, 1868	81, 470
Windlass	M. Bryant	Northport, N. Y	July 30, 1872	129, 927
Windlass	E. Buell	Clinton, Conn	Dec. 26, 1871	122, 151
Windlass	F. G. Cameron	New York	June 12, 1838	776
Windlass	D. N. B. Coffin, jr	Boston, Mass	Jan. 7, 1873	134, 517
Windlass	W. P. Davis	Honeoye Falls, N. Y	Sept. 19, 1871	119, 126
Windlass	A. Day	Detroit, Mich	Sept. 22, 1868	82, 295
Windlass	D. M. Edwards and J. Horner	New York, N. Y., and New Brunswick, N. J.	May 7, 1861	32, 262
Windlass	R. H. Emerson	Fond du Lac, Wis	Apr. 23, 1867	64, 005
Windlass	P. Evarts	Madison, Conn	Feb. 18, 1868	74, 524
Windlass	R. Evarts	Madison, Conn	May 30, 1838	756
Windlass	M. G. Farmer	Salem, Mass	Aug. 9, 1859	25, 008
Windlass	W. N. Gesner	Fair Haven, Conn	Aug. 14, 1855	13, 429
Windlass	W. P. Goolman	Dublin, Ind	Apr. 19, 1859	23, 676
Windlass	D. D. Hammond	Duxbury, Mass	June 1, 1858	20, 427
Windlass	W. H. Harfield	London, England	Aug. 17, 1869	93, 878
Windlass	W. H. Harfield	London, England	Dec. 23, 1873	145, 866
Windlass	J. Harvey	Carmel, Me	June 15, 1858	20, 555
Windlass	A. Hitchcock	New York, N. Y	July 26, 1870	105, 682
Windlass	O. P. Hix	Rockland, Me	July 18, 1871	117, 073
Windlass	G. W. Holmes	Bridgewater, Mass	Jan. 16, 1866	52, 045
Windlass	P. H. Jackson	New York, N. Y	Jan. 12, 1864	41, 222
Windlass	P. H. Jackson	New York, N. Y	June 20, 1865	48, 282
Windlass	J. H. Jackson and S. Eddy	New York and Brooklyn, N. Y.	Jan. 31, 1865	46, 110
Windlass	J. J. Kersey	Bearstown, Pa	July 28, 1863	39, 367
Windlass	D. Knowlton	Camden, Me	May 3, 1859	23, 847
Windlass	J. P. Manton	Providence, R. I	Mar. 30, 1858	19, 787
Windlass	W. C. McGill	Cincinnati, Ohio	Mar. 14, 1865	46, 811
Windlass	W. G. McIvor	Liverpool, England	Jan. 14, 1868	73, 360
Windlass	E. Murray	Paducah, Ky	Mar. 28, 1848	5, 494
Windlass	W. Newcomb	Baltimore, Md	Oct. 28, 1873	143, 993
Windlass	O. Nichols	Lowell, Mass	Jan. 9, 1855	12, 214
Windlass	D. P. Nickerson	Cleveland, Ohio	Aug. 6, 1867	67, 569
Windlass	W. Pennell	Brunswick, Me	June 29, 1829	......
Windlass	J. Reed	Marshfield, Mass	Feb. 15, 1859	22, 978
Windlass	O. Reeder	Baltimore, Md	Jan. 21, 1873	135, 009
Windlass	E. Reynolds	Mansfield, Conn	Jan. 5, 1864	41, 171
Windlass	H. Richards and C. F. Winsor	Boston, Mass	Nov. 28, 1854	12, 013
Windlass	N. Robbins, jr	Rockport, Mass	July 9, 1867	66, 634
Windlass	W. Rogers	Cleveland, Ohio	Feb. 27, 1872	124, 087
Windlass	A. Russell	Newburyport, Mass	Aug. 2, 1870	105, 988
Windlass	A. Russell	Newburyport, Mass	July 16, 1872	129, 497
Windlass	H. W. Sabin	Rushville, N. Y	Oct. 10, 1846	4, 810
Windlass	A. C. Semple	Cincinnati, Ohio	Jan. 27, 1832	8, 685
Windlass	S. N. Smith	New York, N. Y	Aug. 24, 1858	21, 280

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Invention.	Inventor.	Residence.	Date.	No.
Windlass	E. Stearns	Brooklyn, N. Y	June 21, 1864	43, 234
Windlass	J. Stone	Cleveland, Ohio	Oct. 28, 1862	36, 870
Windlass	L. L. Treman	Ithaca, N. Y	Jan. 7, 1868	73, 059
Windlass	E. and G. N. Waterbury	Stamford, Conn	Dec. 27, 1870	110, 521
Windlass	G. L. Woods	Newburyport, Mass	July 14, 1868	79, 885
Windlass, Adjustable	J. S. Brown	Schenectady, N. Y	Mar. 8, 1870	100, 594
Windlass and capstan	D. N. B. Coffin, jr	Boston, Mass	June 17, 1873	139, 872
Windlass and capstan	J. Galvin	Philadelphia, Pa	Nov. 6, 1810	....
Windlass and capstan, Screw	H. Heitman and J. Badican	Brooklyn and New York, N. Y.	Apr. 4, 1865	47, 104
Windlass and chain-stopper	W. D. Baker	Marshfield, Mass	July 2, 1867	66, 282
Windlass and gathering-hoop, Portable	G. M. Kaughan	Curdsville, Ky	Feb. 13, 1872	123, 716
Windlass, Capstan	D. N. B. Coffin, jr	Newton, Mass	Dec. 21, 1869	98, 032
Windlass, Capstan	Z. E. Coffin	Newton, Mass	Sept. 18, 1866	58, 069
Windlass, Capstan	S. P. Patten	New York, N. Y	Nov. 6, 1860	30, 607
Windlass-crank power	J. H. Fleming	Groton Township, Ohio	Nov. 26, 1867	71, 292
Windlass for boats	E. Huson	Ithaca, N. Y	Dec. 3, 1867	71, 762
Windlass for hoisting-machines	J. Rushworth	New York, N. Y	Feb. 25, 1873	136, 270
Windlass for making casks, Power	E. and B. Holmes	Buffalo, N. Y	Aug. 18, 1868	81, 274
Windlass for operating the center-board of vessels	J. C. and H. W. Hamilton	Washington, D. C	Feb. 14, 1865	46, 351
Windlass for tightening ship's standing rigging	J. G. Codmus	Port Richmond, N. Y	Apr. 4, 1865	47, 164
Windlass for weighing anchor	J. M. O'Brien	Brunswick, Me	Nov. 9, 1838	1, 003
Windlass for wells	F. H. Jones	Attica, N. Y	Apr. 16, 1867	63, 800
Windlass, Horse-power	L. and P. H. Dederick	Albany, N. Y	Aug. 12, 1862	36, 142
Windlass, Jigger	C. Perley	New York, N. Y	July 30, 1850	7, 532
Windlass-lever	F. A. Jameson and C. W. Ripley	Kingston, Mass	Aug. 27, 1867	68, 083
Windlass-lever power	P. Dickson	Jersey City, N. J	Apr. 24, 1866	54, 130
Windlass-lever press	T. Williams	Philadelphia, Pa	Aug. 31, 1810	....
Windlass, Operating ship's	N. Smith	Stonington, Conn	Mar. 24, 1857	16, 885
Windlass or drum for raising weights	E. Robinson	Boston, Mass	Feb. 28, 1842	2, 473
Windlass, Power	E. B. Requa	Jersey City, N. J	June 30, 1863	39, 068
Windlass, Ship's	S. Adams	Boston, Mass	Feb. 6, 1835	....
Windlass, Ship's	W. Carr	Bath, Me	Feb. 7, 1842	2, 449
Windlass, Ship's	J. Emerson	Worcester, Mass	May 17, 1855	12, 718
Windlass, Ship's	J. Emerson	Worcester, Mass	Aug. 28, 1855	13, 506
Windlass, Ship's	J. Emerson	Manchester, N. H	Dec. 16, 1862	37, 194
Windlass, Ship's	J. S. Getchell	Machias, Me	July 3, 1866	56, 034
Windlass, Ship's	W. Goodman	Saint John, New Brunswick	Oct. 9, 1866	58, 740
Windlass, Ship's	A. I. Gove	San Francisco, Cal	June 12, 1860	28, 716
Windlass, Ship's	A. Hammond	Boston, Mass	Oct. 6, 1843	3, 291
Windlass, Ship's	J. B. Holmes	New York, N. Y	Sept. 25, 1855	13, 612
Windlass, Ship's	S. Holmes, 2d	Kingston, Mass	Apr. 25, 1848	5, 527
Windlass, Ship's	P. H. Jackson	New York, N. Y	Dec. 16, 1856	16, 238
Windlass, Ship's	P. H. Jackson	New York, N. Y	Aug. 10, 1858	21, 134
Windlass, Ship's	P. H. Jackson	New York, N. Y	Aug. 14, 1866	57, 146
Windlass, Ship's	C. C. Jordeson	Montreal, Canada	Feb. 28, 1871	112, 148
Windlass, Ship's	S. Nicolson	Boston, Mass	Dec. 1, 1828	....
Windlass, Ship's	J. Peevy and A. Sanborn	Bangor, Me	June 23, 1857	17, 633
Windlass, Ship's	C. Perley	New York, N. Y	Mar. 21, 1848	5, 477
Windlass, Ship's	G. H. Remington, B. D. Thayer, and J. P. Manton.	Providence, R. I	Nov. 4, 1873	144, 227
Windlass, Ship's	E. B. Rich	South Boston, Mass	Dec. 14, 1869	97, 813
Windlass, Ship's	A. Russel and E. R. Walker	Newburyport, Mass	May 15, 1847	5, 115
Windlass, Ship's	D. L. Winsor	Duxbury, Mass	Dec. 12, 1854	12, 083
Windlass, Ship's or vessel's	H. Betts		Aug. 29, 1804	....
Windlass, Vertical	P. H. Jackson	New York, N. Y	Apr. 1, 1862	34, 834
Windlass, Vertical	P. H. Jackson	New York, N. Y	July 29, 1862	36, 006
Windlass, Vertical	C. Perley	New York, N. Y	May 5, 1863	38, 408
Windlass, Vertical	C. Perley	New York, N. Y	Mar. 13, 1866	53, 178
Windlass, Vertical ship's	C. Perley	New York, N. Y	Sept. 11, 1860	29, 990
Windlass, Vessel's	O. P. Hix	Rockland, Me	Jan. 16, 1872	122, 831
Windlass, Vessel's	H. Thompson	Rockland, Me	June 4, 1867	65, 450
Windlass, Well	T. J. Wrangham	Benson, Vt	Apr. 24, 1866	54, 242
Windlasses and capstans, Construction of chain	W. H. Hartfield	London, England	Aug. 5, 1862	36, 087
Windlasses and capstans, Method of working ship's	W. Holmes	Baltimore, Md	Mar. 23, 1842	2, 508
Windlasses, Device for operating	J. Edson	Boston, Mass	Mar. 29, 1864	42, 080
Windlasses, Machinery for operating pawl-cases of ship's.	C. Amazeen	New Castle, N. H	Nov. 4, 1856	16, 000
Windlasses, Device for operating ship's	G. Coffin	Boston, Mass	May 15, 1866	54, 688
Windlasses, Mechanism for operating ship's	B. Merritt and F. M. Gibson	Chelsea, Mass	July 1, 1862	35, 772
Windlasses, Method of fitting the heaving-sockets and heads of.	C. Perley	New York, N. Y	Nov. 13, 1849	6, 873
Windlasses when applied to hay-presses, &c., Method of operating.	P. Philip	Ghent, N. Y	July 12, 1859	24, 755
Windmill	S. M. Abbott	Wilmington, Ill	May 16, 1871	114, 899
Windmill	J. Q. and H. R. Adams	Marseilles, Ill	Sept. 23, 1873	143, 111
Windmill	M. J. Althouse	Waupun, Wis	July 2, 1872	128, 577
Windmill	E. A. Atwood and H. H. Bodwell.	San Francisco, Cal	Sept. 16, 1873	142, 885
Windmill	J. K. Babcock	Canandaigua, N. Y	Sept. 18, 1860	30, 038
Windmill	P. Bailey	Smyrna, Iowa	Apr. 4, 1871	113, 243
Windmill	J. Barron	Elizabeth City, Va	July 18, 1816	....
Windmill	J. Barton	Peru, Ill	Aug. 2, 1864	43, 663
Windmill	W. Bell		Nov. 25, 1803	....
Windmill	H. H. Bodwell and E. A. Atwood.	San Francisco, Cal	Aug. 26, 1873	142, 198
Windmill	A. T. Boon	Galesburgh, Ill	Sept. 2, 1873	142, 324
Windmill	A. P. Brown	Syracuse, N. Y	Apr. 26, 1870	102, 364
Windmill	N. Buck and F. A. Smith	Genoa, Ill	May 21, 1872	126, 871
Windmill	G. A. Carter	Princeton, Ill	Sept. 2, 1873	142, 436
Windmill	A. P. Champlin, J. Meeks, and H. C. Champlin.	Avoca, Ill	Oct. 22, 1872	132, 438
Windmill	M. T. and M. C. Chapman	Aurora, Ill	Dec. 9, 1873	145, 335
Windmill	F. G. Charles	Galesburgh, Ill	Sept. 17, 1872	131, 426
Windmill	E. Cleaver	North Wales, Pa	July 4, 1871	116, 553
Windmill	J. P. Clement	Grinnell, Iowa	Nov. 22, 1870	109, 496
Windmill	J. R. Clough	Godfrey, Ill	Dec. 1, 1868	84, 614
Windmill	W. Coburn	Gardiner, Me	June 2, 1826	....

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Invention.	Inventor.	Residence.	Date.	No.
Windmill	J. Cooper	Philadelphia, Pa	May 22, 1806	....
Windmill	M. Crossman and P. A. Spicer	Marshall, Mich	Oct. 17, 1871	119, 971
Windmill	M. Crossman and P. A. Spicer	Marshall, Mich	Oct. 17, 1871	119, 972
Windmill	E. Crump	Waterloo, Wis	Dec. 30, 1873	146, 049
Windmill	J. Curtis	Chicago, Ill	May 23, 1854	10, 959
Windmill	J. Cushman	Thomson, Ill	Dec. 12, 1871	121, 853
Windmill	J. B. Cushman	Thomson, Ill	Oct. 8, 1872	132, 060
Windmill	J. P. Davie and A. Morgan	Galveston County and Cedar Bayou, Tex.	Dec. 2, 1873	145, 158
Windmill	P. Davis	Fall River, Mass	Aug. 11, 1841	2, 215
Windmill	W. C. and P. B. Day	Mohawk, N. Y., and Shelby, Minn.	Mar. 10, 1868	75, 384
Windmill	A. De Witt	Brooklyn, N. Y	July 3, 1860	29, 034
Windmill	J. Dickerson	Sacramento, Cal	Dec. 6, 1859	26, 345
Windmill	E. F. Edwards	Leroy, Ill	Jan. 24, 1860	26, 899
Windmill	J. Erdle	West Bloomfield, N. Y	July 18, 1854	11, 324
Windmill	P. Etienne	New York	Nov. 14, 1820	....
Windmill	W. Evans	Dumfries, Va	July 12, 1839	1, 239
Windmill	B. Fenn	Hartford, Ohio	Jan. 1, 1856	14, 015
Windmill	E. F. M. Fletcher	Georgia Plains, Vt	Apr. 17, 1860	27, 951
Windmill	F. J. Forsyth	Au Sable, Mich	June 29, 1869	92, 030
Windmill	F. G. Fowler	Springfield, Ill	Jan. 29, 1867	61, 530
Windmill	H. H. Frank and P. Hansen	Richton, Ill	Nov. 21, 1871	121, 095
Windmill	J. Frazee	Saint Louis, Mo	Nov. 3, 1868	83, 620
Windmill	M. Frisbee	Rensselaerville, N. Y	Sept. 30, 1856	15, 805
Windmill	H. P. Gallup	Medina, Mich	Apr. 2, 1867	64, 498
Windmill	I. Garver and S. Fahrney	Boonsborough, Md	Dec. 28, 1840	1, 914
Windmill	U. Geer	Norwich, Conn	July 18, 1808	....
Windmill	A. Geerlings	Holland, Mich	July 16, 1872	129, 023
Windmill	A. Giraudat	New York, N. Y	Mar. 26, 1861	31, 798
Windmill	C. C. Gish	Virden, Ill	May 14, 1867	64, 661
Windmill	H. Glover	East Douglass, Mass	July 10, 1860	29, 074
Windmill	C. Goodwin	Beardstown, Ill	Nov. 17, 1868	84, 182
Windmill	E. and E. Gore	Charleston, Iowa	July 3, 1849	6, 571
Windmill	J. Hall	Ligonier, Ind	Aug. 15, 1871	118, 124
Windmill	J. Hall	Ligonier, Ind	Oct. 22, 1872	132, 464
Windmill	C. C. Harris	La Fayette, Ill	Sept. 21, 1869	95, 018
Windmill	R. Hathaway		Jan. 20, 1802	....
Windmill	L. E. Hazen	Fond du Lac, Wis	May 9, 1871	114, 677
Windmill	E. Heath	Fowlersville, N. Y	May 21, 1872	126, 955
Windmill	F. Hewitt	Newark, N. J	Feb. 19, 1867	62, 269
Windmill	J. H. Heyser	Hagerstown, Md	Aug. 14, 1866	57, 131
Windmill	J. M. and H. C. Hill	Fairfield Post-Office, Ill	July 6, 1869	92, 311
Windmill	J. Hoag	San Ramon Valley, Cal	Sept. 23, 1873	143, 076
Windmill	C. Holden		Mar. 15, 1798	....
Windmill	W. Holmes	Macomb, Ill	Jan. 15, 1861	31, 121
Windmill	C. B. Hutchinson	Waterloo, N. Y	June 5, 1849	6, 498
Windmill	T. R. and A. C. Jackson	Sabine Pass, Tex	May 20, 1873	139, 007
Windmill	C. S. Jenkins	Landsdale, Pa	Aug. 10, 1869	93, 446
Windmill	W. Jones	Davenport, Iowa	Aug. 26, 1873	142, 108
Windmill	A. Judd	Cabotville, Mass	May 2, 1846	4, 491
Windmill	M. J. Kauffman	Arcola, Ill	Sept. 2, 1873	142, 479
Windmill	J. Keeler and C. C. Harris	Kewanee, Ill	Dec. 23, 1873	145, 877
Windmill	J. H., S., and G. W. Kimble	Fox Lake, Wis	Dec. 6, 1870	109, 911
Windmill	O. B. Knapp	Brandon, Wis	July 2, 1872	128, 550
Windmill	O. B. Knapp	Brandon, Wis	Sept. 2, 1873	142, 400
Windmill	O. B. Knapp	Brandon, Wis	Sept. 9, 1873	142, 636
Windmill	L. Leach	Wilmington, Ill	July 25, 1871	117, 434
Windmill	I. Lehner	Lima, Ind	Sept. 19, 1871	119, 159
Windmill	I. Lehner	Lima, Ind	Oct. 15, 1872	132, 297
Windmill	E. C. and E. D. Little	Shabbonas Grove, Ill	Apr. 16, 1872	125, 821
Windmill	T. C. Little	Dixon, Ill	July 18, 1871	117, 181
Windmill	C. Livingston	Redwood City, Cal	Aug. 30, 1859	25, 269
Windmill	P. Löffler	Milwaukee, Wis	Mar. 27, 1866	53, 458
Windmill	C. P. Long and C. N. McEvers	Murrayville, Ill	Mar. 18, 1873	137, 012
Windmill	R. O. Lowrey	Saratoga Springs, N. Y	Apr. 29, 1862	35, 100
Windmill	R. O. Lowrey	Tabor, Iowa	Jan. 8, 1867	61, 077
Windmill	J. K. Lum	Skookumchuck, Wash	June 21, 1859	24, 472
Windmill	G. Mabie	Dixon, Ill	Mar. 12, 1872	124, 499
Windmill	G. Mabie	Dixon, Ill	July 1, 1873	140, 514
Windmill	G. Mabie and T. C. Little	Dixon, Ill	May 2, 1871	114, 309
Windmill	H. R. Macomber	Shopiere, Wis	Dec. 22, 1868	85, 114
Windmill	J. D. Makely	Cairo, N. Y	Nov. 23, 1837	479
Windmill	W. W. Marsh and O. E. Miles	Sycamore, Ill	July 15, 1873	140, 931
Windmill	J. M. May	Janesville, Wis	Feb. 15, 1859	22, 964
Windmill	J. M. May	Janesville, Wis	Feb. 15, 1859	22, 965
Windmill	S. W. May	Galesburgh, Ill	Apr. 9, 1872	125, 593
Windmill	W. McAllister	South Reading, Mass	May 10, 1859	23, 932
Windmill	A. McGrew	Cincinnati, Ohio	Aug. 2, 1842	2, 746
Windmill	E. W. Mills	Amber, N. Y	May 1, 1860	28, 100
Windmill	J. Molineux	North Hempstead, N. Y	Jan. 24, 1823	....
Windmill	G. C. and J. H. Morgan	Chicago an Ashkum, Ill	Nov. 5, 1872	132, 729
Windmill	J. S. Morgan	Highland, Ill	July 17, 1855	13, 268
Windmill	J. H. Morse	Peoria, Ill	Feb. 2, 1864	41, 442
Windmill	J. A. Morton		Dec. 16, 1801	....
Windmill	J. Myers	Dallastown, Pa	July 1, 1862	35, 774
Windmill	J. W. Neff	Sacramento, Cal	Oct. 25, 1859	25, 908
Windmill	W. C. Nelson	Kentland, Ind	Aug. 26, 1873	142, 266
Windmill	W. D. Nichols	Chicago, Ill	Jan. 1, 1867	60, 927
Windmill	W. D. Nichols	Chicago, Ill	Apr. 19, 1870	102, 032
Windmill	W. D. Nichols	Chicago, Ill	Mar. 5, 1872	124, 282
Windmill	W. D. Nichols	Chicago, Ill	Mar. 5, 1872	124, 283
Windmill	W. D. Nichols	Batavia, Ill	Apr. 15, 1873	137, 793
Windmill	W. D. Nichols	Batavia, Ill	June 3, 1873	139, 473
Windmill	R. Nutting	Randolph, Vt	Apr. 28, 1857	17, 168
Windmill	M. Padley	Ontario, N. Y	Aug. 31, 1826	....
Windmill	A. E. Paine		Nov. 19, 1803	....
Windmill	I. H. Palmer	Lodi, Wis	Oct. 22, 1872	132, 487

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Invention.	Inventor.	Residence.	Date.	No.
Windmill	J. B. Park	North Platte, Nebr	Apr. 8, 1873	137,565
Windmill	G. Parker	Corinna, Me	Sept. 11, 1845	4,190
Windmill	L. Patric	Springfield, Ohio	Nov. 21, 1871	121,125
Windmill	W. Peck	Rockford, Ill	June 19, 1860	28,770
Windmill	W. Peck	Rockford, Ill	Dec. 31, 1867	72,890
Windmill	W. Peck	Rockford, Ill	Sept. 1, 1868	81,816
Windmill	W. Peck	Rockford, Ill	Feb. 22, 1870	100,061
Windmill	W. Peck	Rockford, Ill	July 16, 1872	129,165
Windmill	W. Peck	Rockford, Ill	Apr. 22, 1873	138,186
Windmill	P. C. Perkins	Mishawaka, Ind	Aug. 10, 1869	93,472
Windmill	W. Phoebus	New York	June 24, 1822	....
Windmill	J. Pope	....	Jan. 26, 1793	....
Windmill	S. H. Radway	Berlin, Wis	Oct. 28, 1873	144,137
Windmill	A. R. Randall	Alvola, Mo	Nov. 22, 1870	109,545
Windmill	L. Reese	Rolling Prairie, Ind	May 1, 1866	54,407
Windmill	G. H. Reister	Washington, Iowa	Jan. 15, 1861	31,141
Windmill	A. D. Ruddock	Berlin, Wis	Nov. 7, 1871	120,778
Windmill	S. W. Ruggles	Fitchburgh, Mass	Dec. 16, 1856	16,257
Windmill	E. Sanderson	Paris, France	Dec. 30, 1873	145,970
Windmill	E. Savoral	New York, N. Y	Jan. 3, 1871	110,683
Windmill	J. Schenker	Brownsville, Minn	Aug. 20, 1867	68,007
Windmill	S. Shannon	Shellsburgh, Iowa	June 24, 1873	140,222
Windmill	G. Shaver	Freeport, Ill	Feb. 11, 1873	135,669
Windmill	H. M. Shaw and G. G. Tindall	Fremont, Ohio	May 26, 1868	78,333
Windmill	E. S. Smith	Good Hope, Ill	Apr. 8, 1873	137,729
Windmill	J. G. Smith	Freeport, Ill	July 16, 1872	129,609
Windmill	I. R. Snow	Sterling, Ill	Feb. 27, 1872	124,021
Windmill	A. H. Southwick	Oskaloosa, Iowa	Mar. 31, 1868	76,261
Windmill	E. P. Sperry	Wenham, Mass	Aug. 31, 1837	363
Windmill	B. W. Stanton	Almena, Mich	Mar. 28, 1871	113,218
Windmill	W. Stanton, jr	....	Dec. 26, 1804	....
Windmill	G. Stearns	El Dorado Mills, Wis	Sept. 30, 1873	143,308
Windmill	J. F. Stewart	Modesto, Cal	July 15, 1873	140,854
Windmill	J. R. St. John	Lockport, N. Y	Sept. 9, 1856	15,709
Windmill	E. and D. C. Stover	Lanark and Freeport, Ill	Dec. 3, 1872	133,601
Windmill	S. F. Stowe	Providence, R. I	Aug. 12, 1873	141,827
Windmill	D. Strunk	Janesville, Wis	Nov. 13, 1866	59,729
Windmill	G. A. Swartz	Twin Grove, Wis	Mar. 25, 1873	137,111
Windmill	C. A. Taylor	Hartford, Conn	July 22, 1873	141,094
Windmill	G. J. Thorn	Pecatonica, Ill	June 9, 1868	78,773
Windmill	J. S. Thornton	Port Gibson, N. Y	Oct. 1, 1867	69,374
Windmill	I. P. Tice	New York, N. Y	Feb. 18, 1868	74,632
Windmill	W. I. Tustin	Benicia, Cal	May 22, 1860	28,423
Windmill	W. I. Tustin	San Francisco, Cal	Nov. 23, 1869	97,136
Windmill	T. S. Van Devort	Ypsilanti, Mich	July 25, 1871	117,488
Windmill	T. S. Van Devort	Ypsilanti, Mich	July 9, 1872	128,931
Windmill	J. H. Van Nortwick	Sturgis, Mich	Apr. 7, 1868	76,561
Windmill	C. R. Webb	Philadelphia, Pa	June 12, 1855	13,067
Windmill	R. Weems	....	Sept. 20, 1804	....
Windmill	H. M. Wheeler	Woodbine, Iowa	Feb. 15, 1870	99,988
Windmill	J. A. Wheeler	Freeborn, Minn	May 5, 1868	77,557
Windmill	J. A. Wheeler	Chippewa Falls, Minn	Dec. 16, 1873	145,541
Windmill	E. Whitman	Abington, Mass	Sept. 9, 1856	15,714
Windmill	J. Wilbur	Fall River, Mass	Mar. 30, 1836	....
Windmill	R. H. Wright	Boston, Mass	Apr. 25, 1810	....
Windmill	W. Zimmerman	Stephenson, Ill	May 29, 1841	2,107
Windmill applied to raising water	E. McAllister	Plainfield, Ill	Aug. 13, 1867	67,664
Windmill, Horizontal	J. B. Aveilhé	....	Mar. 16, 1803	....
Windmill, Horizontal	W. Ingalls	Sanbornton Bridge, N. H	Aug. 19, 1828	....
Windmill, Horizontal	T. P. Jones	New Castle, Del	Feb. 6, 1827	....
Windmill, Horizontal	W. and T. J. Lewis	Cambridge and Boston, Mass.	Jan. 27, 1838	583
Windmill, &c., Horizontal	J. M. Van Osdel	Chicago, Ill	Mar. 12, 1841	2,003
Windmill, Horizontal-draft	S. Goodwin	....	Oct. 31, 1803	....
Windmill-regulator	D. C. Stover	Freeport, Ill	Dec. 23, 1873	145,765
Windmill-sails, Method of furling and unfurling	T. C. Vice	Rochester, N. Y	Aug. 29, 1854	11,630
Windmill, Self-regulating	A. P. Brown	Brattleborough, Vt	July 3, 1855	13,156
Windmill, Self-regulating	J. Dickinson and O. White	Richmond, Ind	July 17, 1855	13,288
Windmill, Self-regulating	J. Elgar	Baltimore, Md	July 10, 1855	13,244
Windmill, Self-regulating	A. G. Field	Quincy, Ill	May 6, 1856	14,808
Windmill, Self-regulating	B. Frantz	Waynesborough, Pa	July 10, 1855	13,247
Windmill, Self regulating	F. G. Johnson	Brooklyn, N. Y	Jan. 9, 1855	12,208
Windmill, Self-regulating	J. M. May	Janesville, Wis	Jan. 27, 1857	16,492
Windmill, Self-regulating horizontal	J. L. Colman	Vincennes, Ind	May 4, 1832	....
Windmills, Machinery of	J. Gue	Waterford, N. Y	Dec. 31, 1822	....
Windmills, Mechanical power for	J. Sharples	....	Sept. 15, 1801	....
Windmills, Method of feathering the sails of	J. C. and T. G. Wilson	Cedar Hill, Tex	Mar. 31, 1857	16,943
Windmills, Method of regulating	J. Battey	Honeoye Falls, N. Y	June 3, 1856	14,997
Windmills, Method of regulating	F. Peabody	Salem, Mass	May 15, 1855	12,870
Windmills, Method of regulating	T. Thompson	....	Jan. 3, 1799	....
Windmills, Method of regulating speed of	F. G. Johnson	Brooklyn, N. Y	Jan. 15, 1856	14,099
Windmills, Mode of checking	A. Lempeke	Pleasant Mount, Pa	May 8, 1855	12,822
Windmills, Mode of regulating	I. Keyes	Putney, Vt	Sept. 14, 1838	918
Windmills, Self-regulating wind-director for	H. S. Wentworth	Napoleon, Mich	Jan. 6, 1857	16,346
Window	G. M. Barth	Philadelphia, Pa	Nov. 11, 1873	144,430
Window	S. Boyer	Charlestown, Mass	Mar. 6, 1866	52,955
Window	T. Bullivant	Ledbury Road, Bayswater, England.	Oct. 18, 1870	108,443
Window	S. Darling	Providence, R. I	Apr. 22, 1873	138,009
Window	E. W. Giddings	Johnstown, Pa	June 14, 1870	104,299
Window	M. A. Heath	Providence, R. I	July 25, 1854	11,375
Window	W. Maurer	Buffalo, N. Y	Aug. 15, 1865	49,426
Window	J. B. Mulvey	Visalia, Ky	May 7, 1867	64,441
Window	J. Perkins	Danielsonville, Conn	May 6, 1873	138,579
Window	H. Redlick	Chicago, Ill	Sept. 28, 1869	95,267
Window	G. A. Russell	Chicago, Ill	May 25, 1869	90,396
Window	G. Shatswell	Waukegan, Ill	Aug. 31, 1869	94,344
Window	L. Till	Sandusky, Ohio	Nov. 2, 1869	96,507

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Invention.	Inventor.	Residence.	Date.	No.
Window	S. Wales	Boston, Mass	July 11, 1865	48, 749
Window	S. Wales	Boston, Mass	Jan. 23, 1866	52, 228
Window and car rack	T. Freuzel	Pittsburgh, Pa	Dec. 31, 1872	134, 375
Window and door-cap molding	J. Parkin and J. H. Smith	Cleveland, Ohio	Dec. 7, 1869	97, 548
Window and door fastener	H. Jordon	Norfolk, Conn	Nov. 21, 1865	51, 059
Window and door fastening	J. R. Post	New York	July 21, 1831	....
Window and door frame	J. Jordon	Rockbridge County, Va	Apr. 30, 1817	....
Window and door grate, Burglar-proof	G. M. Miller and H. Mund	Chicago, Ill	Sept. 24, 1867	69, 236
Window and door screen	D. Goodwillie	Chicago, Ill	Oct. 18, 1870	108, 348
Window and sash fastener	H. S. Chaplin	Glover, Vt	May 15, 1855	12, 854
Window and shutter fastening	N. Hall and J. Chase	Cumberland and York Counties, Me.	Oct. 11, 1836	....
Window-bead fastening	G. F. Brown	Winchendon, Mass	Aug. 24, 1869	93, 960
Window-blinds, Operating	H. Smith	Salem, Mass	Jan. 30, 1866	52, 332
Window-button	A. D. Judd	New Haven, Conn	Mar. 14, 1871	112, 717
Window-button	M. and A. D. Judd	New Haven, Conn	Jan. 11, 1870	98, 694
Window-button	S. C. Trubee	Brooklyn, N. Y	Jan. 25, 1870	99, 263
Window casing and sash	M. M. Ellis	Springfield, Mass	Dec. 26, 1871	122, 239
Window-catch	J. W. Batson	Baltimore, Md	Aug. 1, 1848	5, 693
Window-catch, Joint of a rule for	N. Hurdle	Georgetown, D. C.	Oct. 1, 1818	....
Window-cleaner	G. Munce	Saint Louis, Mo	July 31, 1860	29, 396
Window-cleaner	G. Smeaton	Brooklyn, N. Y	Sept. 19, 1871	119, 055
Window-cord clamp	S. J. Russell	Greensburgh, Ind	July 16, 1872	129, 367
Window, &c., cord holder	G. S. Gladding	Chester, Conn	Mar. 8, 1870	100, 614
Window-cord-locking device	C. R. Rand	Dubuque, Iowa	Feb. 28, 1871	112, 278
Window cross-bar of sheet-iron, Hollow	T. A. Cambensy	Chicago, Ill	Oct. 13, 1868	82, 919
Window-curtain	G. L. Kelty	New York, N. Y	June 5, 1860	28, 585
Window-curtain cord-attachment	W. R. Cole	Baltimore, Md	Sept. 24, 1872	131, 503
Window, Double	S. Earl	Mount Cashell, of More Park, Ireland.	Aug. 31, 1869	94, 331
Window, Double	T. S. Lambert	Peekskill, N. Y	Feb. 25, 1862	34, 550
Window, Double	T. S. Lambert	Peekskill, N. Y	May 23, 1865	47, 837
Window-fastener	L. D. Gould	Newark, N. J	May 18, 1869	90, 092
Window-fastener	W. A. Hawthorn and E. E. Scott	Carson City, Nev	Aug. 5, 1873	141, 505
Window-fastener	E. M. Judd	New Britain, Conn	Oct. 16, 1860	30, 408
Window-fastener	I. Root	Austin, Tex	Aug. 31, 1858	21, 370
Window-fastener	C. H. Sawin and J. A. Titus	Worcester, Mass	July 2, 1867	66, 400
Window-fastener	E. S. Scripture	New Haven, Conn	Mar. 9, 1858	19, 588
Window-fastener	W. Shailer	Deep River, Conn	Dec. 4, 1866	60, 267
Window-fastener	J. D. Simmons	Quincy, Ill	Feb. 12, 1867	62, 078
Window-fastener	L. C. Wing and A. R. Bradeen	Concord, Mass., and Waterborough, Me.	Jan. 22, 1867	61, 497
Window-fastening	B. F. Carleton	Nashua, N. H	Aug. 13, 1867	67, 633
Window-fastening	G. B. Kirkham	New York, N. Y	Nov. 5, 1867	70, 444
Window-fastening	M. Merriman, jr	New Haven, Conn	June 20, 1836	....
Window-fastening	E. Robinson and W. Hall	Boston, Mass	Sept. 11, 1841	2, 248
Window-fastening	J. D. Smith	Naugatuck, Conn	Mar. 19, 1867	63, 113
Window-fastening	H. St. John	Wilton, Conn	Nov. 15, 1870	109, 357
Window-fastening	P. Verbeck	Neenah, Wis	May 7, 1867	64, 601
Window-fastening or spring for fastening and supporting sash-lights.	D. M. Miller		Mar. 8, 1804	....
Window-fastening, Storm	A. J. Lovejoy	Augusta, Me.	Nov. 18, 1873	144, 684
Window-frame	J. Casey	New York, N. Y	June 3, 1856	15, 000
Window-frame	A. J. Cleveland	Baltimore, Md	Feb. 15, 1870	99, 760
Window-frame	C. Croley	Dayton, Ohio	Apr. 9, 1867	63, 616
Window-frame	G. K. Dearborn	South Boston, Mass	Jan. 29, 1867	61, 611
Window-frame	W. H Griffin	Springfield, Mass	Dec. 6, 1870	109, 892
Window-frame	S. Haas	Buffalo, N. Y	Feb. 16, 1858	19, 362
Window-frame	H. E. Hull and B. T. Merritt	Sag Harbor, N. Y	Dec. 22, 1868	85, 097
Window-frame	A. McGuire	Coatesville, Pa	June 18, 1872	128, 200
Window-frame	F. McStocker	Philadelphia, Pa	Apr. 16, 1872	125, 826
Window-frame	S. Myers	Hogestown, Pa	Dec. 29, 1868	85, 394
Window-frame	S. R. Owen	Stewartville, Pa	Jan. 17, 1871	111, 060
Window-frame	H. C. Smith	Portland, Me	Oct. 5, 1852	9, 309
Window-frame	A. W. Stine	Crestline, Ohio	Aug. 23, 1870	106, 634
Window-frame	O. E. H. Sturcken	San Francisco, Cal	Mar. 31, 1868	76, 116
Window-frame	J. H. Thomas	Philadelphia, Pa	May 7, 1867	64, 597
Window-frame	O. Ward	Sunderland, Vt	Nov. 9, 1869	96, 644
Window frame and sash	W. Brown	Duncannon, Pa	Oct. 8, 1872	132, 050
Window frame and sash	J. McNamee	Philadelphia, Pa	Apr. 15, 1878	137, 943
Window frame and sash	C. B. Shaw	Brooklyn, N. Y	Oct. 10, 1865	50, 393
Window frame, Box	J. B. Dodge	Saint Louis, Mo	July 7, 1857	17, 730
Window-frame, Metallic	D. H. Carpenter	Hartford, Conn	Sept. 24, 1872	131, 661
Window-frames, Adjustable stop for	M. Howland	Waterbury, Conn	Mar. 20, 1860	27, 544
Window-frames, Sash-sustaining	H. H. Center	Cincinnati, Ohio	Apr. 19, 1864	42, 431
Window-frieze	W. Woolley	New York	Aug. 13, 1833	....
Window-frieze, &c	W. Woolley	New York, N. Y	July 1, 1836	....
Window-garden	H. Whittemore	Tappantown, N. Y	May 14, 1872	126, 857
Window-glass	T. D. Stetson	New York, N. Y	Aug. 1, 1865	49, 167
Window-glass, Setting	J. M. McMaster	Rochester, N. Y	Oct. 1, 1872	131, 824
Window-grating for prisons	E. May	Indianapolis, Ind	May 29, 1860	28, 496
Window-guard	J. Hunnewell	Charlestown, Mass	Feb. 9, 1864	41, 511
Window-guard	W. K. Thomas	Brooklyn, N. Y	June 14, 1870	104, 228
Window-guard	J. W. White	Weymouth, Mass	Dec. 23, 1873	145, 773
Window-guard against flies and mosquitoes	E. L. Logee	Central Falls, R. I	Mar. 29, 1870	101, 285
Window-jack	S. P. Loomis	Philadelphia, Pa	Jan. 4, 1870	98, 605
Window-jack, Painter's	S. P. Loomis	Philadelphia, Pa	Nov. 19, 1867	71, 027
Window-lock	F. G. Ford	Washington, D. C	May 2, 1865	47, 537
Window-platform, Portable	G. H. Peabody	Brooklyn, N. Y	Apr. 8, 1873	137, 714
Window-protector	W. K. Winant	Rye, N. Y	Jan. 24, 1871	111, 162
Window safety-guard	J. F. Ford	Boston, Mass	May 5, 1868	77, 603
Window-sash fastener	E. Johnson	Joliet, Ill	May 28, 1867	65, 232
Window-screen	W. G. Anderson	Worcester, Mass	Dec. 16, 1873	145, 547
Window-screen	E. F. Beal	Oxford, Me	Mar. 20, 1866	53, 259
Window-screen	J. G. Bicknell	Cambridgeport, Mass	Oct. 29, 1867	70, 155
Window-screen	J. W. Boughton	Philadelphia, Pa	July 8, 1873	140, 674
Window-screen	A. C. Brown	Chicago, Ill	May 17, 1870	103, 010
Window-screen	E. Bucklin, jr., and S. A. Sutton	North Providence, R. I	Oct. 23, 1866	58, 982

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Invention.	Inventor.	Residence.	Date.	No.
Window-screen	R. G. and L. B. Dennett	Saco and Portland, Me	June 25, 1867	66, 005
Window-screen	D. W. Fifield	Worcester, Mass	Mar. 18, 1873	136, 826
Window-screen	W. A. Fletcher	Washington, D. C	May 20, 1873	139, 138
Window-screen	C. W. Fowler	Chicago, Ill	Feb. 18, 1873	135, 901
Window-screen	O. F. Frost	Monmouth, Me	Sept. 12, 1871	118, 922
Window-screen	B. Giroux	Chicago, Ill	May 9, 1871	114, 548
Window-screen	A. W. Griffith	Roxbury, Mass	Dec. 10, 1867	72, 025
Window-screen	J. Hancock, jr	Providence, R. I	Mar. 14, 1871	112, 590
Window-screen	F. Hatch	La Crosse, Wis	Sept. 15, 1868	82, 115
Window-screen	D. N. Hurlbut	Chicago, Ill	Jan. 25, 1870	99, 197
Window-screen	A. Josselyn	Pembroke, Mass	Aug. 16, 1864	43, 855
Window-screen	D. C. Kellam	Detroit, Mich	June 10, 1873	139, 794
Window-screen	C. F. Linscott	Chicago, Ill	Apr. 4, 1871	113, 537
Window-screen	S. T. Lippincott	Elizabeth, N. J	Mar. 11, 1873	136, 740
Window-screen	A. B. McGown	West Hanover, Mass	Feb. 20, 1866	52, 726
Window-screen	J. McFeely	North Woburn, Mass	Oct. 1, 1867	69, 460
Window-screen	C. A. Pease	Boston, Mass	May 14, 1872	126, 737
Window-screen	C. C. Plaisted	Hartford, Conn	Jan. 28, 1868	73, 925
Window-screen	L. L. Reynolds	Manchester, N. H	Mar. 13, 1860	27, 473
Window-screen	J. F. Scherpe	Saint Louis, Mo	Sept. 9, 1873	142, 735
Window-screen	F. B. Scott	Lancaster, N. Y	Apr. 16, 1867	63, 818
Window-screen	G. Shatswell	Waukegan, Ill	May 10, 1870	102, 872
Window-screen	W. H. Smith	Charlestown, Mass	Nov. 5, 1872	132, 869
Window-screen	J. A. Thompson	Readington, N. J	July 15, 1873	140, 967
Window-screen	J. A. Thorn	Chicago, Ill	Nov. 2, 1869	96, 363
Window-screen	S. B. Whitford	Providence, R. I	Dec. 31, 1872	134, 409
Window-screen	R. S. Whittier	Dorchester, Mass	Sept. 8, 1868	82, 053
Window-screen, Adjustable	D. N. Hurlbut	Chicago, Ill	June 1, 1869	90, 845
Window-screen, Adjustable	B. J. Williams	Philadelphia, Pa	Nov. 9, 1869	96, 754
Window-screen, Adjustable	T. M. Worcester	Cincinnati, Ohio	July 16, 1872	129, 200
Window-screen and blind	B. J. Williams	Philadelphia, Pa	Nov. 9, 1869	96, 753
Window-screen and other frames	P. L. Quinn	Brooklyn, N. Y	Mar. 19, 1872	124, 759
Window-screen attachment	G. Reed, W. C. Hoagland, and J. J. Newson.	Brooklyn, Cal	Apr. 19, 1870	102, 154
Window-screen, Extension	J. T. Kimball and B. F. Hebard	Boston, Mass	Jan. 4, 1870	98, 601
Window-screen frame	H. R. Dexter	Putnam, Conn	Nov. 22, 1870	109, 395
Window-screen frame	J. Jackson	Chicago, Ill	May 21, 1872	126, 966
Window-screen frame	C. F. Linscott	Woburn, Mass	Apr. 21, 1868	76, 930
Window-screen frame	W. H. Nash	Reading, Mass	Aug. 27, 1867	68, 103
Window-screen, Sliding	J. L. Field	Philadelphia, Pa	May 14, 1872	126, 629
Window-scrubber	B. F. Burgess, jr	Boston, Mass	July 28, 1868	80, 330
Window-shade	A. Binner	Muscatine, Iowa	Apr. 23, 1867	64, 062
Window-shade	C. D. Blinn	Port Huron, Mich	Jan. 16, 1866	52, 018
Window-shade	J. J. Crooke	New York, N. Y	Aug. 21, 1855	13, 482
Window-shade	T. Danforth	Roxbury, Mass	Dec. 25, 1855	13, 980
Window-shade	F. Gesswein	Fond du Lac, Wis	Aug. 27, 1867	68, 180
Window-shade	J. C. Govers	Washington, D. C	Mar. 3, 1868	75, 152
Window-shade	G. Hasecoster	Richmond, Ind	Feb. 26, 1867	62, 417
Window-shade	T. B. James	Muscatine City, Iowa	Sept. 10, 1867	68, 751
Window-shade	E. E. Johnson	Painesville, Ohio	Feb. 11, 1873	135, 713
Window-shade	G. L. Kelty	New York, N. Y	May 16, 1865	47, 734
Window-shade	P. Lindemeyer and L. Lindemeyer.	Hoboken, N. J., and New York, N. Y.	Nov. 19, 1867	71, 187
Window-shade	F. C. Martin	Brooklyn, N. Y	Feb. 27, 1872	124, 146
Window-shade	C. G. Matchett	Greenville, Ohio	Mar. 3, 1868	75, 037
Window-shade	E. Metcalf and C. Allen	Taberg, N. Y., and Woodstock, Canada.	Apr. 9, 1872	125, 473
Window-shade	I. W. Ogle	Concord, Ill	May 28, 1861	32, 432
Window-shade	J. J. Phares	Whitestown, Ind	Sept. 12, 1871	118, 814
Window-shade	A. W. Porter	Union City, Ind	Jan. 3, 1871	110, 787
Window-shade	T. E. Purdy	Brooklyn, N. Y	Mar. 24, 1868	75, 974
Window-shade	H. Read	Ypsilanti, Mich	June 26, 1866	55, 907
Window-shade	W. S. Rice	Biddeford, Me	Nov. 29, 1870	109, 758
Window-shade	W. Strunk	Nettle Lake, Ohio	Nov. 15, 1870	109, 271
Window-shade	M. Vetter	Muscatine, Iowa	July 16, 1867	66, 915
Window-shade	J. W. Ward and S. D. Wilson	Richmond, Ind	Dec. 12, 1865	51, 501
Window-shade, Adjustable	E. W. Hastings	Boston, Mass	Oct. 4, 1870	107, 902
Window-shade adjuster	E. T. Higham	Philadelphia, Pa	Jan. 24, 1865	46, 050
Window-shade and clothes-dryer	B. G. Fitzhugh	Frederick, Md	Oct. 17, 1871	119, 975
Window-shade cord-tension device	C. H. Miller	Buffalo, N. Y	May 17, 1870	103, 069
Window-shade enamel	E. C., H. M., and E. H. Bancroft	Syracuse, N. Y	Sept. 15, 1868	82, 071
Window-shade fastening	E. T. Higham	Philadelphia, Pa	July 21, 1863	39, 319
Window-shade fastening	E. J. Steele	New Britain, Conn	Sept. 11, 1866	58, 029
Window-shade fixture	R. B. Burchell	Brooklyn, N. Y	Aug. 7, 1860	29, 461
Window-shade fixture	A. H. Burgess	Philadelphia, Pa	June 29, 1869	92, 012
Window-shade fixture	J. Burns	New York, N. Y	Sept. 14, 1869	94, 866
Window-shade fixture	W. Campbell	New York, N. Y	Sept. 24, 1867	69, 176
Window-shade fixture	D. W. De Forest	Brooklyn, N. Y	Apr. 5, 1870	101, 440
Window-shade fixture	A. S. Dickinson	Brooklyn, N. Y	May 23, 1871	115, 178
Window-shade fixture	L. C. Hoffmeister, jr	Philadelphia, Pa	Nov. 14, 1871	120, 971
Window-shade fixture	G. B. Holzach	New Orleans, La	Sept. 28, 1869	95, 349
Window-shade fixture	J. Horner and S. Van Doren	New Brunswick, N. J	May 22, 1866	54, 908
Window-shade fixture	F. J. B. Hubert	New York, N. Y	July 12, 1864	43, 503
Window-shade fixture	J. B. Moore	New York, N. Y	Mar. 10, 1868	75, 446
Window-shade fixture	W. A. C. Oaks	Reading, Pa	Feb 11, 1868	74, 412
Window-shade fixture	C. S. Schleier	Brooklyn, N. Y	Jan. 26, 1858	19, 226
Window-shade fixture	H. Schulte	Milwaukee, Wis	Apr. 6, 1869	88, 671
Window-shade fixture	F. A. Seborn, D. R. Dunlap, and J. F. C. Geist.	Zanesville, Ohio	Sept. 22, 1868	82, 442
Window-shade fixture	N. Thompson	Brooklyn, N. Y	Apr. 4, 1871	113, 364
Window-shade fixture	L. A. Tripp	Middletown, N. Y	Aug. 6, 1867	67, 465
Window-shade material	G. L. Kelty	New York, N. Y	Oct. 29, 1867	70, 226
Window-shade rack	J. Pusey	Philadelphia, Pa	June 28, 1870	104, 767
Window-shade roller	J. B. Bailey	New York, N. Y	Feb. 16, 1858	19, 236
Window-shade roller	S. Hartshorn	New York, N. Y	Apr. 23, 1867	64, 101
Window-shade-roller stop	I. E. Palmer	Hackensack, N. J	Mar. 23, 1869	88, 200
Window-shade slat	J. Shorey and W. D. Butler	Lowell, Mass	Apr. 25, 1871	114, 209
Window-shade slats, Device for cutting	F. A. Bixler	Nashville, Tenn	Nov. 22, 1870	109, 487

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Invention.	Inventor.	Residence.	Date.	No.
Window-shade slats, Machine for cutting	P. P. Simmons	Davenport, Iowa	June 26, 1866	55, 919
Window-shade supporter	T. J. Marinus	Independence, Iowa	Jan. 22, 1867	61, 346
Window-shades, Apparatus for stenciling	D. Lloyd	New York, N. Y	Jan. 29, 1856	14, 162
Window-shades, curtains, maps, &c., Machine for rolling up.	H. Lawson	Boston, Mass	July 17, 1835	......
Window-shades, Hanging	G. P. Fuller	Philadelphia, Pa	Sept. 28, 1869	95, 219
Window-shades, Hanging	H. W. Olney	Pittsburgh, Pa	July 5, 1870	104, 989
Window-shades, Hanging	J. I. Tay	San Francisco, Cal	May 4, 1869	89, 813
Window-shades, Hanging	J. I. Tay	Oakland, Cal	Dec. 7, 1869	97, 726
Window-shades, Hanging	J. I. Tay and L. L. Sawyer	Oakland, Cal	Dec. 7, 1869	97, 727
Window-shades, Machine for embossing	R. K. Slaughter and J. O. Hundt	New York, N. Y	Feb. 4, 1868	74, 159
Window-shades, &c., Making	R. Conant	Lynn, N. H	Sept. 9, 1825	......
Window-shades, Ornamented fabric or manufacture for.	F. A. Perry	Saint Louis, Mo	June 11, 1861	32, 529
Window-shades, Process for making transparent	E. R. Kernan	Pittsburgh, Pa	Mar. 18, 1856	14, 457
Window-shades, Sizing for	W. Devine	Philadelphia, Pa	Aug. 1, 1871	117, 520
Window-shades to windows, Mode of applying	H. J. Cox and W. Hill	Long Eddy, N. Y	July 30, 1867	67, 272
Window-shutter	W. H. Kennard, jr	Baltimore, Md	Aug. 29, 1865	49, 632
Window-shutter	H. M. Wilson	Newark, N. J	Oct. 22, 1861	33, 553
Window shutter and blind	F. H. Knevitt and H. H. Hazard	London, England	Oct. 19, 1869	96, 014
Window-spring	E. K. Breckenridge	Meriden, Conn	Mar. 21, 1865	46, 874
Window-spring	G. Cannon	Nantucket, Mass	Dec. 27, 1810	......
Window-spring	J. Curtis, jr	......	Dec. 10, 1803	......
Window-spring	E. Doen	New Britain, Conn	May 25, 1858	20, 338
Window-spring	G. Drake	Hartford, Conn	Oct. 26, 1818	......
Window-spring	E. W. Munson and W. P. Thomas.	Waterbury, Conn	Oct. 6, 1868	82, 863
Window-spring	I. Scott	......	Dec. 26, 1804	......
Window spring and fastener	G. W. Tileston	New Haven, Conn	Sept. 1, 1863	39, 762
Window-stop	W. L. Beckwith	Olmstead, Ohio	Feb. 8, 1870	99, 523
Window-stop	J. Slingerland	Green Point, N. Y	Oct. 28, 1862	36, 823
Window-stop	T. Williams	Providence, R. I	Oct. 26, 1858	21, 916
Window-stop, Adjustable	W. Shaw	Hudson, N. Y	Aug. 29, 1865	49, 660
Window stop and fastener	C. Shaw	East Aurora, N. Y	Jan. 29, 1861	31, 261
Window stop and fastening	T. Williams	Providence, R. I	July 17, 1860	29, 209
Window-stop attachment	C. Page	Meriden, Conn	Feb. 27, 1872	124, 008
Window, Store	H. Chamberlain	Dayton, Wis	May 12, 1868	77, 716
Window-strip attachment	W. Ward	Mystic Bridge, Conn	Oct. 6, 1868	82, 903
Window-tightener	O. C. Hill	Malone, Ill	Apr. 19, 1864	42, 373
Window-tightening	T. Silver	Philadelphia, Pa	June 13, 1854	11, 092
Window-ventilator	W. C. Betts	Brooklyn, N. Y	May 3, 1870	102, 478
Window-ventilator	W. H. Cowl	Brooklyn, N. Y	Aug. 31, 1869	94, 462
Window-ventilator	S. Darling	Bangor, Me	Sept. 3, 1867	68, 353
Window-ventilator	R. H. Long	Cincinnati, Ohio	Aug. 18, 1868	81, 184
Window-ventilator	J. Loudon and H. Iversen	New York, N. Y	Mar. 12, 1861	31, 672
Window-ventilator	S. C. Maine	Boston, Mass	Mar. 1, 1870	100, 429
Window-ventilator	G. W. Otis	Lynn, Mass	Apr. 28, 1863	38, 327
Window-ventilator	G. W. Pell	New York, N. Y	Apr. 16, 1872	125, 755
Window-ventilator	L. Robinson	Newton, Mass	Nov. 11, 1873	144, 413
Window-ventilator	W. Thompson	Dublin, Ireland	Nov. 24, 1868	84, 319
Window, &c., ventilator	W. L. Washburn	Brooklyn, N. Y	Jan. 29, 1867	61, 585
Window ventilator, Shop	H. A. Gouge	Brooklyn, N. Y	May 26, 1863	38, 675
Window-washer	C. E. Bell	Greenfield, Ohio	Feb. 21, 1871	112, 009
Window-washer	J. Farnsworth	Lewiston, Me	Apr. 29, 1862	35, 090
Window-washer	G. A. Meacham	New York, N. Y	Jan. 30, 1855	12, 340
Window-washer	J. Middleton	New York, N. Y	Aug. 28, 1860	29, 805
Window-washer	N. Palmer	New Castle, Me	July 2, 1867	66, 249
Window-washer and scrubbing pad	J. C. Hull	Meadville, Pa	Oct. 11, 1870	108, 144
Window-washer, Rotary	G. M. Barth	Philadelphia, Pa	Feb. 15, 1870	99, 814
Window-washing implement	T. J. Mayall	Boston, Mass	July 29, 1873	141, 368
Window-washing, Stage for	J. Robinson	Washington, D. C	Mar. 19, 1872	124, 762
Window-weight-rope guide	E. Burnham	Framingham, Mass	May 4, 1869	89, 555
Windows and door-caps, Machine for molding sheet-metal.	J. Parkin and J. H. Smith	Cleveland, Ohio	Oct. 20, 1868	83, 200
Windows and doors, Mode of hanging	G. H. Lupton	Cleveland, Ohio	Nov. 27, 1866	60, 023
Windows and other frames with woven wire, Covering.	J. Sellers	Philadelphia, Pa	Feb. 18, 1834	......
Windows, Apparatus for and mode of cleaning	T. Bruff	Washington, D. C	July 24, 1807	......
Windows, Device for operating	J. S. Lester	Knoxville, Tenn	Aug. 9, 1870	106, 268
Windows, Device for raising and lowering	E. H. Tobey	Bridgeport, Conn	June 9, 1868	78, 844
Windows, Mode of applying netting to	M. M. Livingston	Brooklyn, N. Y	July 1, 1862	35, 767
Windows, &c., Spring bolt and key for raising and fastening.	R. Smith	Norwich, Conn	Mar. 8, 1810	......
Windows, Stand for cleaning	E. Herbster	Chicago, Ill	Sept. 20, 1870	107, 493
Windows, Street-reflector for	O. Henning	Chicago, Ill	July 27, 1869	92, 966
Windows, Ventilating car	G. Mann, jr., and H. Hise	Ottawa, Ill	Apr. 24, 1866	54, 185
Windows, Ventilation of bulk	S. R. Mason	Philadelphia, Pa	Jan. 24, 1860	26, 918
Windows weather-proof, Making	B. Smith	Chicago, Ill	Apr. 8, 1873	137, 572
Windows without weights, Hanging	W. Young	......	Nov. 20, 1800	......
Wine and cider mill	W. K. Foltz and W. A. McCool	Ashland, Ohio	Mar. 8, 1870	100, 517
Wine and cider mill	E. C. Lewis	Benton Harbor, Mich	Dec. 14, 1869	97, 782
Wine and cider press	J. Eiberweiser	Cincinnati, Ohio	Dec. 22, 1857	18, 895
Wine and cider press	T. W. Gunter	Russellville, Ky	Feb. 7, 1871	111, 640
Wine and cider press	T. M. Millett, sr	Savannah, Ga	Aug. 15, 1871	118, 144
Wine and cider press	J. Scholer	Burlington, Iowa	May 11, 1869	90, 053
Wine and cider press	R. Walling	Royalton, Ohio	May 26, 1863	38, 706
Wine and cider press	J. Weizenecker	Saint Louis, Mo	June 15, 1869	91, 502
Wine and water cooler	D. O. Laws	Baltimore, Md	Jan. 23, 1872	123, 028
Wine, Artificial	J. F. Siebenmann	Milwaukee, Wis	Feb. 25, 1868	74, 946
Wine, beer, and liquor, Process of treating	J. O. Donner	Jersey City, N. J	Dec. 21, 1869	98, 155
Wine, beer, &c., in barrels, Cooler for	J. F. Burgin	Northumberland, Pa	Apr. 14, 1857	17, 018
Wine-cooler	J. Nuellens and M. Neuhaus	Torquay and London, England.	Sept. 1, 1868	81, 814
Wine, &c., cooler	F. M. Piper	Chicago, Ill	June 17, 1873	139, 915
Wine-cooler	J. R. Whipple	Boston, Mass	Mar. 11, 1873	136, 632
Wine from cider, Making	J. Hugus	Hempfield, Pa	Dec. 1, 1832	......
Wine from cider, Manufacturing	E. B. Corkings	Bristol, N. Y	Oct. 8, 1813	......
Wine manufacture	J. C. Baxter	Washington, D. C	June 10, 1873	139, 757

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Wine, Manufacture of condensed	J. Damken	New York, N. Y	Aug. 6, 1872	130, 282
Wine or cider mill	H. B. Goucher	Pecatonica, Ill	Nov. 10, 1868	83, 844
Wine-press	J. H. Crandell	Upper Marlborough, Md	Sept. 12, 1871	118, 911
Wine-press	G. L. Davenport and C. G. Case	Davenport, Iowa	Jan. 24, 1871	111, 183
Wine-press	C. F. Hartmann	Nazareth, Pa	Feb. 22, 1870	100, 142
Wine-press	C. F. Hartmann	Nazareth, Pa	June 6, 1871	115, 731
Wine-press	E. Howland	Hammonton, N. J	Nov. 11, 1873	144, 456
Wine-press	W. S. Kimball	Rochester, N. Y	Sept. 4, 1860	29, 889
Wine-press	A. L. Rand	Chicago, Ill	Jan. 23, 1866	52, 202
Wine-press	A. L. Rand	Peoria, Ill	Nov. 5, 1867	70, 468
Wine-press	J. Robertson	East Boston, Mass	Jan. 23, 1866	52, 208
Wine-press	A. F. Wyker	South Easton, Pa	Apr. 4, 1871	113, 609
Wine-sirup, and beverage	A. D. Puffer	Boston, Mass	Feb. 7, 1871	111, 568
Wine, Sorghum	A. Myers	Springfield, Ohio	Jan. 13, 1863	37, 424
Wines, Apparatus for clarifying	A. Gottschalk	Napa, Cal	Oct. 3, 1871	119, 460
Wines, Apparatus for separating high and low	E. B. McDowell and T. W. Wilson.	Philadelphia, Pa	Apr. 2, 1867	63, 409
Wines, liquors, &c., Apparatus for racking off	D. Sexton	San Gabriel, Cal	Nov. 15, 1864	45, 086
Wines, Manufacture of domestic	J. K. Baer	Highland, Ill	July 22, 1862	35, 915
Wines, Manufacture of imitation medicated	V. Brosseau	Saint Sebastian, Canada	Dec. 30, 1873	145, 928
Wines, Process and apparatus for the manufacture of sparkling.	W. Gilham	Richmond, Va	June 13, 1871	115, 950
Winnower	H. H. Beach	Chicago, Ill	Aug. 15, 1854	11, 543
Winnower	T. I. Doyle	Winchester, Va	Apr. 20, 1852	8, 884
Winnower	L. S. Ingraham	Cuyahoga Falls, Ohio	Aug. 9, 1853	9, 920
Winnower	D. S. Mackey and J. R. Smith	Batavia, N. Y	Oct. 25, 1853	10, 155
Winnower	M. Shimer	Union Township, Pa	Feb. 7, 1854	10, 494
Winnower	J. Turner and W. C. Sturoc	Sunapee, N. H	Feb. 7, 1854	10, 495
Winnower and separator, Grain	A. B. Childs	Rochester, N. Y	Aug. 5, 1851	8, 270
Winnower and thrasher	G. F. S. Zimmerman	Charlestown, Va	Feb. 8, 1853	9, 579
Winnower and weigher, Grain	T. T. Strode	Coatesville, Pa	Feb. 24, 1852	8, 763
Winnower, Grain	J. Barker	Honesdale, Pa	Oct. 31, 1854	11, 855
Winnower, Grain	H. H. Beach	Philadelphia, Pa	Mar. 16, 1858	19, 615
Winnower, Grain	H. H. Beach	Philadelphia, Pa	Jan. 10, 1860	26, 742
Winnower, Grain	H. H. Beach	Philadelphia, Pa	June 11, 1861	32, 508
Winnower, Grain	J. Bone	Warrenton, Ohio	June 20, 1854	11, 116
Winnower, Grain	S. Briggs and J. G. Talbot	Sloansville, N. Y	Mar. 29, 1853	9, 631
Winnower, Grain	S. Canby	Ellicott's Mills, Md	Aug. 9, 1853	9, 913
Winnower, Grain	A. B. Childs	Rochester, N. Y	Jan. 25, 1853	9, 564
Winnower, Grain	H. M. Keller	Newark, Ohio	Oct. 11, 1853	10, 111
Winnower, Grain	W. Larrabee	Clermont, Iowa	Aug. 26, 1862	36, 301
Winnower, Grain	W. Moore	Belleville, Ohio	Nov. 14, 1854	11, 941
Winnower, Grain	J. Rohmer	Chicago, Ill	Mar. 18, 1862	34, 694
Winnower, Grain	G. B. Salmon	Elmira, N. Y	July 19, 1853	9, 863
Winnower, Grain	B. D. Sanders	Halliday's Cove, Va	June 27, 1854	11, 178
Winnower, Grain	J. I. Shafer	Burlington, Iowa	Aug. 6, 1861	33, 009
Winnower, Grain	H. B. Thomas	Cascade, Iowa	Mar. 8, 1864	41, 872
Winnower, Grain and seed	G. Westinghouse	Schenectady, N. Y	Mar. 4, 1862	34, 605
Winnower, Reciprocating	H. Keller	Sauk Centre, Minn	June 24, 1873	140, 201
Winnower, Reciprocating	E. Lombard	Plymouth, Mich	Oct. 28, 1873	144, 116
Winnower, Reciprocating	H. C. Wirtz and C. Gebhardt, jr	Northfield, Minn	Dec. 2, 1873	145, 077
Winnower, Rotary	J. H. Adamson	San Francisco, Cal	Dec. 30, 1873	145, 980
Winnower-screen	A. Lash and M. Moore	Belleville, Ohio	Nov. 8, 1853	10, 210
Winnower shaking-shoe	J. L. Van Valkenburgh	Ogdensburgh, N. Y	Oct. 11, 1853	10, 114
Winnower-shoe	J. and J. Montgomery	Lancaster, Pa	Dec. 20, 1853	10, 324
Winnowing and cleansing grain	J. D. Prescott	Chesterville, Me	July 20, 1831	....
Winnowing and thrashing grain	E. P. Davis and W. Carey	Riga, N. Y	June 11, 1829	....
Winnowing, cleaning, and separating machine, Grain.	M. Thomas	Alfred, Me	May 30, 1837	213
Winnowing-machine	H. Beadle	Willingford, Conn	Mar. 30, 1822	....
Winnowing-machine	J. Beane	Montville, Me	Mar. 31, 1836	....
Winnowing-machine	T. Beatty	Washington, D. C	Oct. 5, 1818	....
Winnowing-machine	J. Behel	Mifflintown, Pa	Aug. 21, 1847	5, 250
Winnowing-machine	J. L. Booth	Cuyahoga Falls, Ohio	Apr. 8, 1851	8, 033
Winnowing-machine	J. Bromwell	Baltimore, Md	Nov. 26, 1818	....
Winnowing-machine	J. Brown	New London	Nov. 24, 1820	....
Winnowing-machine	J. K. Buck	Winona, Minn	July 23, 1861	32, 857
Winnowing-machine	S. Canby	Ellicott's Mills, Md	Dec. 28, 1852	9, 500
Winnowing-machine	T. A. Chandler and A. D. Reed	Illinois and Michigan	Dec. 7, 1844	3, 852
Winnowing-machine	T. Cole and J. Littlefield	Allensville, Ind	Aug. 7, 1844	3, 696
Winnowing-machine	A. Cooley	Kalamazoo, Mich	Sept. 2, 1845	4, 169
Winnowing-machine	G. W. D. and J. Culp	Allensville, Ind	Aug. 4, 1843	3, 209
Winnowing-machine	O. Etnier	Shirley Township, Pa	Apr. 29, 1851	8, 063
Winnowing-machine	J. W. Fisk	Rileytown, Ohio	July 3, 1849	6, 569
Winnowing-machine	F. Frye	Time, Ill	Oct. 9, 1866	58, 630
Winnowing-machine	J. G. Goshon	Shirleysburgh, Pa	Oct. 29, 1850	7, 740
Winnowing-machine	A. J. Howell	Spruce Hill, Pa	Nov. 6, 1849	6, 848
Winnowing-machine	J. Keech and S. Stillwell	Waterloo, N. Y	June 13, 1854	11, 069
Winnowing-machine	A. and A. Lomax	Clinton County, Ohio	May 8, 1840	1, 592
Winnowing-machine	F. H. Manny	Rockford, Ill	Oct. 9, 1860	30, 334
Winnowing-machine	J. and J. Montgomery	Baltimore, Md	Jan. 20, 1857	16, 447
Winnowing-machine	J. Nicols	Kent County, Md	June 15, 1835	....
Winnowing-machine	G. R. Remington	Lower Sandusky, Ohio	May 30, 1848	5, 607
Winnowing-machine	B. D. Sanders	Brooke County, Va	June 19, 1849	6, 545
Winnowing-machine	J. Shermer	New Valley, Md	July 20, 1846	4, 648
Winnowing-machine	J. Shipley	Princeton, Wis	Dec. 15, 1857	18, 867
Winnowing-machine	J. Starr	New Lisbon, Ohio	Sept. 9, 1843	3, 258
Winnowing-machine	A. Straub	Milton, Pa	July 17, 1849	6, 597
Winnowing-machine	A. Straub	Milton, Pa	Jan. 15, 1850	7, 029
Winnowing-machine	F. A. Stuart	Catharine, N. Y	June 20, 1846	4, 586
Winnowing-machine	J. Thurston	Bath, Ind	Jan. 6, 1848	5, 410
Winnowing-machine	D. Warren	Gettysburgh, Pa	May 30, 1848	5, 603
Winnowing-machine	H. Watkins	Washington County, Md	Mar. 18, 1819	....
Winnowing-machine	D. Wilson	Johnston, Vt	Feb. 20, 1836	....
Winnowing-machine	S. M. Yeaman	Elizabeth, Ky	June 20, 1846	4, 501
Winnowing-machine chaff-screen	A. Belchamber	Ripley, Ohio	Apr. 13, 1858	19, 905
Winnowing-machine, Grain	J. Bean and B. Wright	Hudson, Mich	July 24, 1860	29, 233
Winnowing machine, Grain	J. James, 3d	Plymouth, Mass	May 4, 1813	....

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Winnowing-machine screen	J. Bean	Montville, Me	Nov. 11, 1851	8,504
Winnowing-machine screen	W. M. Watson	Tonica, Ill	Oct. 29, 1861	33,618
Winnowing-machine screens, Method of hanging	J. A. Krake	Alden, N. Y	Nov. 27, 1855	13,849
Winnowing-machine shaker	H. Filburn	Dayton, Ohio	Jan. 23, 1852	8,653
Winnowing-machines, Motion of riddles in	A. Moffitt	East Bethlehem, Pa	Sept. 25, 1849	6,734
Winnowing-mill	S. Adams	Boston, Mass	Jan. 21, 1868	73,485
Winnowing-mill	T. B. Brown	Locke Township, N. Y	Mar. 6, 1835	....
Winnowing-mill	D. Davis	Cornish, N. H	July 5, 1832	....
Winnowing-mill	M. Elliot	Boscawen, N. H	June 13, 1831	....
Winnowing-mill	H. N. Goodrich	Aurora, Ill	May 13, 1856	14,865
Winnowing-mill	M. Grover	Clyde, Ohio	Aug. 11, 1857	17,995
Winnowing-mill machinery	J. Ruple	Washington, Pa	May 19, 1832	....
Winnowing mill, Tub	M. Elliot	Concord, N. H	May 18, 1816	....
Winnowing-screen	H. Ogborn	Richmond, Ind	June 11, 1867	65,765
Wire	G. D. Dudley	Lowell, Mass	Dec. 9, 1873	145,285
Wire	J. S. Parsons	Windham, Conn	Oct. 4, 1870	107,953
Wire and rope stretching tool	R. L. Taylor	Golden Prairie, Iowa	Apr. 29, 1873	138,298
Wire and steel, Tempering	H. Waterman	Brooklyn, N. Y	Aug. 24, 1858	21,286
Wire, Annealing and tinning	E. H. Hill	Worcester, Mass	Sept. 24, 1872	131,680
Wire annealing and tinning apparatus	E. H. Hill	Worcester, Mass	Sept. 24, 1872	131,681
Wire-annealing apparatus	H. C. Gee	New York, N. Y	June 4, 1867	65,481
Wire, Apparatus for manufacturing	B. A. Mason	New York, N. Y	Mar. 21, 1871	112,944
Wire, Apparatus for sizing and finishing skirt	S. M. Chesney and J. C. Brown	New York and Brooklyn, N. Y.	Oct. 13, 1863	40,244
Wire-binding machine	N. C. Perry	Chester, Conn	May 13, 1862	35,255
Wire-blank for napkin-rings, cruet-holders, &c.	C. W. Goodhue	Lowell, Mass	July 25, 1871	117,272
Wire bracket	W. W. Russell	Ludlow, Vt	Apr. 27, 1869	89,436
Wire, Cap	M. Kelsey	New York, N. Y	Mar. 12, 1836	....
Wire-cloth	T. Baggott	Baltimore, Md	Oct. 13, 1868	83,019
Wire-cloth, Apparatus for drying painted	C. H. Waters	Groton, Mass	Apr. 22, 1873	138,060
Wire-cloth, Crimping	W. Zerns	Pottsville, Pa	Aug. 8, 1865	49,356
Wire-cloth for coal-screens	J. G. Frick	Pottsville, Pa	Sept. 6, 1870	107,171
Wire-cloth, Machine for printing figures on	C. H. Waters	Groton, Mass	Dec. 1, 1868	84,521
Wire-cloth, Manufacture of	R. Nutting	Randolph, Vt	Sept. 27, 1859	25,578
Wire-cloth-painting machine	S. Graves	San Francisco, Cal	Mar. 12, 1872	124,569
Wire-cloth-painting machine	C. H. Waters	Groton, Mass	Dec. 1, 1868	84,520
Wire-cloth-painting machine	G. F. Wright	Clinton, Mass	Aug. 6, 1872	130,350
Wire-cloth paper-making cylinders, Constructing frames for.	J. and R. McMurray	New York, N. Y	Oct. 12, 1858	21,768
Wire-cloth, &c., Roll for painting	G. F. Wright	Clinton, Mass	Feb. 6, 1872	123,373
Wire-cloth, Shuttle for weaving	C. H. Waters and W. Orr, jr	Groton and Clinton, Mass	Aug. 8, 1871	117,837
Wire, &c., Coil-holder for	I. E. Palmer	Hackensack, N. J	Sept. 30, 1873	143,376
Wire-coiling machine	E. B. Allen and C. O. and A. P. Small.	Augusta, Me	Mar. 14, 1871	112,526
Wire-coiling machine	W. Weaver	Phœnixville, Pa	Apr. 2, 1867	63,445
Wire, Coupling conducting	G. W. Beardslee	College Point, N. Y	May 30, 1865	47,918
Wire-covering machine	A. Girudat	New York, N. Y	Apr. 19, 1870	102,110
Wire-covering machine	T. S. Sperry	New York, N. Y	Apr. 18, 1865	47,343
Wire-crimping apparatus	C. P. Seitzinger	Scranton, Pa	Aug. 22, 1871	118,283
Wire-cutter	H. Axtell	Yreka, Cal	July 13, 1869	92,507
Wire cutter	F. Carew	South Hadley Falls, Mass	Sept. 13, 1870	107,334
Wire-cutter	J. Johnson	Marshalltown, Iowa	Aug. 30, 1870	106,829
Wire-cutter	E. Murray	New York, N. Y	June 28, 1870	104,872
Wire-cutter and shears, Combined	C. Brombacher	Tarrytown, N. Y	Jan. 18, 1870	98,843
Wire, Cutting	W. Grover	Holyoke, Mass	Sept. 18, 1855	13,570
Wire, Cutting and drawing	F. Noette	Brooklyn, N. Y	Sept. 9, 1856	15,705
Wire cutting and forming machine	J. Wasson	Elyria, Ohio	Nov. 19, 1867	71,091
Wire cutting and pointing die	J. C. Plumer	Boston, Mass	Nov. 20, 1866	59,778
Wire-cutting machine	W. H. Flinn	Nashua, N. H	May 8, 1866	54,520
Wire-cutting machine	L. W. Johanning, jr	San Francisco, Cal	May 30, 1865	47,956
Wire-cutting pinchers	P. Broadbooks	Batavia, N. Y	June 11, 1867	65,638
Wire-cutting tool	W. H. Flinn	Nashua, N. H	June 11, 1867	65,557
Wire, Device for forming the shed in weaving	M. V. Nobles	Elmira, N. Y	Nov. 23, 1869	97,218
Wire drawing and reducing die	R. Kent	Brooklyn, N. Y	May 11, 1869	89,869
Wire-drawing die	J. D. Alvord	Bridgeport, Conn	May 3, 1870	102,468
Wire-drawing machine	J. I. Staples	Flushing, N. Y	May 10, 1813	....
Wire-drawing machine	W. Wadsworth	Hartford, Conn	Oct. 6, 1812	....
Wire-drawing machine	J. T. and T. Walden	New York, N. Y	Oct. 31, 1812	....
Wire-drawing machine	J. and E. Woods	Warrington, Great Britain	Nov. 25, 1873	144,940
Wire fabric	W. C. Edge	Newark, N. J	Sept. 2, 1873	142,450
Wire fabric	J. W. C. Peters	Chicago, Ill	Mar. 5, 1872	124,286
Wire fabric, Machine for weaving	D. J. Powers	Chicago, Ill	Dec. 17, 1872	133,951
Wire fabric, Woven	J. M. Farnham	Hartford, Conn	Aug. 27, 1872	130,796
Wire fabric, Woven	J. W. C. Peters	Chicago, Ill	Dec. 10, 1872	133,886
Wire fabric, Woven	J. W. C. Peters	Chicago, Ill	June 24, 1873	140,160
Wire-feed, Rotary	W. A. Foskett	Meriden, Conn	Mar. 9, 1869	87,555
Wire figure	W. R. Boerner	Chicago, Ill	Dec. 3, 1867	71,573
Wire, Flier for covering bonnet	E. H. Tyler	Rockville, Mass	June 24, 1873	140,322
Wire for metallic weavers' reeds, Machine for polishing iron and brass.	A. Wilkinson	United States	Aug. 31, 1836	14
Wire for pins, Pointing	O. L. Hopson and H. P. Brooks	Waterbury, Conn	Aug. 9, 1864	43,772
Wire for teeth of burr-cylinders, cards, feed-rolls, &c.	J. K. Proctor	Philadelphia, Pa	Oct. 29, 1872	132,699
Wire for wire goods	W. F. Collier	Worcester, Mass	Sept. 6, 1870	107,006
Wire for wire guards, Tool for twisting	J. McMurray	Brooklyn, N. Y	Jan. 23, 1872	122,903
Wire fork for toasting, &c	T. G. Harold	Brooklyn, N. Y	Feb. 7, 1865	46,235
Wire-gage	H. Smith	Southington, Conn	July 1, 1873	140,554
Wire, Galvanizing	G. Bedson	Manchester, England	Feb. 17, 1863	37,669
Wire gratings, Machinery for weaving	H. Jenkins	Pottsville, Pa	Mar. 6, 1847	5,005
Wire gratings, &c., Process of manufacturing	H. Jenkins	Pottsville, Pa	Mar. 6, 1847	5,006
Wire-handle former	W. C. Jones	Quincy, Ill	Dec. 21, 1869	98,166
Wire, Hardening and tempering	I. Washburn	Worcester, Mass	Feb. 5, 1861	31,361
Wire hardening and tempering apparatus	J. C. Walter	New York, N. Y	June 11, 1867	65,780
Wire heddle-eyes, Machine for making	T. Clegg	Andover, Mass	July 11, 1854	11,285
Wire heddles, Machine for making	P. and F. Philip	Stockport, N. Y	Jan. 11, 1870	98,706
Wire heddles, Machine for making	A. J. Williams	Utica, N. Y	Sept. 11, 1849	6,701
Wire heddles, Machinery for making	M. Finkle	Utica, N. Y	Apr. 9, 1850	7,261
Wire heddles, Machinery for making	E. T. Hertle and R. Thompson	New York, N. Y	July 14, 1868	79,905

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Invention.	Inventor.	Residence.	Date.	No.
Wire heddles, Mechanism for making	E. T. Hertle and R. Thompson	New York, N. Y	Apr. 19, 1870	102,122
Wire-hook-making machine	R. S. Willard	Franklin, Vt	Dec. 29, 1868	85,498
Wire, Hoop-skirt	S. Houghton	Worcester, Mass	June 12, 1866	55,495
Wire in the coil, Machine for pointing	C. Jillson	Worcester, Mass	Feb. 7, 1865	46,242
Wire into metallic pipe, Method of introducing	S. F. B. Moore	New York	Oct. 25, 1843	3,316
Wire jar or vase holder	G. D. Dudley	Lowell, Mass	July 16, 1872	129,467
Wire-loops, Machine for forming	C. M. Spencer	Hartford, Conn	Dec. 2, 1873	145,250
Wire, Machine for making beaded	E. Croft	Waterbury, Conn	Mar. 21, 1865	46,967
Wire, Machine for making friction	D. J. Ferry	Philadelphia, Pa	July 24, 1860	29,259
Wire, Machine for reducing and pointing	T. B. De Forest	Birmingham, Conn	Mar. 3, 1868	75,131
Wire, Machine for reducing or pointing	O. L. Hopson, E. J. Manville, and H. P. Brooks.	Waterbury and Wolcottville, Conn.	Feb. 6, 1866	52,493
Wire, Machine for reducing or pointing	A. G. Hotchkiss	Wolcottville, Conn	Apr. 18, 1871	113,885
Wire, Machine for swaging and reducing	C. F. Hendee	Waterbury, Conn	Jan. 30, 1872	123,101
Wire, Machinery for beating and cleaning	J. J. Howe	Derby, Conn	Dec. 26, 1845	4,324
Wire, Manufacture of skirt	T. S. Sperry	New York, N. Y	Mar. 7, 1865	46,718
Wire, Manufacture of various shapes from steel, copper, brass, &c.	T. Wallace	Haverstraw, N. Y	Mar. 28, 1834	....
Wire, Method of preparing metal for being manufactured into.	T. Wallace	Derby, Conn	July 20, 1843	3,180
Wire-milling device	N. C. Perry	Chester, Conn	May 14, 1872	126,738
Wire, Mode of manufacturing articles of woven	J. A. Topliff and T. Tunnington	Elyria, Ohio	Jan. 16, 1866	52,094
Wire-netting, Machine for making	F. C. C. Weber	Brooklyn, N. Y	Dec. 12, 1871	121,831
Wire, Nipper for twisting	J. W. Fry	Panama, United States of Colombia.	Dec. 23, 1873	145,794
Wire of sheet-metal, Apparatus for making	T. Fowler	Seymour, Conn	Jan. 5, 1869	85,520
Wire or wire rope together, Fastening	M. F. Maury	Liverpool, Great Britain	Apr. 23, 1867	64,018
Wire, Perforated	S. Beatty	Norwalk, Conn	Apr. 26, 1870	102,356
Wire pointing and reducing machinery	O. L. Hopson and H. P. Brooks	Waterbury and Wolcottville, Conn.	Feb. 26, 1867	62,336
Wire-pointing device	R. Kent	Brooklyn, N. Y	Dec. 5, 1871	121,632
Wire-pointing machine	F. H. Aiken	Franklin, N. H	Aug. 19, 1873	141,977
Wire-pointing machine	F. H. Aiken	Franklin, N. H	Oct. 7, 1873	143,486
Wire-pointing machine	C. O. Crosby	New Haven, Conn	Sept. 11, 1866	57,873
Wire-pointing machine	C. Jillson	Worcester, Mass	Sept. 15, 1857	18,205
Wire-pointing machine	C. Jillson	Worcester, Mass	May 30, 1865	47,954
Wire-pointing machine	C. Jillson	Worcester, Mass	May 30, 1865	47,955
Wire-pointing machine	C. Jillson	Worcester, Mass	June 20, 1865	48,283
Wire-pointing machine	J. Lockwood	Wilton, Conn	Mar. 26, 1867	63,250
Wire-pointing machine	E. J. Manville	Waterbury, Conn	Oct. 9, 1866	58,739
Wire, Process of painting or varnishing woven	W. Lincoln	Oakland, Mass	Feb. 26, 1856	14,320
Wire riddles, Tool for manufacturing	S. Adams	Boston, Mass	Oct. 26, 1858	21,866
Wire-rigging coupling	W. C. Ireland	Boston, Mass	Aug. 16, 1870	106,487
Wire rigging, Dead-eyes for	D. H. Chamberlain	West Roxbury, Mass	Mar. 22, 1870	100,976
Wire rigging, Spring turn-buckle for	W. H. Shock	Baltimore, Md	Nov. 23, 1869	97,238
Wire-rolling	W. Walton and J. T. Fallows	Benton, near Manchester, England.	May 13, 1873	138,966
Wire-rolling apparatus	G. Bedson	Manchester, Great Britain	Aug. 22, 1865	49,598
Wire-rolling machine	J. Howell	Philadelphia, Pa	Jan. 11, 1812	....
Wire, Rolling steel and iron	J. Wright	Sheffield, England	Nov. 27, 1860	30,782
Wire-rope bands, Mode of preventing untwisting of the ends of.	A. Barbarin	New Orleans, La	Dec. 10, 1867	71,839
Wire-rope-making machine	C. Collins	Brooklyn, N. Y	June 19, 1860	28,738
Wire-rope-making machine	C. H. Morgan	Worcester, Mass	July 20, 1869	92,870
Wire-rope-making machinery	J. Cushman	Racine, Wis	Mar. 10, 1857	16,790
Wire rope, Manufacturing	J. A. Roebling	Trenton, N. J	Nov. 21, 1854	11,973
Wire-rope way, Endless	A. S. Hallidie	San Francisco, Cal	Jan. 17, 1871	110,971
Wire-rope way, Endless	A. S. Hallidie	San Francisco, Cal	May 30, 1871	115,309
Wire-rope way, Endless	A. S. Hallidie	San Francisco, Cal	May 30, 1871	115,340
Wire-rope-weaving machinery	F. Hazard	Mauch Chunk, Pa	July 10, 1866	56,220
Wire-ropes, Apparatus for transporting loads on	C. Hodgson	Richmond, England	Nov. 15, 1870	109,317
Wire ropes for steering vessels, Mode of manufacturing round flexible.	I. McCord	Harrisburgh, Pa	July 6, 1839	1,219
Wire ropes, Machine for compacting	R. P. Rothwell	Wilkesbarre, Pa	Nov. 12, 1872	133,059
Wire shade and mosquito-netting frame	E. Y. Clark	Jersey City, N. J	Nov. 19, 1872	133,143
Wire scouring and polishing machine	G. Broomhead	Paterson, N. J	Dec. 17, 1872	133,965
Wire screen, &c., making machine	S. Adams	Boston, Mass	June 23, 1868	79,176
Wire screen, Weaving	J. M. Schuyler and W. Zern	Pottsville, Pa	Feb. 21, 1854	10,546
Wire, Sizing and finishing covered skirt	W. E. Frost	Worcester, Mass	July 11, 1865	48,764
Wire, Sizing and finishing covered skirt	W. E. Frost	Worcester, Mass	July 11, 1865	48,765
Wire, Sizing and finishing covered skirt	W. E. Frost	Worcester, Mass	July 11, 1865	48,766
Wire, Skirt	T. D. Day	Brooklyn, N. Y	May 5, 1863	38,377
Wire, Skirt	T. D. Day	New York, N. Y	Feb. 20, 1866	52,692
Wire, Skirt	W. E. Frost	Clinton, Mass	Nov. 19, 1861	33,764
Wire, Skirt	G. W. Reynolds	Smethick, England	Oct. 22, 1867	70,018
Wire spirally, Machine for coiling	T. J. Mayall	Boston, Mass	Apr. 30, 1872	126,315
Wire spring, Flat	H. Kellogg	New Haven, Conn	Oct. 10, 1865	50,420
Wire springs for furniture, Machine for making	C. A. and S. W. Young	Providence, R. I	Sept. 28, 1858	21,635
Wire springs, Machine for making	D. Manule	Boston, Mass	Feb. 11, 1868	74,233
Wire springs, Machine for making spiral	T. Baggott	Baltimore, Md	May 30, 1871	115,413
Wire stand or holder	G. D. Dudley	Lowell, Mass	Dec. 9, 1873	145,283
Wire-stitch fastening	T. R. Reed	East Bridgwater, Mass	Feb. 2, 1869	86,591
Wire-straightening machine	G. I. Washburn	Worcester, Mass	July 4, 1865	48,608
Wire-stretcher	A. Byington	Rochelle, Ill	Feb. 21, 1871	111,905
Wire-stretcher	I. H. Congdon and J. E. House	Omaha, Nebr	Dec. 30, 1873	146,046
Wire-stretcher	E. B. Stephens	Brownville, Nebr	Aug. 22, 1871	118,293
Wire-stretcher	C. H. Strowger	Webster, N. Y	May 28, 1872	127,201
Wire strips, Manufacture of	T. Fowler	Seymour, Conn	Mar. 9, 1869	87,557
Wire-tempering apparatus	P. L. Slayton	New York, N. Y	June 11, 1867	65,699
Wire-tempering apparatus, Steel	J. Hallas	New York, N. Y	May 28, 1867	65,215
Wire-tempering machine, Skirt	J. H. Monk	Brooklyn, N. Y	Nov. 12, 1867	70,881
Wire, Tempering steel	W. Darker, jr	West Philadelphia, Pa	Nov. 15, 1859	26,143
Wire, Tempering steel	W. A. Shaw	New York, N. Y	May 18, 1869	90,314
Wire tie for baling hay, &c	G. L. Laughland	New York, N. Y	Aug. 19, 1873	141,879
Wire turning and galvanizing	E. H. Hill	Worcester, Mass	Mar. 29, 1870	101,264
Wire to hammer-dies, Machine for feeding	W. H. Dayton	Wolcottville, Conn	Aug. 19, 1873	141,922
Wire to machines, Machinery for feeding	A. G. Parkhurst	Hartford, Conn	Aug. 29, 1871	118,481
Wire tubes, Machine for making	W. C. Edge	Newark, N. J	May 28, 1872	127,227

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Wire turning and cutting machine	C. M. Spencer	Hartford, Conn	Apr. 8, 1873	137, 630
Wire-twisting machine	C. Shortan	New York, N. Y	July 16, 1867	66, 896
Wire-twisting machine	T. B. Smith	Boston, Mass	Apr. 2, 1867	63, 570
Wire-way	J. H. and J. W. Rogers	Peekskill, N. Y	June 24, 1873	140, 167
Wire-way, Elevated	C. E. W. Bunster	Valparaiso, Chili	Aug. 12, 1873	141, 757
Wire-way, Elevated	G. Killam	Fort Dodge, Iowa	Oct. 29, 1872	132, 586
Wire-way, Elevated	H. T. Lantis and N. Davis	Atlanta, Idaho	Sept. 16, 1873	142, 857
Wire-way saddle	T. M. Martin	San Francisco, Cal	Sept. 23, 1873	143, 087
Wire, Weaving	T. Kirk and R. Leslie		May 9, 1792	
Wire, Winding and spinning	H. Burke	Philadelphia, Pa	June 18, 1810	
Wire with fine wire, Machine for covering	W. H. Rodgers	Brooklyn, N. Y	Jan. 15, 1867	61, 261
Wire with gutta-percha, rubber, &c., Machine for covering.	T. Sault	Seymour, Conn	Dec. 9, 1862	37, 112
Wire with lead or other ductile metal, Machine for covering insulated.	S. C. Bishop	New York, N. Y	June 9, 1857	17, 481
Wire-work	W. R. Boerner	Chicago, Ill	Nov. 19, 1867	70, 946
Wire-work for railings, &c	W. R. Boerner	Chicago, Ill	Apr. 12, 1870	101, 816
Wisp and flask, Combined	L. T. Pyott	Philadelphia, Pa	Nov. 21, 1871	121, 194
Withe-twisting machinery	J. Smith	Frankfort, Me	Aug. 7, 1847	5, 217
Wood and coal dumping apparatus	E. R. Kerr	Kewanee, Ill	Dec. 22, 1868	85, 101
Wood and coating oil-barrels, Composition for preserving.	C. Brandenburg	New York, N. Y	Mar. 21, 1865	46, 873
Wood and leather preserving compound	J. P. Bridge	Boston, Mass	Feb. 9, 1869	86, 808
Wood and lumber to dry and season it, Treating	J. F. Gyles	Chicago, Ill	June 25, 1872	128, 387
Wood and metal, Machine for finishing works in	G. Storer	New Britain, Conn	June 19, 1860	28, 818
Wood and paper box	D. M. Smyth	New York, N. Y	Oct. 17, 1865	50, 504
Wood and timber, Process of preserving	D. R. Prindle	East Bethany, N. Y	Mar. 26, 1867	63, 300
Wood, Apparatus for giving form to	G. R. Mather	Willingborough, England	Nov. 1, 1870	108, 805
Wood, Articles made of molded	S. B. Heury	Bridgeport, Conn	Jan. 21, 1868	73, 603
Wood articles, Manufacture of compressed	S. P. Wheeler	Bridgeport, Conn	Apr. 5, 1870	101, 552
Wood articles, Manufacture of pressed	O. Knipfer	Bridgeport, Conn	May 28, 1872	127, 353
Wood, Bending	I. W. Bowers	Boston, Mass	Jan. 2, 1866	51, 793
Wood, Bending	J. W. Griffiths	Brooklyn, N. Y	Jan. 2, 1866	51, 827
Wood, Bending	W. C. Wright	Trenton, N. J	Feb. 6, 1866	52, 483
Wood-boring machine	S. C. Ellis	Jersey City, N. J	July 10, 1866	56, 195
Wood-boring machine	D. Hoit	Fort Wayne, Ind	Sept. 4, 1866	57, 718
Wood-boring machine	J. Null	Quincy, Pa	Mar. 24, 1868	75, 785
Wood-boring tool	J. J. Kraus	Menasha, Wis	July 18, 1871	117, 082
Wood-box	F. Ficht	Dyckesville, Wis	June 14, 1870	104, 132
Wood-boxes, Manufacturing	H. Holland	Belcherstown, Mass	Apr. 13, 1832	
Wood, brick, &c., Composition for preserving	S. Constant		Feb. 4, 1800	
Wood, &c., Bundling kindling	H. A. House	Bridgeport, Conn	Apr. 22, 1873	138, 026
Wood, Bundling kindling	C. B. Whittemore	Arlington, Mass	Aug. 26, 1873	142, 309
Wood-bundling machine	D. A. Greene	New York, N. Y	June 5, 1866	55, 282
Wood-bundling machine	J. Rushworth	New York, N. Y	Oct. 25, 1870	108, 731
Wood-bundling machine	D. D. Sherwood	Boston, Mass	Dec. 3, 1867	71, 798
Wood-bundling machine	W. L. Williams	New York, N. Y	May 8, 1860	28, 243
Wood-bundling machine	W. L. Williams	New York, N. Y	Feb. 14, 1871	111, 796
Wood-bundling machine, Fire	C. J. Hobe	New York, N. Y	June 19, 1860	28, 753
Wood, &c., bundling machine, Kindling	H. A. House	Bridgeport, Conn	Apr. 22, 1873	138, 027
Wood-bundling machine, Kindling	F. Myers	New York, N. Y	Feb. 11, 1868	74, 407
Wood-bundling machine, Kindling	J. Richardson	New York, N. Y	Feb. 11, 1868	74, 425
Wood-bundling machine, Kindling	J. Richardson and F. H. Stevens.	New York, N. Y	July 2, 1867	66, 254
Wood-bundling machine, Kindling	L. Tilton	Brooklyn, E. D., N. Y	Feb. 18, 1868	74, 634
Wood-bundling machine, Kindling	W. L. Williams	New York, N. Y	Aug. 16, 1859	25, 156
Wood-bundling machine, Kindling	W. L. Williams	New York, N. Y	Nov. 15, 1859	26, 147
Wood-bundling machine, Kindling	W. L. Williams	New York, N. Y	Nov. 27, 1860	30, 790
Wood, Carbonizing	M. A. L. B. Virloy	Paris, France	Mar. 31, 1863	38, 071
Wood-carbonizing apparatus	P. Hergon	Paris, France	July 18, 1865	48, 882
Wood-carving machine	I. Hall	New York, N. Y	Mar. 10, 1868	75, 413
Wood-carving machine	I. Hall	New York, N. Y	May 26, 1868	78, 279
Wood-carving tool	L. L. Gunther	Chicago, Ill	Dec. 14, 1869	97, 910
Wood-charring kiln	W. H. Guignon and W. D. McDonald.	Warren, Pa	Nov. 26, 1867	71, 383
Wood-cleaver	J. Van Winkle	New York, N. Y	May 26, 1868	78, 344
Wood, cloth, and metals, and for forming various articles, Composition for coating.	A. Pelletier	Parkersburgh, W. Va	Mar. 19, 1867	63, 087
Wood, Coating	P. S. Devlan	Jersey City, N. J	Apr. 9, 1867	63, 618
Wood, Coating embossed	S. P. Wheeler	Bridgeport, Conn	Sept. 13, 1870	107, 428
Wood, coating ships' bottoms, &c., Composition for preserving.	G. A. and P. C. Vivien	Honfleur, France	Feb. 20, 1872	123, 801
Wood, Coloring and hardening	C. F. Spicker	New York, N. Y	June 24, 1844	3, 635
Wood, Coloring and polishing	E. Knabeschuch	New York, N. Y	Dec. 12, 1865	51, 462
Wood, Coloring and preserving	F. Lear	Saint Louis, Mo	Nov. 8, 1870	109, 027
Wood, &c., coloring process	B. H. Jenks	Bridesburgh, Pa	May 29, 1866	55, 110
Wood, Composition for imitation	H. Carter	Taunton, Mass	Sept. 17, 1867	68, 952
Wood, Composition for protecting and ornamenting the surface of.	J. F. Stark	Greensburgh, Pa	Nov. 22, 1859	26, 209
Wood, Composition for staining	M. Turley	Council Bluffs, Iowa	May 31, 1864	42, 974
Wood, Composition for staining	J. Winger	Kansas City, Mo	Mar. 21, 1871	112, 879
Wood, Compound for staining	J. M. Keller	Evansville, Ind	May 30, 1871	115, 484
Wood-compressor	H. A. House	Bridgeport, Conn	Sept. 30, 1873	143, 243
Wood cutter, Kindling	N. Sonnichsen	San Francisco, Cal	June 24, 1873	140, 225
Wood, Cutting figures in relief on	J. T. Bruen	New York, N. Y	Mar. 12, 1850	7, 156
Wood-disintegrating machine	C. Wolff, sr. and jr	Cincinnati, Ohio	Jan. 31, 1871	111, 415
Wood-divider, Electrical	G. and C. Robinson	New York, N. Y	May 28, 1872	127, 270
Wood elevator, Kindling	J. E. Kelsey	Brooklyn, N. Y	Feb. 15, 1870	99, 910
Wood filling and coating compound	H. Thayer	Johnsonsburgh, N. Y	Apr. 13, 1869	88, 936
Wood-filling and paint compound	J. Miller	West Salem, Ohio	May 13, 1873	138, 914
Wood-filling composition	C. S. Benjamin	Kalamazoo, Mich	Sept. 25, 1866	58, 203
Wood-filling composition	J. F. Bernard	Leominster, Mass	Sept. 24, 1867	69, 165
Wood-filling composition	D. C. Cooley, C. F. Smith, and C. E. Bradley.	Aurora, Ill	Aug. 15, 1865	49, 382
Wood-filling composition	W. Harding	Brooklyn, N. Y	June 10, 1873	139, 670
Wood-filling composition	N. R. Holmquist	Boston, Mass	Jan. 16, 1866	52, 046
Wood-filling composition	H. S. Myers	Mount Joy, Pa	Apr. 24, 1866	54, 194

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Wood-filling composition	J. Perry	Leeds, Mass	Sept. 11, 1866	57,960
Wood &c., filling composition	E. S. Pixley	Great Barrington, Mass	Oct. 10, 1865	50,384
Wood-filling compound	C. E. Bradley	Wilmington, Del	Nov. 25, 1873	144,948
Wood-filling compound	J. B. Dittenhaver	Napoleon, Ohio	Sept. 2, 1873	142,446
Wood filling compound	N. Surges	Bordentown, N. J	May 14, 1872	126,653
Wood, Filling for	T. R. Sherry	Newark, N. J	Nov. 29, 1870	109,769
Wood, Finishing	G. Chambers	Ithaca, N. Y	Dec. 17, 1867	72,366
Wood-finishing compound or oil	F. Webster	Brooklyn, N. Y	Apr. 22, 1873	138,109
Wood for boxes, cases, &c., Treating	H. Thayer	Warsaw, N. Y	Dec 20, 1864	45,537
Wood for boxes, Machine for preparing	J. Bentz	New York, N. Y	Sept. 20, 1839	1,339
Wood for boxes, Machinery for preparing	J. H. Stevens	New York	Dec. 19, 1844	3,862
Wood for covering walls, &c., Process of treating	A. R. Davis	Cambridge, Mass	Feb. 4, 1868	74,056
Wood for manufacture of paper, &c., Preparing	C. K. Marshall	New Orleans, La	Nov. 12, 1867	70,872
Wood for manufacture, Process of preparing	J. and B. Saxton	Sumner, Ill	Oct. 12, 1869	95,733
Wood for painting, Composition for preparing	J. Babcock	Cambridgeport, Mass	Feb. 8, 1870	99,618
Wood for paper-stock, Reducing	J. H. Hawes	Stockbridge, Mass	Apr. 20, 1869	89,221
Wood for procuring gases, Charring	S. L. Jones	Philadelphia	Jan 17, 1827	....
Wood for pulp, Machine for preparing	A. K. Gilmore	East Turner, Me	May 28, 1872	127,337
Wood for railway ties, &c., Preserving	A. B. Tripler	New Orleans, La	June 28, 1870	104,917
Wood for roofing, &c., Process for preparing	T. Bailey	Bridport, Vt	Apr. 2, 1872	125,251
Wood for varnishing, Composition for filling	J. Sheller	Wilmington, Del	June 2, 1868	78,613
Wood for varnishing, Filling	F. Seabury	Yarmouth, Me	June 11, 1872	127,804
Wood from decay and mildew, Preserving	A. R. McNair	New York, N. Y	Sept. 7, 1869	94,626
Wood from decay, &c., Preserving	A. Hamar	Hungary, Austria	July 4, 1865	48,636
Wood from decay, Preserving	A. Holmes	Cortland, N. Y	Feb. 26, 1867	62,334
Wood from decay, &c., Preserving	F. Shepherd	Fredericksburgh, Va	Oct. 8, 1834	
Wood from decay, Process of preserving	J. H. Taylor	New York, N. Y	Nov. 12, 1867	70,761
Wood from Teredo, Protecting	R. L. Nicolls	Easton, Md	Feb. 23, 1811	
Wood, Fuel and kindling	W. E. Wertenbaker	Washington, D. C	Mar. 21, 1871	112,995
Wood-gear, Machine for cutting	J. Jackson	Woonsocket, R. I	Dec. 12, 1865	51,458
Wood-gear, Machine for cutting	C. R. James	Jersey City, N. J	Sept. 12, 1865	49,881
Wood-graining apparatus	R. A. Adams	Chicago, Ill	Dec. 26, 1865	51,774
Wood-graining apparatus	C. Falke	New York, N. Y	Oct. 7, 1873	143,444
Wood-graining tool	R. A. Adams	Chicago, Ill	Oct. 13, 1863	40,224
Wood-grinder	J. Eridge	Augusta, Me	Nov. 4, 1873	144,313
Wood-grinder	J. F. Daniels and J. H. Hubbard.	Boston, Mass., and Stanstead, Canada.	July 29, 1873	141,206
Wood hardening and preserving	C. G. Waterbury	New York, N. Y	Mar. 5, 1872	124,402
Wood hardening and preserving composition	H. L. Houghton	Morrison, Ill	June 11, 1867	65,674
Wood hardening and preserving composition	J. L. Samuels	San Francisco, Cal	Jan. 1, 1867	60,794
Wood-horse	E. Whittemore	North Paris, Me	Apr. 28, 1863	38,351
Wood in bending, Method of strapping	J. L. Field	Syracuse, N. Y	May 10, 1859	23,912
Wood in imitation of carving, Manufacture of ornamental articles in.	G. W. Ley	Croydon, England	Aug. 29, 1871	118,464
Wood-incased can	O. S. Camp	Grand Rapids, Mich	Sept. 12, 1871	118,904
Wood into different forms, Method of preparing and molding.	P. Shaw	Boston, Mass	May 15, 1860	28,309
Wood, iron, paper, &c., Composition for coating	A. Pelletier	Washington, D C	Nov. 19, 1867	71,210
Wood-joining	R. McChesney	Ilion, N. Y	Nov. 18, 1873	144,626
Wood, Kindling	M. T. Arnold	Summit, R. I	Sept. 13, 1870	107,319
Wood, Kindling	J. W. Webber	New York, N. Y	Aug. 17, 1869	93,775
Wood-kyanizing machine	D. W. Hunt	San Francisco, Cal	June 29, 1869	91,848
Wood, Machine for cutting	J. A. Taplin	Carthage Landing, N. Y	Oct. 2, 1866	58,507
Wood, Machine for cutting and splitting	A. W. Jackson	La Crosse, Wis	Dec. 15, 1868	85,009
Wood, Machine for cutting curvilinear surfaces on angular pieces of.	G. Muller	Sacramento, Cal	Nov. 30, 1858	22,193
Wood, &c. Machine for turning cylinders of	M. F. Connet	Plainfield, N. J	July 24, 1855	13,301
Wood, Manufacture of artificial non-inflammable	A. L. Fleury	Pittsburgh, Pa	Feb. 13, 1866	52,533
Wood, Manufacture of enameled	C. L. Robertson	Providence, R. I	Aug. 13, 1867	67,679
Wood, Manufacture of pipes, roofing, flooring, &c., from disintegrated.	J. K. Griffin	Waterdown, Canada	Oct. 3, 1871	119,601
Wood, metal, canvas, &c., Composition for preserving.	L. Harmyer	Cincinnati, Ohio	Jan. 14, 1868	73,246
Wood, metal, &c., Composition for coating	P. S. Devlan	Jersey City, N. J	May 10, 1870	102,922
Wood, metal, &c., Compound for cleaning and scouring.	F. M. Woodbury	New York, N. Y	June 15, 1869	91,296
Wood, Method of applying colors to	E. Knabeschuck	New York, N. Y	Nov. 28, 1865	51,104
Wood, Method of applying steam to and of cutting scarfs from.	J. White	Belfast, Me	Dec. 2, 1856	16,157
Wood, Method of banding compressed	C. B. Gilman	Brooklyn, N. Y	Mar. 28, 1871	113,044
Wood, &c., Method of inlaying	J. S. Baldwin	Newark, N. J	Sept. 6, 1870	107,150
Wood, Method of protecting	F. M. Buell	Truxton, N. Y	Mar. 20, 1866	53,267
Wood, Method of uniting	J. A. Thompson	Auburn, N. Y	Dec. 13, 1870	110,089
Wood, Method of variegating	J. Cowee, jr	Keene, N. H	Feb. 1, 1859	22,784
Wood, Mode of forming raised ornaments on	J. B. Macduff	New York, N. Y	Mar. 17, 1868	75,558
Wood, Mode of producing designs on	P. Schwickardt	Brooklyn, N. Y	Mar. 18, 1856	14,472
Wood, Mode of purifying, seasoning, and preserving.	T. W. Heinemann	New York, N. Y	Apr. 14, 1868	76,757
Wood-molding machine	A. S. Gear	New Haven, Conn	Aug. 23, 1870	106,685
Wood-molding machine	J. Stock	New York, N. Y	Nov. 3, 1863	40,511
Wood-molding machine, Cutter-head for	D. Cumming, jr	New York, N. Y	Apr. 9, 1867	63,707
Wood moldings or strips for the frames of mirrors, pictures, &c., Manufacture of.	R. J. Marcher	New York, N. Y	Apr. 28, 1863	38,314
Wood moldings, &c., Polishing-machine for polishing.	B. C. Perry	Bridgeport, Conn	May 18, 1869	90,226
Wood, Obtaining acetic acid from	T. Schwartz	New York, N. Y	Mar. 29, 1870	101,319
Wood or other fibrous material, Drying, preserving, and coloring.	H. Haupt	Philadelphia, Pa	Jan. 25, 1870	99,186
Wood, Peg	W. N. Linnell	Cambridge, Mass	July 25, 1871	117,436
Wood, Plastic material for imitation	W. B. Gleason	Boston, Mass	Nov. 26, 1867	71,294
Wood-polishing machine	F. G. Chapman	Chicago, Ill	Mar. 8, 1870	100,563
Wood-polishing machine	S. Hagaman	Weissport, Pa	Sept. 1, 1868	81,774
Wood-polishing machine	G. F. Hammer	Cincinnati, Ohio	Apr. 14, 1868	76,733
Wood polishing machine	F. Hoffman	West Cambridge, Mass	Jan. 16, 1866	52,044
Wood-polishing machine	F. Hoffman	West Cambridge, Mass	Apr. 24, 1866	54,161
Wood-polishing machine	H. O. Hooper	Diamond Springs, Cal	May 19, 1868	78,093
Wood-polishing machine	J. S. Loomis	Brooklyn, N. Y	May 26, 1868	78,275
Wood-polishing machine	J. Moore	Gardiner, Me	Nov. 13, 1866	59,622

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Invention.	Inventor.	Residence.	Date.	No.
Wood-polishing machine	G. Munger	New Haven, Conn	Apr. 17, 1860	97, 933
Wood-polishing machine	W. F. Spear	Wooster, Ohio	Dec. 14, 1869	97, 823
Wood-polishing machine	E. Weissenborn	Hudson City, N. J	July 30, 1867	67, 240
Wood-polishing machine	D. Westley	Corry, Pa	Nov. 23, 1869	97, 254
Wood-polishing process	C. Seebach	New York, N. Y	Feb. 18, 1873	136, 010
Wood, Preparing and embossing	W. Kopp	Louisville, Ky	May 11, 1869	90 096
Wood, Preparing and preserving	T. Hanvey	Lancaster, N. Y	Mar. 19, 1867	62, 956
Wood-preservative liquids, Apparatus for injecting	W. H Smyth	Steubenville, Ohio	Feb. 14, 1871	111, 784
Wood-preservative substances, Apparatus for seasoning and impregnating wood with.	M. Voorhees and G. W. N. Custis.	Camden, N. J	Feb. 23, 1869	87, 226
Wood, Preserving	V. W. Blanchard	Bridport, Vt	Sept. 14, 1869	94, 704
Wood, Preserving	S. P. Brown	Washington, D. C	June 13, 1871	115, 931
Wood, Preserving	J. Calkins	New York, N. Y	June 2, 1868	78, 514
Wood, Preserving	T. W. Chandler	New York, N. Y	Jan. 3, 1871	110, 738
Wood, Preserving	C. E. Clarke, G. Hadley, and J. C. Clifford.	Buffalo, N. Y	July 23, 1867	67, 104
Wood, Preserving	S. L. Cole	Brooklyn, N. Y	Mar. 12, 1872	124, 418
Wood, Preserving	E. L. Cowling	Boston, Mass	Dec. 8, 1868	84, 733
Wood, Preserving	C. M. Cresson	Philadelphia, Pa	July 7, 1868	79, 554
Wood, Preserving	B. H. Detwiler and S. G. Van Gilder.	Williamsport, Pa	Jan. 17, 1871	111, 045
Wood, Preserving	H. L. Eddy	Geneva, N. Y	Mar. 13, 1866	53, 917
Wood, Preserving	H. W. Fawcett and T. McGowan.	Titusville and Meredith, Pa.	Jan. 23, 1872	123, 009
Wood, Preserving	L. Feuchtwanger	New York, N. Y	Feb. 6, 1872	123, 467
Wood, Preserving	J. R. Hayes	Washington, D. C	Oct. 4, 1870	107, 904
Wood, Preserving	J. Jones	New Orleans, La	Aug. 22, 1871	118, 245
Wood, Preserving	C. Karmrodt and N. Thilmany	Bonn, Prussia	Mar. 30, 1869	88, 392
Wood, &c., Preserving	G. Palmer	Littlestown, Pa	Aug. 1, 1865	49, 146
Wood, Preserving	A. J. Sheldon	Buffalo, N. Y	Aug. 23, 1870	106, 625
Wood, Preserving	A. H. Tait	Jersey City, N. J	June 6, 1871	115, 784
Wood, Preserving	N. H. Thomas	New Orleans, La	Apr. 4, 1871	113, 706
Wood, Preserving	A. B. Tripler	New Orleans, La	Jan. 28, 1870	104, 916
Wood, Preserving	E. Webb	New York, N. Y	Oct. 25, 1870	108, 639
Wood, Preserving	J. G. Vorhees	Aqueduct Mills, N. J	Nov. 21, 1871	121, 141
Wood, Preserving	P. Welch	Saint Louis, Mo	July 16, 1872	129, 503
Wood, Preserving and hardening	B. R. Nickerson	San Francisco, Cal	Sept. 20, 1870	107, 620
Wood, Preserving and seasoning	S. Constant and J. Smith	Peekskill and Brooklyn, N. Y.	June 27, 1871	116, 274
Wood-preserving apparatus	H. G. McGonegal	Washington, D. C	July 1, 1873	140, 520
Wood-preserving apparatus	J. W. Fielder	Princeton, N. J	June 13, 1871	115, 946
Wood-preserving apparatus	F. A. Stevens	Chicago, Ill	May 3, 1870	102, 725
Wood-preserving apparatus, Portable	W. T. Pelton	New York, N. Y	Apr. 4, 1871	113, 338
Wood, Preserving blocks of	E. M. Fowler	New York, N. Y	Feb. 28, 1871	112, 136
Wood, Preserving, coloring, and seasoning	F. Lear	Saint Louis, Mo	July 11, 1871	116, 969
Wood-preserving composition	W. Hayman	Taunton, Mass	Jan. 3, 1871	110, 632
Wood-preserving composition	E. J. De Smedt	New York, N. Y	Mar. 8, 1870	100, 608
Wood-preserving composition	R. Sutphen	Freehold, N. J	Oct. 17, 1871	120, 009
Wood-preserving compound	L. S. Fales	Monmouth Junction, N. J	Sept. 2, 1873	142, 433
Wood-preserving compound	S. T. Harding	Morrison, Ill	Aug. 27, 1867	68, 069
Wood-preserving compound	I. Holmes	Moscow, N. Y	Mar. 5, 1872	124, 358
Wood preserving compound	B. A. Jeager	Bower's Station, Pa	Aug. 18, 1868	81, 172
Wood-preserving process	S. L. Cole	Brooklyn, N. Y	Mar. 12, 1872	124, 420
Wood preserving process	C. J Eames	New York, N. Y	Dec. 24, 1872	134, 133
Wood-preserving process	W. H. Jones	Rochester, N. Y	Oct. 29, 1872	132, 584
Wood-preserving process	H. De Lapparent	Paris, France	July 8, 1862	35, 811
Wood-preserving process	C. Payne	South Lambeth, England	May 28, 1850	7, 399
Wood-preserving process	L. S. Robbins	New York, N. Y	Apr. 4, 1865	47, 139
Wood-preserving process and apparatus	T. W. Heinemann	New York, N. Y	Oct. 5, 1869	95, 474
Wood, Process and apparatus for treating	I. Hayford	Boston, Mass	June 4, 1872	127, 482
Wood, &c., Process for imitating the grain of	G. F. Degelow	Bethlehem, Pa	Sept. 16, 1862	36, 456
Wood, Process for softening and toughening blocks of.	G. W. Swan	San Francisco, Cal	Aug. 26, 1873	142, 298
Wood, Process of treating	E. Spaulding	Brooklyn, N. Y	May 12, 1868	77, 777
Wood, Process of treating	S. P. Wheeler	Bridgeport, Conn	Apr. 5, 1870	101, 553
Wood, Process of varnishing and polishing	G. Bricker, sr	Newville, Pa	Aug. 1, 1865	49, 102
Wood-pulp machine	W. M. Howland	Topsham, Me	Apr. 4, 1871	113, 297
Wood-pulp machine	S. A. Perkins	Topsham, Me	Mar. 14, 1871	112, 734
Wood-pulp machine	J. Taylor	Luzerne, N. Y	July 18, 1871	117, 122
Wood-pulp, Machine for grinding	S. A. Perkins	Topsham, Me	Mar. 14, 1871	112, 733
Wood-pulp, Machine for making	H. Burghardt	Curtisville, Mass	Nov. 23, 1869	97, 041
Wood-pulp, Machine for manufacture of	H. Dodge	Albany, N. Y	Jan. 9, 1872	122, 581
Wood-pulp, Machine for preparing	M. and A. Waissnix and C. A. Specker.	Reichenau and Vienna, Austria.	Jan. 31, 1871	111, 496
Wood-pulping apparatus	G. Ames	New York, N. Y	July 26, 1870	105, 692
Wood (and other fibrous material) pulping machine	J. Bridge	Augusta, Me	May 30, 1871	115, 274
Wood pulping machine	H. Voelter	Heidenheim, Würtemberg	Nov. 2, 1869	96, 515
Wood-pulping process	J. W. Dixon	Philadelphia, Pa	June 5, 1866	55, 253
Wood (and other fibrous substances) pulping process.	V. E. Keegan	New York, N. Y	June 6, 1871	115, 740
Wood, Rack for hauling	A. Landis	Colesburgh, Iowa	Sept. 18, 1866	58, 108
Wood raising, sawing, and splitting machinery	C. Crousillac	New Orleans, La	Nov. 7, 1848	5, 901
Wood-scraper	H. D. Spickler	Canton, Ohio	Apr. 1, 1873	137, 329
Wood-scraping machine	E. S. French	Templeton, Mass	Oct 9, 1866	58, 722
Wood, Seasoning	E. Davee	Marshall, Ill	May 30, 1871	115, 446
Wood, Seasoning	R. A. Douglass	Philadelphia, Pa	May 3, 1870	102, 665
Wood, Seasoning	B. H Jenks	Bridesburgh, Pa	Oct. 2, 1866	58, 425
Wood, Seasoning	J. Ronaldson	Philadelphia, Pa	Feb. 9, 1818	......
Wood, Seasoning and preserving	S. Beer	New York, N. Y	Jan. 21, 1868	73, 563
Wood, Seasoning and preserving	S. Constant and J. Smith	Peekskill and Brooklyn, N. Y.	June 11, 1867	65, 545
Wood, Seasoning and preserving	C. M. Cresson	Philadelphia, Pa	Dec. 6, 1870	109, 872
Wood, Seasoning and preserving	C. M. Cresson	Philadelphia, Pa	Dec. 6, 1870	108, 8[illegible]3
Wood, Seasoning and preserving	J. C. Day	Hackettstown, N. J	Mar. 1, 1870	10[illegible], 380
Wood, Seasoning and preserving	T. W. Heinemann	New York, N. Y	Aug. 31, 1869	94, 204
Wood-seasoning and preserving apparatus	W. T. Pelton	New York, N. Y	Feb. 27, 1872	124, 080
Wood-seasoning process	T. W. Heinemann	New York, N. Y	Oct. 5, 1869	95, 473
Wood, Securing veneers to	W. H. Knight	Boston Highlands, Mass	June 28, 1870	104, 858

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Wood, Separating the fiber of	A. S. Lyman	New York, N. Y	Aug. 3, 1858	21,077
Wood, Shaping irregular surfaces in	W. Hale and A. Goodman	Dana, Mass	July 22, 1845	4,129
Wood-shaping machine	J. Dawe, jr	Newark, N. J	May 22, 1866	55,006
Wood, Shaving	B. Hoadley	Waterbury, Conn	June 14, 1814	....
Wood shaving and smoothing machine	A. Brownson	Lockport, N. Y	June 21, 1826	....
Wood-shaving machine	W. Rose	Philadelphia, Pa	Sept. 3, 1844	3,726
Wood-slivering machine	W. H. Noyes	Gardiner, Me	Mar. 20, 1860	27,597
Wood-slivering machine	J. and G. W. Prescott	Boston, Mass	May 9, 1854	10,893
Wood-slivering machine	S. R. Smith and E. Cowles	Hadley, Mass	Feb. 20, 1855	12,424
Wood-slivering machine	J. Taggart	Roxbury, Mass	Jan. 23, 1866	52,251
Wood, Solution for treatment of	E. W. Clark	Hartford, Conn	Sept. 14, 1869	94,869
Wood-splitter	G. B. Fowler	New York, N. Y	Mar. 20, 1866	53,289
Wood-splitter	C. L. Pierce	Buffalo, N. Y	Aug. 4, 1863	39,420
Wood splitting and bundling machine	W. L. Williams	New York, N. Y	Dec. 24, 1872	134,339
Wood-splitting and other machines, Device for operating.	W. Love and O. Thornley	Indianapolis, Ind	Nov. 6, 1866	59,423
Wood-splitting knife	S. J. Raymond	Brooklyn, N. Y	Mar. 22, 1870	101,041
Wood-splitting machine	W. A. Allen	Baltimore, Md	Dec. 27, 1870	110,415
Wood-splitting machine	J. A. Conover	New York, N. Y	May 15, 1855	12,857
Wood-splitting machine	E. Coogan	Washington, D. C	Nov. 1, 1870	108,883
Wood-splitting machine	J. Davock	New York, N. Y	Jan. 1, 1867	60,702
Wood-splitting machine	T. A. Dugdale	West Richmond, Ind	July 19, 1864	43,576
Wood-splitting machine	C. Day and A. D. Lord	Lancaster and Bethany, N. Y.	May 6, 1856	14,807
Wood-splitting machine	F. Ficht	Dyckeville, Wis	Jan. 31, 1871	111,333
Wood-splitting machine	J. H. Hildebrandt	Brooklyn, N. Y	Mar. 28, 1865	47,019
Wood-splitting machine	J. A. Knight	Saint Louis, Mo	May 17, 1864	42,780
Wood-splitting machine	D. Milliken	New York, N. Y	Sept. 12, 1871	118,963
Wood-splitting machine	R. Murray	New Castle, Del	Aug. 26, 1873	142,116
Wood-splitting machine	F. Noette	Brooklyn, N. Y	Apr. 6, 1858	19,867
Wood-splitting machine	W. L. Ormsby	Jersey City, N. J	Apr. 28, 1857	17,169
Wood-splitting machine	B. F. Penny	Rochester, N. Y	Sept. 12, 1865	49,913
Wood-splitting machine	P. P. Ruger	New York, N. Y	Jan. 25, 1859	22,730
Wood-splitting machine	J. H. Silkman	Milwaukee, Wis	Jan. 23, 1866	52,215
Wood-splitting machine	R. D. Silverwood	Baltimore, Md	Mar. 8, 1870	100,679
Wood-splitting machine	L. Tilton	Brooklyn, E. D., N. Y	May 28, 1867	65,303
Wood-splitting machine	L. Tilton	Brooklyn, N. Y	July 21, 1868	80,241
Wood-splitting machine	F. Wagner	New York, N. Y	July 9, 1872	128,830
Wood-splitting machine	W. Wibert	Buffalo, N. Y	Apr. 12, 1864	42,323
Wood-splitting machine	W. L. Williams	New York, N. Y	Apr. 14, 1857	17,061
Wood-splitting machine	W. L. Williams	New York, N. Y	Dec. 12, 1865	51,506
Wood-splitting machine	W. L. Williams	New York, N. Y	Jan. 30, 1866	52,352
Wood-splitting machine	W. L. Williams	New York, N. Y	Mar. 23, 1869	88,250
Wood-splitting machine	W. L. Williams	New York, N. Y	May 11, 1869	89,906
Wood-splitting machine	W. L. Williams	New York, N. Y	Aug. 8, 1871	117,951
Wood-splitting machine, Fire	E. Davis	New York, N. Y	July 12, 1859	24,735
Wood-splitting machine, Fire	W. O. Bisbee	Camden, N. J	Aug. 28, 1855	13,485
Wood-splitting machine, Fire	W. L. Williams	New York, N. Y	Apr. 19, 1859	23,734
Wood-splitting machine, Kindling	H. Behn	New York, N. Y	Apr. 1, 1862	34,808
Wood-splitting machine, Kindling	W. L. Williams	New York, N. Y	Aug. 18, 1868	81,123
Wood-splitting machine, Kindling	W. L. Williams	New York, N. Y	Aug. 8, 1871	117,952
Wood-splitting machine, Rotary	G. W. B. Gedney	New York, N. Y	Aug. 28, 1855	13,492
Wood-splitting, Tamping and blasting machine for	E. W. Walton	Drytown, Cal	Jan. 21, 1868	73,555
Wood-splitting wedge	A. Heusser	Ellington, Conn	Jan. 17, 1871	110,974
Wood, straw, and other vegetable fibers, Process for treating.	J. W. Dixon	Philadelphia, Pa	Dec. 26, 1865	51,705
Wood, straw, &c., Process for pulping	J. W. Dixon	Philadelphia, Pa	Dec. 26, 1865	51,704
Wood stuffing and filling composition	J. Sheller	Wilmington, Del	Sept. 15, 1868	82,254
Wood, Stuffing and varnishing	H. R. Stone and E. N. Schoultz	Greenwich, N. Y	Dec. 18, 1866	60,590
Wood-stuffing composition	H. Smith	Phillipsburgh, N. J	Oct. 29, 1867	70,277
Wood surfacing and ornamenting machine	T. T. Ponsonby	Liverpool, England	Oct. 12, 1869	95,833
Wood to imitate slate, Coloring and preserving	J. O. Froshaug	Albert Lea, Minn	Dec. 23, 1873	145,859
Wood to metal, Mode of securing	R. Howdon	Cincinnati, Ohio	May 14, 1867	64,767
Wood to obtain useful products, Treating	T. Schwartz	New York, N. Y	Mar. 29, 1870	101,329
Wood to preserve, season, and give it a better surface, Process of treating.	I. Hayford and J. F. Paul	Boston, Mass	Oct. 5, 1869	95,583
Wood to resemble carved work, Mode of treating	W. Kopp and W. Wrampelmeier.	Louisville, Ky	June 1, 1869	90,854
Wood, &c., to sawdust or finer grain, Method of reducing.	W. I. Cantelo	Burlington, N. J	July 5, 1859	24,614
Wood, Treating and recovering the liquid used in seasoning and preserving.	C. M. Cresson	Philadelphia, Pa	Dec. 6, 1870	109,870
Wood-turning tool	E. Quinn	Washington, D. C	Mar. 27, 1866	53,486
Wood, Uniting rubber with wood	F. B. Shearer	Columbus, Ohio	Sept. 27, 1870	107,729
Wood while being bored, tapped, &c., Clamp for holding rectangular pieces of.	H. Miller	Grafton, Va	Feb. 9, 1858	19,307
Wood with oleaginous and saline matter, Method of impregnating.	C. A. Seely	New York, N. Y	Sept. 24, 1867	69,260
Wood with rubber and gutta-percha, Mode of coating.	K. W. Holmes and A. Albright	McGrawville and Dryden, N. Y.	May 7, 1867	64,419
Wood with tar or other material, Apparatus for impregnating.	G. Pustkuchen	Hoboken, N. J	May 14, 1867	64,703
Wood-work, Constructing ornamental	J. Dill and H. E. Jordan	Grand Rapids, Wis	Nov. 23, 1869	97,060
Wood-work joints	S. C. Batchelor and N. S. Thomas.	Watertown, N. Y	Mar. 30, 1836	....
Wood-work, Material for the manufacture of cabinet and other.	A. Herzog and J. G. Roth	New York, N. Y	Mar. 9, 1869	87,672
Wood-work, stone, &c., Composition for cleaning painted.	M. Reed	Saint Louis, Mo	Sept. 2, 1862	36,368
Wood-working machine	G. Dryden	Worcester, Mass	Apr. 20, 1869	89,207
Wood-working-machine cutter-head	E. P. Halsted	Worcester, Mass	Sept. 12, 1871	118,931
Wood-working, Method of	N. Jenkins	New York, N. Y	Jan. 25, 1870	99,201
Wooden axles, Machine for turning	W. McMahon	Saint Peter, Minn	July 16, 1872	129,486
Wooden-block fastening	H. Wells	New York, N. Y	June 7, 1864	43,057
Wooden bowls, Cutter for turning	H. Locke	Grand Rapids, Mich	Oct. 8, 1872	132,000
Wooden bowls, Machine for making	H. Mellish	Walpole, N. H	Jan. 28, 1868	73,740
Wooden bowls, Machinery for turning out	A. Everett	Middlefield, Mass	July 30, 1850	7,523
Wooden box	O. Abell	Wolcott, Vt	Apr. 12, 1870	101,804

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Wooden box	O. Abell	Wolcott, Vt	Apr. 12, 1870	101, 805
Wooden box	M. Fitzgibbons	New York, N. Y	Nov. 3, 1868	83, 770
Wooden box	W. Gilbert	Catskill, N. Y	Oct. 25, 1870	108, 700
Wooden boxes, Construction of	W. F. Veber	Perrysburgh, Ohio	Feb. 28, 1871	112, 301
Wooden boxes, Cutter for turning cylindrical	H. Mellish	Walpole, N. H	May 5, 1857	17, 249
Wooden boxes, Machine for cutting heads and bottoms of.	E. Hersey	Hingham, Mass	Mar. 12, 1867	62, 846
Wooden boxes, Machine for finishing	H. A. Jones	Saint Louis, Mo	Apr. 24, 1860	28, 038
Wooden boxes, Machine for making	J. D. Creig	Niles, Mich	July 16, 1872	129, 462
Wooden boxes, Machine for making	J. Cronin	Richmond, Va	Apr. 26, 1870	102, 232
Wooden boxes, Machine for making	G. F. Palmer	Farmington, N. H	Nov. 15, 1859	26, 119
Wooden boxes, Machine for making	R. Ramsdell	Rindge, N. H	July 14, 1868	79, 858
Wooden boxes, Machine for manufacturing	L. Koch	New York, N. Y	Jan. 2, 1855	12, 149
Wooden boxes, Machine for turning	A. S. Newton	Brandon, Vt	Nov. 17, 1857	18, 646
Wooden boxes, Machine for turning	C. E. Warren	New York, N. Y	Jan. 18, 1840	1, 475
Wooden box, Paper-covered	M. P. Dorsch	New York, N. Y	Feb. 7, 1865	46, 221
Wooden chair-seats, Machine for forming the curved surfaces of solid.	E., A., and C. Kilburn	Burlington, Vt	Mar. 10, 1857	16, 800
Wooden comb	N. Jones	Southington, Conn	May 9, 1809	....
Wooden handles, Machine for polishing	E. Quinlan	Sheboygan Falls, Wis	Aug. 4, 1868	80, 564
Wooden hoops for casks, &c., Shave for cutting out	C. Stratton	Brattleborough, Vt	Aug. 6, 1842	2, 749
Wooden hoops, Machine for coiling	L. Zistel	Sandusky, Ohio	May 15, 1866	54, 809
Wooden hoops, Machine for cutting and finishing the locks of.	H. Litteljohn	Troy, N. Y	Sept. 14, 1858	21, 508
Wooden hoops, Machine for cutting locks and tapering the ends of.	R. Parce	Pitcher, N. Y	June 19, 1855	13, 097
Wooden hoops, Method of planing and tapering	C. H. Brown	Forest Port, N. Y	Dec. 16, 1856	16, 225
Wooden mat for picture-frames	H. S. Hale	Philadelphia, Pa	Dec. 30, 1873	146, 067
Wooden pins, Machine for making	E. C. Johnson	Williamsport, Pa	May 6, 1873	138, 658
Wooden pins, Machine for making	G. Rowe	Worcester, Mass.	Apr. 23, 1867	64, 037
Wooden pins, Machine for making	R. H. Watson	Lapeer, Mich	Nov. 1, 1870	108, 859
Wooden pins, Machine for making	R. H. Watson, A. L. Kingsbury, and W. D. and A. S. King.	Lapeer and Pontiac, Mich	Dec. 10, 1872	133, 907
Wooden pipe	A. Brisbane	New York, N. Y	Apr. 9, 1867	63, 697
Wooden pipes from veneers, Manufacture of	A. Müller	Brooklyn, N. Y	Oct. 24, 1871	120, 210
Wooden rods, Connection of	A. Good, jr., and S. Strouse	Titusville, Pa	Aug. 18, 1868	81, 270
Wooden-shovel tips	W. P. Wentworth	Seneca Falls, N. Y	Feb. 14, 1871	111, 891
Wooden spring	J. Clark	Kent County, Del	July 31, 1818	....
Wooden structures, Composition for coating	J. Heckel	Decatur, Ill	Dec. 3, 1867	71, 752
Wooden surfaces, Machine for smoothing planed	B. D. Whitney	Winchendon, Mass	Aug. 11, 1857	17, 992
Wooden troughs, Machine for cutting	A. Wyckoff	Elmira, N. Y	Feb. 19, 1861	31, 509
Wooden troughs, Machine for manufacturing	S. F. Field	Worcester, Mass	Feb. 1, 1859	22, 792
Wooden tubing	O. W. Stearns	Johnson, Vt	May 6, 1862	35, 186
Wooden ware, Hollow	H. Mellish	Walpole, N. H	May 10, 1864	42, 675
Wooden ware, Machine for cutting out	G. R. Hay	Berea, Ohio	Aug. 9, 1859	25, 014
Wooden ware, Machine for making	A. Howard, jr	Readsborough, Vt	Apr. 10, 1860	27, 803
Wooden ware, Machine for making	L. Z. Parke	Windham, N. Y	June 14, 1825	....
Wooden ware, Machine for making	A. R. Reese	Phillipsburgh, N. J	Oct. 29, 1867	70, 263
Wooden ware, Machine for manufacturing	D. Pierce	Woodstock, Vt	June 19, 1855	13, 099
Wooden ware, Manufacture of hollow	E. Briggs	Perry, N. Y	July 30, 1827	....
Wooden ware without staves, Manufacturing	J. Patridge	Zanesville, Ohio	Apr. 16, 1831	....
Wool after carding, Apparatus for delivering and drawing long-fibered.	J. and J. Dobson	Philadelphia, Pa	Nov. 25, 1873	144, 840
Wool and cotton, Beater-cylinder for cleaning	A. Arnold	Walpole, Mass	May 9, 1848	5, 562
Wool and cotton by hand, Machine for roping and spinning.	J. Brown	Providence, R. I	Jan. 23, 1821	....
Wool and cotton cleaning machine	T. Ely	New York	Sept. 14, 1843	3, 269
Wool and cotton for carding, Preparing	G. L. Mason	Williston, Vt	Sept. 4, 1847	5, 274
Wool and cotton from burs, seeds, &c., Machine for cleaning.	W. W. Calvert and A. Crane	Chelmsford, Mass	July 16, 1841	2, 175
Wool and cotton, Picking and breaking	J. Shly	Augusta, Ga	Oct. 27, 1836	....
Wool and cotton picking and breaking machine	J. Shly	Augusta, Ga	Oct. 27, 1836	69
Wool and cotton roping and spinning machine	F. Burdick	Kortright, N. Y	May 30, 1825	....
Wool and cotton roping and spinning machine	Z. Knox and W. Hoskins	Lowville, N. Y	Aug. 16, 1824	....
Wool and cotton roping and spinning machine	A. Patterson and F. Burdock	Delaware County, N. Y	Sept. 29, 1824	....
Wool and flax comber	W. W. Calvert	Lowell, Mass	July 2, 1836	....
Wool and hair cleaning	C. F. A. Simonin and E. W. Coffin.	Philadelphia, Pa., and Glendale, N. J.	Apr. 19, 1870	102, 166
Wool and hair from skins of animals, Compound for stripping.	J. Watteau	Antwerp, Belgium	Feb. 13, 1872	123, 598
Wool and other animal fibers, Material for lubricating.	G. F. Henry, I. A. F. Bang, F. R. C. Monestier, and J. P. A. Fiquier.	Paris, France	Aug. 10, 1869	93, 617
Wool and other fibers for spinning, Preparing	W. Smith	Manchester, N. H	Nov. 2, 1858	21, 988
Wool and other fibrous materials, Machine for washing.	W. Murkland	Lowell, Mass	Jan. 2, 1867	51, 900
Wool and other fibrous materials, Manufacturing	J. Goulding	Dedham, Mass	June 11, 1829	....
Wool and woolen fabrics, Process of scouring and cleansing.	O. Macdaniel	New York, N. Y	Nov. 19, 1867	71, 191
Wool and woolen goods, Cleaning	W. A. Govern	Holyoke, Mass	Aug. 14, 1866	57, 122
Wool, Apparatus for c eansing dyed	J. E. Ackroyd	Chester, Pa	Oct. 14, 1873	143, 603
Wool, Bleaching and whitening	P. Stevenson	Clinton, Mass	June 14, 1864	43, 160
Wool-box	C. Wightman	Batavia, Ill	May 26, 1868	78, 407
Wool breaking and carding machine, Sheep's	B. Standring	....	June 28, 1803	....
Wool-burring, &c	J. W. Boynton and J. A. McGaw	East Hartford, Conn., and Newark, N. J.	Jan. 7, 1868	72, 966
Wool-burring	P. Cassow	San Francisco, Cal	Sept. 20, 1870	107, 417
Wool-burring	S. Couillard, jr	Boston, Mass	Mar. 30, 1833	....
Wool-burring	T. Crossley	Bridgeport, Conn	July 22, 1873	141, 038
Wool-b rring	C. L. Harding	Winooski Falls, Vt	May 29, 1860	28, 476
Wool-burring	W. Sykes	Newton Lower Falls, Mass.	Dec. 24, 1867	72, 563
Wool burring and carding machine, Cylinder for	C. L. Goddard	New York, N. Y	July 3, 1866	56, 038
Wool burring and cleaning machine	Z. Parkhurst	Milford, Mass	Aug. 31, 1869	94, 437
Wool burring and cleaning machine	Z. Parkhurst	Milford, Mass	Apr. 12, 1870	101, 763
Wool burring and cleaning machine	C. G. Sargent	Graniteville, Mass	Aug. 15, 1871	118, 158
Wool-burring and cotton-cleaning machinery	T. Ely	New York, N. Y	May 16, 1845	4, 054
Wool-burring and cotton-ginning machine	F. A. Calvert	Lowell, Mass	Nov. 25, 1841	2, 373
Wool-burring and cotton-ginning machine	F. A. Calvert and C. G. Sargent	Lowell, Mass	June 7, 1859	24, 280

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Wool-burring and cotton-ginning machine	R. J. Clay	Green Point, N. Y	Apr. 2, 1867	63, 471
Wool burring and picking and cotton-ginning machine.	F. A. Calvert	New York	June 3, 1843	3, 120
Wool-burring and similar machines, Cylinder of	C. L. Goddard	New York, N. Y	Aug. 29, 1865	49, 625
Wool-burring cylinder	C. G. Sargent	Westfield, Mass	Apr. 6, 1869	88, 742
Wool, &c., burring cylinders. Manufacture of	F. A. Calvert	Lowell, Mass	Jan. 23, 1849	6, 044
Wool, &c., burring cylinders, Operating the teeth of	T. B. Butler	Norwalk, Conn	Aug. 10, 1858	21, 116
Wool-burring machine	L. Brumback	Reading, Pa	Apr. 28, 1868	77, 249
Wool-burring machine	W. Candell	Paterson, N. J	Aug. 7, 1847	5, 222
Wool-burring machine	R. J. Clay	Green Point, N. Y	July 30, 1867	67, 394
Wool-burring machine	H. Conklin	Poughkeepsie, N. Y	July 6, 1839	1, 217
Wool-burring machine	D. Crowley	Philadelphia, Pa	Feb. 27, 1872	124, 119
Wool-burring machine	C. L. Goddard	New York, N. Y	July 3, 1866	56, 037
Wool-burring machine	D. and G. T. Jones	Philadelphia, Pa	Nov. 15, 1864	45, 047
Wool-burring machine	D. L. and G. T. Jones	Philadelphia, Pa	Jan. 19, 1869	86, 078
Wool-burring machine	T. Musgrave	Leeds, Mass	Mar. 30, 1858	19, 816
Wool-burring machine	J. Nichols	Paterson, N. J	Nov. 3, 1868	83, 723
Wool-burring machine	Z. Parkhurst	Milford, Mass	Mar. 12, 1867	62, 877
Wool &c, burring machine	W. Richardson	Oldham, Great Britain	Jan. 17, 1871	111, 004
Wool-burring machine	S. Sawyer	Boston, Mass	Mar. 30, 1833	......
Wool-burring machine, Feed-roll box for	C. L Goddard	New York, N. Y	Nov. 15, 1864	45, 034
Wool-burring machinery	E. J. McCarthy	New York, N. Y	Jan. 10, 1860	26, 775
Wool-burring process	J. Fullen	Saxonville, Mass	Dec. 8, 1863	40, 832
Wool-burring process	W. A. Govern	Norwalk, Conn	Oct. 22, 1867	70, 085
Wool-burring, Treating wool for	J. Fullen	Yonkers, N. Y	July 12, 1864	43, 547
Wool-cards, Evener for	C. F. Morrison	Thompsonville, Conn	Nov. 4, 1873	144, 348
Wool, Cleaning	H. Hayward and J. M. Pendleton.	Brooklyn and New Brighton, N. Y.	Nov. 19, 1867	71, 170
Wool, Cleaning	E. F. Richter	Berlin, Prussia	Aug. 30, 1870	106, 871
Wool, Cleaning	F. M. Ruschhaupt and J. G. Perzel.	New York, N. Y	July 26, 1864	43, 647
Wool, Cleaning	M. H. Simpson	Boston, Mass	July 7, 1835	......
Wool-cleaning and cotton-ginning machine	M. D. Whipple	East Douglass, Mass	Oct. 28, 1840	1, 839
Wool cleaning and lapping machine	F. A. Calvert	Lowell, Mass	Jan. 23, 1849	6, 051
Wool-cleaning machine	L. W. Boynton	South Coventry, Conn	Sept. 12, 1854	11, 659
Wool-cleaning machine	L. S. Chichester	Brooklyn, N. Y	Feb. 14, 1854	10, 515
Wool-cleaning machine	T. Ely	Poughkeepsie, N. Y	Sept. 17, 1838	925
Wool-cleaning machine	S. R. Parkhurst	Bloomfield, N. J	Aug. 20, 1867	67, 901
Wool-cleaning machine	W. H. Watrous	Brooklyn, N. Y	Feb. 10, 1857	16, 622
Wool-cleaning machine	J. Wolcott, jr., and C. W. Brown.	Roxbury, Mass	Oct. 18, 1837	427
Wool-cleaning machinery	J. Platt and W. Richardson	Oldham, Great Britain	Oct. 21, 1862	36, 727
Wool-cleaning machinery	A. W. Putnam	Brooklyn, N. Y	Oct. 7, 1856	15, 856
Wool, &c., cleaning process	L. S. Robbins	New York, N. Y	Mar. 24, 1868	75, 980
Wool-cleansing machine	L. W. Boynton	South Coventry, Conn	Aug. 12, 1851	8, 287
Wool, Combing	S. Couillard	Boston, Mass	June 16, 1836	......
Wool, Combing	S. Couillard	Boston, Mass	July 7, 1835	......
Wool, &c., combing and preparing apparatus	E. Halden	Laurel Mount Baildon, near Leeds, England.	Jan. 18, 1870	98, 966
Wool, &c., combing and preparing machine	F. A. Calvert	Lowell, Mass	Oct. 9, 1841	2, 278
Wool-combing machine	F. A. Calvert	New York, N. Y	Dec. 27, 1843	3, 391
Wool-combing machine	P. Fairbairn and J. Hargrave	Leeds and Kirkstall, York County, England.	Dec. 4, 1855	13, 870
Wool-combing machine	E. Gould	Paterson, N. J	Oct. 9, 1844	3, 785
Wool-combing machine	H. Rawson	Leicester England	July 9, 1861	32, 781
Wool-combing machine	C. G. Sargent	Lowell, Mass	Oct. 7, 1842	2, 805
Wool-combing machine	C. Whipple	Providence, R. I	May 5, 1857	17, 244
Wool-combing machinery	G. E. Donisthorpe	Bradford, England	Sept. 11, 1844	3, 734
Wool-combing machinery	S. C. Sister and G. E. Donisthorpe.	York County, England	Oct. 26, 1852	9, 356
Wool-combing machinery	C. G. Sargent	Lowell, Mass	Mar. 13, 1847	5, 018
Wool-combing machinery	C. G. Sargent	Lowell, Mass	Aug. 15, 1854	11, 534
Wool-combing machinery	C. G. Sargent	Lowell, Mass	May 16, 1854	10, 913
Wool-combing machinery	M. H. Simpson	Boston, Mass	Mar. 17, 1857	16, 864
Wool-combing machinery	W. H. Walton	Brooklyn, N. Y	July 1, 1856	15, 268
Wool, Composition for treating	W. S. Hubbell and A. Barrett	Kingsville, Ohio	June 7, 1853	9, 764
Wool, Composition for treating	A. H. Ward, jr	Boston, Mass	Jan. 1, 1856	14, 037
Wool, Compound for destroying burs in	W. H. Jubb	Norwalk, Conn	Feb. 4, 1868	73, 980
Wool, Compound for treating	H. H. Capamagian	Pittsburgh, Pa	Nov. 1, 1870	108, 756
Wool-condenser	J. S. Hogeland	La Fayette, Ind	Jan. 18, 1853	9, 546
Wool, cotton, and other fibrous substances, Machine for picking and opening.	G. C. Kellogg and P. Gillett	New Hartford, Conn	Apr. 30, 1840	1, 575
Wool, cotton, &c., burring and cleaning machine	S. G. Mumford	North Providence, R. I	Mar. 28, 1844	3, 516
Wool, cotton, &c., burring and picking machine	R. D. Nesmith	Franklin, N. H	Sept. 1, 1863	39, 742
Wool, cotton, &c., Cleaning	G. H. Pond	Rutland, Vt	Dec. 27, 1870	110, 495
Wool, cotton, &c., Machine for preparing	A. J. Dern	Heusy, Belgium	Apr. 21, 1868	77, 011
Wool, cotton, &c., Machinery for cleaning	S. R. Parkhurst	New York, N. Y	June 17, 1862	35, 621
Wool, Covering thread with	A. L Fuller	Clinton, Mass	Dec. 2, 1856	16, 164
Wool, &c., Device for applying steam to	W. Carter	Columbus, Ind	Aug. 10, 1869	93, 506
Wool, Device for shearing and clipping	R. F. Smith and J. K. Priest	Nashua, N. H	Dec. 10, 1867	72, 103
Wool, Doffer-cylinder and machine for roping and spinning.	S. Learned	Watertown, Mass	Aug. 3, 1815	......
Wool, Drawing and spinning	W. Humphreys	Humphreysville, Conn	Oct. 4, 1811	......
Wool drawing and spinning machinery	J. H. Bloodgood	New York, N. Y	Oct. 1, 1861	33, 374
Wool drawing and spinning machinery	J. H. Bloodgood	New York, N. Y	May 13, 1862	35, 211
Wool drawing and twisting machinery	J. W. Kennedy and J. T. Plummer.	Plainfield, Conn	Sept. 14, 1858	21, 538
Wool drawing and twisting machinery	J. T. Plummer	Plainfield, Conn	Jan. 1, 1861	31, 031
Wool-dryer	C. Beu	Dessau, Anhalt-Dessau	Jan. 15, 1867	61, 145
Wool-dryer	L. S. Blake	Racine, Wis	Aug. 2, 1870	105, 891
Wool-dryer	L. W. Boynton	Hartford, Conn	Feb. 26, 1867	62, 468
Wool-dryer	L. W. Boynton	Hartford, Conn	Apr. 2, 1867	63, 462
Wool-dryer	J. E. Crane	Lowell, Mass	Dec. 19, 1865	51, 562
Wool-dryer	J. M. Dick	Buffalo, N. Y	June 20, 1871	116, 032
Wool-dryer screen	J. E. Crane	Lowell, Mass	Jan. 30, 1866	52, 270
Wool-drying frame	E. Duffee	Haverhill, Mass	Sept. 9, 1873	142, 561
Wool-drying machine	B. James	Worcester, Mass	May 28, 1861	32, 424
Wool, &c., drying machine	J. Petrie, jr	Rochdale, England	Apr. 1, 1862	34, 864

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Wool-drying machine	H. Smith	Worcester, Mass	Sept. 29, 1863	40, 148
Wool-drying machine	J. P. Stillman	Westerly, R. I	July 12, 1864	43, 530
Wool flannel	J. F. Rich	Chatham Run, Pa	Apr. 5, 1864	42, 226
Wool-fleeces, Apparatus for tying and packing	J. M. Worcester	Oberlin, Ohio	Dec. 4, 1866	60, 316
Wool-fleeces, Machine for bundling	J. How	Deer Creek, Mich	May 1, 1855	12, 778
Wool-fleeces, Machine for compressing	L. Tupper	Genoa, N. Y	Feb. 8, 1848	5, 433
Wool-fleeces, Machine for folding	J. Porter	Ruggles, Ohio	July 17, 1866	56, 443
Wool-fleeces, Machine for putting up	S. G. Chase	Raymertown, N. Y	Oct. 17, 1865	50, 450
Wool folding and packing machine	W. H. Main	Liverpool, Ohio	June 28, 1859	24, 567
Wool-folding machine	R. D. M. Edwards	Franklin, Mich	Mar. 15, 1859	23, 234
Wool for combing, Machinery for preparing	A. Reinhardt	New York, N. Y	July 17, 1855	13, 290
Wool for picking, carding, &c., Apparatus for treating.	P. S. Haines	Newburgh, N. Y	June 12, 1866	55, 490
Wool for use, Process for preparing refuse	L. T. Stiastny	Hoboken, N. J	Jan. 3, 1865	45, 768
Wool for worsted, Mode of heating machine for preparing.	J. Bamford	Philadelphia, Pa	Mar. 18, 1813	......
Wool from jute, Producing a substitute for	H. M. De Villeneuve	Paris, France	Apr. 24, 1849	6, 372
Wool from mixed articles and fabrics, Apparatus for extracting.	A. and J. Knowles and J. Barraclough.	Bristol, Great Britain	Feb. 19, 1867	62, 139
Wool from mixed fabrics, Process of recovering	J. G. Perzel	New York, N. Y	Sept. 8, 1863	39, 8[illegible]8
Wool from rags of cotton and wool, Process of separating.	J. H. Collins	Albany, N. Y	Sept. 24, 1872	131, 504
Wool from rags, Separating	J. F. Collins	Albany, N. Y	Sept. 19, 1871	119, 077
Wool from skin, Machine for pulling	J. Watteau	Antwerp, Belgium	Dec. 5, 1871	121, 565
Wool, hair, &c., Forming web without spinning or weaving.	J. Arnold and G. G. Bishop	Norwalk, Conn	Oct. 20, 1836	......
Wool in roving-machines, Apparatus for removing electricity from.	A. Goodspeed	Granville, N. Y	Oct. 26, 1869	96, 102
Wool in the process of manufacture, Removing electricity from.	J. Metcalf	Worcester, Mass	Sept. 24, 1850	7, 671
Wool-lubricant	B. A. Earl	Philadelphia, Pa	Feb. 28, 1865	46, 551
Wool, &c., lubricant	A. B. Fleming, R. Irvine, and R. C. Maclagan.	Leith, North Britain	Sept. 17, 1872	131, 345
Wool-lubricating composition	B. A. Earl	Philadelphia, Pa	Apr. 14, 1863	38, 156
Wool-lubricating compound	J. J. Lundy	Leith, near Edinburgh, North Britain.	Mar. 14, 1871	112, 728
Wool-lubricating during the process of manufacture.	J. J. Lundy	Leith, Great Britain	Apr. 4, 1871	113, 679
Wool, Lubricating-material for	H. Bottomley	Camden, N. J	July 4, 1865	48, 509
Wool-lubricating, Process of preparing petroleum for.	S. Gibbons	Freedom, Pa	Mar. 9, 1869	87, 658
Wool, Machine for bundling	H. T. La Roy	Richmond, Ill	Nov. 10, 1868	83, 976
Wool, &c., Machine for shearing twisted strands of	E. T. C. Lutton	Philadelphia, Pa	Dec. 4, 1866	60, 211
Wool, Manufacture of	E. Cobb	Georgetown	Apr. 29, 1812	......
Wool, &c., Manufacture of	J. Goulding	Boston, Mass	July 29, 1836	......
Wool, &c., Manufacturing	J. Goulding	Dedham, Mass	Dec. 15, 1826	......
Wool, &c., Manufacturing	J. Goulding	Dedham, Mass	Apr. 27, 1827	......
Wool, Manufacturing	J. Goulding	Dedham, Mass	July 10, 1827	......
Wool, Manufacturing	J. Goulding	Dedham, Mass	Aug. 24, 1827	......
Wool, Manufacturing	J. Goulding	Dedham, Mass	July 21, 1829	......
Wool, &c., Manufacturing	J. Goulding	United States	July 29, 1836	2
Wool, Method of scouring	G. Michelet	Brussels, Belgium	Sept. 25, 1866	58, 358
Wool, Oiling	B. H. Lightfoot	Philadelphia, Pa	Jan. 24, 1865	46, 006
Wool-oiling apparatus	T. A. Campbell	New York, N. Y	Jan. 18, 1870	98, 922
Wool-oiling apparatus	B. A. Earl and H. Holcroft	Media and Philadelphia, Pa	May 30, 1865	47, 938
Wool, &c., oiling apparatus	M. J. Roberts	Pendarran House, England	June 20, 1865	48, 351
Wool-oiling composition	J. Gomersall	Mansfield, Mass	Jan. 29, 1867	61, 532
Wool-oiling composition	J. McCabe	Lewiston, Me	Dec. 24, 1867	72, 658
Wool-oiling composition	J. Shaw	Philadelphia, Pa	Aug. 9, 1870	106, 219
Wool-oiling device for carding and other machines.	W. K. Platt and H. Holcroft	Gloucester, N. J., and Media, Pa.	June 28, 1864	43, 336
Wool-oiling machine	T. A. Campbell	New York, N. Y	Feb. 11, 1868	74, 300
Wool oiling machine	R. Dexter and H. Gledhill	Worcester, Mass	Dec. 22, 1868	85, 219
Wool-oiling machine	J. Kelly	Troy, N. Y	Apr. 25, 1865	47, 427
Wool-oiling machine	M. Mayall	Roxbury, Mass	Jan. 28, 1868	73, 909
Wool-oiling machine	C. G. Sargent	Westford, Mass	Apr. 25, 1871	114, 048
Wool, &c., oiling machinery	T. A. Campbell	New York, N. Y	Jan. 2, 1866	51, 801
Wool-oiling machinery	W. Clissold	Dunbridge Works, Stroud, England.	Oct. 7, 1862	36, 603
Wool-oiling machinery	G. S. Harwood	Newton, Mass	Nov. 8, 1864	44, 951
Wool-oiling machinery	J. Shinn	Leverington, Pa	June 20, 1865	48, 348
Wool on the pelt, Cleaning	J. M. Brown	Lynn, Mass	Aug. 5, 1873	141, 423
Wool on the pelt, Machine for burring	J. Waterhouse	Little Falls, N. Y	Nov. 3, 1857	18, 564
Wool on the skin, Cleaning	L. L. Miller	Rochester, N. Y	Jan. 31, 1831	......
Wool on the skin, Machine for burring	E. H. Ashcroft	Lynn, Mass	Dec. 27, 1870	110, 418
Wool, &c., on the skin, Machine for burring	G. F. Dockham	Lynn, Mass	May 24, 1870	103, 309
Wool on the skin, Machine for cleaning burs from	E. Tracy	Poughkeepsie, N. Y	Dec. 20, 1837	526
Wool or other fibrous material, Manufacturing	J. Goulding	Dedham, Mass	Feb. 16, 1829	......
Wool or flax to brush into teeth	W. W. Calvert	Lowell, Mass	Sept. 18, 1835	......
Wool or other fibrous material, Manufacturing	J. Goulding	Dedham, Mass	Feb. 16, 1829	......
Wool-packer	A. Saeger	Meadville, Pa	Feb. 20, 1866	52, 732
Wool-packer	A. Saeger	Meadville, Pa	Aug. 27, 1867	68, 240
Wool-packing device	W. A. Davis	Salem, Ohio	Mar. 3, 1863	37, 810
Wool-packing machine	C. Carlisle	Woodstock, Vt	Oct. 6, 1857	18, 322
Wool-packing machine	A. Dorr	Orleans, Mich	Oct. 6, 1857	18, 328
Wool-packing table	A. Franklin	Galena, Ohio	July 16, 1867	66, 824
Wool-packing table	W. S. Harris	Eckford Township, Mich	June 4, 1867	65, 379
Wool, &c., picker	H. W. Axford	Richmond, Ind	Aug. 24, 1869	93, 946
Wool-picker	B. Brown	Exeter, R. I	Sept. 2, 1822	......
Wool-picker	G. C. Kellogg	New Hartford, Conn	Mar. 28, 1848	5, 484
Wool-picker	M. Morrison	Boston, Mass	Aug. 15, 1811	......
Wool-picker	S. R. Parkhurst	Mont Clair, N. J	Jan. 11, 1870	98, 704
Wool picker and duster	M. Bliss	Ionia, Mich	Mar. 29, 1870	101, 218
Wool, &c., picking and cleaning machine	S. R. Parkhurst	New York, N. Y	Mar. 15, 1864	41, 936
Wool-picking machine	J. Cate	Rumsey, Ky	Sept. 21, 1869	94, 999
Wool-picking machine	E. Kellogg	New Hartford, Conn	Jan. 6, 1852	8, 644
Wool-picking machine	W. Wardsworth and R. H. Semple.	Saint Louis, Mo	Nov. 17, 1868	84, 236

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Wool, &c., picking machinery	R. Daniels and A. G. Dewey	Woodstock, Vt	Apr. 3, 1849	6, 259
Wool-press	G. Baldwin and A. B. Chase	Italy Hill, N. Y	Jan. 1, 1867	60, 821
Wool-press	J. C. Ball	Ionia County, Mich	Mar. 1, 1864	41, 752
Wool-press	S. C. Bond	Farmersville, N. Y	Mar. 5, 1867	62, 597
Wool-press	G. M. Briggs	Boston, N. Y	Mar. 19, 1867	62, 930
Wool-press	H. H. Brown	Washington, Pa	Apr. 24, 1866	54, 103
Wool-press	S. Cooley	Oakwood, Mich	Oct. 16, 1866	58, 779
Wool-press	J. Crane	Glover, Vt	June 13, 1865	48, 159
Wool-press	R. Greene	Willette, N. Y	Mar. 28, 1865	47, 064
Wool-press	P. B. Killam	Alina, Mich	May 29, 1866	55, 116
Wool-press	O. C. McCune	Darby Creek, Ohio	Oct. 16, 1866	58, 860
Wool-press	T. N. Morse	Grattan, Mich	July 11, 1865	48, 705
Wool-press	J. W. Phillips	Randolph Centre, Wis	Mar. 28, 1865	47, 037
Wool-press	U. B. Williams	Lowell, Mich	Dec. 5, 1865	51, 377
Wool, Process for packing	G. M. Cooper	Litchfield, Mich	Mar. 26, 1861	31, 784
Wool pressing, packing, and weighing device	A. W. Fox	Columbiaville, Mich	Sept. 15, 1868	82, 103
Wool, Process and apparatus for treating	I. Hayford	Boston, Mass	Mar. 22, 1870	101, 012
Wool, Process for removing vegetable matter from	W. Sykes	Glenham, N. Y	July 10, 1866	56, 291
Wool, Process for treating	T. Barrows	Dedham, Mass	July 10, 1855	13, 206
Wool-pulling machinery	J. Watteau	Antwerp, Belgium	Aug. 19, 1873	141, 972
Wool rolling and pressing	W. W. Purdy	Liverpool, Ohio	Jan. 18, 1859	22, 673
Wool-rolls from the machine, Method of receiving	G. Brewster	Norwich, Conn	Mar. 13, 1824	....
Wool roping and spinning machine	J. R. and J. B. Wheeler	Galway, N. Y	Aug. 28, 1826	....
Wool-scouring compound	A. Peple	East Billerica, Mass	Jan. 19, 1864	41, 318
Wool-table	J. Mallett	Catharine, N. Y	June 15, 1869	91, 355
Wool washing and drying machine	G. and W. Yewdall	Philadelphia, Pa	Nov. 20, 1866	59, 788
Wool-washing machine	J. A. Clarke	New York, N. Y	Jan. 31, 1865	46, 078
Wool-washing machine	J. Hunter	North Adams, Mass	Feb. 23, 1864	41, 705
Wool-washing machine	J. and W. McNaught, jr	Rochdale, England	Apr. 29, 1869	89, 420
Wool-washing machine	E. Nongaret	Newark, N. J	Dec. 7, 1869	97, 682
Wool-washing machine	J. K. Proctor	Philadelphia, Pa	Nov. 26, 1872	133, 481
Wool-washing machine	C. G. Sargent	Graniteville, Mass	Jan. 19, 1864	41, 324
Wool-washing machine	C. G. Sargent	Graniteville, Mass	Nov. 14, 1865	50, 961
Wool-washing machine	S. Taylor	Rochdale, England	Feb. 7, 1865	46, 306
Wool-washing machine	J. and W. Yewdall	Philadelphia, Pa	Sept. 27, 1870	107, 846
Wool-washing machinery	R. G. Turner and S. B. Robinson.	East Dedham, Mass	Oct. 1, 1861	33, 408
Wool-washing machine, Lifting-cylinder of	J. Petrie, jr., and J. Teal	Rochdale and Towerby, England.	Sept. 25, 1866	58, 359
Wool-washing on the sheep	C. Harris	Snowhill, Ohio	Oct. 1, 1830	....
Woolen and other fabrics, Machine for printing	J. McInnes	Braintree, Mass	Apr. 29, 1856	14, 772
Woolen and silk goods, Process of treating	G. Warren	Roxbury, Mass	Apr. 21, 1868	77, 138
Woolen-cleansing solution	E. F. Prentiss	Philadelphia, Pa	June 22, 1858	20, 661
Woolen cloth for dyeing, Process of preparing	W. H. Salisbury	Lawrence, Mass	Dec. 1, 1868	84, 582
Woolen fabrics, Process for finishing	P. and G. King	Greenfield, Mass	Feb. 9, 1864	41, 515
Woolen roping or slubbing, Making	A. Steele	Waterbury, Conn	Apr. 1, 1830	....
Woolen roving, Preparing	A. E. Bigelow	Chicopee, Mass	Mar. 27, 1855	12, 581
Womb-supporter	J. Magoffin	Saint Louis, Mo	Nov. 17, 1868	84, 128
Work-bench	H. W. Neary	Princeton, N. J	Mar. 9, 1869	87, 584
Work-bench, Carpenter's	E. and W. H. Andre	Tiffin, Ohio	Oct. 8, 1872	131, 989
Work-bench, Carpenter's	J. Bragdon	Boston, Mass	Nov. 19, 1867	71, 126
Work-bench, Carpenter's	J. Devoge	Randolph, Pa	Aug. 24, 1858	21, 247
Work-bench, Joiner's	H. White	Chicago, Ill	July 1, 1873	140, 394
Work-box	W. Brace	Washingtonville, Ohio	Apr. 29, 1873	138, 372
Work-box	J. S. Fletcher	South Bend, Ind	Nov. 12, 1867	70, 825
Work-box	E. Heath	San Francisco, Cal	May 13, 1873	138, 886
Work-box	E. Hinckley	San Francisco, Cal	Sept. 16, 1873	142, 786
Work-box	J. E. Marvel	Seaford, Del	Oct. 11, 1870	108, 278
Work-box	C. C. Schmitt	New York, N. Y	Dec. 1, 1857	18, 773
Work-box	H. E. Wilcox	Ilion, N. Y	July 29, 1873	141, 409
Work-box and desk	C. W. Small	Worcester, Mass	Nov. 23, 1869	97, 128
Work-holder	N. Clute and O. W. Marshall	Schenectady, N. Y., and Hartford, Conn.	Oct. 25, 1870	108, 569
Work-holder	E. P. Forbes	Hartford, Conn	Dec. 3, 1872	133, 524
Work-holder	W. F. Gilbert	Derby, Conn	June 18, 1872	128, 034
Work-holder	J. E. Gilman	Hartford, Conn	May 3, 1870	102, 534
Work-holder	R. W. Perkins	West Meriden, Conn	May 6, 1873	138, 691
Work-holding device	F. E. Hahn	Philadelphia, Pa	Dec. 30, 1873	146, 064
Work-stand	C. S. Caple	Frankfort, N. Y	Apr. 22, 1873	138, 072
Work-stand	I. Morris	Clinton, Ill	Apr. 14, 1868	76, 796
Work-stand, Lady's	C. S. Caple	Frankfort, N. Y	July 18, 1871	117, 044
Work-stand, Lady's	G. S. Manning	Danville, Ill	June 3, 1873	139, 501
Work-stand, Lady's	J. N. Miller	Cambridge City, Ind	July 23, 1872	129, 850
Work-table	F. M. B. Clark	Wilmington, Vt	Oct. 18, 1870	108, 449
Work-table appliance	J. G. Lucas	Newark, N. J	Oct. 13, 1868	83, 072
Work-table implement and spool of thread combined.	G. Wells	Bethel, Conn	July 13, 1869	92, 498
Work-table, Lady's	W. S. Little	Boston, Mass	Apr. 20, 1869	89, 052
Work-table, Lady's	J. Wood	Lowell, Mass	Sept. 24, 1867	69, 148
Work-tables, Attachment for lady's	J. P. Wilson	New York, N. Y	Sept. 23, 1873	143, 212
Worm-boiler	J. Truman	Philadelphia, Pa	June 24, 1809	....
Worm-specific	C. McLane	Morgantown, Va	Aug. 19, 1833	....
Worsted, &c., Machinery for dressing or finishing	B. B. Tilt and J. Skinner	Roxbury, Mass	July 8, 1843	3, 155
Wort, &c., Apparatus for extracting	F. Jacoby	Saint Louis, Mo	Sept. 1, 1868	81, 785
Wort-cooling apparatus	J. Wilkins	Troy, N. Y	Oct. 26, 1858	21, 915
Woven bag	C. Moore, sr	Trenton, N. J	July 3, 1866	56, 081
Woven fabric	S. W. Baker	Providence, R. I	Sept. 4, 1866	57, 659
Woven fabric	G. Crompton	Worcester, Mass	July 17, 1866	56, 381
Woven fabric	J. Earnshaw	East Greenwich, R. I	Dec. 10, 1867	72, 005
Woven fabric	J. Healey	Bolton-le-Moors, England	Dec. 18, 1855	13, 970
Woven fabric	T. Isherwood	Ramsbottom, England	June 13, 1871	115, 859
Woven fabric	E. F. Richman	Muscatine, Iowa	Feb. 4, 1868	74, 137
Woven fabric for floor-matting, &c	I. Lindsley	Pawtucket, R. I	Apr. 14, 1868	76, 781
Woven fabric, Thick	J. Gujer	Philadelphia, Pa	May 18, 1858	20, 167
Woven fabrics, Coating and water-proofing	H. F. Smith	London, England	Feb. 9, 1869	86, 784
Woven fabrics, Machine for filling or starching	T. L. Livsey	Bury, Great Britain	Dec. 20, 1870	110, 252
Woven fabrics, Machinery for beetling	J. Patterson	Belfast, Ireland	Aug. 12, 1873	141, 725

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Woven fabrics, Mode of applying designs in relief and brilliancy to.	F. Pelitdidier	Paris, France	May 7, 1867	64,562
Woven fabrics, Wire for making piles in	E. B. Bigelow	Clinton, Mass	Nov. 25, 1851	8,539
Woven tucked fabric	T. France	New York, N. Y	May 18, 1858	20,263
Wrapper-cutter	J. R. Tunnicliff	Van Hornesville, N. Y	May 16, 1871	114,887
Wrecks, Mode of discharging and raising	P. Bennet	New York, N. Y	Sept. 2, 1845	4,177
Wrecking-apparatus	B. McGroder and H. Tiedemann.	Cleveland, Ohio	Sept. 9, 1873	142,712
Wrecking-apparatus	M. Osborn	Cleveland, Ohio	Oct. 28, 1873	144,125
Wrench:				
See Adjustable wrench. Bit-brace wrench. Bung-bush wrench. Carriage-wrench. Carriage-wheel wrench. Double-headed wrench. Duplex wrench. Dynamometer-wrench. Fork-wrench. Gas-fitter's wrench. Gas-pipe wrench. Hinged-claw wrench. Hose-wrench. Jaw-wrench. Monkey-wrench. Nut-wrench. Pipe-wrench. Pump-tube-elevating wrench. Railway-track wrench. Ratchet-wrench. Rotary wrench. Screw-wrench. Slide-wrench. Socket-wrench. Spindle-wrench. Tap-wrench. Track-wrench. Wagon-wrench.				
Wrench	H. E. Anthony	Providence, R. I	Dec. 22, 1868	85,049
Wrench	J. N. Arvin	Valparaiso, Ind	Feb. 16, 1869	86,967
Wrench	Q. S. Backus	Miller's Falls, Mass	Nov. 5, 1872	132,789
Wrench	S. S. Barnaby	Chicago, Ill	Apr. 2, 1867	63,459
Wrench	J. B. Barnes	Fort Wayne, Ind	May 26, 1868	78,176
Wrench	S. Barry and F. Perkins	Brunswick, Ohio	May 6, 1873	138,468
Wrench	W. Baxter	Newark, N. J	Feb. 12, 1856	14,221
Wrench	W. Baxter	Newark, N. J	Dec. 1, 1868	84,605
Wrench	E. Beach	Titusville, Pa	Feb. 28, 1871	112,108
Wrench	E. Beach	Titusville, Pa	Feb. 28, 1871	112,109
Wrench	B. F. Bee	Harwich, Mass	Feb. 23, 1869	87,133
Wrench	H. J. Behrens	New York, N. Y	Sept. 25, 1855	13,597
Wrench	H. J. Behrens	New York, N. Y	May 24, 1859	24,175
Wrench	A. J. Bell	Greensburgh, Ky	Dec. 20, 1859	26,468
Wrench	W. C. Bemis	Springfield, Mass	Dec. 2, 1873	145,085
Wrench	G. W. Bishop	Stamford, Conn	Apr. 27, 1869	89,461
Wrench	H. D. Blake	New Hartford, Conn	Sept. 22, 1857	18,266
Wrench	O. Bonneville	Worcester, Mass	Nov. 26, 1872	133,402
Wrench	B. C. Bradley	Chicago, Ill	June 24, 1873	140,111
Wrench	W. Bradshaw and C. Lyon	Delphi, Ind	June 30, 1868	79,306
Wrench	J. W. Brewster	Stamford, N. Y	May 31, 1859	24,190
Wrench	C. B. Bristol	Naugatuck, Conn	June 26, 1855	13,120
Wrench	H. G. Brown	Collinsville, Conn	Apr. 23, 1872	126,013
Wrench	M. Bubser	Jersey City, N. J	July 29, 1873	141,259
Wrench	T. L. Buckley	Mankato, Minn	Nov. 25, 1873	144,826
Wrench	P. Burress and C. Cline	Braidwood, Ill	Nov. 22, 1870	109,493
Wrench	J. Burt	Fall River, Mass	Dec. 29, 1868	85,276
Wrench	R. B. Butler	Allentown, Pa	May 1, 1866	54,290
Wrench	R. P. Buttles	Mansfield, Pa	July 3, 1860	28,964
Wrench	B. F. Burton	West Randolph, Vt	May 10, 1870	102,770
Wrench	D. Campbell and W. Saul	Elizabeth, N. J	Oct. 4, 1870	107,871
Wrench	G. J. Capewell	West Cheshire, Conn	Jan. 18, 1870	98,847
Wrench	J. F. Cass	L'Original, Canada	Oct. 18, 1870	108,330
Wrench	L. Chapman	Collinsville, Conn	Sept. 15, 1868	82,085
Wrench	L. Chapman	Collinsville, Conn	Sept. 14, 1869	94,710
Wrench	L. Chapman	Collinsville, Conn	Mar. 22, 1870	100,978
Wrench	L. Chapman	Collinsville, Conn	Nov. 21, 1871	121,083
Wrench	S. Chapman	Charlestown, Mass	Aug. 16, 1870	106,467
Wrench	J. Charlton	Newark, N. J	Apr. 13, 1869	88,848
Wrench	T. D. Christopher	Madison, Ind	Aug. 27, 1867	68,168
Wrench	H. M. Clark	New Britain, Conn	Sept. 8, 1857	18,135
Wrench	A. G. Coes	Worcester, Mass	Mar. 6, 1866	52,968
Wrench	A. G. Coes	Worcester, Mass	Mar. 8, 1870	100,602
Wrench	A. G. Coes	Worcester, Mass	May 2, 1871	114,505
Wrench	A. G. Coes	Worcester, Mass	Dec. 26, 1871	122,108
Wrench	L. Coes	Worcester, Mass	Mar. 9, 1869	87,547
Wrench	L. Coes	Worcester, Mass	Oct. 26, 1869	96,203
Wrench	D. W. Colburn	Loami, Ill	June 16, 1868	78,861
Wrench	J. C. Conner	Williamsburgh, N. Y	Feb. 6, 1866	52,487
Wrench	E. A. Cooper	Lancaster, N. Y	Jan. 21, 1873	135,084
Wrench	M. G. Crane	Newton, Mass	Aug. 12, 1873	141,767
Wrench	J. E. Cronk	Poughkeepsie, N. Y	Apr. 2, 1867	63,481
Wrench	A. Cumberworth	Toronto, Canada	Sept. 26, 1871	119,265
Wrench	J. D. Dale	Philadelphia, Pa	Aug. 21, 1855	13,456
Wrench	A. B. Davis	Pleasantville, Pa	Oct. 5, 1869	95,438
Wrench	A. B Davis	Philadelphia, Pa	Nov. 14, 1871	120,947
Wrench	F. S. Delfor	Burlington, Iowa	Nov. 26, 1872	133,422
Wrench	L. R. Dexter	Whitefield, N. H	Mar. 23, 1869	88,017
Wrench	H. Dodge	Albany, N. Y	Nov. 6, 1866	59,370
Wrench	J. F. Dodge	Newark, N. J	July 31, 1866	56,731
Wrench	J. H. Doolittle	Derby, Conn	July 22, 1862	35,971
Wrench	W. P. Dunlap	Maquoketa, Iowa	June 11, 1867	65,550
Wrench	T. Earle	Valley Falls, Smithfield, R. I.	Feb. 12, 1867	61,929
Wrench	J. J. Ellis	Auburn, N. Y	Mar. 10, 1868	75,399
Wrench	W. Evans	Forestville, Conn	Nov. 13, 1866	59,571
Wrench	J. Faessler	Bloomington, Ill	Mar. 22, 1870	101,114
Wrench	H. Fessler and R. V. Jones	Canton, Ohio	Aug. 16, 1870	106,475
Wrench	O. V. Flora	Madison, Ind	Apr. 6, 1869	88,560
Wrench	E. T. Ford	Stillwater, N. Y	Nov. 3, 1868	83,618
Wrench	D. P. Foster	Shelburne Falls, Mass	Feb. 15, 1859	22,947

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Wrench	J. N. Freestone	Williamsburgh, N. Y	Sept. 3, 1867	68,431
Wrench	E. P. Furlong	Westbrook, Me	Jan. 23, 1866	52,155
Wrench	G. P. Ganster	New York, N. Y	May 22, 1866	54,888
Wrench	G. P. Ganster	New York, N. Y	Apr. 6, 1869	88,623
Wrench	T. Garrick	Providence, R. I	June 29, 1869	91,838
Wrench	J. Gates	Portland, Oregon	Oct. 3, 1871	119,596
Wrench	P. L. Gibbs	Chicago, Ill	Nov. 5, 1872	132,823
Wrench	L. D. Gilman	Troy, N. Y	Aug. 5, 1856	15,482
Wrench	W. D. Gold	Philadelphia, Pa	Oct. 9, 1866	58,633
Wrench	J. Goodin	Centralia, Ill	Sept. 29, 1868	82,513
Wrench	J. Goodin	Centralia, Ill	May 4, 1869	89,575
Wrench	J. Goodin	Joliet, Ill	Jan. 10, 1871	110,914
Wrench	A. I. Gove	San Francisco, Cal	June 12, 1860	28,665
Wrench	A. Graham	Roxbury, Mass	Aug. 7, 1855	13,388
Wrench	D. G. Greene	North Bridgewater, Mass	Aug. 30, 1859	25,302
Wrench	A. C. Greth	Reading, Pa	Nov. 17, 1868	84,111
Wrench	G. W. Griswold	Logansport, Ind	Mar. 10, 1863	37,865
Wrench	G. W. Griswold	Abington, Pa	Mar. 1, 1864	41,768
Wrench	D. Harrigan	Charlestown, Mass	Oct. 15, 1867	69,911
Wrench	J. H. Hathaway	Millbury, Mass	July 7, 1857	17,797
Wrench	F. D. Haywood	Malden, Mass	Aug. 17, 1858	21,196
Wrench	H. W. Howet	New York, N. Y	Mar. 16, 1869	87,774
Wrench	S. B. Hill	Chicopee, Mass	Mar. 5, 1867	62,639
Wrench	J. J. Hull	Brooklyn, N. Y	July 12, 1870	105,336
Wrench	W. J. Innis	Oil City, Pa	Sept. 9, 1873	142,570
Wrench	J. C. Jackson	Rochester, N. Y	Jan. 22, 1867	61,340
Wrench	W. Johnson	Milwaukee, Wis	Dec. 3, 1872	133,536
Wrench	W. Johnson	Milwaukee, Wis	Aug. 12, 1873	141,794
Wrench	L. Jordan	Southington, Conn	June 4, 1867	65,489
Wrench	L. Jordan and L. E. Smith	Southington, Conn	Oct. 10, 1865	50,364
Wrench	W. Kearney	Union, N. J	Nov. 6, 1860	30,579
Wrench	F. Keehnold	Bridgeport, Conn	Feb. 12, 1856	14,243
Wrench	G. B. Keeler	Greenwich, Conn	June 11, 1867	65,678
Wrench	D. A. Kellogg	Valparaiso, Ind	June 11, 1867	65,679
Wrench	C. Knisely	Chicago, Ill	Dec. 6, 1870	109,913
Wrench	F. W. Kroeber	Forbestown, Cal	Dec. 18, 1860	30,985
Wrench	W. H. Landbeck	Rochester, N. Y	Apr. 24, 1866	54,178
Wrench	W. H. Landbeck	Rochester, N. Y	May 14, 1867	64,676
Wrench	O. C. Lawbaugh	Shanesville, Ohio	Sept. 27, 1870	107,790
Wrench	B. S. Lawson	Brooklyn, N. Y	Oct. 22, 1867	70,005
Wrench	J. Lee	Saint Louis, Mo	Dec. 30, 1873	145,953
Wrench	E. J. Leyburn	Lexington, Va	Oct. 13, 1868	82,962
Wrench	J. P. Lindsay	New Haven, Conn	Dec. 12, 1865	51,465
Wrench	A. B. Lipsey	New York, N. Y	Jan. 11, 1870	98,698
Wrench	A. P. Lord	Friendship, N. Y	Aug. 15, 1871	118,141
Wrench	J. Madden	Cleveland, Ohio	July 7, 1868	79,665
Wrench	J. W. Mahlon	New York, N. Y	Aug. 29, 1871	118,619
Wrench	G. W. Martin	Morrisania, N. Y	Apr. 16, 1861	32,106
Wrench	W. Mason	Warren, Mass	Feb. 26, 1861	31,576
Wrench	T. D. McBride	Philadelphia, Pa	Oct. 24, 1871	120,304
Wrench	A. Y. McDonald	Dubuque, Iowa	Mar. 28, 1865	47,067
Wrench	P. E. McIntosh	Chicago, Ill	Apr. 1, 1873	137,310
Wrench	J. McKenzie	Green Island, N. Y	May 11, 1858	20,211
Wrench	J. McLaren	Albany, N. Y	Nov. 20, 1866	59,852
Wrench	P. McManus	Brunswick, N. Y	Apr. 1, 1856	14,571
Wrench	A. D. McMaster	Rochester, N. Y	Sept. 30, 1873	143,367
Wrench	G. Meader	Earlville, Ill	July 16, 1861	32,838
Wrench	G. Meader	Ottawa, Ill	Jan. 17, 1865	45,931
Wrench	C. H. Miller	Buffalo, N. Y	July 26, 1870	105,827
Wrench	D. M. Moore	Windsor, Vt	Dec. 6, 1864	45,334
Wrench	W. Morehouse	Buffalo, N. Y	Feb. 27, 1866	52,930
Wrench	I. and C. M. Morris	Fair Haven, Conn	Aug. 28, 1866	57,547
Wrench	R. Morrison	New York, N. Y	Jan. 4, 1870	98,515
Wrench	F. B. Morse	Plantsville, Conn	Apr. 25, 1871	114,179
Wrench	I. Morse	Danbury, Conn	Apr. 21, 1868	77,076
Wrench	J. Mott	Danville, Cal	Oct. 8, 1867	69,575
Wrench	A. Murray	Troy, N. Y	Mar. 30, 1858	19,790
Wrench	J. E. Neill	United States Navy	Jan. 24, 1860	26,951
Wrench	J. N. Newell	Adrian, Mich	May 9, 1871	114,703
Wrench	A. Newton and F. Favro	Worcester, Mass	Aug. 7, 1866	56,996
Wrench	E. P. Newton	Green Island, N. Y	Feb. 12, 1856	14,249
Wrench	P. Nichols	Troy, N. Y	Jan. 23, 1872	123,040
Wrench	R. Nicholson	Pleasantville, Pa	Nov. 30, 1869	97,430
Wrench	J. F. Nordquist	Gottenburg, Sweden	Apr. 26, 1870	102,307
Wrench	W. C. Noyes	Seymour, Conn	May 31, 1864	42,961
Wrench	A. M. Olds	New York, N. Y	July 3, 1866	56,147
Wrench	F. L. Oliver	Scarborough, Me	Nov. 3, 1868	83,654
Wrench	W. M. Owen	Homer, Iowa	Nov. 13, 1866	59,634
Wrench	T. C. Page	Holyoke, Mass	Jan. 9, 1867	51,961
Wrench	A. Partridge	Springfield, Mass	July 29, 1873	141,289
Wrench	J. A. Partridge	Lowell, Mass	Apr. 16, 1867	63,935
Wrench	J. L. Peake	New York, N. Y	Jan. 22, 1867	61,355
Wrench	J. W. Penney	Mechanic Falls, Me	Oct. 11, 1864	44,653
Wrench	J. W. Penney and E. M. Thurston.	Mechanic Falls, Me	Dec. 19, 1865	51,617
Wrench	E. Perry	Hopkinton, Mass	Nov. 5, 1867	70,605
Wrench	A. S. Petrie	Hudson City, N. J	Apr. 7, 1868	76,519
Wrench	G. B. Phillips	Newark, N. J	May 15, 1860	28,300
Wrench	G. B. Phillips	Newark, N. J	May 28, 1861	32,453
Wrench	G. B. Phillips	Newark, N. J	June 24, 1862	35,740
Wrench	G. B. Phillips	Cleveland, Ohio	Aug. 1, 1871	117,679
Wrench	C. Pinder	Lowell, Mass	May 5, 1857	17,229
Wrench	N. Porter	Youngstown, N. Y	Jan. 20, 1863	37,459
Wrench	N. L. Post	East Cleveland, Ohio	Feb. 11, 1873	135,842
Wrench	C. T. Poulton	Danborough, Pa	Sept. 10, 1867	68,787
Wrench	T. Pratt	Valparaiso, Ind	Jan. 8, 1867	61,097
Wrench	T. Pratt	Valparaiso, Ind	Feb. 11, 1868	74,245
Wrench	L. B. Prindle	Bantam Falls, Conn	Oct. 28, 1873	144,134

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Wrench	T. C. Purington	Lincoln, Cal	May 31, 1870	103, 653
Wrench	E. W. Quincy	Lacon, Ill	Sept. 8, 1868	82, 033
Wrench	F. P. Rand	Pawtucket, R. I	Sept. 20, 1870	107, 539
Wrench	H. F. Read	Brooklyn, N. Y	May 13, 1873	138, 932
Wrench	M. Redlinger	Freeport, Ill	May 31, 1870	103, 656
Wrench	C. H. Reynolds	New York, N. Y	Mar. 26, 1861	31, 826
Wrench	A. C. Richard	Newtown, Conn	Feb. 7, 1860	27, 090
Wrench	J. J. Richardson	Woodstock, Vt	June 16, 1863	38, 914
Wrench	F. C. Richer	Gilmer, Tex	May 4, 1869	89, 690
Wrench	E. Ripley	Troy, N. Y	Apr. 7, 1857	16, 997
Wrench	E. Ripley	Troy, N. Y	Dec. 18, 1860	30, 987
Wrench	E. Ripley	Troy, N. Y	Jan. 1, 1861	31, 034
Wrench	J. F. Robertson	Warwick, N. Y	Jan. 3, 1871	110, 789
Wrench	H. S. Ross	Buffalo, N. Y	Mar. 3, 1868	75, 199
Wrench	J. F. Rowan, jr	Boston, Mass	July 12, 1870	105, 372
Wrench	B. Rowe	Albany, N. Y	Apr. 29, 1856	14, 779
Wrench	P. C. Rowe	Boston, Mass	Jan 26, 1869	86, 328
Wrench	E. P. Russell	Manlius, N. Y	Oct 13, 1868	82, 994
Wrench	P. A. Samuel	Paris, France	Jan. 26, 1869	86, 181
Wrench	R. S. Sanborn	Rockford, Ill	Apr. 16, 1872	125, 695
Wrench	J. B. Savage	Southington, Conn	Feb. 19, 1867	62, 291
Wrench	B. F. Sawyer	Rome, Ga	Dec. 24, 1872	134, 317
Wrench	L. Schwartzhoff and L. Kaselowsky.	Berlin, Prussia	May 24, 1864	42, 903
Wrench	E. S. Scripture	Brooklyn, E. D., N. Y	Dec. 6, 1870	109, 949
Wrench	E. S. Scripture	New Haven, Conn	Apr. 13, 1858	19, 954
Wrench	E. S. Scripture	New York, N. Y	Aug. 28, 1860	29, 826
Wrench	E. S. Scripture	Brooklyn, N. Y	Oct. 28, 1873	144, 036
Wrench	T. A. Searle	Providence, R. I	Apr. 21, 1868	77, 107
Wrench	J. V. H. Secor	New York, N. Y	June 25, 1867	66, 177
Wrench	H. Sharp	Port Richmond, N. Y	Jan. 5, 1864	41, 100
Wrench	W. H. Sible	Harrisburgh, Pa	Feb. 2, 1869	86, 597
Wrench	H. N. Smade	Manistee, Mich	Aug. 29, 1871	118, 559
Wrench	E. A. Smead	Tioga, Pa	Apr. 7, 1868	76, 536
Wrench	J. Smiley	Franklin, Pa	Feb. 11, 1873	135, 856
Wrench	I. H. Smith	Albany, N. Y	June 25, 1867	66, 051
Wrench	O. J. Smith	Wauwatosa, Wis	Apr. 19, 1870	102, 058
Wrench	O. J. Smith	Wauwatosa, Wis	July 19, 1870	105, 604
Wrench	T. J. Smith and J. Lee	Saint Louis, Mo	June 3, 1873	139, 622
Wrench	W. S. Smoot	Washington, D. C	Nov. 17, 1868	84, 142
Wrench	P. Sommer	Newark, N. J	Jan. 29, 1867	61, 575
Wrench	R. S. Stenton	Brooklyn, N. Y	July 24, 1866	56, 628
Wrench	R. S. Stenton	Brooklyn, N. Y	Jan. 1, 1867	60, 801
Wrench	D. C. Stillson	Charlestown, Mass	Oct. 12, 1869	95, 744
Wrench	D. C. Stillson	Charlestown, Mass	Sept. 13, 1870	107, 304
Wrench	J. H. Strickler	Brandon, Ohio	Oct 29, 1872	132, 700
Wrench	T. Symonds	Portland, Me	Apr. 17, 1866	54, 040
Wrench	G. C. Taft	Worcester, Mass	May 25, 1858	20, 379
Wrench	G. C. Taft	Worcester, Mass	Apr. 19, 1859	23, 725
Wrench	G. C. Taft	Worcester, Mass	Apr. 26, 1859	23, 798
Wrench	G. C. Taft	Worcester, Mass	Nov. 10, 1863	40, 590
Wrench	G. C. Taft	Worcester, Mass	June 26, 1866	55, 932
Wrench	G. C. Taft	Worcester, Mass	Aug. 13, 1867	67, 818
Wrench	G. C. Taft	Worcester, Mass	July 21, 1868	80, 237
Wrench	G. C. Taft	Worcester, Mass	Mar. 23, 1869	88, 230
Wrench	G. C. Taft	Worcester, Mass	Apr. 27, 1869	89, 517
Wrench	G. C. Taft	Worcester, Mass	May 4, 1869	89, 702
Wrench	G. C. Taft	Worcester, Mass	Dec. 14, 1869	97, 988
Wrench	G. C. Taft	Worcester, Mass	Jan. 4, 1870	98, 644
Wrench	G. C. Taft	Worcester, Mass	Oct. 25, 1870	108, 738
Wrench	G. C. Taft	Worcester, Mass	Dec. 5, 1871	121, 685
Wrench	G. C. Taft	Worcester, Mass	Dec. 26, 1871	122, 139
Wrench	G. C. Taft	Worcester, Mass	Jan. 16, 1872	122, 787
Wrench	J. A. Talpey	Somerville, Mass	Aug. 27, 1867	68, 128
Wrench	R. M. Thompson	Coshocton, Ohio	Oct. 26, 1869	96, 287
Wrench	C. R. Thorn and A. Leigh	Clinton Station, N. J	Apr. 5, 1864	42, 239
Wrench	H. Tilden	Boston, Mass	Jan. 5, 1869	85, 624
Wrench	E. Tracy	Troy, N. Y	Mar. 11, 1856	14, 424
Wrench	H. Tregellas	Calumet, Mich	Sept. 13, 1870	107, 425
Wrench	G. Utley	Chapel Hill, N. C	Apr. 26, 1870	102, 336
Wrench	S. W. Wakefield	Keokuk, Iowa	Aug. 5, 1873	141, 477
Wrench	H. D. Walcott	Pawtucket, Mass	Mar. 25, 1856	14, 541
Wrench	W. Ward	Mount Holly, N. J	Aug. 31, 1869	94, 269
Wrench	N. Warren and J. C. Stock	Wilmington, Del	Nov. 14, 1871	121, 027
Wrench	W. Warwick	Pittsburgh, Pa	Mar. 25, 1856	14, 528
Wrench	C. C. Wobber	Springfield, Mass	May 1, 1866	54, 471
Wrench	W. Webster	Morrisania, N. Y	Feb. 9, 1864	41, 554
Wrench	J. B. Weeden	Stafford, Conn	Mar. 11, 1873	136, 797
Wrench	A. Whitcomb	Worcester, Mass	Nov. 7, 1871	120, 687
Wrench	J. White	Cleveland, Ohio	Aug. 1, 1865	49, 208
Wrench	R. White	Lowell, Mass	Feb. 21, 1871	112, 101
Wrench	W. S. and J. A. Wilcox	Hartford and Rocky Hill, Conn.	Sept. 12, 1871	118, 891
Wrench	W. A. Wilson	Savannah, Mo	Aug. 24, 1869	94, 161
Wrench	L. Winslow	Rochester, N. Y	Apr. 29, 1862	35, 123
Wrench	O. O. Witherell	New York, N. Y	Dec. 2, 1856	16, 158
Wrench	W. F. Wolfkiel	Philadelphia, Pa	May 17, 1870	103, 268
Wrench	E. J. Worcester	Worcester, Mass	June 9, 1857	17, 531
Wrench	E. J. Worcester	Worcester, Mass	Oct. 25, 1870	108, 747
Wrench	S. J. Wright	Ellsworth, N. Y	Dec. 16, 1873	145, 710
Wrench	H. S. Wrightson	Baltimore, Md	Jan. 21, 1868	73, 561
Wrench and bolt-cutter	P. Broadbooks	Batavia, N. Y	Mar. 18, 1873	136, 964
Wrench and drill	N. W. Woodbury	South Danvers, Mass	Jan. 16, 1866	52, 106
Wrench and grappling-tool, Combined	S. B. Dexter	Mason City, Iowa	Mar. 25, 1873	137, 129
Wrench and oiler	E. B. Gifford	Westport, Mass	Feb. 28, 1871	112, 238
Wrench and pinchers	E. Froggatt	Central City, Colo	Apr. 6, 1869	88, 621
Wrench and pinchers	E. Ripley	Troy, N. Y	Aug 14, 1860	29, 620
Wrench and pruning-shears, Combined	J. S. Kalb	Fostoria, Ohio	Aug 20, 1867	67, 987

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Wrench and saw-set, Combined	G. J. Capewell	West Cheshire, Conn	Dec. 14, 1869	97, 877
Wrench and tongs	J. N. Arvin	Valparaiso, Ind	Apr. 2, 1867	63, 356
Wrench and vise	W. Russell	Stoughton, Mass	Aug. 14, 1860	29, 623
Wrench-bar-heading machine	L. Coes	Worcester, Mass	June 22, 1869	91, 605
Wrench-bar heads, Machine for forming	A. G. Coes	Worcester, Mass	June 18, 1872	128, 118
Wrench-bars, Apparatus for heading	T. C. Rice	Worcester, Mass	Apr. 30, 1867	64, 364
Wrench-bars, Apparatus for rolling	T. C. Rice	Worcester, Mass	May 7, 1867	64, 447
Wrench-bars, Mode of forming heads of	A. G. Coes	Worcester, Mass	Apr. 18, 1871	113, 743
Wrench for bung-bushings	G. W. Harris	New York, N. Y	Oct. 21, 1873	143, 757
Wrench-head die	H. W. Pell	Rome, N. Y	July 24, 1866	56, 602
Wrench-head-forging machine	A. G. Coes	Worcester, Mass	July 5, 1870	104, 931
Wrench-heads, Die for forging	A. B. Candee and L. S. Taylor	Hamden and Unionville, Conn.	Feb. 2, 1869	86, 361
Wrench-heads, Die for forming	L. Chapman	Collinsville, Conn	Mar. 25, 1873	137, 052
Wrench-heads, Die for forming	L. Chapman	Collinsville, Conn	Mar. 25, 1873	137, 053
Wrench-heads, Die for making	L. Chapman	Collinsville, Conn	Feb. 13, 1872	123, 554
Wrench-heads, Die for making	L. Chapman	Collinsville, Conn	Feb. 4, 1873	135, 406
Wrench-heads, Manufacture of	L. Coes	Worcester, Mass	Sept. 16, 1873	142, 771
Wrench, Hose-coupling	A. F. Allen	Providence, R. I	Apr. 14, 1868	76, 579
Wrench-rack	A. G. Hull	Troy, N. Y	June 20, 1836	....
Wrench-rack	H. King	Springfield, Mass	Oct. 25, 1832	....
Wrench, scraper, and screw-driver, Combined	T. J. Penny	Wooster, Ohio	Mar. 17, 1863	37, 920
Wrench-swaging die	T. Meikle	Louisville, Ky	Oct. 18, 1870	108, 502
Wrenches and other tools, Nut for	J. S. Arthur	Cordaville, Mass	Mar. 29, 1864	42, 062
Wrenches, Attachment for	D. Cunningham, jr	Brooklyn, N. Y	Oct. 8, 1872	132, 058
Wrenches, Manufacture of	J. Richards	Philadelphia, Pa	Nov. 29, 1870	109, 665
Wrenches, Manufacture of	G. C. Taft	Worcester, Mass	May 31, 1859	24, 247
Wrenches, Supplemental jaw for	R. Faries	Indianapolis, Ind	June 23, 1868	79, 219
Wringer: *See* Clothes-wringer. Elastic wringer. Mop-wringer. Peat-wringer.				
Wringer	A. M. Bailey	Middlefield, Conn	June 23, 1868	79, 096
Wringer	M. Romans	Fond du Lac, Wis	Jan. 12, 1869	85, 857
Wringer and washing machine	E. Chesterman	Roxbury, Mass	Sept. 25, 1866	58, 215
Wringer-clamp	T. Brooks	Middlefield, Conn	Jan. 14, 1864	43, 089
Wringer-machine roller	S. F. Emerson	Seville, Ohio	May 29, 1866	55, 077
Wringer-roll	H. Robbins	Cincinnati, Ohio	May 8, 1866	54, 651
Wringer-roll spindle	T. E. McDonald	Trenton, N. J	Oct. 24, 1871	120, 207
Wringer-rolls, Machine for covering	J. Moulton	Boston, Mass	Oct. 3, 1871	119, 636
Wringer-roller	J. B. Forsyth	Roxbury, Mass	Jan. 23, 1866	52, 153
Wringer-roller	R. B. Hugunin	Cleveland, Ohio	Aug. 2, 1864	43, 692
Wringer-roller	A. Magawan	Boston, Mass	Oct. 27, 1868	83, 518
Wringer-roller	J. Makechney	Trenton, N. J	May 30, 1871	115, 491
Wringer-roller	C. V. Mead	Hamilton, N. J	Jan. 29, 1867	61, 677
Wringer-roller	J. F. Pond	Cleveland, Ohio	Apr. 5, 1864	42, 224
Wringer-roller	H. Robbins	Cincinnati, Ohio	Sept. 11, 1866	58, 027
Wringer-roller	J. Whitehead	Trenton, N. J	Aug. 22, 1871	118, 313
Wringer-roller shaft	L. H. Whitney	Washington, D. C	Dec. 13, 1870	110, 098
Wringer-roller spindle	T. E. McDonald	Trenton, N. J	Apr. 4, 1871	113, 544
Wringer-rollers, Device for covering	R. B. Hugunin	Cleveland, Ohio	May 23, 1865	47, 827
Wringer-shafts, Attaching rubber to	S. R. Kenyon	Greenville, R. I	Aug. 9, 1870	106, 175
Wringers, &c., Elastic roller for	A. O. Bourn	Providence, R. I	Nov. 29, 1870	109, 579
Wringing and mangling machine	A. Paine	Burrillville, R. I	Jan. 16, 1872	122, 735
Wringing and washing machines, Shaft for rubber roller for.	J. Cram	Chicago, Ill	Oct. 16, 1866	58, 780
Wringing-machine	J. Alender	New London, Conn	July 30, 1861	32, 954
Wringing-machine	C. H. Amidon	Greenfield, Mass	Oct. 28, 1862	36, 761
Wringing-machine	C. H. Amidon	Greenfield, Mass	Apr. 4, 1865	47, 079
Wringing-machine	F. Arnold	Haddam, Conn	Aug. 25, 1863	39, 623
Wringing-machine	J. E. Atwood	Lynn, Mass	Aug. 15, 1865	49, 361
Wringing-machine	I. Avery	Tunkhannock, Pa	May 8, 1847	5, 106
Wringing-machine	S. A. Bailey	New London, Conn	Mar. 27, 1860	27, 609
Wringing-machine	S. A. Bailey	Woonsocket, R. I	Aug. 2, 1864	43, 661
Wringing-machine	S. A. Bailey	Woonsocket, R. I	Mar. 12, 1867	62, 805
Wringing-machine	S. A. Bailey	Woonsocket, R. I	Apr. 28, 1868	77, 346
Wringing-machine	E. G. W. Bartlett	Providence, R. I	Oct. 25, 1870	108, 674
Wringing-machine	E. G. W. Bartlett	Providence, R. I	Oct. 15, 1872	132, 193
Wringing-machine	S. Blodgett	Glover, Vt	Aug. 26, 1862	36, 271
Wringing-machine	G. N. Bolles	Kalamazoo, Mich	Jan. 24, 1865	46, 046
Wringing-machine	J. Brinkerhoff	Auburn, N. Y	Oct. 15, 1872	132, 195
Wringing-machine	A. Burbank	Rochester, N. Y	Oct. 29, 1872	132, 628
Wringing-machine	J. D. Burdick	Ishaway, R. I	Aug. 15, 1865	49, 372
Wringing-machine	J. M. Clark	Lancaster, Pa	Dec. 5, 1871	121, 580
Wringing-machine	M. J. Cluff	Waltham, Mass	Mar. 1, 1864	41, 759
Wringing-machine	J. O. Couch	Middletown, Conn	July 25, 1865	49, 025
Wringing-machine	J. O. Couch	Middlefield, Conn	Oct. 17, 1865	50, 531
Wringing-machine	W. Denton	Amsterdam, N. Y	Aug. 29, 1871	118, 519
Wringing-machine	E. Dummer	Newburyport, Mass	Dec. 24, 1872	134, 131
Wringing-machine	S. F. Emerson	Seville, Ohio	Oct. 27, 1868	83, 480
Wringing-machine	L. Evans	Fayetteville, N. Y	June 30, 1863	39, 039
Wringing-machine	J. E. Everett	Dedham, Mass	June 10, 1862	35, 560
Wringing-machine	T. Farrington and L. White	Washington County, Vt	Jan. 6, 1863	37, 284
Wringing-machine	H. Glass	Honeoye Falls, N. Y	July 7, 1863	39, 141
Wringing-machine	M. Harris and R. G. Bush	Jamestown, N. Y	July 25, 1865	48, 933
Wringing-machine	E. S. Howell	Hope, N. J	Apr. 26, 1864	42, 486
Wringing-machine	R. B. Hugunin	Cleveland, Ohio	Mar. 12, 1867	62, 851
Wringing-machine	G. R. Huntley	Taunton, Mass	Mar. 22, 1864	41, 998
Wringing-machine	J. W. Latcher and J. Young	Albany and Amsterdam, N. Y.	Jan. 8, 1867	61, 012
Wringing-machine	J. N. Pease	Panama, N. Y	July 25, 1865	49, 043
Wringing-machine	E. L. Perry and C. Manheim	New York, N. Y	Aug. 3, 1869	93, 223
Wringing-machine	W. B. Rhoads	South Dedham, Mass	Nov. 25, 1862	37, 007
Wringing-machine	J. G. Roth	New York, N. Y	Jan. 9, 1872	122, 658
Wringing-machine	J. G. Roth	New York, N. Y	Jan. 9, 1872	122, 659
Wringing-machine	A. H. Spencer	Providence, R. I	Jan. 31, 1871	111, 484
Wringing-machine	S. Squires	Boston, Mass	Jan. 8, 1867	61, 027
Wringing-machine	P. D. Van Hoesen	New York, N. Y	Oct. 1, 1861	33, 409
Wringing-machine	S. Walker	Boston, Mass	Aug. 11, 1863	39, 512

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Wringing-machine	M. and F. Way	Springfield, Ohio	Feb. 6, 1872	123, 432
Wringing-machine	A. P. Young	Providence, R. I	Oct. 15, 1872	132, 228
Wringing-machine	J. Young and L. Y. Gardiner	Amsterdam, N. Y	Oct. 8, 1872	132, 039
Wringing-machine	J. Young and L. Y. Gardiner	Amsterdam, N. Y	Nov. 19, 1872	133, 286
Wringing-machine clamp	J. Stimpson	Baldwinsville, Mass	Oct. 9, 1866	58, 694
Wringing-machine cylinder	S. A. Bailey	New London, Conn	Apr. 29, 1862	35, 072
Wringing-machine roller	S. A. Bailey	New London, Conn	June 24, 1862	35, 663
Wringing-machine roller	A. O. Bourn	Providence, R. I	Nov. 19, 1872	133, 076
Wringing-machine roller	J. J. Haley	South Dedham, Mass	Jan. 14, 1862	34, 142
Wringing-machine roller	H. W. Holly and A. F. Smith	Norwich, Conn	July 7, 1863	39, 201
Wringing-machine roller	T. S. Lambert	Peekskill, N. Y	Dec. 8, 1863	40, 845
Wringing-machine roller	H. D. Palmer	Cleveland, Ohio	Jan. 29, 1867	61, 559
Wringing-machine roller	S. R. Wing	Sandwich, Mass	May 13, 1862	35, 283
Wringing-machines, Rubber roller for	J. B. Forsyth	Roxbury, Mass	July 17, 1866	56, 398
Wringing-machines, Wash-bench for	J. B. Sweetland	Pontiac, Mich	Mar. 11, 1873	136, 788
Wristband	P. T. Gates	Plattsburgh, N. Y	Mar. 13, 1866	53, 134
Wristband-fastener	D. S. Baker	Providence, R. I	Dec. 14, 1858	22, 274
Wristband-fastener	J. P. Derby	Boston, Mass	Dec. 2, 1856	16, 140
Wristband-fastener	B. F. Grinnell	New York, N. Y	Oct. 20, 1857	18, 445
Wrist-pin turner	P. Maltby	Cleveland, Ohio	Dec. 15, 1868	84, 954
Wrist-pins, crank-pins, &c., Apparatus for turning	T. A. Goff	San Francisco, Cal	June 9, 1868	78, 733
Wrist-pins, Device for fitting	G. Raft	Erie, Pa	June 16, 1868	79, 0[illegible]0
Wrist pins, Method of making	E. P. Russell	Manlius, N. Y	Aug. 8, 1865	49, 306
Wrist-supporter, Penman's	H. F. Cristy	Charlestown, Mass	June 7, 1870	103, 991
Wrists or pins, &c., Turning cross-head	W. S. Phelps	Detroit, Mich	Mar. 31, 1863	38, 000
Writing, Alphabetical	J. B. Manning	Gloucester, Mass	Feb. 16, 1829	....
Writing and copying case, Portable	A. G. Buzby	Philadelphia, Pa	July 30, 1867	67, 163
Writing and printing machine	A. Peeler	Webster City, Iowa	Aug. 14, 1866	57, 182
Writing, Apparatus for giving ease to the arm in	J. G. Goshon and W. H. Towers	Shirleysburgh, Pa., and Bucyrus, Ohio.	Apr. 29, 1851	8, 065
Writing-apparatus, Portable	H. C. Whitten	Plymouth, Mass	Jan. 6, 1863	37, 326
Writing by a construction of fountain-pens adapted to writing on a guide formed of ground glass.	W. Davidson	Baltimore, Md	Oct. 9, 1841	2, 287
Writing-case and checker-board, Combined	H. C. Small	East Limington, Me	Jan. 14, 1862	34, 168
Writing-desk and table, Combined	J. White	Marshall, Mich	Nov. 1, 1845	4, 252
Writing-fluid	H. C. Baildon	Edinburgh, Scotland	Sept. 5, 1865	49, 843
Writing-fluid	S. W. Eells	Mansfield, Ohio	Aug. 23, 1859	25, 184
Writing-fluid	N. P. Slade	Rockford, Ill	Dec. 17, 1872	133, 954
Writing-fluid, Blue	H. King	Baltimore, Md	Nov. 7, 1839	1, 400
Writing-fluid, Compound for	I. Popper	Phillipsburgh, N. J	Mar. 26, 1872	126, 077
Writing-implement	J. Pusey	Philadelphia, Pa	July 16, 1872	128, 977
Writing-instrument	E. L. Miller	Charleston, S. C	May 11, 1811	....
Writing, Instrument for training the muscles in	E. G. Squires	Lima, N. Y	Mar. 14, 1865	46, 827
Writing-machine	C. Thurber	Norwich, Conn	Nov. 18, 1845	4, 271
Writing-materials, Case for	G. B. Chase	Austinburgh, Ohio	Nov. 19, 1872	133, 142
Writing or printing on charred paper, Process of restoring.	J. V. Z. Blaney	Chicago, Ill	Nov. 28, 1871	121, 321
Writing-plates, Geometrical	S. Ellis	....	Nov. 25, 1809	....
Writing, Preparing carbonated silk and paper for multiplying.	J. Hartshorne	Philadelphia, Pa	Apr. 20, 1810	....
Writing-table	J. S. Haskell	Salem, Mass	Oct. 19, 1858	21, 832
Writing table and chair	P. Geiser	Waynesborough, Pa	Sept. 29, 1868	82, 616
Writing with two pens, Machine for	M. I. Brunel	....	Jan. 17, 1799	....
Wrought-metal tubing, Method of manufacturing welded.	S. P. M. Tasker	Philadelphia, Pa	June 22, 1869	91, 791
Wrought-metal wheels, Manufacture of	B. Brunon	Lyons, France	Nov. 22, 1870	109, 380
Wrought-nail and spike machine	W. C. Grimes	York, Pa	Dec. 17, 1834	....
Wrought-nail and spike machine	W. C. Grimes	York, Pa	Dec. 17, 1834	....
Wrought-nail machine	S. G. Reynolds	Providence, R. I	Mar. 18, 1835	....
Wrought-nails and brads from hot rods, Machine for making.	L. Ruggles	....	Oct. 18, 1803	....
Wrought-nails and brads, Manufacturing	J. Dodge	Rutland, Vt	July 8, 1807	....
Wrought-nails and rivets, Machine for making	S. G. Reynolds	Bristol, R. I	Apr. 13, 1829	....
Wrought-nails and screws, Machine for making	S. I. Gould	Litchfield, Conn	July 25, 1829	....
Wrought-nails and spikes, Machine for making	A. Eastman	Norway, Mass	Apr. 8, 1811	....
Wrought-nails and spikes, Machine for making	J. McCrone	Ellicott's Mills, Md	Feb. 21, 1840	1, 497
Wrought-nails, brads, &c	W. Slater	Clarksville, Ohio	Mar. 5, 1834	....
Wrought-nails, Machine for making	D. Armstrong	Chicago, Ill	Dec. 21, 1869	98, 008
Wrought-nails, Machine for making	N. W. Bishop and S. Brooks	Saybrook and Chester, Conn	Sept. 21, 1837	390
Wrought-nails, Machine for making	S. Gardiner	New York, N. Y	June 9, 1857	17, 502
Wrought-nails, Machine for making hot	E., O., O., and G. Bartlett	....	Feb. 17, 1803	....
Wrought-nails, Manufacture of	O. Breden	Saint Louis, Mo	Oct. 19, 1858	21, 812
Wrought-nails, Manufacture of	H. Burden	Troy, N. Y	May 26, 1825	....
Wrought-nails, Manufacturing	R. Daniels	Woodstock, Vt	May 13, 1834	....
Wrought-nails, Manufacturing	S. Davis, jr	Dartmouth, Mass	Dec. 8, 1829	....
Wrought-nails, Manufacturing	D. French	....	Dec. 3, 1796	....
Wrought-nails, Manufacturing	J. V. Green	New York	Dec. 28, 1832	....
Wrought-nails, Manufacturing	T. W. Harvey	Jamestown, N. Y	Jan. 24, 1832	....
Wrought-nails, Manufacturing	G. B. Manly	Canton, Mass	Dec. 14, 1830	....
X.				
Xyloidine and its compounds, Manufacture of	D. Spill	Paradise Terrace, Hackney, England.	Mar. 22, 1870	101, 175
Xyloidine, Compound containing	D. Spill	Hackney, England	June 15, 1869	91, 377
Xyloidine for use in the arts, Dissolving	D. Spill	Hackney, England	Nov. 30, 1869	97, 454
Y.				
Yard-mark and knife	E. D. Richardson	Chardon, Ohio	July 6, 1869	92, 362
Yard-stick, Registering	W. P. Lupton and C. M. Talbot	Cadiz, Ohio	Dec. 17, 1867	72, 210
Yards for ships	E. Masters	Cleveland, Ohio	Sept. 3, 1867	68, 522
Yards, Hanging top-sail	J. Nute	East Boston, Mass	May 22, 1860	28, 399
Yards of vessels, Apparatus for bracing	T. Beck	Newark, N. J	Dec. 24, 1861	33, 977
Yards of vessels, Attaching the head-cringle to	N. Crocker	Sandwich, Mass	Oct. 25, 1853	10, 168
Yards of vessels, Parrel for	D. S. Bayles	Brooklyn, N. Y	Dec. [illegible], 1852	9, 4[illegible]8
Yards of vessels, Suspending	S. A. Wells	Boston, Mass	Jan. 23, 1828	....
Yards to top-masts, Attachment of	S. Hall	Boston, Mass	May 22, 1860	28, 364

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Yards to trusses, Method of attaching	T. Odeon	Portsmouth, Va	Aug. 27, 1850	7,605
Yards to vessel-masts, Trussing	J. Perkins	Salem, Mass	Dec. 12, 1854	12,087
Yarn and bobbin washing, bleaching, and cleansing apparatus.	J. G. Marshall	Leeds, England	Oct. 6, 1868	82,732
Yarn and cloth printing machine	T. Henderson	Lowell, Mass	Nov. 20, 1855	13,818
Yarn and forming into readies, Mode of drawing	R. Graves	Boston, Mass	Nov. 22, 1820	......
Yarn and thread dyeing, bleaching, washing, and drying apparatus.	I. Osgood and A. Munroe	Utica and German Flats, N. Y.	Apr. 9, 1867	63,744
Yarn, Apparatus for parti-coloring	A. Smith	West Farms, N. Y	June 18, 1850	7,446
Yarn, Apparatus for spooling	G. H. Dodge	Attleborough, Mass	May 8, 1849	6,435
Yarn-beam friction-mechanism	H. Chilson	Ware, Mass	May 27, 1873	139,236
Yarn-brushing machine	J. Brady	Fall River, Mass	Oct. 11, 1870	108,110
Yarn by felting, Process of forming	J. H. Bloodgood	Rahway, N. J	Apr. 5, 1853	9,643
Yarn by steam, Sizing	H. A. Fletcher	Shelburne, Vt	July 8, 1843	3,166
Yarn, Clouded	J. Chase	Worcester, Mass	Oct. 22, 1867	69,967
Yarn, Composition drawing or roving can for use in the manufacture of.	P. Lawson	Lowell, Mass	May 18, 1869	90,109
Yarn, Creel for winding	M. O. Potter	South Scituate, R. I	Oct. 29, 1867	70,260
Yarn doubling and twisting machine	F. H. Perry	Niagara Falls, N. Y	Apr. 16, 1872	125,088
Yarn doubling and twisting machinery	T. Lyle	Collinsville, Pa	Oct. 17, 1848	5,851
Yarn-doubling-machine stopping-mechanism	I. W. Clarke	Providence, R. I	May 11, 1869	89,854
Yarn-dressing frame	A. J. Sutherland	Lowell, Mass	Jan. 15, 1856	14,120
Yarn-dressing machine	H. Whitehill	Newburgh, N. Y	Sept. 3, 1861	33,222
Yarn-dressing-machine roll	B. R. Cotten	Lewiston, Me	Apr. 23 1867	64,078
Yarn dressing or sizing machine	B. Saunders	Nashua, N. H	July 19, 1864	43,627
Yarn-drying machine	R. Hartman	Chemnitz, Saxony	Feb. 20, 1872	123,895
Yarn-drying machine	G. Richardson	Lowell, Mass	July 6, 1869	92,210
Yarn-drying machine	H. Whitehill	Newburgh, N. Y	Nov. 27, 1866	60,103
Yarn, Dyeing and dressing	J. H. Higgins	New York, N. Y	June 25, 1872	128,395
Yarn-dyeing apparatus	T. Sheard	Little Falls, N. Y	Mar. 5, 1872	124,292
Yarn-evener	G. S. Smith	Bozrahville, Conn	July 6, 1869	92,218
Yarn, Extracting fur from skins and manufacturing it into.	L. Ward and P. Atwell	Walworth, N. Y	Apr. 30, 1834	......
Yarn, &c., felting or fulling machine	M. A. Johnson	Lowell, Mass	Apr. 16, 1867	63,798
Yarn for beaming, &c., Spoolers for winding	B. Saunders	Nashua, N. H	Oct. 10, 1865	50,392
Yarn for dyeing and scouring, Preparing	L. E. Pratt	South Kingston, R. I	Mar. 31, 1857	16,934
Yarn for the manufacture of duck and other coarse fabrics, Preparing cotton.	H. N. Gambrill	Baltimore, Md	June 15, 1852	9,021
Yarn for the manufacture of tapestry, Printing	A. Hartmann	Clappville, Mass	Aug. 1, 1848	5,688
Yarn for warp, Process of sizing	J. A. Rhodes	Providence, R. I	May 13, 1862	35,262
Yarn for weaving, Mode of preparing	H. P. Franklin and W. B. Winsor.	Providence, R. I	Aug. 8, 1817	......
Yarn for weaving tape, Machine for winding	I. Gibbs	Warren, Mass	Nov. 28, 1865	51,171
Yarn from bobbins or spools, Winding	P. Moody	Boston	Mar. 9, 1816	......
Yarn from mixed cotton and wool, Manufacturing	G. S. Bradford	Sand Lake, N. Y	Mar. 31, 1857	16,903
Yarn from spools, Means for winding or delivering	R. Kershaw	Morristown, Pa	Sept. 24, 1867	69,101
Yarn from the cop, Spooling	S. Thompson	Newburyport, Mass	Feb. 21, 1854	10,557
Yarn guide and clearer	A. C. Dakin and J. D. Butler	Clinton and Lancaster, Mass.	Feb. 16, 1869	86,973
Yarn in the bobbin, Coloring	J. Thomson and W. P. Wakelee	New Hartford, N. Y	June 30, 1857	17,708
Yarn in the skein, Apparatus for dyeing	M. Delany	Clinton, Mass	Jan. 26, 1858	19,184
Yarn, Machine for beaming	J. C. Arms	Northampton, Mass	Sept. 10, 1872	131,205
Yarn, &c., Machine for equalizing strain upon	R. Graves	Boston, Mass	Nov. 22, 1820	......
Yarn, Machine for making clouded	J. Chase	Worcester, Mass	Sept. 24, 1867	69,178
Yarn, Machine for manufacturing clouded	J. W. Bentley	Woonsocket, R. I	Mar. 31, 1868	76,042
Yarn, Machine for washing and cleaning	S. Olcott	Philadelphia, Pa	Apr. 11, 1840	1,549
Yarn, Machinery for doubling and twisting	M. Hey	Springfield, Pa	Oct. 8, 1850	7,701
Yarn, Machinery for dressing preparatory to weaving.	S. Batchelder	Saco, Me	June 22, 1832	......
Yarn-manufacture	E. T. C. Lutton	Philadelphia, Pa	Dec. 18, 1866	60,530
Yarn-manufacture	F. Vouillon and F. Tavernier	Paris, France	Jan. 31, 1860	27,014
Yarn, Manufacture of cotton	S. C. Lister and I. Warburton	Bradford and Addingham, England.	Oct. 20, 1857	18,461
Yarn, Manufacture of felted	J. H. Bloodgood and M. A. Johnson.	New York, N. Y., and Lowell, Mass.	Aug. 15, 1865	49,367
Yarn, Manufacturing cotton	G. G. Henry	Mobile, Ala	Nov. 25, 1856	16,117
Yarn, Manufacturing felted	M. A. Johnson	Lowell, Mass	May 6, 1856.	14,815
Yarn or thread, Machine for dressing	G. Jaquith	West Concord, Mass	Mar. 14, 1871	112,600
Yarn or thread reel	C. Knauer	Pittsburgh, Pa	May 26, 1857	17,379
Yarn or warp, Machine for beaming	G. Draper	Hopedale, Mass	Dec. 20, 1870	110,218
Yarn, paper, &c., Sizing-composition for	J. Leigh	Manchester, England	May 26, 1857	17,381
Yarn-press	T. Stibbs	Wooster, Ohio	Sept. 19 1871	119,195
Yarn-printing machine	J. Foster	Pawtucket, R. I	May 26, 1868	78,273
Yarn-printing machine	E. J. Stevens	Pawtucket, R. I	Oct. 13, 1868	83,103
Yarn-printing machine	E. J. Stephens and H. E. Green	Pawtucket, R. I	Mar. 14, 1865	46,829
Yarn-printing machine	E. J. Stephens and H. E. Green	Pawtucket, R. I	Aug. 28, 1866	57,592
Yarn-printing machinery	C. F. Austel	New York, N. Y	Aug. 11, 1868	80,895
Yarn-printing machinery	J. Forrest	Lawrence, Mass	Mar. 10, 1868	75,239
Yarn-printing machinery	W. McAllister	Lawrence, Mass	May 26, 1868	78,272
Yarn-printing machinery	W. McAllister	Lawrence, Mass	Feb. 20, 1872	123,921
Yarn-printing machinery	E. J. Stephens	North Providence, R. I	Oct. 6, 1868	82,889
Yarn-reel	E. Voegtli	Montgomery City, Mo	Nov. 10, 1868	84,026
Yarn reeling and measuring	W. A. Ditson	Girard, Ill	Jan. 19, 1869	85,916
Yarn-shearing machine	E. T. C. Lutton	Philadelphia, Pa	Feb. 25, 1868	74,923
Yarn sizing and dyeing apparatus	A. Bascom	East Jaffrey, N. H	Nov. 18, 1851	8,520
Yarn-sizing machine	T. Abbott	Blackburn, Great Britain	Jan. 21, 1873	134,964
Yarn-sizing machine	J. S. Thomson and K. Girvin	Brooklyn, N. Y	Nov. 10, 1868	83,890
Yarn-steaming apparatus	J. H. Higgins	New York, N. Y	Jan. 25, 1870	99,189
Yarn, Tarring	J. Thursby	Bushwick, N. Y	May 2, 1843	3,067
Yarn, thread, &c., Let-off and tension for	A. B. Ely	Newton, Mass	Apr. 30, 1867	64,209
Yarn to the action of liquids, Machinery for submitting.	P. Heilmann	Mulhousetown, France	Feb. 25, 1862	34,494
Yarn-twisting machine	J. H. Jackson and S. Leak	Putnam, Conn	Aug. 29, 1871	118,536
Yarn, Warping and dressing	S. T. Thomas and E. Everett	Lawrence, Mass	Aug. 1, 1854	11,436
Yarn-warping machine	D. Hussey	Lowell, Mass	Feb. 28, 1871	112,230
Yarn-warping machinery	R. Garsed and C. Denn	Philadelphia, Pa	Sept. 20, 1859	25,501
Yarn-washing machine	E. Haeffley	Lowell, Mass	Apr. 26, 1870	102,256
Yarn-winding machine	W. Orr, jr	Clinton, Mass	Apr. 3, 1866	53,746

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Invention.	Inventor.	Residence.	Date.	No.
Yarn-winding reel	E. L. Buckup	Stapleton, N. Y	Aug. 17, 1869	93, 670
Yarn without the aid of twist, Making cotton	E. Walcott	Newport, N. Y	Dec. 11, 1821	....
Yarn, Woolen	W. B. Walker	Hillsborough Bridge, N. H.	July 1, 1836	....
Yeast, Acid-powder as a substitute for	W. J. Walker	Brooklyn, N. Y	May 5, 1868	77, 685
Yeast and application in mashing and brewing, Manufacture of.	D. Green	New York, N. Y	May 9, 1871	114, 671
Yeast-cake dryer	C. Gleason	Buffalo, N. Y	Sept. 11, 1866	57, 891
Yeast-cake, Manufacture of	B. F. Lee	Sandusky, Ohio	Jan. 12, 1869	85, 743
Yeast for baking-purposes, Substitute for	J. E. Lauer	New York, N. Y	Dec. 4, 1866	60, 201
Yeast for brewers and others	J. Wolff	Chicago, Ill	Apr. 9, 1872	125, 646
Yeast for distillers, Manufacture of	J. Wolf	Lexington, Ky	Feb. 8, 1870	99, 615
Yeast from the froth of fermenting-tank, Apparatus for separating and collecting.	C. Fleischmann	Cincinnati, Ohio	Apr. 23, 1872	125, 945
Yeast, Manufacture of	H. Fleischmann	New York, N. Y	Apr. 26, 1870	102, 387
Yeast, Manufacture of	H. Sommer and A. Weiss	Massillon, Ohio	Aug. 29, 1871	118, 495
Yeast, Method of making	G. Terry	Providence, R. I	Apr. 6, 1869	88, 590
Yeast, Preparation of	J. T. Alden	Cincinnati, Ohio	Nov. 3, 1863	40, 451
Yeast-powder, Manufacturing crystalline acid phosphate of lime for.	J. E. Lauer	New York, N. Y	June 17, 1873	140, 051
Yeast-raising device	A. A. Sage	Memphis, Mich	Oct. 13, 1863	40, 284
Yellow-wash for barns, buildings, &c	H. Bechtold and J. Nunamacker	Lancaster County, Pa	Sept. 8, 1868	81, 975
Yoke	F. M. Shields	Macon, Miss	Aug. 4, 1868	80, 674
Yoke	J. L. W. Townsend	Mont Blanco, Ohio	June 8, 1869	91, 183
Yoke, Adjustable ox	S. G. Walker	Croydon, N. H	Aug. 4, 1868	80, 788
Yoke and fastening, Bell	J. P. Cowing	Seneca Falls, N. Y	Nov. 18, 1862	36, 944
Yoke and pole coupling, Neck	W. W. Skinner	Des Moines, Iowa	Sept. 3, 1872	131, 033
Yoke and whiffletree clip, Neck	Z. T. Sweet	Eugene City, Oreg	Apr. 6, 1869	88, 676
Yoke and whiffletree, Neck	A. S. Dow	Cedarville, N. Y	Sept. 29, 1863	40, 141
Yoke and whiffletree socket, Neck	C. C. Holman	Clayville, N. Y	Sept. 26, 1865	50, 124
Yoke bow, Ox	W. G. Beckwith	Lowndesborough, Ala	Sept. 28, 1869	95, 305
Yoke, Draft neck	A. B. Coleman	Lyndonville, N. Y	Sept. 10, 1867	68, 699
Yoke fastening, Neck	H. J. Lamm	Richmond, Ind	Nov. 26, 1867	71, 312
Yoke fastening, Ox	A. Hotchkiss	Sharon, Conn	July 17, 1849	6, 592
Yoke fastening, Ox	W. N. Lockwood	New Britain, Conn	May 22, 1860	28, 384
Yoke for double harness, Breast	A. F. Hammel	Saint Louis, Mo	Oct. 6, 1868	82, 830
Yoke, Harness	Z. Butt	Lincolnton, N. C	Nov. 29, 1859	26, 252
Yoke, Harness neck	S. Burgess	Princeville, Ill	Sept. 10, 1872	131, 249
Yoke, Harness neck	A. Parliman	Palmyra, N. Y	Jan. 10, 1871	110, 932
Yoke holder, Neck	G. R. Huntley	Hubbardston, Mich	Sept. 16, 1873	142, 852
Yoke, Horse	A. Allen	Troy, N. Y	June 29, 1827	....
Yoke, Horse	T. J. Barnes	Cambridge, Ill	Nov. 5, 1867	70, 502
Yoke, Horse	T. J. Barnes	Cambridge, Ill	Sept. 22, 1868	82, 274
Yoke, Horse	A. B. Beaumont	Austerlitz, Mich	Dec. 27, 1870	110, 541
Yoke, Horse	G. P. Cole	Hudson, Mich	Mar. 12, 1872	124, 547
Yoke, Horse	D. K. Croffut	Birmingham, Conn	Feb. 11, 1868	74, 316
Yoke, Horse	E. H. Danforth	Busti, N. Y	July 28, 1846	4, 672
Yoke, Horse	E. Sanford	Meriden, Conn	Mar. 10, 1868	75, 299
Yoke, Horse	J. Woodward	Wilmot Flat, N. H	Aug. 21, 1855	13, 472
Yoke, Horse neck	C. L. Rawdon	Bristol, Ohio	Aug. 17, 1852	9, 201
Yoke, Horse or ox	G. Hotchkiss	Windsor, N. Y	Aug. 31, 1837	367
Yoke lifting, Apparatus for hand and	M. Mattson	New York, N. Y	Dec. 3, 1867	71, 775
Yoke, Neck	A. Benedict	Jonesville, N. Y	Jan. 15, 1867	61, 142
Yoke, Neck	S. Briggs and J. G. Talbot	Sloansville, N. Y	Sept. 26, 1854	11, 717
Yoke, Neck	S. P. Campbell	Rochester, Minn	Feb. 16, 1864	41, 601
Yoke, Neck	W. B. Chapman	Waukau, Wis	Sept. 24, 1867	69, 074
Yoke, Neck	G. P. Cole	Hudson, Mich	Nov. 30, 1869	97, 359
Yoke, Neck	A. B. Coleman	Lyndonville, N. Y	Nov. 28, 1865	51, 147
Yoke, Neck	A. C. Cooke	Ohio, Ill	May 15, 1866	54, 690
Yoke, Neck	E. and J. C. Covert	Farmer Village, N. Y	Jan. 21, 1868	73, 581
Yoke, Neck	J. Cummings	Perry, Mich	Nov. 7, 1865	50, 801
Yoke, Neck	A. S. Dow and E. W. Wilcox	Cedarville, N. Y	Apr. 14, 1868	76, 609
Yoke, Neck	P. Epler	Collumsville, Pa	May 27, 1873	139, 380
Yoke, Neck	H. E. Goble	Lake Mill, Mich	Apr. 6, 1869	88, 562
Yoke, Neck	W. Hull	Fort Wayne, Ind	May 18, 1869	90, 174
Yoke, Neck	J. Ives	Mount Carmel, Conn	June 4, 1872	127, 605
Yoke, Neck	J. Jacobs	Oneida, Ill	Nov. 23, 1869	97, 197
Yoke, Neck	T. J. Jones	Rochester, Mich	Feb. 18, 1868	74, 544
Yoke, Neck	J. King and C. S. Gould	Janesville, Wis	Mar. 29, 1870	101, 274
Yoke, Neck	J. R. Pierce	Castile, N. Y	May 30, 1854	10, 991
Yoke, Neck	J. T. Plato	Jasper, N. Y	Jan. 27, 1852	8, 693
Yoke, Neck	C. S. Sanford	Lena, Ill	Jan. 25, 1870	99, 243
Yoke, Neck	C. E. Sweney	Geneseo, Ill	May 25, 1869	90, 406
Yoke, Neck	R. Voris	Oneida, Ill	June 29, 1869	92, 127
Yoke, Neck	N. H. Vosburgh	Coxsackie, N. Y	Aug. 21, 1866	57, 413
Yoke, Ox	I. K. Bennett	Narrows, Pa	Apr. 21, 1857	17, 071
Yoke, Ox	W. Burnham	Essex, Mass	May 24, 1859	24, 096
Yoke, Ox	D. Chappel	Sheldon, Vt	Sept. 3, 1846	4, 733
Yoke, Ox	J. Chase	Craftsburgh, Vt	Nov. 20, 1849	6, 878
Yoke, Ox	W. R. Close	Bangor, Me	May 2, 1865	47, 523
Yoke, Ox	W. Cooper	Paris, Me	Oct. 13, 1868	82, 922
Yoke, Ox	L. Dederick	Albany, N. Y	Jan. 2, 1855	12, 158
Yoke, Ox	J. D. Foster	Montgomery, Ala	Jan. 18, 1859	22, 637
Yoke, Ox	J. D. Foster	Montgomery, Ala	July 12, 1870	105, 323
Yoke, Ox	H. B. Hammon	Bristolville, Ohio	May 16, 1854	10, 918
Yoke, Ox	E. N. Hillsgrove	Concord, N. H	May 18, 1869	90, 101
Yoke, Ox	E. Hough	Saint Johnsville, N. Y	Aug. 3, 1852	9, 172
Yoke, Ox	H. P. Judson	Bethlehem, Conn	Nov. 22, 1859	26, 191
Yoke, Ox	E. Knowlton and S. F. Smith	Stockbridge and Royalton, Vt.	Apr. 13, 1869	88, 965
Yoke, Ox	W. B. Krum	Troy, N. Y	Apr. 24, 1866	54, 176
Yoke, Ox	T. D. Lakin	Hancock, N. H	Oct. 28, 1862	36, 882
Yoke, Ox	J. Langenbach	Dorchester, Iowa	Jan. 21, 1868	73, 613
Yoke, Ox	I. W. Little	Newbury, Mass	May 16, 1854	10, 937
Yoke, Ox	I. W. Little	Newbury, Mass	Apr. 7, 1868	76, 332
Yoke, Ox	M. W. Mason	Elbridge, N. Y	Aug. 6, 1861	32, 003
Yoke, Ox	W. Perrin	Andover, Mass	July 25, 1865	48, 997
Yoke, Ox	C. Phelon	East Granville, Mass	Aug. 31, 1869	94, 438
Yoke, Ox	T. W. Porter	Bangor, Me	Jan. 25, 1861	32, 646

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Yoke, Ox	C. H. Post	Guilford, Conn	Aug 13, 1867	67, 798
Yoke, Ox	H. Rawson	Jericho, Vt	Feb. 18, 1868	74, 592
Yoke, Ox	J. H. Riggs	Gloucester, Mass	Aug. 3, 1858	21, 087
Yoke, Ox	A. L. Simpson	Durham, N. H	Jan. 7, 1851	7, 893
Yoke, Ox	M. Smith	Sandisfield, Mass	July 29, 1856	15, 444
Yoke, Ox	W. A. Thompson	West Winsted, Conn	Aug. 13, 1867	67, 819
Yoke, Ox	J. Tucker	Norway, Me	May 22, 1855	12, 925
Yoke, Ox	A. Vose	Pittsfield, Vt	Oct. 25, 1853	10, 165
Yoke, Ox	G. W. Weeks	Boston, Mass	Aug. 31, 1858	21, 392
Yoke, Ox	J. H. Whiting	Sandisfield, Mass	Mar. 7, 1865	46, 742
Yoke, Ox	E. S. Woodford	Winchester, Conn	Apr. 11, 1865	47, 263
Yoke, Ox	E. S. Woodford	Winsted, Conn	May 2, 1865	47, 592
Yoke-ring attachment for the poles of ox-carts	J. C. Gilbert	Leeds Junction, Me	Apr. 19, 1859	23, 673
Yoke-ring attachment for vehicle-poles	A. S. Murchinson	Elmira, Ill	Mar. 5, 1872	124, 376
Yoke, Self-adjusting neck	J. Jacobs	Oneida, Ill	Apr. 30, 1867	64, 327
Yoke slide, Neck	G. Purple	Wellington, Ohio	Jan. 28, 1868	73, 754
Yokes to carriage-poles, Attaching	U. Reynolds	New York, N. Y	Sept. 24, 1867	69, 251
Yokes to carriage-poles, Attaching neck	J. M. Brown	Bloomfield, Ohio	June 18, 1850	7, 435
Yoke trundle, Neck	A. H. Cole	Sylvania, Ohio	Feb. 5, 1867	61, 807
Yoke tug, Neck	G. Bennett	New Pennington, Ind	Feb. 8, 1870	99, 524
Yoke, Wagon neck	T., jr., and I. Byrd	Williamsville, Mich	Apr. 30, 1872	126, 181
Yokes, Bow-pin for ox	E. G. Gale	Holland, Mich	Sept. 11, 1866	57, 887
Yokes, Bow-pin for ox	W. J. Ives	Meriden, Conn	Dec. 9, 1873	145, 422
Yokes, Bow-pin for ox	O. O. Woodruff	Killingworth, Conn	Apr. 4, 1865	47, 149
Yokes, Combined box-fastener and guard for ox	E. N. Bacon	Chelsea, Vt	Dec. 9, 1873	145, 381
Yokes, Fastening pins in the bow of ox	J. Warner and T. C. Silliman	Chester, Conn	July 17, 1860	29, 207
Yokes to poles, Device for fastening neck	T. H. Russell	Lebanon, N. H	Aug. 15, 1871	118, 157
Yucca, Extract of	L. G. Fellner	Las Vegas, New Mexico	Jan. 14, 1873	134, 876
Z.				
Zinc and lead, Manufacture of pigments containing.	F. Osgood	New York, N. Y	Apr. 1, 1873	137, 474
Zinc and lead, Method of treating the mixed sulphurets of.	J. D. Whelpley and J. J. Storer	Boston, Mass	Nov. 13, 1866	59, 694
Zinc and ore furnace	A. Muller	Paris, France	July 16, 1861	32, 840
Zinc, Apparatus for condensing and collecting white.	C. W. Trotter	Brooklyn, N. Y	Dec. 30, 1873	145, 976
Zinc, Apparatus for cooling the vapor of oxide of	J. E. Burrows	Newark, N. J	Nov. 8, 1870	108, 965
Zinc, Apparatus for granulating	E. H. Richter	Taunton, Mass	Dec. 9, 1873	145, 449
Zinc, Apparatus for manufacturing oxide of	I. M. Milbank	Greenfield Hill, Conn	Feb. 14, 1860	27, 142
Zinc, Apparatus for purifying white oxide of	J. Wharton	Philadelphia, Pa	July 29, 1856	15, 448
Zinc, Apparatus for the manufacture of white oxide of.	S. Wetherill	Philadelphia, Pa	Jan. 7, 1868	73, 147
Zinc, Coating sheet-iron with	J. D. Grey	Pittsburgh, Pa	Mar. 14, 1871	112, 588
Zinc, Collecting oxide of	G. C. Hall	Brooklyn, N. Y	Dec. 10, 1867	72, 032
Zinc compounds, Process of reducing ores by	E. L. Seymour	Williamsburgh, N. Y	Aug. 26, 1851	8, 308
Zinc dross and skimmings for the manufacture of pigments, Treating.	F. Osgood	New York, N. Y	May 6, 1873	138, 685
Zinc for a paint, Preparation of oxide of	C. Titterton	Rohampton, England	May 14, 1861	32, 320
Zinc for organ-pipes, &c., Process of preparing	C. Fogelberg	New York, N. Y	May 11, 1869	89, 980
Zinc for pigment, Manufacture of oxide of	F. Osgood	New York, N. Y	May 6, 1873	138, 684
Zinc for use in paint, Preparation of white oxide of.	G. T. Lewis	Philadelphia, Pa	Sept. 9, 1862	36, 414
Zinc, Forming stamped article from sheet	A. T. Perkins	Toledo, Ohio	May 21, 1872	127, 101
Zinc from gold and silver, Separating	E. Balbach, jr	Newark, N. J	May 21, 1867	64, 934
Zinc from its ores, Furnace for extracting	A. Thoma	New York, N. Y	June 8, 1869	91, 051
Zinc from ore, Preparing	H. W. Adams	New York, N. Y	July 27, 1852	9, 145
Zinc from sulphureted ore, Manufacture of oxide of.	D. Lees	Blair County, Pa	Nov. 3, 1868	83, 643
Zinc from the dross in galvanizing iron, Manufacture of.	L. D. Metz	Elizabeth, N. J	Feb. 6, 1872	123, 461
Zinc from waste-gas of furnaces, Apparatus for collecting.	H. Weissenborn	Newark, N. J	Dec. 10, 1861	33, 911
Zinc-furnace	E. H. and F. G. Richter	Taunton, Mass	Dec. 9, 1873	145, 450
Zinc-furnace	A. Thoma	New York, N. Y	June 8, 1869	91, 052
Zinc, Furnace for distilling	S. Wetherill	Bethlehem, Pa	Jan. 25, 1859	22, 758
Zinc, Furnace for manufacture of oxide of	J. G. Lang	Pittsburgh, Pa	Sept. 9, 1873	142, 571
Zinc, Furnace for manufacture of oxide of	J. Wharton	Philadelphia, Pa	Dec. 16, 1862	37, 190
Zinc, Furnace for manufacturing oxide	J. Wharton and N. Bartlett	Philadelphia and Bethlehem, Pa.	July 13, 1858	20, 926
Zinc, Furnace for smelting	S. Boyden	Newark, N. J	Mar. 13, 1849	6, 180
Zinc-iron ore, Process of smelting	J. C. Kent	Cooper Iron Works, N. J	Feb. 10, 1857	16, 594
Zinc, Manufacture of	F. Bennett	Bagillt, England	Mar. 3, 1863	37, 803
Zinc, Manufacture of	A. G. Hunter	Flint, Wales	May 5, 1868	77, 618
Zinc, Manufacture of	G. T. Lewis	Philadelphia, Pa	May 12, 1863	38, 493
Zinc, Manufacture of	J. Webster	Birmingham, England	Jan. 31, 1865	46, 198
Zinc, Manufacture of chloride of	J. E. Mills	Brooklyn, N. Y	Oct. 8, 1867	69, 573
Zinc, Manufacture of metallic	A. Monnier	Camden, N. J	May 18, 1858	20, 201
Zinc, Manufacture of oxide of	J. Jenkins and J. McMahon	Elizabeth, N. J., and Lower Saucon, Pa.	July 19, 1864	43, 587
Zinc, Manufacture of oxide of	E. J. Leclaire and J. J. E. Barruel.	Paris, France	May 7, 1850	7, 351
Zinc, Manufacture of white oxide of	R. Jones	Mount Holly, N. J	Oct. 5, 1869	95, 484
Zinc, Method of working siliceous and other calamine ores of.	J. Jenkins and G. H. Cook	Elizabeth and New Brunswick, N. J.	Jan. 14, 1862	34, 146
Zinc or spelter, Manufacturing articles of	S. Davis	New York	Aug. 11, 1831	......
Zinc-ore, Apparatus for reducing	A. Monnier	Camden, N. J	May 19, 1857	17, 333
Zinc-ore, Furnace for smelting	J. and I. Kalbach	Bernville, Pa	Aug. 30, 1859	25, 267
Zinc-ore, Furnace for treating	S. T. Jones	New York, N. Y	July 24, 1855	13, 339
Zinc-ore, Process for reducing	S. Wetherill	Bethlehem, Pa	Jan. 6, 1857	16, 362
Zinc, Process of manufacturing white oxide of	S. Wetherill	Philadelphia, Pa	Jan. 7, 1868	73, 146
Zinc, Retort for refining	W. Blake	Boston, Mass	Aug. 25, 1863	39, 625
Zinc, Treating impure	A. Pierce, jr	New Bedford, Mass	Sept. 6, 1864	44, 112
Zinc-white, Apparatus for separating	S. Wetherill	Bethlehem, Pa	Feb. 20, 1855	12, 418
Zinc-white furnace	J. Renton	Newark, N. J	Feb. 28, 1854	10, 574
Zinc-white furnace	J. G. Trotter	Newark, N. J	Mar. 28, 1854	10, 711
Zinc-white furnace	S. Wetherill	Bethlehem, Pa	Sept. 30, 1856	15, 830
Zinc-white furnace, Construction of	J. G. Trotter	Newark, N. J	Jan. 30, 1855	12, 333
Zinc-white, Making	J. E. Burrows	Newark, N. J	Aug. 14, 1855	13, 416

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Zinc-white, Making	R. Jones	Burlington County, N. J	Mar. 28, 1854	10, 696
Zinc-white, Making	S. T. Jones	New York, N. Y	Aug. 14, 1855	13, 431
Zinc-white, Manufacture of	N. Bartlett	Bayonne City, N. J	June 10, 1873	139, 761
Zinc-white, Manufacture of	S. Gardner	New York, N. Y	Mar. 27, 1855	12, 613
Zinc-white, Manufacture of	S. T. Jones	New York, N. Y	Feb. 24, 1852	8, 756
Zinc-white, Process for making	S. Wetherill	Bethlehem, Pa	Nov. 13, 1855	13, 806
Zinc-white, Use of steam to make	H. W. Adams	Boston, Mass	Oct. 28, 1851	8, 477
Zinc with lead, Coating	E. Morewood and G. Rogers	London, England	June 28, 1853	9, 818
Zincing and tinning bath	F. Chase	Philadelphia, Pa	Sept. 29, 1868	82, 491
Zincing iron	F. A. Kraft	Philadelphia, Pa	June 23, 1868	79, 234
Zincing iron	J. H. Peake	Washington, D. C	July 27, 1869	92, 998
Zirconia for use in producing light, and for other purposes, Preparing.	C. M. Tessié du Motay	Paris, France	Mar. 2, 1869	87, 477

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A.				
Abdominal supporter	S. A. Moody	New York, N. Y	May 3, 1864 Jan. 30, 1866	2,165
Abdominal supporter	J. M. Mulligan	New Albany, Ind	Feb. 10, 1857 Sept. 15, 1857	493
Accouterments, Mode of slinging	W. D. Mann	Detroit, Mich	Dec. 8, 1863 June 7, 1864	1,692
Acid and phosphates for use in preparation of food, Manufacture of phosphoric.	E. N. Horsford, by the Rumford Chemical Works, assignee, (mesne.)	Providence, R. I	Apr. 22, 1856 May 7, 1867	2,597
Acid, Apparatus for generating carbonic	J. F. Boynton	Syracuse, N. Y	Oct. 7, 1856 July 13, 1869	3,546
Acid for use in preparation of soda-powers, farinaceous food, &c., Pulverulent.	E. N. Horsford, by the Rumford Chemical Works, assignee, (mesne.)	Providence, R. I	Apr. 22, 1856 June 9, 1868	2,979
Acid, Manufacture of sulphuric	A. Monnier	Camden, N. J	Aug. 11, 1857 Oct. 6, 1857	502
Acid, Manufacture of sulphuric	A. Monnier	Camden, N. J	Aug. 11, 1857 Sept. 21, 1858	603
Addressing newspapers, &c	H. Moeser, (extended June 24, 1865)	Pittsburgh, Pa	June 24, 1851 Jan. 30, 1866	2,161
Agricultural boiler	E. E. Sill and A. H. Bennett, by E. E. Sill, assignee.	Rochester, N. Y	Nov. 29, 1870 Apr. 9, 1872	4,863
Agricultural fork	C., A., and C. N. Clow, by A. and C. Clow, assignees.	Port Byron, N. Y	Dec. 8, 1857 Sept. 3, 1867	2,758
Air-compressing apparatus	J. S. Patric	Rochester, N. Y	Apr. 18, 1865 Apr. 11, 1871	4,337
Air-engine	P. Shaw	Boston, Mass	May 2, 1854 July 17, 1860	1,014
Air-engine	P. Shaw	Boston, Mass	May 2, 1854 Apr. 23, 1861	1,176
Air-engine	S. Wilcox, jr	Westerly, R. I	May 3, 1859 Nov. 20, 1860	1,082
Air-engine	S. Wilcox, jr	Westerly, R. I	May 3, 1859 Nov. 20, 1860	1,083
Air-heating furnace	W. Bryant, by J. W. Reed, assignee, (mesne.)	Boston and West Roxbury, Mass.	Oct. 24, 1854 Mar. 27, 1860	934
Alarm-lock	J. S. and R. Porter	Waterford, N. Y	Mar. 5, 1867 Sept. 15, 1868	3,120
Album, Photographic	J. D. Mets, by Altemus & Co., assignees.	Dubuque, Iowa, and Philadelphia, Pa.	July 21, 1863 Dec. 1, 1863	1,581
Album, Photographic	R. Van Velthoven and J. H. Hazzard, by W. W. Harding, assignee, (mesne.)	Philadelphia, Pa	Oct. 17, 1865 May 21, 1867	2,617
Alcoholic liquor from rhubarb plants	J. H. Deacon	Lumberton, N. J	Jan. 26, 1869 Feb. 15, 1870	3,837
Alcoholic liquor from rhubarb plants, Manufacture of.	J. H. Deacon	Lumberton, N. J	Jan. 26, 1869 Oct. 24, 1871	4,606
Alizarine, Manufacture of	C. Graebe and C. Liebermann	Frankfort-on-the-Main and Berlin, Prussia.	Oct. 5, 1869 Apr. 4, 1871	4,320
Alkali, Box for preserving	G. Thompson	East Tarentum, Pa	Sept. 15, 1857 Feb. 8, 1859	657
Alkali, Device for putting up caustic	G. Thompson	East Tarentum, Pa	Oct. 21, 1856 Feb. 1, 1859	654
Alkali, Manufacture of caustic	G. Thompson	East Tarentum, Pa	Oct. 21, 1856 Apr. 16, 1867	2,569
Alkali, Manufacture of caustic	G. Thompson	East Tarentum, Pa	Oct. 21, 1856 Apr. 16, 1867	2,571
Alkali, Process of putting up caustic	G. Thompson	East Tarentum, Pa	Oct. 21, 1856 Apr. 16, 1867	2,570
Alloy for plow mold-boards, &c., Copper	W. Magee	Jamaica, N. Y	Sept. 19, 1871 Dec. 26, 1871	4,684
Amalgam and mercury from ore-pulp, Machine for collecting and separating.	Z. Wheeler	San Francisco, Cal	July 14, 1863 May 10, 1864	1,669
Amalgamating and collecting gold and silver	H. W. Adams and W. S. Worthington.	New York and Newton, N. Y.	Feb. 16, 1864 July 18, 1865	2,028
Amalgamating gold and silver, Process and apparatus for.	A. B. Crosby, by the Crosby Patent Gold and Silver Amalgamating Association, assignee, (mesne.)	Greene, Me	Sept. 26, 1871 July 9, 1872	4,964
Amalgamator	L. Solomon	New York, N. Y	Dec. 7, 1858 Mar. 15, 1859	675
Amalgamator	T. Varney	San Francisco, Cal	Dec. 16, 1862 Mar. 28, 1865	1,924
Amalgamator, Gold	W. Ball	Chicopee, Mass	Sept. 9, 1851 Aug. 6, 1854	274
Amalgamator, Gold	J. N. Wickoff and T. M. Fell	Brooklyn, N. Y., and Melville Mines, Va.	July 26, 1859 Apr. 9, 1861	1,169
Anchor	F. Wittram	San Francisco, Cal	June 9, 1868 Sept. 22, 1868	3,137
Aniline dye	B. Bloch	Soultz, France	July 14, 1868 Sept. 1, 1868	3,103
Aniline, Red dye from	J. Renard	Lyons, France	Apr. 8, 1859 Dec. 9, 1862	1,359
Aniline to produce a red coloring matter or dye, Treating.	J. Renard	Lyons, France	Apr. 8, 1859 Dec. 9, 1862	1,358
Animal and vegetable substances, Apparatus for evaporating the moisture from.	C. Alden, by self and Newberg and Alden Fruit-Preserving Company, assignees.	New York, N. Y	Mar. 15, 1870 June 7, 1870	4,010
Animal and vegetable substances, Process and apparatus for preserving.	C. Alden	Newburgh, N. Y	Dec. 5, 1871 Nov. 11, 1873	5,648

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Animal and vegetable substances, Process for evaporating the moisture from.	C. Alden, by self and Newberg and Alden Fruit-Preserving Company, assignees.	New York, N. Y	Mar. 15, 1870 June 7, 1870	4,011
Animal-trap	C. Jillson	Worcester, Mass	Nov. 16, 1858 May 7, 1867	2,590
Animal-trap	J. A. Lee, by R. M. Mann, assignee, (mesne.)	Chattanooga, Tenn	Nov. 3, 1868 Aug. 30, 1870	4,113
Annealing-furnace	J. J. Eagleton	New York, N. Y	May 20, 1856 June 24, 1856	373
Annealing furnace, Plowshare, &c	W. M. Watson	Tonica, Ill	Feb. 6, 1872 Nov. 5, 1872	5,137
Apples, grapes, &c., Machine for grinding and pressing.	C. B. Hutchinson	Auburn, N. Y	Feb. 3, 1863 Feb. 8, 1870	3,830
Apple-grinding mill	W. O. Hickok	Hamburgh, Pa	Nov. 20, 1855 Mar. 26, 1861	1,161
Arithmometer for adding	O. L. Castle	Upper Alton, Ill	Nov. 24, 1857 May 11, 1858	551
Arm-chair, Folding	H. S. Golightly and C. S. Twitchell, by J. G. English and E. F. Mersick, assignees.	New Haven, Conn	Oct. 6, 1863 July 5, 1864	1,716
Asphalt rock, Manufacture of artificial	A. B. Vandemark	Jersey City, N. J	Aug. 8, 1871 Oct. 10, 1871	4,591
Auger	R. Cook, (extended June 17, 1865.)	Saratoga Springs, N. Y	June 17, 1851 Mar. 19, 1867	2,513
Auger	W. A. Ives	New Haven, Conn	Oct. 12, 1869 Oct. 18, 1870	4,156
Auger	R. Jennings	Deep River, Conn	Jan. 30, 1855 Oct. 3, 1865	2,081
Auger	R. Jennings	Deep River, Conn	Jan. 30, 1855 Oct. 3, 1865 Jan. 16, 1866	2,146
Auger	A. C. Kasson, by self and N. C. Gridley, assignees.	Milwaukee, Wis., and Saint Louis, Mo.	Jan. 15, 1867 Apr. 9, 1867	2,551
Auger	I. T. Payne	Chester, Conn	Mar. 10, 1860 Mar. 15, 1870	3,879
Auger	B. Walch	Frederick, Md	Jan. 17, 1871 Jan. 14, 1873	5,238
Auger-bits, Machine for bending lips of	J. Swan	Seymour, Conn	Mar. 15, 1870 Aug. 15, 1871	4,517
Auger-bits, Machine for forming	W. A. Ives	New Haven, Conn	Mar. 19, 1872 June 17, 1873	5,455
Auger-bits, Machine for manufacturing	J. Swan	Seymour, Conn	June 9, 1868 Aug. 15, 1871	4,516
Auger-bits, Machine for manufacturing	J. Swan, by R. P. Bruff, assignee	Seymour, Conn	June 9, 1868 Oct. 21, 1873	5,624
Auger, Earth, (Division B)	S. H. Dickerson	Hudson, Mich	Mar. 8, 1870 July 29, 1873	5,508
Auger-handle	J. M. Horton, by the Miller's Falls Manufacturing Company, assignee.	Chicago, Ill., and Miller's Falls, Mass.	July 8, 1862 Nov. 29, 1870	4,187
Auger, Hollow	W. A. Clark	New Haven, Conn	Dec. 12, 1871 May 6, 1873	5,393
Auger, Hollow	W. A. Ives	New Haven, Conn	Oct. 13, 1868 Apr. 13, 1869	3,365
Auger, Hollow	A. Wyckoff	Elmira, N. Y	July 12, 1859 Mar. 13, 1866	2,204
Augers, Machine for making	W. W. Grier and R. H. Boyd	Hulton, Pa	May 22, 1866 Aug. 6, 1867	2,712
Augers, Machinery for forming lips of	J. Swan	Seymour, Conn	June 27, 1871 Sept. 26, 1871	4,569
Augers, Manufacturing double-twist screw	E. L'Hommedieu and R. N. Watrans, by E. L'Hommedieu, assignee.	Chester, Conn	July 24, 1838 July 30, 1845	72
Augers to handles, Attaching	J. M. Horton, by self, assignee, (mesne.)	Albany, N. Y	July 8, 1862 Apr. 17, 1866	2,229
Augers to handles, Attaching	J. E. Larkin, by E. L. Larkin, administratrix.	Ballston Spa, N. Y	Nov. 19, 1850 June 17, 1851	203
Automatic gate	W. I. Wooster	Harvard, Ill	Mar. 18, 1873 July 15, 1873	5,489
Auxiliary table	J. Blake, by self and G. Blake, assignees.	Scranton, Pa	Mar. 23, 1869 Nov. 2, 1869	3,697
Ax	D. W. Colburn, by T. Bakewell, and J. Lippincott, assignees.	Laomi, Ill., and Pittsburgh, Pa.	July 9, 1867 Aug. 18, 1868	3,083
Axle-box	D. Dalzell	South Egremont, Mass	Aug. 16, 1870 Oct. 17, 1871	4,594
Axle box, Car	A. Higley, by Higley Car-Journal Company, assignee.	Cleveland, Ohio	Feb. 2, 1869 June 17, 1873	5,453
Axle-box, Carriage-wheel	E. W. Ives, by self and D. D. Ives, assignees.	Mount Carmel, Conn	Apr. 25, 1871 Sept. 17, 1872	5,063
Axle box, Railway	C. B. Boynton, by J. B. Fletcher, assignee.	Saint Albans, Vt	Nov. 12, 1867 May 10, 1870	3,963
Axle box, Railway-car	R. N. Allen	Cleveland, Ohio	Mar. 23, 1858 Dec. 20, 1864	1,834
Axle box, Railway-car	T. B. Stewart	Wethersfield, Conn	Nov. 19, 1867 Dec. 22, 1868	3,243
Axle-box roller	G. W. and J. C. Geisendorff	Indianapolis, Ind., and Cincinnati, Ohio.	Feb. 6, 1855 Jan. 13, 1857	420
Axle-box, Vehicle-wheel	D. Dalzell	South Egremont, Mass	Aug. 16, 1870 Apr. 23, 1872	4,877
Axle-boxes, Mode of constructing	E. W. Ives, by self and D. D. Ives, assignees.	Mount Carmel, Conn	Apr. 25, 1871 Oct. 29, 1872	5,118
Axle-journals, Reducing friction of railway	L. J. Pomme de Mirimonde, by J. H. Denning, assignee.	Paris, France, and New York, N. Y.	Feb. 2, 1858 Nov. 23, 1858	627
B.				
Back-comb. (Design)	A. Gray, by E. Brown	Wappinger's Falls, N. Y	Jan. 24, 1860 Apr. 26, 1864	1,658

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Bag-frame	A. J. Sessions	Bristol, Conn	June 12, 1866 Aug. 28, 1866	2,345
Bag-machine	J. M. Hurd	Auburn, N. Y	Aug. 9, 1864 June 17, 1873	5,454
Bagasse-furnace	S. H. Gilman	New Orleans, La	Dec. 4, 1855 Aug. 5, 1856	383
Bagasse-furnace	A. Hager and Y. Allyn	Baton Rouge and New Orleans, La.	May 6, 1856 May 4, 1858	549
Bagasse-furnace	A. Stillman, by E. A. Harris, administratrix.	New York, N. Y	May 1, 1855 Nov. 9, 1858	619
Bagasse, Spider-arch for burning	J. Amick	Ascension Parish, La	Apr. 19, 1870 June 28, 1870	4,044
Bail-ear, Metallic	T. Evans, (extended June 21, 1873.)	Branchport, N. Y	June 21, 1859 Sept. 23, 1873	5,578
Balance	R. Shaler	Madison, Conn	Nov. 28, 1865 Aug. 21, 1866	2,341
Bale-tie	D. McComb, deceased, by M. A. McComb, administratrix, (extended June 17, 1870.)	Memphis, Tenn	June 17, 1856 Oct. 21, 1873	5,616
Bale tie, Cotton	G. N. Beard	Saint Louis, Mo	July 16, 1861 Apr. 9, 1867	2,548
Bale tie, Cotton	G. Brodie, by J. J. McComb, assignee, (extended March 22, 1873.)	Plum Bayou, Ark., and Liverpool, England.	Mar. 22, 1859 Mar. 25, 1873	5,333
Bale tie, Cotton	A. J. Going	Clinton, La	Apr. 1, 1873 Aug. 26, 1873	5,553
Bale tie, Cotton	Z. W. Lee, by J. C. Lee, assignee	Gonzales, Tex	Oct. 16, 1866 Jan. 8, 1867	2,449
Bale tie, Cotton	J. R. McClintock and J. Cumberland, deceased, by A. J. Aiken, assignee, (mesne.)	Mobile, Ala., and New Orleans, La.	May 23, 1871 May 13, 1873	5,404
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee, (mesne.)	Fayette County, Ky., and New Orleans, La.	Apr. 10, 1860 June 17, 1873	5,457
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee.	Lexington, Ky	Oct. 2, 1866 Oct. 21, 1873	5,617
Bale tie, Cotton	J. F. Milligan, by J. W. Branch and J. Crookes, assignees.	Saint Louis, Mo	Nov. 6, 1866 Apr. 9, 1867	2,554
Bale tie, Cotton	W. Trowbridge, by D. C. Lowber and G. L. Laughland, assignees, (mesne.)	New York, N. Y., and New Orleans, La.	Mar. 10, 1868 Mar. 23, 1869	3,337
Bale tie, Cotton	C. W. Wailey	New Orleans, La	Oct. 9, 1866 Feb. 19, 1867	2,486
Bale ties, Method of fastening cotton	C. Swett, by C. G. Johnsen, assignee.	Martinsville, Miss., and New Orleans, La.	Oct. 23, 1866 May 7, 1872	4,876
Bale ties, Method of securing metallic cotton	D. McComb, by M. A. McComb, administratrix, (extended June 17, 1870.)	Memphis, Tenn	June 17, 1856 July 16, 1872	4,993
Bales, Hoop-lock for cotton	E. V. Fassmann	New Orleans, La	Apr. 18, 1865 Dec. 11, 1866	2,417
Baling-band, Metallic	G. Brodie	Plum Bayou, Ark	Mar. 22, 1859 Apr. 27, 1869	3,405
Baling-press	P. K. Dederick	Albany, N. Y	Feb. 1, 1870 Aug. 6, 1872	5,022
Baling-press	P. K. Dederick	Albany, N. Y	Feb. 1, 1870 Aug. 6, 1872	5,023
Baling-press	F. F. Cornell, jr	New York, N. Y	June 20, 1865 Nov. 7, 1865	2,101
Baling-press	C. H. Robinson	Bath, Me	Jan. 10, 1865 Nov. 14, 1865	2,105
Ball-and-socket joint	M. W. St. John	Leonardsville, N. Y	June 30, 1868 Dec. 9, 1873	5,679
Ball-brace	H. S. Bartholomew	Bristol, Conn	May 21, 1861 Nov. 4, 1862	1,351
Ball, Loaded	W. Hunt, by G. A. Arrowsmith, assignee.	New York, N. Y	Aug. 10, 1848 Feb. 26, 1850	164
Ballasting vessel	J. B. Stoner, by self, L. Mendelson, and T. Crommelin, assignee.	New York, N. Y	Feb. 4, 1868 Oct. 20, 1868	3,167
Band-comb	C. H. Noyes	Orange, N. J	Aug. 30, 1870 Apr. 8, 1873	5,348
Bands, Machine for contracting circumference of wrought-iron.	W. Massey, by C. L. Crowell and R. Smith, assignees.	Greene County and Peoria, Ill.	July 3, 1849 Jan. 24, 1860	887
Bands, Machine for contracting circumference of wrought-iron.	W. Massey, by C. L. Crowell and R. Smith, assignees.	Greene County and Peoria, Ill.	July 3, 1849 Jan. 24, 1860	888
Bandage	N. Jensen	Washington, D. C	Dec. 14, 1858 Feb. 15, 1859	665
Bank-lock	A. C. Harig and D. C. Stoy	Louisville, Ky	July 25, 1854 Aug. 22, 1854	275
Bank-notes, papers, &c., Self-cementing band for holding.	E. M. Carrington	New York, N. Y	Aug. 25, 1868 Jan. 12, 1869	3,290
Bark-extracts, Apparatus for evaporating and concentrating.	T. W. Johnson, jr., and A. W. Goodell.	Windsor, Nova Scotia	Nov. 1, 1870 Aug. 29, 1871	4,531
Barrel	H. G. Porter	Grand Rapids, Mich	Apr. 26, 1870 Feb. 21, 1871	4,272
Barrel and cask making machine	I. Cressett	Bennington, Vt	July 1, 1844 Mar. 2, 1858	533
Barrel-filler, Automatic	S. C. Catlin	Cleveland, Ohio	Jan. 25, 1870 Oct. 31, 1871	4,617
Barrel-filler, Automatic	S. C. Catlin	Cleveland, Ohio	Jan. 25, 1870 Oct. 31, 1871	4,618
Barrel-hoops, Machine for making splints for	J. B. Dougherty, by E. Dougherty, assignee, (mesne.)	Rochester, N. Y	Feb. 23, 1864 May 18, 1869	3,443
Barrel-machinery	W. Trapp, jr	Dryden, N. Y	Oct. 1, 1845 Mar. 10, 1849	132
Barrel-machinery	W. Trapp, (extended October 1, 1859.)	Elmira, N. Y	Oct. 1, 1845 May 2, 1865	1,946
Barrel-machinery	W. Trapp, (extended October 1, 1859.)	Elmira, N. Y	Oct. 1, 1845 May 2, 1865	1,947

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Barrel-pitching apparatus	L. Schulze	Baltimore, Md	Aug. 30, 1870 Mar. 7, 1871	4,294
Barrel-washing machine	J. Peacock	Rockford, Ill	Mar. 13, 1866 Sept. 3, 1867	2,761
Barrels to contain petroleum, coal-oil, &c., Preparing.	L. S. Robbins	New York, N. Y	May 3, 1864 Jan. 3, 1865	1,847
Barrels to render them oil-tight, Coating	A. J. Hook and J. H. Darlington, by the United States Barrel-Coating Company, assignee, (mesne.)	New York, N. Y	June 7, 1864 Jan. 31, 1865	1,860
Barrow frame, Wheel	B. W. Tuthill	Oregon City, Oreg	Jan. 3, 1871 Apr. 11, 1871	4,341
Basket	L. Marble, by self and T. North, assignees.	Vassar, Mich	Jan. 7, 1862 Mar. 10, 1868	2,892
Basket	R. B. Wheeler, by H. Lardner, assignee.	Dowagiac, Mich	Oct. 29, 1872 Mar. 18, 1873	5,332
Bathing-apparatus, Electro-magnetic	J. Young	New York, N. Y	May 14, 1861 June 28, 1864	1,711
Bathing-tub	J. L. Mott	Mott Haven, N. Y	Sept. 27, 1853 Aug. 14, 1855	322
Batting, Cotton, &c	H. B. and H. T. Lawton	Troy, N. Y	Mar. 13, 1849 June 22, 1852	219
Bayonets and apparatus therefor, Manufacture of	H. Waters	Boston, Mass	May 2, 1865 May 23, 1871	4,394
Beam, Sheet-metal	R. Montgomery	New York, N. Y	July 12, 1853 July 2, 1867	2,668
Beams, Machine for shearing ends of	J. M. Cornell	New York, N. Y	Aug. 13, 1872 Oct. 15, 1872	5,097
Bearings and packings, Material for	E. D. Murfey, by the Manhattan Packing-Manufacturing Company, assignee.	New York, N. Y	July 12, 1870 Dec. 20, 1870	4,210
Bed-bottom	A. S. Babbitt	Keeseville, N. Y	Jan. 29, 1867 Aug. 20, 1867	2,736
Bed-bottom	J. Flinn	Philadelphia, Pa	July 31, 1866 Oct. 1, 1872	5,080
Bed-bottom	G. L. Gerard	New Haven, Conn	Mar. 26, 1867 July 9, 1867	2,677
Bed-bottom	T. Howe	Cambridgeport, Mass	June 13, 1854 Jan. 17, 1860	884
Bed-bottom	R. O. Lowrey	Salem, N. Y	Mar. 16, 1869 May 25, 1869	3,463
Bed-bottom	D. Manuel, by J. S. Paine, assignee, (mesne.)	Boston, Mass	Mar. 19, 1867 Feb. 23, 1869	3,311
Bed-bottom	S. Pearson, by E. G. Gory, assignee.	Cincinnati, Ohio	Aug. 15, 1865 Oct. 14, 1873	5,604
Bed-bottom	A. Turnbull	New Britain, Conn	June 25, 1872 Oct. 7, 1873	5,591
Bed-bottom	A. Turnbull and R. L. Webb, by the National Wire Mattress Company, assignee, (mesne.)	New Britain, Conn	Apr. 9, 1872 Dec. 10, 1872	5,185
Bed-bottom	A. Turnbull and R. L. Webb, by the National Wire Mattress Company, assignee, (mesne.)	New Britain, Conn	Apr. 9, 1872 Mar. 4, 1873	5,312
Bed-bottom	E. Yeoman	Waukegan, Ill	Aug. 13, 1867 Nov. 15, 1870	4,180
Bed-bottom, Folding	F. C. Payne	New York, N. Y	Mar. 29, 1864 Apr. 25, 1865	1,941
Bed-bottom, sofa, and chair-seat, Spring	C. Rich, by the Metallic Union Spring Company, assignee.	Poughkeepsie, N. Y	June 27, 1871 Jan. 30, 1872	4,728
Bed-bottom, Spring	H. D. W. Bailey	Sterling, Ill	Sept. 13, 1870 Feb. 18, 1873	5,286
Bed-bottom, Spring	H. E. Bissell	Hartford, Conn	Sept. 14, 1869 Sept. 19, 1871	4,564
Bed-bottom, Spring	E. E. Everitt, by H. F. Hover, assignee.	Philadelphia, Pa	Sept. 24, 1867 Jan. 16, 1872	4,713
Bed-bottom, Spring	E. Kreighoff, by I. Pechner, assignee.	New York, N. Y	July 9, 1867 June 11, 1872	4,940
Bed-bottom, Spring	E. Krieghoff, by I. Pechner, assignee.	Toronto, Canada, and New York, N. Y.	July 9, 1867 Dec. 17, 1872	5,189
Bed-bottom, Spring	H. Tucker, (additional improvement June 9, 1857.)	Cambridgeport, Mass	July 3, 1855 Apr. 5, 1859	683
Bed-bottom, Spring	H. Tucker, (additional improvement June 9, 1857.)	Newton, Mass	July 3, 1855 Aug. 6, 1861	1,217
Bed-bottom, Spring	H. Tucker, by the Tucker Manufacturing Company, assignee, (mesne.) (additional improvement June 9, 1857.)	Newton and Boston, Mass.	July 3, 1855 Aug. 11, 1868	3,081
Bed-bottom, Spring	P. Ulmer	New York, N. Y	Oct. 4, 1859 Mar. 13, 1860	929
Bed-bottom, Spring	D. P. Webster and H. W. Ladd	Boston, Mass	Apr. 23, 1867 Feb. 9, 1869	3,295
Bed-canopy	I. E. Palmer	Middletown, Conn	Jan. 31, 1860 Nov. 8, 1864	1,816
Bed, Cot	L. B. Morse, by L. Morse, assignee.	Athol, Mass	Feb. 4, 1873 Apr. 29, 1873	5,380
Bed-lounge	W. H. Colley, by J. Seymour, W. H. Coolidge, and C. Stimson, assignees.	Leavenworth, Kans	May 24, 1870 Feb. 21, 1871	4,275
Bed, Sofa	M. Crosby	Boston, Mass	May 21, 1872 July 16, 1872	4,990
Bed, Spring	J. H. Crane	Charlestown, Mass	Apr. 3, 1860 June 9, 1863	1,491
Bed-spring	C. Rich, by the Metallic Union Spring Company, assignees.	Poughkeepsie, N. Y	Aug. 30, 1870 Feb. 28, 1871	4,286

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Invention.	Inventor.	Residence.	Date.	No.
Bedstead	S. Caro	Washington, D. C	Dec. 31, 1872 Feb. 11, 1873	5,275
Bedstead	N. Colver	Abington, Mass	Apr. 24, 1849 July 6, 1852	220
Bedstead	D. Manuel, by self and F. K. Ballou, assignees, (mesne)	Dedham and Foxborough, Mass.	Apr. 14, 1863 Sept. 28, 1869	3,655
Bedstead and tester	F. Layaux	Monroe, La	Aug. 30, 1870 June 6, 1871	4,414
Bedstead-fastening	L. W. Buxton, (extended April 5, 1873.)	Nashua, N. H	Apr. 5, 1859 June 17, 1873	5,447
Bedstead-fastening	E. E. Everitt	Philadelphia, Pa	Mar. 29, 1859 Mar. 26, 1861	1,160
Bedstead-fastening	J. Lemman, by J. L. Haven & Co., assignees.	Cincinnati, Ohio	Oct. 2, 1866 June 14, 1870	4,028
Bedstead-fastening	T. W. Moore, by F. N. Moore, assignee.	New York, N. Y	June 11, 1872 Oct. 14, 1873	5,603
Bedstead-fastening	J. Rodefer, by J. L. Haven & Co., assignees of A. M. Rodefer, administratrix, (extended April 10, 1869.)	Hamilton County and Cincinnati, Ohio.	Apr. 10, 1855 June 20, 1871	4,432
Bedstead, Folding	T. B. Bleecker	New York, N. Y	Apr. 17, 1847 July 24, 1860	1,015
Bedstead, Folding	T. B. Bleecker, by the New York Wire Railing Company, assignee, (extended April 17, 1861.)	New York, N. Y	Apr. 17, 1847 Mar. 4, 1862	1,284
Bedstead, Folding	J. B. Wickersham	Brooklyn, N. Y	June 2, 1857 Dec. 18, 1860	1,101
Bedstead, Folding	J. B. Wickersham	Brooklyn, N. Y	June 2, 1857 Dec. 18, 1860	1,102
Bedstead, Invalid	W. Heath	Bath, Me	Mar. 10, 1868 May 26, 1868	2,950
Bedstead, Sofa	J. B. Harlow	Portland, Me	Feb. 11, 1873 Dec. 9, 1873	5,678
Bedstead, Sofa	C. F. Martine	Boston, Mass	June 6, 1854 Dec. 25, 1855	336
Bedstead, Sofa	C. F. Martine	Boston, Mass	June 6, 1854 Aug. 27, 1867	2,757
Bedstead, Sofa	R. Scarritt	Saint Louis, Mo	Oct. 8, 1850 Jan. 7, 1851	185
Bee-hive	H. Alley	Wenham, Mass	June 18, 1872 Sept. 24, 1872	5,065
Bee-hive	J. M. Beebe	Casadaga, N. Y	Nov. 12, 1867 June 16, 1868	2,984
Bee-hive	J. S. Harbison	Sacramento, Cal	Jan. 4, 1859 Sept. 3, 1861	1,225
Bee-hive	L. L. Langstroth	Oxford, Ohio	Oct. 5, 1852 May 26, 1863	1,484
Bee-hive	A. Sanburn	Hamilton County, Ohio	Mar. 26, 1845 Feb. 13, 1849	128
Bee-hive	A. T. Wright	New Vienna, Ohio	June 16, 1863 Apr. 2, 1867	2,540
Beer, &c., cooler	J. L. Baudelot, by H. Migeon, assignee.	Harancourt, France, and Wolcottville, Conn.	Nov. 1, 1859 Jan. 28, 1862	1,267
Beer, &c., cooler	J. L. Baudelot, by G. B. Turrell, assignee, (mesne.)	New York, N. Y	Nov. 1, 1859 Nov. 2, 1869	3,711
Beer, &c., Cooling	J. L. Baudelot, by H. Migeon, assignee.	Harancourt, France, and Wolcottville, Conn.	Nov. 1, 1859 Jan. 28, 1862	1,265
Beer, &c., Cooling	J. L. Baudelot, by H. Migeon, assignee.	Harancourt, France, and Wolcottville, Conn.	Nov. 1, 1859 Jan. 28, 1862	1,266
Beer, Manufacture of	B. Bates	Baltimore, Md	Apr. 11, 1871 Feb. 13, 1872	4,756
Beer, Root or tonic	B. Bates	Baltimore, Md	Apr. 11, 1871 Feb. 13, 1872	4,755
Bell-attachment	A. E. Taylor	New Britain, Conn	Oct. 23, 1860 Dec. 15, 1868	3,234
Bell, Door	H. H. Abbe	Chatham, Conn	July 11, 1865 Dec. 26, 1865	2,134
Bell, Door	M. L. Delavan and J. Dyson, by J. Dyson and P. and F. Corbin, assignees, (mesne.)	New Britain, Conn	July 23, 1867 June 4, 1872	4,932
Bell, Door	A. Turnbull, by P. and F. Corbin, assignees.	New Britain, Conn	June 13, 1865 May 18, 1869	3,439
Bell-machinery for hotels	T. D. Jackson and A. Judson, by J. V. D. Wyckoff, assignee, (mesne.)	New York	Oct. 17, 1846 Apr. 18, 1848	111
Bell, Pressure	J. Barton, by W. L. and N. L. Bradley and W. Hubbard, assignees, (mesne.)	Middle Haddam and West Meriden, Conn.	Apr. 8, 1856 Oct. 25, 1864	1,798
Bells, Hanging	G. W. Hildreth	Lockport, N. Y	June 19, 1855 May 1, 1860	955
Bells, Hanging	G. R. Meneely	West Troy, N. Y	Oct. 9, 1860 Aug. 13, 1872	5,030
Bells, Manufacture of	A. Patterson	Birmingham, Pa	Mar. 5, 1867 Oct. 29, 1867	2,793
Belts and pulleys, Compound to increase the friction between.	L. F. Robertson	New York, N. Y	June 14, 1870 Jan. 24, 1871	4,230
Belt-fastening	G. W. Blake, by J. A. Greene and H. A. Tweed, assignees, (mesne.)	New York, N. Y	Apr. 24, 1860 Aug. 4, 1868	3,064
Belt-fastening	G. W. Blake, by J. A. Greene and H. A. Tweed, assignees, (mesne.)	New York, N. Y	Mar. 26, 1861 Aug. 4, 1868	3,065
Belt-lacing	H. C. Babcock, by self and M. Jewell, assignees.	Cincinnati, Ohio, and Hartford, Conn.	Nov. 12, 1867 Dec. 22, 1868	3,236
Belts, pantaloons, &c., Spiral spring for	W. Hunt	New York, N. Y	Mar. 21, 1838 Nov. 16, 1839	16

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Invention.	Inventor.	Residence.	Date.	No.
Belting, Finishing vulcanized-rubber	C. McBurney	Boston, Mass	June 13, 1871 Dec. 5, 1871	4,662
Belting, Machine	T. J. Mayall	Roxbury, Mass	Nov. 24, 1863 Mar. 8, 1864	1,627
Bending machine, Wood	S. Kingsland, by H. Acorr, assignee.	Council Bluffs, Iowa	July 22, 1862 Sept. 12, 1871	4,553
Bending machine, Wood	J. P. Leizelter	Lancaster, Pa	Feb. 21, 1865 Feb. 13, 1866	2,173
Bending machine, Wood	W. P. Letchworth	Buffalo, N. Y	Aug. 18, 1868 Feb. 22, 1870	3,850
Bending machine, Wood	H. McDonald	Shortsville, N. Y	Jan. 22, 1861 Sept. 12, 1871	4,548
Bending machine, Wood	H. McDonald	Shortsville, N. Y	Jan. 22, 1861 Oct. 31, 1871	4,614
Bending machine, Wood	J. C. Morris	Cincinnati, Ohio	Mar. 11, 1856 May 27, 1862	1,312
Bending machine, Wood	C. Prudden	Philadelphia, Pa	Apr. 17, 1866 Apr. 25, 1871	4,357
Bending wood	T. Blanchard	Boston, Mass	Dec. 18, 1849 Nov. 15, 1859	853
Bilge-water from vessel-holds, Apparatus for discharging.	A. Hermann	New Haven, Conn	Oct. 2, 1866 Aug. 6, 1867	2,713
Billiard-cue	C. Leicht	New York, N. Y	May 27, 1856 Feb. 23, 1858	531
Billiard-cue	H. Platts	Ithaca, N. Y	June 3, 1873 Aug. 5, 1873	5,522
Billiard-cushion, (Division B)	M. Delaney	New York, N. Y	July 11, 1871 Dec. 9, 1873	5,681
Billiard-cushion, Rubber and gutta-percha	J. Murphy	New York, N. Y	Sept. 26, 1871 May 21, 1872	4,912
Billiard-cushions, Mold for rubber, (Division A)	M. Delaney	New York, N. Y	July 11, 1871 Dec. 9, 1873	5,680
Billiard-table cushion	A. Bassford	New York, N. Y	Dec. 5, 1848 Dec. 25, 1849	155
Billiard-table cushion	J. M. Brunswick	Cincinnati, Ohio	Dec. 8, 1857 July 12, 1859	754
Billiard-table cushion	H. W. Collender	New York, N. Y	Dec. 8, 1857 Aug. 23, 1859	799
Billiard-table cushion	H. W. Collender	New York, N. Y	Dec. 8, 1857 Mar. 19, 1867	2,510
Billiard-table cushion	H. W. Collender	New York, N. Y	Jan. 12, 1858 Mar. 19, 1867	2,511
Billiard-table cushion	H. W. Collender	New York, N. Y	May 2, 1871 Jan. 21, 1873	5,241
Billiard-table cushion	H. W. Collender, by self and M. Phelan, assignees.	New York, N. Y	Sept. 25, 1860 Mar. 19, 1867	2,512
Billiard-table cushion	L. Becker	New York, N. Y	Dec. 18, 1866 Mar. 9, 1869	3,323
Billiard-table cushion	G. D. Sharp	New York	Nov. 15, 1859 Apr. 8, 1873	5,349
Billiard-table shade	D. Conlan	New York, N. Y	June 7, 1859 Oct. 6, 1863	1,549
Binder, Temporary	G. W. Emerson, by J. R. Barritt, assignee.	Chicago, Ill	July 7, 1868 Sept. 12, 1871	4,545
Bird-cages, Manufacture of	J. Hepp, by O. Lindemann & Co., assignees.	New York, N. Y	Mar. 12, 1872 Oct. 29, 1872	5,116
Bit-brace	H. S. Bartholomew	Bristol, Conn	May 21, 1861 Aug. 22, 1871	4,518
Bit-brace	H. S. Bartholomew	Bristol, Conn	May 21, 1861 Aug. 22, 1871	4,519
Bit-brace	N. Spofford	Haverhill, Mass	Nov. 1, 1859 Apr. 23, 1867	2,576
Bit-brace	G. Stackpole, by W. A. Ives, assignee, (mesne.)	Elizabeth, N. J, and New Haven, Conn.	Sept. 23, 1862 Aug. 20, 1872	5,042
Bit-brace	G. Stackpole, by self and J. N. Winslow, assignees.	New York, N. Y., and Portland, Me.	Sept. 23, 1862 June 23, 1868	3,005
Bit stock	A. C. Moore, by L. J. Gunn and C. H. Amidon, assignees.	Greenfield, Mass	Mar. 31, 1857 Dec. 13, 1870	4,199
Bits and other tools, Device for holding	W. H. Barber, by Miller's Falls Manufacturing Company, assignee, (mesne.)	Miller's Falls, Mass	May 24, 1864 Feb. 6, 1872	4,736
Blast-furnace	F. W. Lürmann, by G. Asmus, assignee.	New York, N. Y	Nov. 5, 1867 Nov. 24, 1868	3,204
Blast furnace, Hot	P. Hoop, jr., and R. Hoop	Berlin Cross Roads, Ohio	Oct. 27, 1868 Jan. 19, 1869	3,269
Blast stove for blast-furnaces, Hot	J. Player, by J. Henderson and J. M. Lawford, assignees.	New York, N. Y., and Philadelphia, Pa.	June 11, 1867 Oct. 11, 1870	4,149
Blast stove for blast-furnaces, Hot	J. Player, by J. Henderson and J. M. Lawford, assignees.	New York, N. Y., and Philadelphia, Pa.	June 11, 1867 Oct. 11, 1870	4,150
Blasting-compound	M. Nowak, by L. and L. Ludovici, jr., assignees.	New York, N. Y	May 24, 1864 Mar. 27, 1866	2,214
Blasting-powder	W. R. Thomas and M. Emanuel, jr.	Catasauqua, Pa	Mar. 11, 1862 Mar. 17, 1863	1,436
Blasting-powder	W. R. Thomas and M. Emanuel, jr.	Catasauqua, Pa	Dec. 9, 1862 Mar. 17, 1863	1,437
Blasting-powder, Composition for	W. R. Thomas and M. Emanuel, jr.	Catasauqua, Pa	Apr. 9, 1861 Mar. 17, 1863	1,435
Blasting with nitroleum, Method of	T. P. Shaffner	Louisville, Ky	Dec. 18, 1866 Apr. 13, 1869	3,374
Blasting with nitroleum, Method of	T. P. Shaffner	Louisville, Ky	Dec. 18, 1866 Apr. 13, 1869	3,375
Bleaching-apparatus	C. T. Appleton	Roxbury, Mass	Aug. 30, 1853 May 22, 1855	311
Bleaching fibrous substances, Process for	J. Short, by J. J. Eckel and I. S. Schuyler, assignees.	New York, N. Y	Jan. 23, 1866 Apr. 3, 1866	2,217
Blind-fastening	H. Vansands, by R. Hayden and J. C. Ferree, assignees.	Middletown, Conn	May 5, 1857 Apr. 20, 1869	3,392

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Invention.	Inventor.	Residence.	Date.	No.
Blind-slat opener, (Division B)	B. J. Williams	Philadelphia, Pa	May 10, 1870 Aug. 5, 1873	5,528
Blind-stile boring and mortising machine	L. Worcester, (extended July 5, 1873.)	Lebanon, N. H	July 5, 1859 Sept. 9, 1873	5,568
Blind, Window	S. Hebron	Buffalo, N. Y	Sept. 7, 1869 Apr. 26, 1870	3,933
Blower	P. H. Roots	Connersville, Ind	Sept. 25, 1860 Oct. 2, 1866	2,369
Blower, Fan	F. P. Dimpfel	Philadelphia, Pa	Dec. 28, 1839 Jan. 25, 1848	106
Blower, Furnace	M. Alden	Ralston, Pa	Apr. 18, 1848 July 11, 1848	119
Blowers, Case for rotary	P. H. and F. M. Roots	Connersville, Ind	Aug. 11, 1868 July 27, 1869	3,570
Blowers, Cross-head for	P. H. and F. M. Roots	Connersville, Ind	July 24, 1866 Mar. 17, 1868	2,900
Boat	E. and G. A. Waters	Troy, N. Y	June 30, 1868 May 11, 1869	3,435
Boat-detaching apparatus	S. Sneden	Brooklyn, N. Y	Aug. 5, 1873 Sept. 30, 1873	5,584
Boat-detaching tackle	T. Huntington	New Rochelle, N. Y	June 5, 1866 Feb. 12, 1867	2,478
Boat for transporting railway-cars	J. Wheelock	Lancaster, N. Y	Jan. 25, 1859 Sept. 13, 1870	4,121
Boat-lowering apparatus	G. W. Mallory	Mystic Bridge, Conn	Mar. 21, 1871 July 29, 1873	5,512
Boats, Construction of	A. Van Order	Ithaca, N. Y	Sept. 10, 1861 Feb. 18, 1868	2,873
Boiler and steamer	D. R. Prindle	Bethany, N. Y	Sept. 13, 1859 Dec. 13, 1859	864
Boiler and washing-machine	D. H. Hull, by self and J. B. Savage, assignees.	Plantsville, Conn	Apr. 5, 1870 Aug. 22, 1871	4,521
Boiler-feeder, Automatic	H. B. Adams, by S. B. Hunt, assignee.	Brooklyn and New York, N. Y.	Jan. 4, 1859 Apr. 24, 1860	946
Boiler-feeder, Automatic	S. Cook, by the Automatic Boiler-Feeder Company, assignee, (mesne.)	Magnolia, Iowa	Nov. 30, 1869 Feb. 11, 1873	5,276
Boiler-furnace for burning wet fuel	G. Bantz	Frederick, Md	June 22, 1858 Feb. 6, 1872	4,731
Boiler furnace, Steam	J. Armory	West Roxbury, Mass	Apr. 19, 1859 Aug. 29, 1865	2,057
Boiler furnace, Steam	J. Armory	West Roxbury, Mass	Apr. 19, 1859 Aug. 29, 1865	2,058
Boiler furnace, Steam	J. P. Evans	Hazleton, Pa	Apr. 1, 1862 Apr. 7, 1863	1,147
Boiler furnace, Steam	J. T. Hancock	Boston, Mass	Mar. 1, 1864 Jan. 14, 1868	2,835
Boiler furnace, Steam	H. McClure, by self and J. Ellis, assignees.	Terre Haute, Ind	Oct. 2, 1866 June 9, 1868	2,975
Boiler-heads, Device for flanging flue-holes of	E. Regan	Indianapolis, Ind	Feb. 8, 1870 May 10, 1870	3,966
Boiler-holes and tops of stoves, Plate for	J. B. Challar, by D. Stuart and R. Peterson, assignees, (mesne)	Albany, N. Y., and Philadelphia, Pa.	Feb. 6, 1849 May 31, 1859	732
Boiler-tubes, Mechanism for scaling	P. E. Garwin	Philadelphia, Pa	Aug. 8, 1805 Oct. 3, 1865	2,080
Bolt	W. J. Clark	Southington, Conn	Aug. 2, 1864 Mar. 28, 1865	1,917
Bolt-drawing machine	S. Wilmarth	Charlestown, Mass	Nov. 29, 1859 Sept. 15, 1863	1,540
Bolt-heading machine	J. R. Abbe	Providence, R. I	Jan. 19, 1869 May 4, 1869	3,414
Bolt-heading machine	C. H. and J. F. Emerson	New York, N. Y	Apr. 20, 1869 Aug. 24, 1869	3,619
Bolt-heading machine	J. Minter, by self, J. Hope, and R. H. Butcher, assignees.	Worcester, Mass	July 12, 1864 Oct. 17, 1865	2,093
Bolt-heading machine	J. Minter, by self, J. Hope, and R. H. Butcher, assignees.	Lowell, Mass	July 12, 1864 Nov. 21, 1871	4,641
Bolt-making machine	W. J. Lewis	Pittsburgh, Pa	Mar. 15, 1864 Jan. 5, 1869	3,251
Bolt-making machine	W. J. Lewis	Pittsburgh, Pa	Mar. 15, 1864 Nov. 23, 1869	3,743
Bolt or nut threading machine	F. Schweizer, by the Schweitzer Patent Bolt Company, assignee.	New York, N. Y	Mar. 5, 1867 Mar. 3, 1868	2,889
Bolt-threading machine	W. Sellers	Philadelphia, Pa	Dec. 1, 1857 Feb. 8, 1859	656
Bolt-threading machine	S. H. Wright, by J. Hope, R. H. Butcher, and J. Minter, assignees, (mesne.)	Lowell, Mass	Oct. 3, 1871 May 14, 1872	4,906
Bolts and rivets, Device for cutting	J. Johnson	Cochransville, Pa	June 4, 1867 Mar. 14, 1871	4,299
Bomb for killing whales	N. Scholfield and W. W. Wright, by N. Scholfield, assignee.	Norwich, Conn	May 10, 1857 July 7, 1857	478
Bomb-lance for killing whales	C. C. Brand	Norwich, Conn	June 22, 1852 Aug. 26, 1856	392
Bone-black, Cleaning and purifying	C. N. Brock	Philadelphia, Pa	July 2, 1861 July 16, 1867	2,679
Bone-black, Furnace for burning	A. Weber	New York, N. Y	June 4, 1867 Dec. 13, 1870	4,201
Bones, &c., Steam-digester for treating	W. Perry	North Bridgewater, Mass	Feb. 26, 1867 June 25, 1867	2,663
Bonnet-frame	W. E. Kidd	New York, N. Y	Apr. 13, 1858 May 15, 1860	959
Bonnet-front	G. A. Cox	Brooklyn, N. Y	Jan. 17, 1860 Apr. 23, 1861	1,175
Bonnet-fronts, Mold for pressing	W. E. Kidd	New York, N. Y	Nov. 28, 1854 Jan. 13, 1857	421

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Invention.	Inventor.	Residence.	Date.	No.
Bonnets and bonnet-frames, Machine for pressing..	W. Osborn	Louisville, Ky	Aug. 19, 1856 Feb. 17, 1857	427
Bonnets and bonnet-frames, Machine for pressing..	W. Osborn, by W. E. Doubleday and J. Stewart, assignees.	Brooklyn and New York, N. Y.	Aug. 19, 1856 May 29, 1866	2,257
Bonnets and bonnet-frames, Machine for pressing..	W. Osborn, by W. E. Doubleday and J. Stewart, assignees, (mesne.)	Brooklyn and New York, N. Y.	Aug. 19, 1856 June 19, 1866	2,288
Bonnets, bonnet-frames, &c., Machine for pressing..	W. Osborn, by M. J. Osborn, administratrix.	Louisville, Ky	Aug. 19, 1856 Mar. 27, 1860	933
Book-clamp, Portable	T. Goodrum, by A. J. Manchester, assignee.	Providence, R. I	Oct. 16, 1866 Sept. 29, 1868	3,141
Book-cover, Embossed	W. T. Anderson, by self and H. S. Archer, assignees.	Brooklyn, N. Y	July 5, 1864 Oct. 17, 1865	2,089
Book-cover protector	C. L. Alexander and V. A. Osborn.	Washington, D. C	Sept. 24, 1867 Mar. 3, 1868	2,886
Book for photographs and other pictures	J. F. Mascher, by E. Mascher, administratrix, (extended from March 8, 1867.)	Philadelphia, Pa	Mar. 8, 1853 Feb. 9, 1869	3,291
Book, &c., trimming machine	L. F. Markham	Cambridgeport, Mass	Apr. 18, 1848 Apr. 19, 1853	235
Book-trimming machinery	M. Riehl	Philadelphia, Pa	Aug. 28, 1855 May 4, 1869	3,422
Books, Binding	F. B. Wells, by self and J. H. Cook, assignees.	Fishkill, N. Y	Oct. 20, 1868 Mar. 30, 1869	3,347
Books, Binding invoice	J. L. Rile	New York, N. Y	June 13, 1871 Oct. 3, 1871	4,577
Boot	P. West and G. S. Lee	Worcester, Mass	Sept. 2, 1873 Nov. 25, 1873	5,670
Boot and shoe	T. D. Ballou, by A. B. Ely, assignee.	Newton, Mass	July 4, 1865 Mar. 30, 1869	3,352
Boot and shoe	C. S. Dunbrack, by self and W. N. Spinney, assignees.	Swampscott and Lynn, Mass.	Sept. 28, 1869 June 13, 1871	4,422
Boot and shoe	L. H. and S. B. Holden, by the McKay Turned Shoe Company, assignee, (mesne.)	Woburn, Mass., and Mass	Apr. 2, 1861 Dec. 27, 1864	1,841
Boot and shoe	L. H. and S. B. Holden, by the McKay Turned Shoe Company, assignee, (mesne.)	Woburn, Mass., and Mass	Apr. 2, 1861 Dec. 27, 1864	1,842
Boot and shoe lifts, Machine for punching	G. W. Ellis, by J. W. Brooks, assignee, (mesne)	Lynn, Mass	Dec. 22, 1863 Aug. 6, 1872	5,024
Boot and shoe lifts, Machine for punching	G. W. Ellis, by J. W. Brooks, trustee and assignee, (mesne.)	Lynn, Mass	Dec. 22, 1863 Aug. 19, 1873	5,539
Boot and shoe nailing machine	L. R. Blake and A. S. Libby, by G. McKay, trustee of the McKay Sewing-Machine Association, assignee.	Boston, Lawrence, and Boston, Mass.	Mar. 31, 1868 Dec. 23, 1873	5,696
Boot and shoe nailing machines, Device for preparing patterns for.	A. A. Reed, by G. McKay, assignee.	North Bridgewater and Boston, Mass.	Oct. 22, 1872 Nov. 26, 1872	5,164
Boot and shoe seam rolling apparatus	J. C. White, by A. W. Thomas, assignee, (mesne.)	Auburn, N. Y	Aug. 11, 1863 Mar. 12, 1872	4,805
Boot and shoe, Sewed	H. Dunham, jr., by F. W. Carruth and E. P. Richardson, assignees.	Boston and Lawrence, Mass.	Oct. 17, 1865 Apr. 20, 1869	3,387
Boot and shoe stretcher	W. Holden, by the Stiles and Parker Press Company, assignee, (mesne,) (extended May 1, 1869:)	Philadelphia, Pa., and Middletown, Conn.	May 1, 1855 Mar. 12, 1872	4,799
Boot and shoe tip	N. Silverthorn, by G. Goodyear, assignee, (mesne.)	Prescott, Wis., and Fredericktown, Ohio.	Nov. 29, 1859 Sept. 2, 1862	1,329
Boot and shoe tip	N. Silverthorn, by the American Shoe-tip Company, assignee, (mesne.)	Connecticut	Nov. 29, 1859 Aug. 4, 1868	3,070
Boot and shoe uppers, Cutting out	J. Chilcott and R. Snell	Brooklyn, N. Y	Sept. 13, 1853 July 7, 1857	477
Boot-crimp	J. Copeland, by J. M. Read, assignee, (mesne.)	Weymouth and Boston, Mass.	Jan. 20, 1844 Aug. 11, 1857	483
Boot-crimper	D. C. Mowrey	Milford, Mass	June 25, 1867 Dec. 31, 1867	2,826
Boot, &c., seam	S. A. Brackett and W. W. Whitcomb.	Boston, Mass	Dec. 10, 1872 May 6, 1873	5,391
Boot-strap	F. H. Moore	Boston, Mass	Jan. 5, 1864 Feb. 16, 1864	1,619
Boot-tree	C. T. Eames	Milford, Mass	May 27, 1856 Mar. 25, 1862	1,292
Boot-tree	C. T. Eames	Milford, Mass	May 27, 1856 Jan. 29, 1867	2,466
Boots and shoes, Finishing	J. Purinton, jr	Lynn, Mass	Jan. 26, 1864 Apr. 9, 1867	2,556
Boots and shoes, Manufacture of	E. Alexander, by L. H. Farnsworth, assignee of P. S. Alexander, administratrix.	Hudson, Mass	Aug. 4, 1863 June 4, 1872	4,933
Boots and shoes, Manufacture of	G. Hawkes	Lynn, Mass	June 26, 1866 Nov. 26, 1867	2,807
Boots and shoes, Manufacture of sewed	F. D. Ballou, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	Jan. 10, 1860 Apr. 20, 1869	3,390
Boots and shoes, Metal tip for toes of	G. A. Mitchell	Turner, Me	Jan. 5, 1858 Dec. 7, 1858	652
Boots and shoes, Metal tip for toes of	G. A. Mitchell	Turner, Me	Jan. 5, 1858 Feb. 19, 1861	1,142
Boots and shoes, Metallic shank for	E. Heaton	New Haven, Conn	Feb. 23, 1864 May 19, 1868	2,935
Boots and shoes, Wooden shank for	J. M. Watson, by H. A. Lothrop, assignee.	Sharon, Mass	Mar. 14, 1871 Mar. 4, 1873	5,315
Boots, Cutting	D. Lynahon	Buffalo, N. Y	Oct. 18, 1853 May 9, 1854	264
Boots, Pattern for cutting	E. Shopbell	Ashland, Ohio	Jan. 27, 1863 Apr. 28, 1868	2,922

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Boring-machine	N. R. Merchant, by A. P. and M. Merchant, administrators.	Guilford, N. Y	May 28, 1861 Jan. 7, 1873	5,222
Boring-machine	G. F. Rice, by E. L. Bates, assignee.	Fiskedale, Mass	Dec. 21, 1858 Aug. 3, 1869	3,574
Boring-machine	L. Stevens, by A. Wyckoff, assignee, (mesne.)	Elmira, N. Y	Dec. 15, 1857 Sept. 22, 1868	3,133
Boring-machine	A. Wyckoff and E. R. Morrison, by A. Wyckoff, assignee.	Elmira, N. Y	Sept. 25, 1855 Oct. 14, 1856	404
Boring-machines, Variable crank for	G. C. Taft, by T. Mace, assignee	New York, N. Y	Dec. 10, 1867 Dec. 14, 1869	3,760
Bottle and bottle-stopper	W. A. Shaw	Boston, Mass	Dec. 17, 1861 Nov. 24, 1863	1,576
Bottle for druggists and chemists	W. N. Walton, by E. E. Walton, assignee, (mesne.)	Newark, N. J	Sept. 23, 1862 May 28, 1867	2,631
Bottle-lock	J. Dugan, by L. C. Wicks, assignee.	New York, N. Y	Aug. 17, 1869 Nov. 19, 1872	5,151
Bottle, Nursing	F. J. La Forme, by M. S. Burr, assignee, (mesne.)	Boston, Mass	Nov. 29, 1859 Jan. 14, 1868	2,831
Bottle-stopper	A. Albertson, by J. Matthews.	New York, N. Y	Aug. 26, 1862 Oct. 30, 1866	2,386
Bottle-stopper fastening	H. W. Putnam	New York, N. Y	Mar. 15, 1859 Jan. 19, 1864	1,606
Bottle-stoppers, Apparatus for making glass	T. R. Hartell	Philadelphia, Pa	Oct. 19, 1858 Apr. 24, 1860	949
Bottle-stoppers, Securing	J. Allender, by T. Pimer, assignee.	New London, Conn	July 24, 1855 Dec. 1, 1863	1,584
Bottles, Apparatus for filling	H. W. Putnam	Bennington, Vt	Oct. 29, 1861 June 28, 1870	4,050
Bottling fluids under gaseous pressure, Method of.	A. Quantin, by P. Schmitt, assignee of J. Quantin and H. A. Pintard, admrs.	New York, N. Y	Mar. 4, 1856 Oct. 27, 1868	3,175
Bottling fluids under gaseous pressure, Method of.	A. Quantin, by P. Schmitt, assignee of J. Quantin and H. A. Pintard, admrs.	New York, N. Y	Mar. 4, 1856 June 19, 1869	3,272
Boxes, &c., Material for the manufacture of	M. Fitzgibbons	New York, N. Y	Nov. 3, 1868 Dec. 15, 1868	3,230
Boxes, trunks, buckets, barrels, &c., Construction of.	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,090
Bracelet	J. S. Palmer	Providence, R. I	Mar. 19, 1861 Sept. 9, 1873	5,571
Bracelet	F. M. Sweet, by D. D. and A. E. Codding and T. I. Smith, assignees, (extended August 31, 1872.)	Newark, N. J	Aug. 31, 1858 Mar. 4, 1873	5,311
Bracelets, Manufacture of enameled	A. Codding, jr.	North Attleborough, Mass.	June 22, 1869 Feb. 7, 1871	4,253
Bracelets, Manufacture of plated-metal	J. Barclay	Bergen, N. J	Aug. 24, 1869 Dec. 6, 1870	4,192
Braid, trimming, &c., Imitation	H. Loewenberg	New York, N. Y	Aug. 2, 1870 June 27, 1871	4,444
Branding-apparatus	J. W. Dodge	Malden, Mass	May 4, 1869 May 20, 1873	5,420
Bread, Device for baking	A. I. Quackenbush and G. Hawn.	Fort Plain, N. Y	Jan. 25, 1870 Jan. 10, 1871	4,230
Breast-strap slide, Harness	D. Pettengill, by self and A. Buckham, assignees, (mesne.)	Delhi, N. Y	Nov. 25, 1862 Feb. 23, 1869	3,312
Breast-straps, Metallic shield for	M. W. Pond and H. E. Mussey, by M. W. Pond, assignee.	Elyria, Ohio	Sept. 6, 1864 Aug. 28, 1866	2,344
Breech-loader	H. Berdan, by the Berdan Fire-Arms Manufacturing Company, assignee.	New York, N. Y	Jan. 9, 1866 Sept. 15, 1868	3,117
Breech-loader	H. Berdan, by the Berdan Fire-Arms Manufacturing Company, assignee.	New York, N. Y	Jan. 9, 1866 Sept. 15, 1868	3,118
Brewer's boiler	A. Hammer	New York, N. Y	Aug. 11, 1857 June 20, 1865	2,001
Brewing	L. Hacker	Altenburg, Hungary	July 1, 1862 May 31, 1864	1,680
Brewing	A. Hammer	New York, N. Y	Aug. 17, 1858 Mar. 21, 1865	1,905
Brewing ale and beer	J. McCormick	Boston, Mass	Nov. 16, 1869 Jan. 25, 1870	3,804
Brick-kiln	B. R. Hawley, by A. R. Morgan, assignee.	Normal, Ill., and New York, N. Y.	Aug. 22, 1871 Apr. 2, 1872	4,848
Brick-machine	H. Dueberg	New York, N. Y	Nov. 26, 1867 June 16, 1868	2,985
Brick-machine	B. M. and E. R. Gard, by the United States Brick-Machine Company, assignee.	Chicago, Ill	Feb. 22, 1870 Aug. 23, 1870	4,108
Brick-machine	J. Hotchkiss	Springfield, Ohio	July 17, 1860 Dec. 5, 1865	2,121
Brick-machine	J. W. Jayne	Sandusky, Ohio	May 5, 1857 June 28, 1859	746
Brick-machine	A. Morand	Brooklyn, N. Y	June 27, 1871 June 25, 1872	4,956
Brick-machine	P. H. Kells	Adrian, Mich	Mar. 19, 1867 Dec. 10, 1867	2,810
Brick-machine	J. Sangster	Buffalo, N. Y	Oct. 23, 1866 Nov. 15, 1870	4,178
Brick-machine	J. Sangster	Buffalo, N. Y	Oct. 23, 1866 Nov. 15, 1870	4,179
Brick-machine	H. Martin, by E. C. Bradford, J. H. Renick, and O. A. Clough, assignees.	New York, N. Y	June 27, 1865 Apr. 9, 1867	2,553
Brick-machine	R. A. Smith	Newburyport, Mass	July 9, 1872 Apr. 29, 1873	5,390
Brick-machine	P. L. Sword and G. S. Tiffany, by P. L. Sword, assignee, (mesne.)	Adrian, Mich	June 14, 1864 Mar. 26, 1867	2,532

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Brick-machine	R. A. Ver Valen	Haverstraw, N. Y	June 29, 1852 May 10, 1864	1,668
Brick-machine	J. Watson, by self, assignee, (mesne.)	Buffalo, N. Y	June 5, 1866 Mar. 26, 1867	2,533
Brick-press	I. Gregg	Philadelphia, Pa	June 6, 1848 Sept. 17, 1850	177
Bridge	A. Fink	Louisville, Ky	Apr. 9, 1867 Aug. 9, 1870	4,093
Bridge	D. Hammond	Canton, Ohio	July 3, 1866 Apr. 30, 1867	2,586
Bridge	D. Hammond	Canton, Ohio	July 3, 1866 May 11, 1869	3,433
Bridge	D. Hammond and W. R. Reeves	Canton, Ohio	June 21, 1864 July 30, 1867	2,701
Bridge	Z. King and P. M. Frees, by Z. King, assignee.	Cleveland, Ohio	Oct. 1, 1861 July 30, 1867	2,707
Bridge	D. C. McCallum	Owego, N. Y	Jan. 20, 1857 June 21, 1859	739
Bridge	F. H. Smith, by Smith, Latrobe & Co., assignees.	Baltimore, Md	Oct. 26, 1869 Dec. 7, 1869	3,758
Bridge, Corrugated-iron	R. Montgomery	New York, N. Y	Aug. 23, 1859 Nov. 1, 1870	4,172
Bridge, Draw	L. Schneider and J. A. Montgomery, by L. Schneider, assignee.	Williamsport, Pa., and Springfield, N. J.	Sept. 4, 1860 Apr. 22, 1873	5,372
Bridge, Iron	D. Hammond and W. R. Reeves	Canton, Ohio	June 21, 1864 Feb. 9, 1869	3,292
Bridge, Iron	D. H. Morrison	Dayton, Ohio	Oct. 29, 1867 May 23, 1871	4,398
Bridge, Suspension	C. Bender	New York, N. Y	Dec. 10, 1867 Aug. 11, 1868	3,073
Bridge, Swing	G. R. Winkler, by B. Berndt and M. Winkler, assignees.	Williamsport, Pa	Jan. 19, 1869 May 28, 1872	4,926
Bridge, Truss	A. D. Briggs	Springfield, Mass	July 27, 1858 Sept. 12, 1865	2,070
Bridge, Truss	R. Comins	Troy, N. Y	Feb. 10, 1857 Feb. 28, 1865	1,884
Bridge, Wooden-brace	S. H. Long	United States Army	Nov. 7, 1839 July 20, 1841	34
Bridges, arches, beams, tunnels, &c., Material used in constructing.	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,086
Bridges, &c., Truss-frame for	W. Howe	Springfield, Mass	Aug. 3, 1840 Sept. 3, 1850	175
Bridle	J. McKibben	Lima, Ohio	Dec. 8, 1868 May 18, 1869	3,448
Bridle, Safety	G. W. Barnes	Mount Vernon, N. Y	Aug. 11, 1868 Jan. 12, 1869	3,259
Bridle winkers, Manufacture of harness	E. Ward, by self, F. C. Butler, and E. S. Ward, assignees.	Newark, N. J	May 24, 1870 July 16, 1872	4,988
Bristle cleaning and assorting machine	G. E. Burt, by N. H. Spafford, assignee, (mesne,) (extended February 7, 1868.)	Boston, Mass	Feb. 7, 1854 Dec. 1, 1868	3,220
Bristle cleaning and assorting machine	G. E. Burt, by N. H. Spafford, assignee, (mesne,) (extended February 7, 1868.)	Boston, Mass	Feb. 7, 1854 Dec. 1, 1868	3,221
Broiler	S. Bowers, by the American Broiler Company, assignee.	Elmira, N. Y	July 21, 1868 Oct. 19, 1869	3,684
Broiler	W. T. Howard, by H. G. Leisenring, assignee.	Baltimore, Md	Apr. 18, 1871 Jan. 21, 1873	5,240
Broiler	J. T. Page	Rochester, N. Y	Aug. 9, 1870 Dec. 27, 1870	4,218
Broiler	D. E. Roe	Elmira, N. Y	Aug. 9, 1870 Nov. 28, 1871	4,651
Broiler	D. E. Roe	Elmira, N. Y	Aug. 9, 1870 Nov. 28, 1871	4,652
Bronze from iron, Manufacture of imitation	H. Tucker, by the Tucker Manufacturing Company, assignee.	Newton and Boston, Mass.	Dec. 15, 1863 Sept. 11, 1866	2,356
Bronzing and gilding	J. L. Duffee, by self and J. H. Johnson, assignees.	Washington, D. C	Apr. 19, 1870 May 3, 1870	3,962
Bronzing or coloring iron, Process of	H. Tucker, by the Tucker Manufacturing Company, assignee.	Newton and Boston, Mass.	Dec. 15, 1863 Sept. 11, 1866	2,355
Broom	C. L. W. Baker	Hartford, Conn	June 11, 1861 Aug. 29, 1865	2,059
Broom	T. Wright, by W. H. Cory, assignee, (mesne.)	New York, N. Y	Nov. 13, 1866 May 14, 1867	2,598
Brooms, Clamp for making	J. Day	Murray, N. Y	Nov. 27, 1866 Feb. 26, 1867	2,495
Brooms, Flanged collar for	H. A. Lee, by self and J. F. Lee, jr., assignees.	New York and Brooklyn, N. Y.	Oct. 10, 1871 Jan. 9, 1872	4,706
Brush	A. C. Estabrook, by Florence Manufacturing Company, assignee, (mesne.)	Florence, Mass	June 19, 1866 Oct. 19, 1869	3,676
Brush	J. Marchbank, by J. McQuide	Lansingburgh, N. Y	Nov. 20, 1866 Oct. 11, 1870	4,151
Brush	A. M. White, by the American Brush Company, assignee, (mesne.)	Port Chester, N. Y., and New Haven, Conn.	Apr. 4, 1865 Jan. 2, 1872	4,701
Brush	J. L. Whiting	Boston, Mass	Aug. 4, 1863 Dec. 15, 1868	3,235
Brush, Boiler-flue	R. King, by T. Prosser & Son, assignees.	Brooklyn and New York, N. Y.	Nov. 27, 1866 June 27, 1871	4,442
Brush, Dusting	R. H. Aldrich, by J. O. Adams and E. A. Warfield, assignees.	Northampton, Mass	Mar. 12, 1867 Mar. 31, 1868	2,903
Brush-handles, Machine for finishing	T. Mitchell, by J. Ames, assignee.	Lansingburgh, N. Y	June 23, 1857 June 28, 1859	749

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Brush handles, Machine for finishing hair	T. Mitchell	Lansingburgh, N. Y	June 28, 1859 Jan. 17, 1860	885
Brush handles, Machine for finishing hair	T. Mitchell	Lansingburgh, N. Y	June 28, 1859 June 26, 1860	990
Brush-holder	B. Morahan	Brooklyn, N. Y	July 9, 1867 Aug. 20, 1867	2,750
Brush-making machine	J. Ruegg, by R. C. Fellows, assignee, (mesne.)	Saint Louis, Mo	Nov. 20, 1860 July 16, 1872	4,978
Brush, Scrubbing	S. Gibson, by B. F. Koller, assignee.	Shrewsbury, Pa	Oct. 6, 1868 Dec. 21, 1869	3,773
Brush-stock, Method of holding bristles in	C. D. Rogers and M. P. Wilkins, by the Manhattan Brush Manufacturing Company, assignee.	Utica, N. Y., and Jersey City, N. J.	Oct. 29, 1867 July 4, 1871	4,459
Brush, Toilet	S. Barnes, (extended September 7, 1872.)	New Haven, Conn	Sept. 7, 1858 Dec. 3, 1872	5,168
Brush, Toilet	S. Barnes, (extended September 7, 1872.)	New Haven, Conn	Sept. 7, 1858 Dec. 3, 1872	5,169
Bucket-ear	H. Callahan, by self, J. Reese, and R. S. Hoglen, assignees, (mesne.)	Dayton, Ohio	May 7, 1867 Oct. 5, 1869	3,658
Buckle	T. G. Bailey	Amenia, N. Y	July 4, 1865 Aug. 11, 1868	3,072
Buckle	E. Cole	Fairfield, Mich	Sept. 24, 1867 Dec. 31, 1867	2,823
Buckle	L. Fogg, by F. Stevens, assignee.	Boston, Mass., and New York, N. Y.	June 2, 1863 Aug. 11, 1863	1,522
Buckle	L. Fogg, by F. Stevens, assignee.	Boston, Mass., and Harrison Township, N. J.	June 2, 1863 June 21, 1864	1,708
Buckle	S. S. Hartshorn, by the West Haven Buckle Company, assignee.	Orange and West Haven, Conn.	Nov. 7, 1854 May 26, 1868	2,955
Buckle	S. S. Hartshorn, by the West Haven Buckle Company, assignee.	West Haven, Conn	July 24, 1860 Mar. 1, 1870	3,868
Buckle	O. L. Hopson and H. P. Brooks	Waterbury, Conn	May 12, 1863 May 31, 1864	1,681
Buckle	J. A. Mashmeyer, by S. S. Sargeant, assignee.	Beardstown, Ill., and Newark, N. J.	Apr. 21, 1868 May 13, 1873	5,411
Buckle	L. A. Sprague, by C. Goodyear, jr., assignee.	Brooklyn and New York, N. Y.	May 27, 1862 Feb. 13, 1872	4,759
Buckle, Girth	L. C. Chase	Boston, Mass	Nov. 8, 1859 May 26, 1863	1,483
Buckle-polishing machine	R. G. Pine, by E. Andrews, assignee.	Williamsport, Pa	Apr. 8, 1856 May 12, 1868	2,927
Buckles, rings, &c., Manufacture of rubber-coated	R. C. Dunham, by A. Albright, assignee, (mesne.)	New Britain, Conn	Oct. 9, 1866 Dec. 3, 1872	5,172
Buckles, rings, &c., Process of applying hard rubber to.	R. C. Dunham, by A. Albright, assignee, (mesne.)	New Britain, Conn	Oct. 9, 1866 Dec. 3, 1872	5,173
Buggy-top	A. M. Cory	New Providence, N. J	Dec. 7, 1869 Aug. 23, 1870	4,104
Building-blocks, Machine for forming	J. S. Elliott, by Union Stone Company, assignee.	Chelsea, Mass	Feb. 21, 1871 May 13, 1873	5,401
Buildings, Cooling and ventilating	T. Krausch	New York, N. Y	Oct. 25, 1870 Oct. 24, 1871	4,607
Buildings, Heating and ventilating	B. R. Hawley	Normal, Ill	Dec. 28, 1869 July 23, 1872	5,001
Buildings, Heating and ventilating	E. Y. Robbins	Cincinnati, Ohio	May 6, 1862 June 26, 1866	2,297
Buildings, Warming and ventilating	H. Ruttan	Cobourg, Canada West	Dec. 5, 1848 Aug. 14, 1855	323
Bullets, &c., Manufacture of	G. W. Campbell	New York, N. Y	Nov. 20, 1847 Aug. 3, 1852	2[illegible]2
Bung-bush	J. Lacey and G. B. Cornell, by G. B. Cornell, assignee.	Chicago, Ill	Aug. 29, 1871 Aug. 6, 1872	5,027
Bung-bush-extracting wrench	J. Lacey and G. B. Cornell, by G. B. Cornell, assignee.	Chicago, Ill	Aug. 29, 1871 Aug. 6, 1872	5,626
Burglar-alarm	E. Brown	Lowell, Mass	Oct. 31, 1854 Mar. 6, 1860	924
Burglar-alarm	J. P. Wilson and J. F. Thomas, by the Wilson Manufacturing Company, assignee, (mesne.)	Frankfort, Ilion, and New York, N. Y.	Feb. 8, 1859 May 22, 1860	964
Burglar-alarm, Electro-magnetic	W. B. Guernsey, by C. B. Martin, assignee.	Jersey City, N. J., and Newburgh, N. Y.	Oct. 11, 1870 Mar. 14, 1871	4,297
Burial-case	G. W. Scollay	Saint Louis, Mo	Mar. 18, 1862 Aug. 19, 1862	1,330
Burner and lamp-post combined, Vapor	B. D. Evans, by J. W. Baker, assignee.	Columbus, Ohio	June 1, 1869 Apr. 18, 1871	4,342
Burner, Base	D. G. Littlefield	Albany, N. Y	Oct. 9, 1860 Oct. 10, 1871	4,585
Burner for cooking, &c., Gas	A. Ceiss	Buffalo, N. Y	Nov. 28, 1865 Oct. 16, 1866	2,377
Burner for cooking, &c., Petroleum	J. P. Hayes	Philadelphia, Pa	Sept. 26, 1865 Dec. 5, 1865	2,120
Burner, Gas	Y. Baily, by J. K. O'Neil, assignee.	Philadelphia, Pa., and Kingston, N. Y.	Oct. 12, 1858 May 3, 1859	708
Burner, Gas	C. H. Johnson, (additional improvement March 18, 1856.)	Boston, Mass	June 26, 1855 June 2, 1857	467
Burner, Gas	R. B. Locke and W. B. Ulrich, by B. Collins, assignee, (mesne.)	New York, N. Y	Apr. 16, 1867 Sept. 28, 1869	3,630
Burner, Gas	A. H. Ray, by E. P. Gleason, assignee.	New York, N. Y	June 15, 1858 May 14, 1867	2,605
Burner, Gas	A. H. Wood, by J. R. Foster, assignee.	Boston, Mass	Sept. 21, 1858 Dec. 28, 1858	644
Burner, Hydrocarbon	J. Lee	Galesburgh, Ill	Apr. 2, 1867 Oct. 6, 1868	3,146

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Burner, Lamp	A. W. Browne, by A. Burtis, W. D. Ludlow, and M. A. Van Alen, assignees.	Brooklyn and New York, N. Y.	Feb. 25, 1868 July 5, 1870	4, 058
Burner, Lamp	J. Downing	Bridgeport, Conn	July 22, 1862 Oct. 13, 1868	3, 158
Burner, Lamp	W. H. Gray, by self and S. Ross, assignees.	Saint Louis, Mo	Apr. 18, 1871 June 20, 1871	4, 435
Burner, Lamp	H. W. Hayden, by Holmes, Booth, & Hayden, assignees.	Waterbury, Conn	Aug. 16, 1870 Aug. 29, 1871	4, 541
Burner, Lamp	G. Lavere	New Haven, Conn	May 12, 1868 July 23, 1872	5, 002
Burner, Lamp	G. Lavere	New Haven, Conn	May 12, 1868 July 23, 1872	5, 003
Burner, Lamp	J. C. Love, by W. H. Love and R. H. and H. W. Childs, assignees, (mesne.)	Philadelphia, Pa	Dec. 17, 1867 Mar. 24, 1868	2, 901
Burner, Lamp	J. J. Marcy, by E. Miller, assignee.	Meriden, Conn	July 21, 1863 Dec. 4, 1866	2, 412
Burner, Lamp	W. Painter, by self and C. Painter, assignees, (mesne.)	Baltimore and Owing's Mills, Md.	June 30, 1863 Feb. 4, 1868	2, 854
Burner, Lamp	W. F. Rippon and G. A. Johnson.	Providence, R. I	Sept. 14, 1869 Jan. 25, 1870	3, 805
Burner, Lamp	E. Trittin, by A. J. Walker, assignee, (mesne.)	New York, N. Y	Aug. 19, 1862 Feb. 19, 1867	2, 492
Burner, Vapor	W. H. Smith, by J. D. Smith, assignee.	Greig, N. Y	June 30, 1868 Aug. 17, 1869	3, 607
Burners, Chimney-holder for gas	E. P. Gleason	New York, N. Y	Nov. 13, 1866 Dec. 17, 1867	2, 813
Burners, Mode of lighting street gas	E. P. Russell, by self and P. Tremain, assignees.	Manlius, N. Y	Oct. 29, 1867 Nov. 17, 1868	3, 195
Burning-fluid	L. L. Hill	New York, N. Y	June 15, 1858 Feb. 24, 1863	1, 416
Burning-kiln	B. Kreischer	New York, N. Y	Sept. 1, 1868 Feb. 14, 1871	4, 260
Burnishing machine, Metal	J. Stever	Bristol, Conn	May 1, 1855 Oct. 11, 1859	834
Burnishing machine, Metal	J. Stever, by J. H. Ashmead, E. Hurlburt, E. W. Sperry, S. S. Rogers, and G. Kendrick, assignees, (mesne.)	Bristol, Conn	May 1, 1855 July 2, 1861	1, 205
Burring-machine cylinder	J. K. Proctor, by C. R. Lindsay, assignee.	Philadelphia, Pa	Oct. 29, 1872 July 15, 1873	5, 483
Bustle	M. K. Bortree	Jackson, Mich	Feb. 25, 1873 July 15, 1873	5, 484
Bustle	J. B. Loomis	Chelsea, Mass	Aug. 18, 1868 Feb. 2, 1869	3, 285
Bustle	H. H. May	Birmingham, Conn	June 25, 1872 May 20, 1873	5, 416
Butter-package	H. P. Adams	Cleveland, Ohio	Oct. 29, 1872 June 24, 1873	5, 464
Butter-worker	E. P. Walker	Belchertown, Mass	Apr. 21, 1868 Apr. 26, 1870	3, 943
Butter, Working	J. Seymour, by J. P. Corbin, assignee, (mesne.)	Whitney's Point, N. Y	Dec. 20, 1859 Oct. 15, 1867	2, 776
Button	J. Hatch, by W. Robinson, assignee, (extended February 20, 1859.)	Attleborough, Mass	Feb. 20, 1845 Nov. 3, 1863	1, 563
Button	G. B. Meachman, by C. Smart, assignee, (mesne.)	New York, N. Y	Jan. 10, 1860 June 20, 1865	2, 006
Button	D. M. Somers and W. S. Atwood, by W. H. Reed, assignee.	New York, N. Y	Dec. 31, 1867 May 4, 1869	3, 421
Button and stud, Sleeve	B. Clayton	Philadelphia, Pa	Feb. 12, 1867 June 7, 1870	4, 016
Button-backs and connecting the eyes thereto, Machine for forming.	J. C. Cooke, by City Manufacturing Company, assignee, (mesne.)	Waterbury, Conn	July 27, 1852 Apr. 7, 1863	1, 446
Button-fastening	G. J. Capewell	West Cheshire, Conn	Feb. 12, 1867 Feb. 23, 1869	3, 307
Button-fastening	E. F. Lee, by J. Wienhold, assignee.	Bayonne, N. J., and New York, N. Y.	Nov. 8, 1870 May 13, 1873	5, 403
Button-hole	B. M. Smith, by C. Goodyear, jr., and L. A. Sprague, assignees.	New York, N. Y	Mar. 3, 1868 Mar. 14, 1871	4, 303
Button-hole cutter	F. C. Leypoldt	Philadelphia, Pa	Dec. 18, 1860 July 12, 1864	1, 728
Button-holes and embossing and printing articles of wearing-apparel, Incising.	S. S. Stone	Troy, N. Y	Aug. 23, 1864 July 4, 1865	2, 024
Buttons, Machine for making glass	H. Bock, by W. W. McFarlan, assignee.	New York and Brooklyn, N. Y.	Feb. 14, 1865 Aug. 5, 1873	5, 517
Buttons, Process of preparing wood for the manufacture of.	R. H. Isbell	New Milford, Conn	Dec. 24, 1872 Dec. 23, 1873	5, 684
Butts and hinges, Machine for making	J. Roy, J. and B. Knower, and A. Roy.	Watervliet, N. Y	May 17, 1836 Aug. 9, 1845	75
C.				
Cabinet, College	W. W. Levering	New York, N. Y	Dec. 18, 1866 May 18, 1869	3, 446
Cables, Arrangement of means for working and stopping chain.	T. Brown	London, England	July 25, 1854 Feb. 15, 1859	664
Cables, Working and stopping chain	T. Brown	London, England	July 25, 1854 Mar. 25, 1856	364
Caldron and furnace, Combined	J. L. Mott	Mott Haven, N. Y	Dec. 1, 1840 Feb. 6, 1855	296
Caldron and furnace, Combined	J. L. Mott, (extended December 1, 1854.)	Mott Haven, N. Y	Dec. 1, 1840 Feb. 24, 1857	431

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Calendar, Office	C. W. Bryan, by self, S. and B. F. Bowles, and J. F. Tapley, assignees.	Springfield, Mass	Feb. 26, 1867 Feb. 23, 1869	3, 306
Calorifiers	S. Whitmarsh	Northampton, Mass	Aug. 17, 1852 Oct. 10, 1854	280
Camera plate-holder	A. S. Southworth	Boston, Mass	Apr. 10, 1850 Sept. 25, 1860	1, 049
Can-opening instrument, Sealed, &c	S. D. Lecompte, by E. H. Bourne, E. Damon, jr., and H. M. Knowles, assignees.	Leavenworth City, Kans., and Cleveland, Ohio.	Sept. 19, 1865 Feb. 4, 1868	2, 851
Candle-mold apparatus	W. Humiston	Troy, N. Y	July 24, 1855 Jan. 22, 1861 Nov. 14, 1865	2, 108
Candle-molding apparatus	W. Humiston	Troy, N. Y	Dec. 23, 1851 Jan. 22, 1861	1, 132
Candle-molding apparatus	W. Humiston	Troy, N. Y	Apr. 4, 1854 Mar. 6, 1866	2, 190
Candle-molding machine	W. Humiston	Troy, N. Y	July 24, 1855 Jan. 22, 1861	1, 131
Candlestick	F. A. Rockwell, by J. W. Rockwell, assignee.	Ridgefield, Conn	Dec. 16, 1851 Feb. 27, 1855	207
Candy-slicing machine	J. P. Anderson	Philadelphia, Pa	Aug. 1, 1871 June 4, 1872	4, 927
Cannon, Breech-loading	C. F. Brown	Warren, R. I	Sept. 18, 1860 Nov. 24, 1868	3, 211
Cannon-lock	B. Chambers, by J. Chambers	Washington, D. C	July 31, 1849 Apr. 19, 1853	237
Cannon, Manufacture of	D. Treadwell	Cambridge, Mass	Dec. 11, 1855 Feb. 4, 1862	1, 272
Cannon, Manufacture of wrought	H. Ames	Falls Village, Conn	Aug. 16, 1864 Feb. 28, 1865	1, 882
Caoutchouc and other vulcanizable gums, Treating	L. O. P. Myer, by C. Poppenhusen, assignee.	Newtown, Conn., and New York, N. Y.	Apr. 4, 1854 Aug. 16, 1859	797
Caoutchouc, Cleansing	A. G. Day	Seymour, Conn	June 10, 1856 July 12, 1859	756
Caoutchouc, Manufacture of	C. Goodyear, by C. Goodyear, executor, (extended June 15, 1858.)	New Haven, Conn., and New York, N. Y.	June 15, 1844 Nov. 20, 1860	1, 084
Caoutchouc, Manufacture of	C. Goodyear, by C. Goodyear, executor, (extended June 15, 1858.)	New Haven, Conn., and New York, N. Y.	June 15, 1844 Nov. 20, 1860	1, 085
Caoutchouc, Treatment of	A. G. Day	Seymour, Conn	Aug. 10, 1858 Nov. 9, 1858	620
Caoutchouc, Treatment of crude	A. G. Day	Seymour, Conn	June 10, 1856 July 12, 1859	757
Cap-shearing mechanism, (Division A)	R. Cooke and T. Hanford	New Hartford, N. Y., and Norwich, Conn.	Oct. 3, 1871 Nov. 4, 1873	5, 642
Capstan and windlass	D. N. B. Coffin, jr., by self and B. Woodward, assignees, (mesne.)	Somerville, Mass	Nov. 27, 1866 Aug. 16, 1870	4, 100
Capstan and windlass	D. N. B. Coffin, jr., by self and B. Woodward, assignees, (mesne.)	Newton Centre, Mass	Dec. 21, 1869 July 4, 1871	4, 453
Capstan and windlass, Ship's	J. Emerson, by J. P. Manton, W. H. and F. W. Reynolds, and W. H. Taylor, assignees, (mesne.)	Worcester, Mass., and Providence, R. I.	June 17, 1856 Jan. 12, 1864	1, 604
Capstan for ships, Compound	C. Perley	New York, N. Y	Aug. 4, 1857 Oct. 7, 1862	1, 345
Capstan, Power	D. N. B. Coffin, jr., by self and I. D. Spaulding, assignees.	Boston, Mass	Nov. 21, 1865 Apr. 16, 1867	2, 558
Capstan, Power	D. N. B. Coffin, jr., by self and I. D. Spaulding, assignees.	Boston, Mass	Nov. 21, 1865 Apr. 16, 1867	2, 559
Capstan, Steam	J. Schaffer	Saint Louis, Mo	Mar. 31, 1857 Mar. 6, 1866	2, 187
Capstan, Steamboat	J. Schaffer	West Manchester, Pa	Oct. 21, 1856 Aug. 25, 1857	488
Capstan, Steamboat	J. Schaffer	Saint Louis, Mo	Oct. 21, 1856 Jan. 1, 1867	2, 437
Car and carriage spring, Railway	P. G. Gardiner	New York, N. Y	Apr. 26, 1859 June 12, 1860	981
Car and truck connection	J. J. Sherman	Albany, N. Y	Apr. 14, 1863 July 14, 1863	1, 512
Car-axle lubricator	J. S. Sanson, by self and C. Mettam, assignees.	Morrisania, N. Y	Jan. 2, 1872 Apr. 23, 1872	4, 880
Car-body bolster, Railway	A. Ward, (extended June 21, 1873.)	Altoona, Pa	June 21, 1859 Sept. 2, 1873	5, 560
Car-brake	W. H. Dunham and J. Widney, by selves and S. P. Ross, assignees.	Hokah, Minn., and Allegheny and Pittsburgh, Pa.	Dec. 3, 1867 July 11, 1871	4, 465
Car-brake	W. D. Goodnow, by J. A. Goewey, D. G. Wood, and J. Jones, assignees, (mesne.)	Albany and West Albany, N. Y.	Oct. 18, 1864 July 23, 1867	2, 696
Car-brake apparatus, Steam power	G. Westinghouse, jr	Pittsburgh, Pa	June 6, 1871 July 29, 1873	5, 506
Car brake, Railway	A. M. Allen	New York, N. Y	June 15, 1869 Jan. 11, 1870	3, 790
Car brake, Railway	S. and W. W. Balkwill	Cleveland, Ohio	July 30, 1872 Feb. 11, 1873	5, 271
Car brake, Railway	J. Davis	Allegheny City, Pa	Oct. 20, 1863 Jan. 31, 1865	1, 857
Car brake, Railway	J. Davis	Allegheny City, Pa	May 29, 1866 July 6, 1869	3, 532
Car brake, Railway	J. W. Latcher and W. J. Powell	Amsterdam, N. Y	Dec. 27, 1864 Aug. 20, 1867	2, 747
Car-brake shoe	W. H. Dunham and J. Widney, by selves and S. P. Ross, assignees.	Hokah, Minn., and Allegheny and Pittsburgh, Pa.	Dec. 3, 1867 July 11, 1871	4, 466

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Car-brake, Steam	J. T. Bassett, by self, J. Bassler, and M. S. Matthews, assignees.	Galesburgh, Ill	Oct. 17, 1871 Feb. 6, 1872	4, 732
Car-brakes, Operating	N. Hodge	North Adams, Mass	Oct. 2, 1849 Mar. 1, 1853	231
Car brakes, Operating railway	C. B. Turner, by A. Berney, assignee, (mesne,) (extended November 14, 1862.)	Buffalo, N. Y., and Jersey City, N. J.	Nov. 14, 1848 Oct. 4, 1864	1, 783
Car brakes, Operating railway	C. B. Turner, by A. Berney, assignee, (mesne,) (extended November 14, 1862.)	Buffalo, N. Y., and Jersey City, N. J.	Nov. 14, 1848 Oct. 4, 1864	1, 784
Car, Cattle	J. B. Shafer, by the National Cattle-Car Company, assignee.	Salem, Ohio	July 21, 1860 May 2, 1871	4, 368
Car, Cattle	J. W. Street	Marshalltown, Iowa	Nov. 2, 1869 Apr. 11, 1871	4, 340
Car-coupling	S. O. Campbell	Centre Town, Mo	Dec. 14, 1869 Jan. 23, 1872	4, 716
Car-coupling	C. L. Horack	Winona, Minn	May 14, 1872 Oct. 29, 1872	5, 117
Car-coupling	W. B. Snedaker	Phœnix, N. Y	Oct. 18, 1870 Apr. 11, 1871	4, 339
Car-coupling	D. J. Tittle, by A. M. Tittle, assignee.	Greenbush, N. Y	July 2, 1867 Dec. 17, 1872	5, 191
Car-coupling	M. Van Slyke and D. W. Wood	Rome, N. Y	Nov. 2, 1869 July 12, 1870	4, 073
Car-coupling attachment	W. G. Brown and J. W. Jedkins	Monmouth, Me	Jan. 28, 1873 Oct. 7, 1873	5, 587
Car door, Grain	C. Barker, by self and T. C. Thomas, assignees.	Maquon, Ill	May 17, 1870 Dec. 2, 1873	5, 671
Car door, Grain	J. Bassler	Galesburgh, Ill	Mar. 12, 1872 Nov. 26, 1872	5, 157
Car door, Railway	C. Barker, by self and T. C. Thomas, assignees.	Maquon, Ill	May 17, 1870 Dec. 31, 1872	5, 206
Car, Dumping	J. Hughes	New Berne, N. C	July 15, 1873 Aug. 19, 1873	5, 541
Car, Dumping	I. Keith, by self, H. T. and I. N. Keith, assignees.	West Sandwich, Mass	July 13, 1869 Oct. 19, 1869	3, 679
Car for carrying petroleum	J. Clark	Canandaigua, N. Y	Nov. 3, 1863 Mar. 5, 1872	4, 788
Car for day and night service, Railway	J. B. Creighton	Tiffin, Ohio	May 18, 1858 Sept. 21, 1858	602
Car for railway, Metallic	B. J. La Mothe, by the La Mothe Life-Preserving Iron Car Company, assignee.	New York, N. Y	Sept. 24, 1861 Dec. 16, 1862	1, 364
Car for transporting petroleum	J. and A. Densmore	Meadville, Pa	Apr. 10, 1866 May 29, 1866	2, 261
Car for transporting petroleum, Railway	J. F. Keeler	Pittsburgh, Pa	Jan. 10, 18[illegible] Aug. 31 18[illegible]	3, [illegible]
Car-frame	W. G. Van Staden	Strathroy, Canada	Sept. 24, 18[illegible] July 8, 18[illegible]	5, 4[illegible]
Car, Hand	H. L. Brown	Adrian, Mich	Sept. 7, 18[illegible] Feb. 11, 1873	5, [illegible]
Car, Hand	H. L. Brown	Adrian, Mich	Sept. 7, 1869 Feb. 11, 1873	5, 274
Car heater, Railway	E. H. Ashcroft	Lynn, Mass	May 15, 1866 Apr. 14, 1868	2, 917
Car heater, Railway	W. S. McNeil and O. S. Cadwell, jr., by American Car-Heating Company, assignee, (mesne.)	New York, N. Y	Aug. 25, 1868 June 22, 1869	3, 509
Car heater, Railway	H. R. Robbins	Baltimore, Md	May 2, 1871 May 28, 1872	4, 922
Car heater, Street	J. Gibson, jr	Albany, N. Y	Jan. 1, 1867 July 14, 1868	3, 029
Car, Iron	R. Montgomery	New York, N. Y	Aug. 7, 1860 July 22, 1862	1, 325
Car, Iron railway	R. Montgomery	New York, N. Y	Aug. 7, 1860 July 6, 1869	3, 542
Car, Iron railway	S. J. Seely, by C. W. Durant, assignee.	New York, N. Y	Apr. 24, 1860 July 9, 1861	1, 213
Car platform, Railway	R. A. Cowell	Cleveland, Ohio	Jan. 10, 1871 Apr. 2, 1872	4, 846
Car, Railway	B. J. La Mothe	New York, N. Y	Apr. 4, 1854 Mar. 18, 1856	360
Car, Railway	L. Myers	Philadelphia, Pa	June 24, 1851 Mar. 21, 1865	1, 910
Car, Railway	F. M. Ray	Catskill, N. Y	Nov. 3, 1838 June 8, 1841	32
Car, Railway	S. J. Seely, by C. W. Durant, assignee.	New York, N. Y	Apr. 24, 1860 Oct. 2, 1860	1, 055
Car, Railway day and night	J. B. Creighton by J. H. Myers, assignee, (mesne.)	Rochester, N. Y	May 18, 1858 May 4, 1869	3, 419
Car, Railway oil	S. W. Murray and B. P. Lamason.	Milton, Pa	Feb. 22, 1870 May 13, 1873	5, 406
Car, Railway sleeping	E. Wheeler	Elmira, N. Y	Aug. 3, 1858 Sept. 18, 1860	1, 043
Car, Railway stock	J. S. Kendall, by the National Cattle-Car Company, assignee, (mesne.)	Saint Louis, Mo., and Salem, Ohio.	June 1, 1869 Aug. 15, 1871	4, 514
Car-roof	J. Garry, by the Garry Iron Roofing Company, assignee.	Cleveland, Ohio	Oct. 11, 1870 Nov. 19, 1872	5, 147
Car-roof	J. C. Wands	Nashville, Tenn	Mar. 4, 1873 July 29, 1873	5, 515
Car roof, Railway	A. P. Winslow	Cleveland, Ohio	Aug. 9, 1859 Aug. 8, 1865	2, 050
Car-seat	G. Buntin	Boston, Mass	Dec. 5, 1871 Nov. 26, 1872	5, 158

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Car seat and couch	H. Allen	New York, N. Y	June 12, 1866 July 23, 1867	2,692
Car seat and couch, Railway	T. T. Woodruff	Philadelphia, Pa	Dec. 2, 1856 Mar. 17, 1863	1,439
Car seat and couch, Railway	T. T. Woodruff, (extended December 2, 1870.)	Philadelphia, Pa	Dec. 2, 1856 Jan. 24, 1871	4,241
Car-seat band. (Design)	D. F. Randall, by S. and T. A. Randall, administrators.	Chicopee, Mass., and Providence, R. I.	July 2, 1867 Dec. 31, 1872	5,212
Car-seats, End frames of. (Design)	G. Buntin	Boston, Mass	Apr. 2, 1867 July 8, 1873	5,480
Car-seats into beds or lounges, Converting backs of.	H. B. Myer	Buffalo, N. Y	Sept. 19, 1854 May 3, 1859	711
Car seats into beds or lounges, Converting railway	H. B. Myer	Cleveland, Ohio	Sept. 19, 1854 Oct. 8, 1861	1,227
Car, Sleeping	G. M. Pullman and B. Field, by G. M. Pullman, assignee, (mesne.)	Chicago, Ill	Sept. 19, 1865 Jan. 5, 1869	3,254
Car, Sleeping	G. M. Pullman and B. Field, by G. M. Pullman, assignee.	Chicago, Ill., and Albion, N. Y.	Sept. 19, 1865 Feb. 11, 1868	2,862
Car, Sleeping	J. Swan	Baltimore, Md	June 18, 1867 Oct. 13, 1868	3,160
Car-spring	T. F. Allyn	Canandaigua, N. Y	June 20, 1865 July 17, 1866	2,314
Car-spring	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859 Mar. 17, 1863	1,431
Car-spring	G. Douglass	Scranton, Pa	Dec. 29, 1857 Apr. 28, 1863	1,461
Car-spring	J. J. Gest	Cincinnati, Ohio	Mar. 20, 1866 Oct. 20, 1868	3,161
Car-spring	A. Hebbard, by self and J. P. Onderdonk, assignees.	Buffalo, N. Y	Mar. 13, 1866 Apr. 11, 1871	4,335
Car-spring	A. Hebbard, by self and J. P. Onderdonk, assignees.	Cambridge, Mass., and Philadelphia, Pa.	Mar. 13, 1866 Dec. 12, 1871	4,670
Car-spring	J. G. Pugsley	New York, N. Y	Aug. 4, 1863 Aug. 21, 1866	2,340
Car-spring	E. T. Russell, by the Union Car-Spring Company, assignee.	Indianapolis, Ind	Nov. 24, 1868 Feb. 27, 1872	4,767
Car-spring	R. Vose	New York, N. Y	Jan. 3, 1860 June 4, 1861	1,194
Car-spring	R. Vose	New York, N. Y	June 5, 1860 Aug. 6, 1861	1,217½
Car-spring	R. Vose	New York, N. Y	Mar. 11, 1862 Feb. 24, 1863	1,420
Car-spring	R. Vose	New York, N. Y	Mar. 11, 1862 Feb. 24, 1863	1,421
Car spring Railway	T. F. Allyn, by the Combination Car-Spring Company, assignee, (mesne.)	Nyack, N. Y	Jan. 15, 1861 July 2, 1872	4,959
Car spring, Railway	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859 Jan. 6, 1863	1,371
Car spring, Railway	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859 Jan. 6, 1863	1,372
Car spring, Railway	H. M. Paine, by the Railroad-Car Spring Company, assignee, (mesne.)	Worcester, Mass., and Philadelphia, Pa.	Oct. 27, 1857 Feb. 15, 1859	667
Car spring, Railway	F. M. Ray	Catskill, N. Y	Nov. 3, 1838 Sept. 25, 1840	25
Car spring, Railway	D. B. Rogers	Pittsburgh, Pa	Feb. 23, 1858 July 26, 1859	782
Car spring, Railway	A. T. Watson	Castleton, N. Y	Mar. 20, 1860 July 16, 1861	1,214
Car-starting apparatus	J. Steger	New York, N. Y	July 9, 1867 Jan. 14, 1868	2,830
Car, Stock	A. Rank, by the National Cattle-Car Company, assignee	Salem, Ohio	Feb. 14, 1871 June 13, 1871	4,425
Car, Stock	A. Rank, H. King, and J. Sharp, by the National Cattle-Car Company, assignee.	Salem, Ohio	Feb. 14, 1871 Aug. 1, 1871	4.428
Car, Stock	L. Swearingen, by the National Cattle-Car Company, assignee.	Grafton, W. Va., and Salem, Ohio.	May 29, 1860 Apr. 11, 1871	4,336
Car-ventilator	M. T. Hitchcock, by J. W. Labaree, assignee.	Springfield, Mass	Feb. 18, 1868 May 31, 1870	4,005
Car ventilator, Railway	M. T. Hitchcock, by J. W. Labaree, assignee.	Springfield, Mass	Feb. 18, 1868 Aug. 1, 1871	4,494
Car ventilator, Railway	R. Hitchcock, by H. D. Carroll, R. Hitchcock, and J. H. Hare, assignees.	Springfield, Mass	Aug. 20, 1867 Apr. 12, 1870	3,910
Car-wheel	J. Raddin	Lynn, Mass	May 14, 1867 Jan. 2, 1872	4,702
Car-wheel	T. Sharp	Chicago, Ill	Sept. 29, 1863 Jan. 10, 1865	1,851
Car-wheel	S. P. Smith, by J. A. Woodbury, assignee, (mesne.)	Troy, N. Y., and Boston, Mass.	May 29, 1860 Feb. 13, 1872	4,760
Car-wheel	S. P. Smith, by J. A. Woodbury, assignee, (mesne.)	Troy, N. Y., and Boston, Mass.	May 29, 1860 Feb. 13, 1872	4,761
Car-wheel	N. K. Wade and J. Kaye	Pittsburgh, Pa	Sept. 4, 1860 July 8, 1862	1,323
Car-wheel, Cast-iron	A. Atwood	Troy, N. Y	May 15, 1847 June 9, 1857	468
Car-wheel, Cast-iron	A. Atwood	Troy, N. Y	May 15, 1847 Sept. 22, 1857	497
Car-wheel, Cast-iron	A. Atwood	Troy, N. Y	May 15, 1847 Sept. 22, 1857	498
Car-wheel, Cast-metal	G. G. Lobdell	Wilmington, Del	Apr. 15, 1862 June 17, 1862	1,317
Car wheel, Railway	G. Natorp	New York, N. Y	Nov. 3, 1868 Apr. 12, 1870	3,919

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Car wheel, Railway	J. K. Sax and G. W. Kear	Kingston, Pa	Apr. 6, 1869 May 3, 1870	3, 954
Car wheel, Railway	W. B. Treadwell	Albany, N. Y	Jan. 9, 1849 Mar. 30, 1858	541
Car-wheels, Casting	J. K. Sax	Pittston, Pa	Jan. 9, 1872 Dec. 30, 1873	5, 716
Car-wheels, Chill for casting	W. Wilmington	Toledo, Ohio	Dec. 15, 1868 Aug. 16, 1870	4, 102
Car-wheels, Manufacture of	W. G. Hamilton, by the Hamilton Steeled Wheel Company, assignee.	Ramapo, N. Y	Dec. 22, 1868 Feb. 25, 1873	5, 298
Cars, Braking and starting street	A. Higley	South Bend, Ind	Aug. 14, 1866 Jan. 15, 1867	2, 460
Cars, Device for unloading grain	I. H. Palmer	Lodi, Wis	June 18, 1867 June 29, 1869	3, 527
Cars, Excluding dust from	E. Hamilton, by H. B. Goodyear, administrator of N. Goodyear, assignee.	Bridgeport, Conn	May 2, 1851 Feb. 15, 1853	230
Cars for transporting oil, Constructing railway	J. F. Keeler	Pittsburgh, Pa	Jan. 10, 1865 July 18, 1865	2, 031
Cars from one track to another, Transferring	W. Wharton, jr	Philadelphia, Pa	Sept. 18, 1860 Feb. 19, 1861	1, 143
Cars, Platform-bridge for railway	A. Rank	Salem, Ohio	Apr. 28, 1868 Jan. 9, 1872	4, 708
Cars, Pole-coupling for railway	B. E. Sampson, by J. B. Proctor, assignee.	Boston and Fitchburgh, Mass.	July 27, 1858 Feb. 21, 1860	906
Cars, Starting street-railway	T. R. Sinclaire	New York, N. Y	Dec. 19, 1865 Mar. 27, 1866	2, 216
Cars, Ventilating-window for railway	G. Neilson	Boston, Mass	May 30, 1854 Jan. 18, 1859	649
Carbureter	H. S. Maxin, by Maxin Gas-Machine Company, assignee, (mesne.)	New York, N. Y	Sept. 8, 1868 Jan. 21, 1873	5, 247
Carbureter, Air	H. L. McAvoy, by self and E. S. Hutchinson, assignees.	Baltimore, Md	Dec. 13, 1864 Sept. 5, 1865	2, 069
Carbureter, Air	H. L. McAvoy, by E. L. Mix and the Monumental Automatic Gas-Machine Company, assignees, (mesne.)	Rochester, N. Y., and Baltimore, Md.	Feb. 7, 1865 Dec. 8, 1868	3, 225
Carbureter, Air	G. Odiorne	Boston, Mass	Nov. 1, 1864 May 22, 1866	2, 253
Carbureter, Air	B. Sloper	Saint Louis, Mo	June 13, 1871 July 18, 1871	4, 476
Carbureter, Air and gas	A. Barbarin	New Orleans, La	Oct. 5, 1869 Mar. 22, 1870	3, 892
Carbureter, Air or gas	J. A. Bassett	Salem, Mass	Mar. 14, 1865 Sept. 15, 1868	3, 124
Carbureter, Gas	J. F. Boynton	Syracuse, N. Y	Sept. 5, 1865 Oct. 16, 1866	2, 375
Carbureter, Gas	J. F. Boynton	Syracuse, N. Y	Sept. 25, 1866 Oct. 16, 1866	2, 376
Carbureting air	L. L. Hill	New York, N. Y	Dec. 20, 1859 Feb. 24, 1863	1, 417
Carbureting air for the production of light and heat.	J. D. Jenkins, by B. Pilkington, assignee, (mesne.)	Oakland, Cal	Jan. 28, 1868 Dec. 28, 1869	3, 779
Carbureting gas for illumination, Process and apparatus for.	J. A. Bassett, by T. D. Worrall, assignee.	Salem, Mass., and New York, N. Y.	Mar. 4, 1862 Sept. 18, 1866	2, 357
Carbureting gases	C. M. Williams, by H. L. Stuart, assignee.	New York, N. Y	Jan. 8, 1867 Oct. 22, 1867	2, 785
Card-rack	J. Adair	Pittsburgh, Pa	Oct. 2, 1866 Aug. 4, 1868	3, 061
Card-rack	L. C. Prindle	Chicago, Ill	Oct. 17, 1871 Dec. 31, 1872	5, 211
Carding and spinning machine	M. Chase, by R. S. Stewart, executor of G. Law, assignee.	Baltimore, Md	Mar. 23, 1842 Jan. 1, 1850	158
Carding-engine	A. D. Shattuck	Grafton, Mass	Sept. 23, 1856 Mar. 10, 1857	434
Carding-engine	W. H. Walton	New York, N. Y	Dec. 9, 1856 Sept. 1, 1857	490
Carding-engines, Cleaning the top-flats of	W. H. Walton	New York, N. Y	Dec. 9, 1856 Jan. 13, 1857	422
Carding-engines, Machinery for cleaning top-flats of	H. Woodman	Saco, Me	July 8, 1856 Mar. 13, 1866	2, 202
Carding-machine	H. N. Gambrill and S. F. Burgee.	Woodbury Mills, Md	Feb. 27, 1855 Nov. 17, 1857	509
Carding-machine	L. O'Brien	Indianapolis, Ind	Oct. 6, 1863 Feb. 7, 1865	1, 865
Carding-machine	S. R. Parkhurst	New York, N. Y	June 20, 1848 Feb. 23, 1858	532
Carding-machines, Cleaning top-cards of	H. Woodman	Biddeford, Me	Aug. 1, 1854 Dec. 8, 1857	514
Carding-machines, Stripping top-flats in	G. Wellman, by W. B. Bates, administrator.	Mansfield, Mass	Dec. 6, 1853 July 30, 1867	2, 706
Carding-machines, Stripping top-flats in	G. Wellman, by W. B. Bates, administrator.	Mansfield, Mass	Mar. 18, 1856 July 30, 1867	2, 705
Carpenter's gage	J. Bryant	Brooklyn, N. Y	Aug. 19, 1856 Apr. 14, 1857	448
Carpenters' squares, Machine for figuring	N. Millington, by the Eagle Square Company, assignee, (mesne,) (extended October 18, 1867.)	Shaftsbury, Vt	Oct. 18, 1853 Feb. 14, 1871	4, 262
Carpet	W. Wallace, by self and C. McAllister, assignees.	Philadelphia, Pa	June 14, 1870 May 14, 1872	4, 904
Carpet-bag frame	S. Lagowitz	Newark, N. J.	July 7, 1863 July 25, 1865	2, 035
Carpet-bag frame	A. Sonnekalb and J. W. Lieb	Newark, N. J	Aug. 21, 1866 Jan. 19, 1869	3, 273

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Invention.	Inventor.	Residence.	Date.	No.
Carpet-bag lock	B. Steinmetz	Paris, France	Aug. 1, 1865 Dec. 14, 1869	3,765
Carpet-beating machine	J. Harris, jr., and D. Holmes, by D. Holmes, assignee.	Roxbury and Chelsea, Mass	Feb. 23, 1858 May 13, 1862	1,307
Carpet-cleaning compound	L. Marks, by L. Stern, assignee	Cincinnati, Ohio, and Boston, Mass.	Dec. 27, 1870 Apr. 9, 1872	4,860
Carpet-lining	G. W. Chipman	Boston, Mass	Dec. 18, 1866 July 12, 1870	4,066
Carpet-lining	J. F. Fales	Walpole, Mass	Feb. 27, 1866 Mar. 14, 1871	4,296
Carpet-lining	J. R. Harrington, by G. W. Chipman, assignee, (mesne.)	Boston, Mass	Apr. 1, 1856 Dec. 11, 1866	2,415
Carpet-linings, Machine for making	J. R. Harrington, by G. W. Chipman, assignee, (mesne.)	Boston, Mass	Apr. 1, 1856 Dec. 11, 1866	2,416
Carpet-sweeper	H. H. Herrick, by C. J. F. Eastman, assignee, (mesne.)	East Boston and Boston, Mass.	Aug. 17, 1858 Nov. 20, 1860	1,079
Carpets, Manufacturing	J. G. Macnair	Norwich, Conn	Aug. 7, 1855 Dec. 23, 1856	417
Carriage	J. Curtis	Cincinnati, Ohio	Mar. 26, 1867 Aug. 10, 1869	3,590
Carriage	J. Jones	Clyde, N. Y	Jan. 14, 1851 Mar. 4, 1851	191
Carriage-axle	A. E. Smith	Bronxville, N. Y	May 8, 1860 Apr. 27, 1869	3,401
Carriage-axle	A. E. Smith	Bronxville, N. Y	Dec. 24, 1867 Apr. 27, 1869	3,410
Carriage-axle	A. E. Smith	Bronxville, N. Y	Dec. 28, 1869 May 24, 1870	3,991
Carriage-axle arms, Mode of making the skeins of	G. Schreyer	Columbus, Ohio	May 7, 1861 Nov. 2, 1869	3,709
Carriage body and seat	S. P. Graham, by T. Comstock, and E. and H. F. Booth, assignees, (mesne.)	London, Canada, and Columbus, Ohio.	Oct. 5, 1869 Mar. 5, 1872	4,780
Carriage-bodies with perch by means of springs, Connecting.	G. Nichols	Trumbull, Conn	Apr. 10, 1844 Mar. 4, 1846	80
Carriage-bolt die	W. J. Clark	Southington, Conn	Aug. 2, 1864 Mar. 28, 1865	1,916
Carriage-brake, Self-acting	J. Dubois, jr	Cascade, Pa	June 13, 1846 Nov. 4, 1846	89
Carriage check-brace	I. D. Johnson	Kennett's Square, Pa	Apr. 28, 1868 Aug. 4, 1868	3,067
Carriage, Child's	F. Boylston	New York, N. Y	Oct. 6, 1868 Dec. 8, 1868	3,224
Carriage, Child's	A. Christian	New York, N. Y	Apr. 24, 1866 Aug. 11, 1868	3,074
Carriage, Child's	A. Christian	New York, N. Y	Apr. 24, 1866 Sept. 14, 1869	3,636
Carriage, Child's	B. P. Crandall, by self, and W. E. and C. F. Crandall, assignees.	New York, N. Y	Dec. 28, 1869 May 17, 1870	3,971
Carriage, Child's	W. E. Crandall	New York, N. Y	Feb. 22, 1870 May 17, 1870	3,972
Carriage, Child's	W. E. Crandall	New York, N. Y	Feb. 22, 1870 Jan. 3, 1871	4,223
Carriage-circle coupling	G. G. Larkin	West Amesbury, Mass	Apr. 5, 1864 Sept. 1, 1868	3,105
Carriage handle, Child's	R. G. Elder	New York, N. Y	Feb. 1, 1870 Mar. 26, 1872	4,823
Carriage-prop	C. Thomas, by self and D. P. Nichols, assignees.	Roxbury, Mass	Sept. 22, 1857 Aug. 26, 1862	1,331
Carriage running-gear	G. L. Hausskencht	New Haven, Conn	Jan. 13, 1852 Mar. 17, 1857	437
Carriage-seat	S. P. Graham, by T. Comstock, assignee.	London, Canada	June 13, 1871 May 21, 1872	4,908
Carriage-seat, Clamping movable	S. W. Beach, by Beach Patent Shifting Carriage-Seat Manufacturing Company, assignee.	Ypsilanti, Mich	Nov. 8, 1870 Jan. 28, 1873	5,262
Carriage-spring	A. Buzzell	West Fairlee, Vt	Sept. 15, 1868 Nov. 24, 1868	3,205
Carriage-spring	B. T. Henry, by the Henry Spring Company, assignee.	New Haven and Winsted, Conn.	May 21, 1867 July 30, 1872	5,011
Carriage-spring	J. G. Reiff	Lancaster, Pa	Oct. 8, 1867 Dec. 22, 1868	3,241
Carriage-springs, Clip-plate for	N. C. Dean, by S. S. Bliss, assignee.	Union Springs, N. Y	Jan. 14, 1873 July 15, 1873	5,490
Carriage-springs, Connecting	J. A. Topliff and G. H. Ely	Elyria, Ohio	Dec. 19, 1871 Apr. 9, 1872	4,857
Carriage-step cover and wheel fender	J. W. Gosling	Cincinnati, Ohio	Feb. 26, 1867 Nov. 4, 1873	5,644
Carriage-top prop	F. A. Bradley, by J. G. English and E. F. Mersick, assignees, (mesne.)	New Haven, Conn	Sept. 15, 1868 Apr. 16, 1872	4,869
Carriage-top-prop block	W. N. Barnett, by S. L. Barnett and S. Beery, assignees, (mesne.)	Urbana, Ohio	Jan. 23, 1866 Nov. 7, 1871	4,621
Carriage wear-iron	I. G. Lefler	Philadelphia, Pa	Sept. 8, 1857 Oct. 5, 1858	609
Carriage-wheel	T. Brownfield	Georges Township, Pa	Aug. 19, 1856 Dec. 15, 1857	515
Carriage-wheel	T. M. Jones and C. W. Fillmore	Chicago, Ill	Nov. 1, 1870 July 30, 1872	5,013
Carriage-wheel	R. W. McClelland	Springfield, Ill	Feb. 8, 1870 Apr. 4, 1871	4,322
Carriage-wheel	J. Raddin, by self and G. W. Chipman, assignees.	Lynn and Boston, Mass	June 13, 1865 Apr. 23, 1867	2,572
Carriage-wheel	J. D. Sarven	Columbia, Tenn	June 9, 1857 Aug. 11, 1868	3,079

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Invention.	Inventor.	Residence.	Date.	No.
Carriage-wheel	J. D. Sarven	New Haven, Conn	Jan. 9, 1857 Sept. 6, 1870	4,116
Carriage-wheel	S. Vreeland, by Metallic Suspension-Wheel Company, assignee, (mesne.)	Pottstown, Pa	July 20, 1869 Jan. 14, 1873	5,237
Carriage-wheel	H. G. Weibling	Denver City, Colo	Jan. 20, 1863 Sept. 13, 1864	1,768
Carriage-wheels, Machine for compressing	H. Killam	New Haven, Conn	Oct. 15, 1867 July 12, 1870	4,070
Carriage-wheels to axles, Attaching	W. Elder, by S. G. Morrison, assignee.	Mill Hall, Pa	Dec. 27, 1870 Mar. 26, 1872	4,830
Carriage-window-sash holder	S. E. Totten, jr., by W. Bloodgood, assignee.	New York, N. Y	Mar. 11, 1873 May 27, 1873	5,426
Carriages, cars, coaches, and other vehicles, Construction of.	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,092
Carriages, Preventing rattling in	W. S. Chapman	Baltimore, Md	Aug. 8, 1854 Sept. 18, 1866	2,358
Cartridge	G. Smith	Buttermilk Falls, N. Y	June 30, 1857 Sept. 14, 1858	598
Cartridge-balls, Attaching	W. Hunt, by W. R. Palmer, assignee.	New York, N. Y	Aug. 10, 1848 Feb. 26, 1850	163
Cartridge-box	A. A. Bennett	Cincinnati, Ohio	Jan. 27, 1863 Apr. 14, 1863	1,451
Cartridge-box	E. Blakeslee	New Haven, Conn	Dec. 20, 1864 Feb. 7, 1865	1,861
Cartridge-box	J. T. Warren, by R. A. Cheesbrough, assignee.	Stafford and New York, N. Y.	June 28, 1864 Oct. 17, 1865	2,094
Cartridge-case, Metallic	W. C. Dodge	Washington, D. C	July 4, 1865 July 13, 1869	3,548
Cartridge-cases, Machine for loading metallic	C. H. Lavis	Philadelphia, Pa	Aug. 9, 1864 Jan. 31, 1865	1,858
Cartridge-cases, Machine for making	E. Allen	Worcester, Mass	Feb. 14, 1860 May 9, 1865	1,948
Cartridge-cases, Machine for making	E. Allen	Worcester, Mass	Feb. 14, 1860 May 9, 1865	1,949
Cartridge-extractor, Fire-arm	H. Reynolds	Springfield, Mass	Nov. 22, 1864 May 1, 1866	2,234
Cartridge for breech-loading fire-arms, Metallic	A. E. Burnside, by Burnside Rifle Company, assignee.	Providence, R. I	Mar. 25, 1856 Mar. 10, 1863	1,428
Cartridge for small-arms	E. Lindner	New York, N. Y	July 30, 1861 Feb. 17, 1863	1,411
Cartridge, Metallic	H. Berdan, by the Berdan Fire-Arms Manufacturing Company, assignee.	New York, N. Y	Sept. 29, 1868 Aug. 1, 1871	4,491
Cartridge, Metallic	W. C. Ellis and J. N. White, by E. H. Plant, H. Reynolds, A. P. Plant, and A. Hotchkiss, assignees.	Springfield, Mass., New Haven, Conn., Springfield, Mass., and Southington, Conn.	July 12, 1859 Aug. 25, 1863	1,529
Cartridge, Metallic	E. Maynard	Washington, D. C	Jan. 11, 1859 May 28, 1861	1,192
Cartridge, Metallic	I. M. Millbank	Greenfield Hill, Conn	Feb. 19, 1867 Aug. 6, 1867	2,716
Cartridge, Metallic	T. J. Powers	New York, N. Y	Oct. 17, 1865 Sept. 14, 1869	3,638
Cartridge, Metallic	R. White	Lowell, Mass	Nov. 26, 1861 Feb. 8, 1870	3,833
Cartridge, Packing	C. Sharps	Philadelphia, Pa	July 10, 1860 Apr. 21, 1863	1,455
Cartridge, Patched	W. H. Elliot, by E. Remington & Sons, assignees.	Plattsburgh and Ilion, N. Y.	July 15, 1862 Sept. 23, 1873	5,577
Cartridge, Priming	A. Moffatt	Washington, D. C	Mar. 13, 1866 July 19, 1870	4,075
Cartridge, Priming	A. Moffatt	Washington, D. C	Mar. 13, 1866 July 19, 1870	4,076
Cartridge-shell	S. W. Wood	Cornwall, N. Y	Apr. 1, 1862 Apr. 2, 1872	4,843
Cartridge-shells, Machine for necking	B. Payne	South Coventry, Conn	Oct. 17, 1865 Jan. 11, 1870	3,793
Cartridge-shells to tapered forms, Machine for and method of compressing.	B. S. Roberts	United States Army	Mar. 9, 1869 May 4, 1869	3,425
Cartridges, Priming metallic	H. Smith and D. B. Wesson	Springfield, Mass	Apr. 17, 1860 June 4, 1867	2,636
Carving-machine	B. J. Tayman	Philadelphia, Pa	May 21, 1872 Oct. 7, 1873	5,594
Caster	J. T. Barnes	Hudson City, N. J	Oct. 30, 1866 June 11, 1867	2,641
Caster, Pickle	H. C. Wilcox, by the Meriden Britannia Company, assignee.	West Meriden, Conn	Feb. 20, 1872 Mar. 19, 1872	4,820
Caster, Revolving	C. H. Latham and J. S. Sugg, by E. P. Woods, D. Sherwood, and C. H. Latham, assignees.	Lowell, Mass	July 4, 1871 Dec. 5, 1871	4,656
Caster, Revolving	C. H. Latham and J. S. Sugg, by E. P. Woods, D. Sherwood, and C. H. Latham, assignees.	Lowell, Mass	July 4, 1871 Dec. 5, 1871	4,657
Caster, Sirup	E. Bigelow	Springfield, Mass	Apr. 6, 1858 May 4, 1858	547
Caster, Table	R. Gleason, jr., by R. Gleason & Sons, assignees.	Dorchester, Mass	Mar. 8, 1859 Dec. 27, 1859	871
Caster, Table	C. H. Latham, by Woods, Sherwood & Co., assignees.	Lowell, Mass	June 28, 1870 Dec. 20, 1870	4,208
Caster, Trunk	J. Schmadel and J. A. Lieb, by J. A. Lieb, assignee.	Newark, N. J	June 13, 1865 June 8, 1869	3,487
Casters, and applying them to bedsteads	P., E. W., and J. A. Blake	New Haven, Conn	June 30, 1838 July 30, 1845	73
Casters, and applying them to bedsteads	P., E. W., and J. A. Blake	New Haven, Conn	June 30, 1838 July 30, 1845	74
Casters, Cup for	C. H. Latham, by Woods, Sherwood & Co., assignees.	Lowell, Mass	June 28, 1870 Dec. 20, 1870	4,209

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Casting edge and other tools	S. W. Collins, by the Collins Company, assignee.	Collinsville, Conn	Nov. 20, 1860 Aug. 29, 1871	4,537
Casting edge and other tools	S. W. Collins, by the Collins Company, assignee.	Collinsville, Conn	Nov. 20, 1860 Aug. 29, 1871	4,538
Casting metals, Clay mold and pattern for	J. J. C. Smith, by the Metallic Compression-Casting Company, assignee.	Boston, Mass	Dec. 29, 1868 Apr. 27, 1869	3,409
Casting refractory metal, Apparatus for	M. Smith, by Metallic Compression-Casting Company, assignee.	Boston, Mass	Oct., 22, 1867 May 18, 1869	3,449
Castings, Manufacture of steel	W. Kelly, by T. C. Coleman, assignee.	Louisville, Ky	Dec. 26, 1871 Oct. 28, 1873	5,636
Ceiling and roof, Fire-proof	J. Gilbert	Philadelphia, Pa	May 14, 1867 Nov. 5, 1867	2,794
Cellar walls and floors, Constructing	A. B. Moen	New York, N. Y	Feb. 26, 1856 Apr. 8, 1856	367
Cement, Asphaltic	A. Straub, by I. Straub, administrator.	Kenton County, Ky	Nov. 17, 1863 Jan. 19, 1869	3,275
Cement for fixing door-knobs	P. Kennedy	New York, N. Y	June 11, 1867 Apr. 14, 1868	2,916
Cement for uniting leather and other substances	S. F. Hilton, by self and W. D. Hilton, assignees.	Providence and Cranston, R. I.	Aug. 13, 1861 May 5, 1863	1,471
Cement from slag, Preparing	J. J. Bodmer	Newport, England	Nov. 5, 1867 May 19, 1868	2,933
Cement-pipe mold	H. Knight	Jersey City, N. J	May 8, 1860 Feb. 25, 1862	1,277
Cement pipe, Water and air proof	A. F. Jalouream, by T. Weed and P. S. Shelton, assignees.	Paris, France, Albany, N. Y., and Boston, Mass.	Dec. 30, 1857 Feb. 10, 1863	1,407
Cement pipes, Device for lining	M. Stephens	Brooklyn, N. Y	Apr. 23, 1872 July 15, 1873	5,494
Cement pipes, Machine for making	W. Goodwin, by E. L. Baker, H. Knight, and E. Dayton, assignees, (mesne.)	Boston, Mass., Brooklyn, N. Y., and Meriden, Conn.	Sept. 5, 1865 Sept. 19, 1871	4,563
Cement pipes, Machine for making	H. Holden	New Haven, Conn	Sept. 20, 1864 May 9, 1865	1,953
Cement pipes, Machinery for the manufacture of bituminous.	A. F. Jaloureau, by T. Weed and P. S. Shelton, assignees.	Paris, France, Albany, N. Y., and Boston, Mass.	Dec. 30, 1857 Feb. 10, 1863	1,408
Cement pipes, Process of manufacturing water-proof.	A. F. Jaloureau, by T. Weed and P. S. Shelton, assignees.	Paris, France, Albany, N. Y., and Boston, Mass.	Dec. 30, 1857 Feb. 10, 1863	1,406
Center-bits, Fastening	A. W. Streeter	Shelburne Falls, Mass	Jan. 23, 1855 June 14, 1859	737
Centrifugal machine	G. B. Hartson and E. J. Woolsey	New York, N. Y	Feb. 13, 1866 July 10, 1866	2,302
Centrifugal machine for draining sugar, &c	S. S. Hepworth, by self and G. Paulding, assignees, (mesne.)	Yonkers, N. Y	Sept. 22, 1868 Feb. 27, 1872	4,769
Centrifugal machine for draining sugar, &c	H. W. and R. Lafferty	Gloucester, N. J	Apr. 21, 1868 Oct. 6, 1868	3,153
Centrifugal machine for draining sugar	H. W. and R. Lafferty	Gloucester City, N. J	Mar. 23, 1869 Jan. 31, 1871	4,247
Centrifugal machine for draining sugar	H. W. and R. Lafferty	Gloucester City, N. J	Mar. 23, 1869 Jan. 31, 1871	4,248
Centrifugal machine for draining sugar, &c	D. M. Weston	Boston, Mass	Apr. 9, 1867 Jan. 14, 1868	2,845
Centrifugal sugar-machine	A. Mackey	New York, N. Y	June 18, 1867 July 30, 1867	2,708
Chain elevator and bucket	J. A. Ball	Grass Valley, Cal	Nov. 16, 1869 June 18, 1872	4,947
Chain-links, Device for swaging	V. Draper, by O. M. Draper, assignee.	North Attleborough, Mass	Sept. 26, 1865 Mar. 1, 1870	3,858
Chain-machine	L. Towne	Providence, R. I	Oct. 20, 1857 Mar. 13, 1860	928
Chain, Ornamental	J. Lancelott, by Sackett, Davis & Co., assignees.	Providence, R. I	Mar. 22, 1859 Jan. 16, 1866	2,147
Chair	J. Fernald	Boston, Mass	July 22, 1856 Oct. 12, 1858	611
Chair bottom or back	A. S. Smith, by I. P. Tice, assignee, (mesne.)	New York, N. Y	May 25, 1858 June 27, 1865	2,016
Chair-legs, Tip for foot of	E. S. Winchester	Boston, Mass	Nov. 5, 1867 Nov. 10, 1868	3,187
Chair-seat	O. A. Bingham, by G. C. Winchester, assignee.	Ashburnham, Mass	Sept. 7, 1869 Mar. 22, 1870	3,890
Chair-seat	O. A. Bingham, by G. C. Winchester, assignee.	Ashburnham, Mass	Sept. 7, 1869 Oct. 25, 1870	4,164
Chair-seat	R. Wood, by H. I. Seymour, assignee.	West Troy and Troy, N. Y.	Mar. 29, 1864 Feb. 14, 1865	1,873
Chair-seats, Device for weaving	G. A. Watkins	Proctorsville, Vt.	Mar. 10, 1868 Nov. 2, 1869	3,712
Chairs, Extension foot-rest for	J. H. Travis	Charlestown, Mass	Oct. 22, 1872 Dec. 16, 1873	5,690
Charcoal, Cleaning animal	G. A. Jasper, by the Union Sugar Refinery, assignee.	Charlestown, Mass	Mar. 27, 1866 Oct. 15, 1867	2,778
Cheese-frame	T. M. Brintnall, by self, R. B. Walker, and W. W. Pancoast, assignees, (mesne.)	Medina, Ohio	Aug. 15, 1871 July 30, 1872	5,006
Cheese, Manufacture of	F. A. Redington and G. McClure.	Fredonia, N. Y	Feb. 8, 1859 May 21, 1861	1,189
Cheese, Manufacture of German hand	F. C. and T. F. Mende	Philadelphia, Pa	Oct. 5, 1869 Apr. 4, 1871	4,323
Cheese-press	G. B. Boomer, T. G. Morse, and R. E. Boschert.	Syracuse, N. Y., Erie, Pa., and Syracuse, N. Y.	Nov. 1, 1870 Jan. 28, 1873	5,256
Cheese-vat	E. H. and W. A. Stuart	Cedarville, N. Y	Feb. 21, 1871 June 6, 1871	4,416
Cheese-vat	C. M. Wilkins	West Andover, Ohio	Nov. 22, 1859 Dec. 24, 1861	1,248
Cheese-vat	C. M. Wilkins	West Andover, Ohio	Nov. 22, 1859 Mar. 17, 1863	1,438

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Cherry-stoner	G. Geer, by self, T. G. Hadley, and W. Hamilton, assignees.	Galesburgh, Ill	Apr. 9, 1867 Aug. 23, 1870	4,105
Chest-protector	P. Lear	Boston, Mass	Feb. 28, 1871 Oct. 22, 1872	5,110
Chilled wheels, Manufacture of cast	G. Whitney	Philadelphia, Pa	July 16, 1872 Nov. 5, 1872	5,140
Chuck, Lathe	W. A. Reilly	Cincinnati, Ohio	May 30, 1865 Aug. 15, 1865	2,053
Chuck, Planer	C. H. Riggs	Windsor Locks, Conn	May 19, 1868 Sept. 15, 1868	3,121
Chuck, Self-centering	E. B. Beach, by G. H. and J. T. Clark, assignees, (mesne.)	Meriden, Conn	Sept. 6, 1864 Nov. 14, 1865	2,104
Churn	J. Macnish	Berlin, Wis	Apr. 20, 1858 Nov. 30, 1858	639
Churn	R. Murphy	Jasper, N. Y	July 5, 1864 Jan. 12, 1869	3,264
Churn	J. B. Raynor	Mazo Manie, Wis	Feb. 25, 1868 June 30, 1868	3,012
Churn	Z. C. Robbins	Saint Louis, Mo	June 1, 1849 Jan. 1, 1850	159
Churn-body	J. C. Hills	Willoughby, Ohio	May 24, 1864 Sept. 4, 1866	2,349
Churn-dasher, Atmospheric	N. Chapin, by C. I. Anthony, assignee.	Syracuse, N. Y	May 9, 1848 May 15, 1849	137
Cider-mill	J. Eiberweiser, by J. S. and A. W. Hall, J. A. Moore, and H. Burkhardt, assignees.	Jeffersonville, Ind., and Louisville, Ky.	Oct. 26, 1858 Jan. 11, 1870	3,791
Cider-mill	T. J. Kindleberger	Eaton, Ohio	May 29, 1855 Aug. 14, 1866	2,332
Cider-mill	J. Krauser, by H. K. Parsons, assignee, (mesne.)	Reading and Harrisburgh, Pa.	Aug. 30, 1853 Oct. 11, 1864	1,793
Cider-mill	W. N. Whiteley, J. Fassler, and O. S. Kelly.	Springfield, Ohio	Dec. 15, 1863 Feb. 26, 1867	2,499
Cider-mill	W. N. Whiteley, J. Fassler, and O. S. Kelly.	Springfield, Ohio	Dec. 15, 1863 July 30, 1867	2,704
Cigar-bodies, Machine for making	G. A. Reiniger, by G. Moebs, assignee, (mesne.)	Detroit, Mich	Oct. 29, 1861 June 16, 1868	2,989
Cigar-bunches, Apparatus for pressing, shaping, and drying.	A. Pearl, by H. Pearl, assignee.	New York, N. Y	Oct. 11, 1870 July 4, 1871	4,458
Cigar-lighter	M. F. Gale	New York, N. Y	Nov. 21, 1871 July 30, 1872	5,010
Cigar-machine	I. A. Heald	Washington, D. C	Aug. 6, 1861 Aug. 30, 1864	1,751
Cigar-machine	G. A. Reiniger, by G. Moebs, assignee, (mesne.)	Detroit, Mich	May 29, 1866 June 30, 1868	3,011
Cigar-wrappers, Machine for putting on	G. A. Reiniger, by G. Moebs, assignee, (mesne.)	Detroit, Mich	Oct. 29, 1861 June 16, 1868	2,990
Cigars, Mouth-piece for	J. Ball	Elmira, N. Y	Mar. 28, 1865 Nov. 28, 1865	2,113
Circular kiln	F. E. Hoffmann	Berlin, Prussia	June 13, 1865 Dec. 22, 1868	3,237
Clapboard-joint	W. Baker	Utica, N. Y	May 16, 1854 Sept. 22, 1863	1,541
Clapboard-joint	W. Baker, (extended May 16, 1868.)	Utica, N. Y	May 16, 1854 Jan. 19, 1869	3,268
Clapboard-machine	A. A. Wilder	Detroit, Mich	Oct. 30, 1855 Oct. 18, 1859	840
Clapboard sawing and edging machine	A. A. Wilder	Detroit, Mich	Oct. 30, 1855 May 15, 1866	2,247
Clay-pulverizing machine	G. F. Blake, by self and P. Hubbell.	Boston, Mass	Nov. 26, 1863 Dec. 11, 1866	2,414
Clinch-rings, Machine for making	G. M. Patten	Bath, Me	May 2, 1854 Jan. 1, 1867	2,444
Clock	J. B. Mayer	Niagara Falls, N. Y	Sept. 15, 1868 Aug. 17, 1869	3,606
Clock, Calendar	W. H. Akins and J. C. Burritt, (extended September 19, 1868.)	Ithaca, N. Y	Sept. 19, 1854 Nov. 2, 1869	3,694
Clock, Calendar	E. M. and J. E. Mix, by W. T. Huntington and H. Platts, assignees.	Ithaca, N. Y	Jan. 31, 1860 Oct. 29, 1861	1,233
Clock, Calendar	H. Skinner	Huron, Ohio	Mar. 2, 1858 Oct. 18, 1859	837
Clock, Calendar	W. A. Terry	Bristol, Conn	June 16, 1868 Dec. 20, 1870	4,213
Clock-case. (Design)	E. Ingraham	Bristol, Conn	Feb. 15, 1870 Dec. 20, 1870	4,207
Clock, Electric	S. A. Kennedy, S. W. Holt, and J. Gerlach, by the Kennedy Electric Clock Company, assignee.	New York, N. Y	Dec. 3, 1867 Dec. 21, 1869	3,772
Clock-movement, Machine for turning pillars for	W. H. Nettleton, C. Raymond, and A. Hatch, by W. H. Nettleton, assignee.	Bristol, Conn	Nov. 17, 1857 June 8, 1869	3,489
Clock-striking mechanism	J. B. Mayer, by self and T. Witmer, assignees.	Niagara Falls and Williamsville, N. Y.	Sept. 15, 1868 July 6, 1869	3,536
Cloth-cutting machine	I. Fenno and P. Horne, by I. Fenno, R. D. Goodwin, C. M. Blake, A. K. Tolman, J. B. Fiske, and H. G. Hartshorn, assignees.	Boston, Mass	July 16, 1872 Sept. 17, 1872	5,061
Cloth-drying machine	B. Sexton	East Windsor, Conn	May 8, 1860 Sept. 25, 1860	1,050
Cloth, Elastic	R. Solis, by H. H. Day, assignee, (mesne.)	New York, N. Y	Nov. 7, 1848 Dec. 14, 1858	636
Cloth, Elastic gore	C. Winslow	Lynn, Mass	Aug. 4, 1857 Sept. 15, 1857	492
Cloth, Steaming and cooling	L. M. Heery	Hinsdale, Mass	May 23, 1871 Oct. 3, 1871	4,575

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Invention.	Inventor.	Residence.	Date.	No.
Cloth-web without spinning or weaving, Forming	J. Arnold and G. G. Bishop, by the Union Manufacturing Company, assignee, (mesne,) (extended by Commissioner October 17, 1850, and by Congress March 28, 1854.)	Norwalk, Conn	Oct. 20, 1836 Mar. 17, 1857	440
Cloth-web without spinning or weaving, Forming	J. Arnold, by the Union Manufacturing Company, assignee, (mesne.)	Norwalk, Conn	July 15, 1829 Mar. 8, 1856	362
Clothes-dryer	S. Morrill	Andover, N. H	Nov. 11, 1856 Sept. 27, 1859	830
Clothes-dryer	S. H. Tift	Morrisville, Vt	July 20, 1858 Aug. 2, 1859	789
Clothes-dryer	J. N. Valley	North East, Pa	May 17, 1870 Dec. 3, 1872	5,176
Clothes-frame	J. E. Earle, by P. R. Carll, assignee, (mesne.)	New Haven, Conn	Nov. 25, 1862 Aug. 8, 1871	4,503
Clothes-frame	J. E. Earle, by P. R. Carll, assignee, (mesne.)	New Haven, Conn	Nov. 25, 1862 Aug. 8, 1871	4,504
Clothes-hook	H. M. Whitmarsh and S. S. Putnam.	Abington and Dorchester, Mass.	Jan. 29, 1867 Aug. 20, 1867	2,744
Clothes-pin	G. W. Parker	Fitzwilliam, N. H	Mar. 18, 1856 Feb. 17, 1857	429
Clothes-pin	D. Pierce, (extended May 25, 1872.)	Pawlet, Vt	May 25, 1858 Aug. 20, 1872	5,041
Clothes-rack	V. M. Heath	Morristown, Vt	Sept. 7, 1869 Aug. 8, 1871	4,505
Clothes-washer	A. B. Mercier	Providence, R. I	July 31, 1866 Jan. 3, 1871	4,227
Clothes-wringer	A. Albrecht, by American Machine Company, assignee, (mesne.)	Philadelphia, Pa	Mar. 14, 1871 Jan. 28, 1873	5,261
Clothes-wringer	A. M. Bailey and J. O. Couch, by the Metropolitan Washing-Machine Company, assignee.	Middlefield, Conn	Jan. 14, 1862 Nov. 30, 1869	3,755
Clothes-wringer	A. M. Bailey and J. O. Couch, by the Metropolitan Washing-Machine Company, assignee.	Middlefield, Conn	Jan. 14, 1862 Apr. 2, 1872	4,844
Clothes-wringer	J. Brinkerhoff	Auburn, N. Y	Dec. 26, 1871 Jan. 7, 1873	5,218
Clothes-wringer	R. S. Cathcart, by the Queen City Wringer Company, assignee, (mesne.)	Cincinnati, Ohio	Sept. 17, 1872 Apr. 22, 1873	5,360
Clothes-wringer	G. J. Colby, by Colby Brothers & Co., assignees.	Waterbury, Vt	Dec. 4, 1860 Dec. 4, 1866	2,408
Clothes-wringer	C. A. Cummings and F. A. Swallow, by the Metropolitan Washing-Machine Company, assignee, (mesne.)	Worcester, Mass., and Middlefield, Conn.	Feb. 11, 1862 Oct. 3, 1871	4,574
Clothes-wringer	E. Dickerman	Richmond, Vt	Apr. 10, 1860 Jan. 8, 1861	1,119
Clothes-wringer	R. B. Huginin, by A. H. Spencer, assignee.	Cleveland, Ohio., and Providence, R. I.	Mar. 10, 1868 Nov. 21, 1871	4,638
Clothes-wringer	C. H. Knox	Mount Pleasant, Iowa	July 2, 1867 Jan. 14, 1868	2,840
Clothes-wringer, (Division A)	A. H. Page, by the Metropolitan Washing-Machine Company, assignee, (mesne)	Manchester, N. H	Jan. 29, 1867 Jan. 7, 1873	5,223
Clothes-wringer, (Division B)	A. H. Page, by the Metropolitan Washing-Machine Company, assignee, (mesne.)	Manchester, N. H	Jan. 29, 1867 Jan. 7, 1873	5,224
Clothes-wringer, (Division C)	A. H. Page, by the Metropolitan Washing-Machine Company, assignee, (mesne.)	Manchester, N. H	Jan. 29, 1867 Jan. 7, 1873	5,225
Clothes-wringer	T. Pool, by Metropolitan Washing-Machine Company, assignee.	Brunswick, Ohio	June 24, 1862 Mar. 18, 1873	5,330
Clothes-wringer	N. A. Rhoads	Waterbury, Vt	Mar. 11, 1862 Dec. 9, 1862	1,360
Clothes-wringer	N. A. Rhoads	Waterbury, Vt	Mar. 11, 1862 Dec. 9, 1862	1,361
Clothes-wringer	I. A. Sergeant, by S. Walker, assignee of A. J. Sergeant, administratrix.	Dayton, Ohio, and Newark, N. J.	July 27, 1858 June 18, 1867	2,652
Clothes-wringer	I. A. Sergeant, by S. Walker, assignee of A. J. Sergeant, administratrix.	Newark, N. J., and Dayton, Ohio.	July 27, 1867 Dec. 31, 1867	2,829
Clothes-wringer	N. B. White, by W. B. Rhoads, assignee, (mesne.)	South Denham, Mass	Mar. 4, 1862 June 12, 1866	2,287
Clothes-wringer	W. Whitney, by the Metropolitan Washing-Machine Company, assignee.	Winchendon, Mass	Dec. 3, 1861 Sept. 26, 1871	4,570
Clothes-wringer roller	J. Allender, by S. A. Bailey and S. S. and B. M. Cook, assignees, (mesne.)	New London, Conn., and Woonsocket, R. I.	Jan. 11, 1859 June 28, 1864	1,709
Clothes-wringer roller	J. F. Holt, by the Boston Belting Company, assignee, (mesne.)	Providence, R. I., and Boston, Mass.	July 25, 1865 July 18, 1871	4,473
Clothes-wringer roller	J. F. Holt, by Woonsocket Rubber Company, assignee.	Woonsocket, R. I	July 25, 1865 Apr. 19, 1870	3,930
Clothes-wringer roller and fastening	R. B. Huginin, by A. H. Spencer, assignee.	Cleveland, Ohio, and Providence, R. I.	Mar. 6, 1866 Dec. 26, 1871	4,680
Clothes-wringers, Rubber roll for	J. B. Forsyth	Boston, Mass	Nov. 20, 1856 Jan. 31, 1871	4,243
Clothes-wringing hook	J. H. Pratt, by self and B. F. Larrabee, assignees.	Lynn, Mass	Feb. 21, 1871 Apr. 18, 1871	4,343

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Clothes-wringing machine	S. A. Bailey, by self and S. S. and B. M. Cook, assignees, (mesne.)	New London, Conn., and Woonsocket, R. I.	Apr. 5, 1859 June 28, 1864	1,710
Clothes-wringing machine	S. A. Bailey, by the Bailey Washing and Wringing Machine Company, assignee, (mesne.)	Woonsocket, R. I.	Apr. 5, 1859 May 14, 1867	2,609
Clover-bolt	E. K. Collins	Chili, N. Y.	Aug. 16, 1859 June 7, 1864	1,690
Clover hulling and thrashing machine	J. C. Birdsell	West Henrietta, N. Y.	May 18, 1858 Apr. 8, 1862	1,299
Clover-hulling machine	I. V. Blackwell, by E. A. Blackwell, administratrix.	Ovid, N. Y.	Mar. 30, 1858 Feb. 14, 1865	1,868
Clover-seed bolting and cleaning machine	J. C. Birdsell	South Bend, Ind	Dec. 13, 1859 Nov. 12, 1867	2,797
Clover-separator	C. Reif	Hartleton, Pa	Aug. 8, 1854 Feb. 5, 1861	1,135
Clutch, Friction	W. Wright	New York, N. Y.	June 15, 1852 Nov. 19, 1861	1,235
Coal and other ores, Desulphurizing	J. J. Storer	Boston, Mass	Apr. 9, 1861 May 28, 1867	2,629
Coal-breaking machine	J. Battin, (additional improvement January 20, 1844.)	Philadelphia, Pa	Oct. 6, 1843 Sept. 4, 1849	142
Coal-bucket, Self-dumping	J. Wüst	Philadelphia, Pa	July 13, 1858 Feb. 8, 1859	658
Coal-drilling machine	J. Grimm	Darlington Township, Beaver County, Pa.	Nov. 23, 1869 July 22, 1873	5,499
Coal-dumping apparatus	E. R. Kerr, by self and J. L. Platt, assignees.	Kewanee, Ill	Oct. 2, 1866 Feb. 19, 1867	2,489
Coal from slate, Device for separating	L. P. Garner	Ashland, Pa	Aug. 7, 1860 July 27, 1869	3,568
Coal-hod	E. A. Jeffery	New Haven, Conn	Feb. 27, 1866 Oct. 4, 1870	4,147
Coal-scuttle	W. Miller, by J. Edgar, assignee.	Newark, N. J.	Mar. 10, 1863 Apr. 5, 1870	3,902
Coal-scuttles, Construction of	A. Bardell and S. Smith	New York, N. Y.	Mar. 12, 1867 May 18, 1869	3,438
Coat and hat hook	G. F. J. Colburn, by J. T. and H. A. Pratt, assignees.	New York, N. Y.	Nov. 1, 1864 June 13, 1865	1,997
Cock	J. P. Gallagher	Saint Louis, Mo	July 11, 1865 Oct. 4, 1870	4,140
Cock	N. Jenkins	Boston, Mass	Apr. 18, 1865 June 6, 1865	1,979
Cock for gas, Cut-off and regulating	C. E. Seal, by E. F. Brooks, assignee.	Winchester, Va	July 1, 1873 Sept. 30, 1873	5,585
Cock for mains, Branch stop	R. A. Hill, by self and H. C. Lane, assignees.	Washington, D. C.	May 25, 1869 Feb. 8, 1870	3,829
Cock for tapping pipes under pressure, Stop	J. Ridgway, by J. Ridgway, administrator.	New York	Apr. 16, 1842 Sept. 23, 1843	55
Cock, Gas	J. G. Leffingwell	Newark, N. J.	Feb. 19, 1861 Apr. 11, 1865	1,931
Cock, Steam	A. Hallowell and H. R. Barker	Lowell, Mass	Nov. 28, 1865 July 16, 1867	2,687
Cock, Stop	E. Stebbins	Chicopee, Mass	Apr. 19, 1859 Dec. 20, 1859	868
Cock, Steam-gage	A. Bisbee, by O. F. Earle, assignee, (extended September 18, 1869.)	Norwalk, Conn	Sept. 18, 1855 June 14, 1870	4,027
Cock, Stop	E. Stebbins	Chicopee, Mass	Apr. 19, 1859 Mar. 23, 1869	3,341
Cock, Valve	S. Adams, by self and J. H. Davis, assignees.	Boston, Mass., and Pittsburgh, Pa.	May 25, 1858 Feb. 20, 1872	4,762
Cock, Valve	J. R. and H. S. Robinson	Clinton, Mass	Aug. 31, 1858 Aug. 16, 1859	795
Cocks, Method of governing the action of valve	F. H. Bartholomew	New York, N. Y.	June 20, 1854 Nov. 13, 1860	1,071
Cocks, Method of governing the action of valve	F. H. Bartholomew	New York, N. Y.	June 20, 1854 Nov. 13, 1860	1,072
Coffee and tea pot strainer	M. Simons, by G. A. Lawrence, assignee, (mesne.)	Springfield, Mass	Mar. 5, 1867 May 25, 1869	3,462
Coffee, Compound for coating roasted	J. T. Cooke	Brooklyn, N. Y.	Oct. 1, 1872 Apr. 29, 1873	5,383
Coffee-cooler	J. Burns	New York, N. Y.	Jan. 22, 1867 Nov. 18, 1873	5,658
Coffee-mill	T. W. Brown, by C. Parker, assignee.	Boston and Meriden, Conn	July 19, 1870 Sept. 27, 1870	4,130
Coffee-pot	W. H. Elliot	Plattsburgh, N. Y.	Jan. 25, 1859 May 10, 1859	713
Coffee-pot	J. MacGregor, jr., by G. R. Chittenden and C. A. Smith, (extended April 11, 1868.)	Chicago, Ill., and Milwaukee, Wis.	Apr. 11, 1854 Oct. 27, 1868	3,176
Coffee-pot	C. B. Waite and J. W. Sener	Fredericksburgh, Va	Apr. 22, 1856 Aug. 10, 1858	583
Coffee-pot	C. B. Waite and J. W. Sener	Fredericksburgh, Va	Apr. 22, 1856 Oct. 18, 1859	836
Coffee, Process for treating	J. Ashcroft, by S. J. Ashcroft, assignee.	Brooklyn, N. Y.	Apr. 18, 1871 July 25, 1871	4,479
Coffee-roaster	T. Heermans	Mitchellsville, Tenn	Jan. 18, 1859 Apr. 12, 1859	691
Coffee-strainer	D. Sherwood, by E. P. Woods, D. Sherwood, and C. H. Latham, assignees.	Lowell, Mass	July 9, 1861 Apr. 5, 1870	3,908
Coffee, Treating	J. Ashcroft, by S J. Ashcroft, assignee.	Brooklyn, N. Y.	Apr. 18, 1871 July 25, 1871	4,480
Coffin	A. D. Fisk, by J. G. Forbes and R. Squires, assignees, (mesne.)	New York, N. Y.	Nov. 14, 1848 Mar. 6, 1860	919
Coffin-bier	P. Joyce	Rochester, N. Y.	Mar. 9, 1869 June 22, 1869	3,512

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Invention.	Inventor.	Residence.	Date.	No.
Coffin-handle	C. Strong	Winsted, Conn	Dec. 14, 1869 Apr. 22, 1873	5,374
Coffin, Metallic	M. H. Crane, by Crane, Breed & Co., assignees.	Cincinnati, Ohio	Jan. 23, 1855 Mar. 13, 1855	301
Coffins, Lifting-handle for	P. Bradford, by Sargent & Co., assignees.	New Haven, Conn	Mar. 12, 1867 Nov. 9, 1869	3,723
Coke from lignites, &c., Process of making	H. Engelmann	Salt Lake City, Utah	Mar. 11, 1873 July 15, 1873	5,486
Collar	H. G. Emery and M. C. Fuller	Boston, Mass	July 19, 1870 May 28, 1872	4,916
Collar and cuff, Lady's	W. E. Lockwood	Philadelphia, Pa	Apr. 26, 1859 June 6, 1865	1,980
Collar and cuff, Lady's	W. E. Lockwood	Philadelphia, Pa	Apr. 26, 1859 June 6, 1865	1,981
Collar and cuff, Lady's	W. E. Lockwood	Philadelphia, Pa	Apr. 26, 1859 June 6, 1865	1,982
Collar and cuff, Lady's	W. E. Lockwood	Philadelphia, Pa	Apr. 26, 1859 June 6, 1865	1,983
Collar and cuff, Lady's	W. E. Lockwood	Philadelphia, Pa	Apr. 26, 1859 Jan. 28, 1873	5,259
Collar and harness, Horse	E. Whitney	Albany, N. Y	Oct. 27, 1863 Jan. 19, 1864	1,607
Collar caps and harness, Lining for horse	D. Curtis, by H. Gilman and G. H. Richards, assignees.	Sun Prairie, Wis	Aug. 2, 1870 Jan. 21, 1873	5,251
Collar caps and harness, Lining for horse	D. Curtis, by G. H. Richards and H. Gilman, assignees.	Sun Prairie, Wis	Aug. 2, 1870 June 10, 1873	5,443
Collar, Shirt	S. S. Gray	Boston, Mass	June 23, 1863 Mar. 29, 1864	1,646
Collar, Shirt	W. Hunt, by the Union Paper Collar Company, assignee, (mesne.)		July 25, 1854 July 10, 1866	2,306
Collar, Shirt	W. Hunt, by the Union Paper Collar Company, assignee, (mesne.)		July 25, 1854 July 10, 1866	2,307
Collar, Shirt	W. Hunt, by the Union Paper Collar Company, assignee, (mesne,) (extended July 25, 1868.)	New York, N. Y	July 25, 1854 Oct. 22, 1872	5,109
Collar, Shirt	W. Hunt, by W. E. Lockwood, assignee, (mesne.)	New York, N. Y., and Philadelphia, Pa.	July 25, 1854 Nov. 29, 1864	1,828
Collar, Shirt	W. Hunt, by W. E. Lockwood, assignee, (mesne.)	Philadelphia, Pa	July 25, 1854 Feb. 7, 1865	1,867
Collar, Shirt	W. Hunt, by W. E. Lockwood, assignee, (mesne.)	Philadelphia, Pa	July 25, 1854 Apr. 4, 1865	1,926
Collar, Shirt	W. Hunt, by W. E. Lockwood, assignee, (mesne.)	Philadelphia, Pa	July 25, 1854 Apr. 4, 1865	1,927
Collar, Sleeping	L. Dederick	New York, N. Y	May 17, 1870 Dec. 6, 1870	4,193
Collars, Apparatus for forming	S. S. Gray	Boston, Mass	July 5, 1864 Dec. 20, 1864	1,835
Collars, Apparatus for forming	S. S. Gray	Boston, Mass	July 5, 1864 Dec. 20, 1864	1,836
Collars, Compound fabric for the production of shirt.	W. Hunt, by W. E. Lockwood, assignee, (mesne.)	Philadelphia, Pa	May 4, 1869 July 13, 1869	3,552
Collars, Fabric for covering horse	E. Sullivan, by the American Horse-Collar Company, assignee.	Boston, Mass	June 16, 1868 June 1, 1869	3,482
Collars, &c., Lining for wooden horse	D. Curtis	Sun Prairie, Wis	May 14, 1872 Jan. 21, 1873	5,250
Collar, Machine for applying re-inforcing-patch to button-holes of.	J. T. Bruen and G. M. Jacobs, by G. W. Ray and V. N. Taylor, assignees, (mesne.)	Springfield, Mass	Nov. 27, 1866 Mar. 30, 1869	3,344
Collodion, Preparing compounds containing	J. A. McClelland	Louisville, Ky	Apr. 28, 1868 Dec. 28, 1869	3,777
Coloring-matter	H. Stephens	Great Britain	Oct. 28, 1837 Apr. 21, 1838	3
Coloring-matter from anthracene, Preparing	J. Brönner and H. Gutzkow	Frankfort-on-the-Main, Prussia.	Dec. 7, 1869 Sept. 19, 1871	4,558
Comb	J. H. Briggs	Brooklyn, N. Y	Oct. 15, 1867 Dec. 31, 1867	2,822
Combination-lock	H. Clarke, by the Clarke Lock Company, assignee, (mesne.)	Baltimore, Md., and Louisville, Ky.	Feb. 4, 1873 July 22, 1873	5,497
Combustion, Solution for preventing	J. McGill	Boston, Mass	May 1, 1866 Feb. 16, 1869	3,300
Compensating or equilibrium spring	C. Shea	Newark, N. J	Oct. 12, 1869 May 17, 1870	3,984
Compensating-spring	C. Shea	Newark, N. J	Oct. 12, 1869 May 17, 1870	3,983
Compressing and beater press	G. Ertel	Quincy, Ill	Mar. 31, 1868 Sept. 17, 1872	5,060
Condenser	W. A. Lighthall	New York, N. Y	Dec. 17, 1861 Feb. 21, 1865	1,878
Condenser and feed-water heater, Steam-engine	J. Dilworth and J. C. Hodgins, said Dilworth by T. K. Morgan and H. Thorn, (assignees.)	Muskoka District, and Toronto, Canada.	Feb. 21, 1871 May 6, 1873	5,394
Condenser, Portable water	W. A. Lighthall	New York, N. Y	July 29, 1862 Feb. 21, 1865	1,879
Condenser, Steam	J. Houpt	Springtown, Pa	Apr. 19, 1870 May 31, 1870	3,999
Condenser, Steam-engine surface	J. P. Pirsson	New York, N. Y	Apr. 2, 1850 Aug. 10, 1858	584
Condenser, Surface	D. Barnum	New York, N. Y	May 24, 1859 Oct. 13, 1863	1,552
Condenser, Surface	T. Prosser	New York, N. Y	Dec. 15, 1857 May 22, 1866	2,254
Condenser, Surface	T. Prosser	New York, N. Y	Dec. 15, 1857 May 22, 1866	2,255

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Condensers, Steam-engenery for surface	W. A. Lighthall	New York, N. Y	Apr. 20, 1869 May 7, 1872	4,894
Cooking-apparatus and refrigerator	J. and I. Newburg, by I. Newburg assignee.	New York, N. Y	Nov. 6, 1866 May 21, 1867	2,618
Cooking apparatus, Portable lamp	C. A. Harper	Rahway, N. J	May 1, 1866 Dec. 18, 1866	2,421
Cooling and ventilating rooms, Method of	A. S. Lyman, (extended March 25, 1870.)	New York, N. Y	Mar. 25, 1856 Dec. 26, 1871	4,683
Copying-apparatus, Portable	W. Van Anden	Poughkeepsie, N. Y	Sept. 7, 1858 Dec. 18, 1860	1,100
Copying-press	F. Hovey, by E. W. Frost, assignee.	New York, N. Y	Mar. 29, 1864 Mar. 21, 1871	4,306
Copying-press, Letter	G. C. Taft	Worcester, Mass	Apr, 24, 1860 May 20, 1873	5,417
Cord-covering machine	J. Turner and I. E. Palmer, by J. Turner, assignee.	Montville, Conn	Apr. 14, 1863 Nov. 28, 1871	4,649
Cord, Machine for making covered	J. Turner and I. E. Palmer, by J. Turner, assignee.	Norwich, Conn	Apr. 14, 1863 Mar. 30, 1869	3,345
Cord, Machinery for making	W. E. Nichols	East Haddam, Conn	Dec. 11, 1849 Jan. 13, 1857	423
Cordage-machinery	H. Pearce	Cincinnati, Ohio	May 22, 1855 Nov. 3, 1857	504
Cordage, Machinery for manufacturing	W. Joslin	Cleveland, Ohio	Jan. 19, 1847 Sept. 25, 1860	1,048
Cores, Anchor for securing	Z. Ellis	Philadelphia, Pa	Jan. 11, 1870 Aug. 19, 1873	5,540
Cork-cutting machine	J. Power and A. J. Bailey, by P. Holmes, assignee.	Boston and Charlestown, Mass.	May 20, 1862 July 18, 1865	2,030
Cork for the manufacture of mattresses, Article of prepared.	L. Bauhoefer, by H. Hauer, administrator.	Philadelphia, Pa	Nov. 6, 1866 Feb. 2, 1869	3,283
Cork for the manufacture of mattresses, Method of treating.	L. Bauhoefer, by H. Hauer, administrator.	Philadelphia, Pa	Nov. 6, 1866 Feb. 2, 1869	3,282
Corks, Machine for manufacturing	W. R. Crocker, by M. F. Crocker, administratrix, (extended October 30, 1869.)	West Winsted, Conn	Oct. 30, 1855 Dec. 5, 1871	4,654
Corn-husker	D. M. Mefford	Jeffersonville, Ind	Dec. 22, 1857 May 15, 1860	962
Corn-husker, Hand	A. W. Brinkerhoff	Upper Sandusky, Ohio	Sept. 2, 1862 Jan. 2, 1872	4,687
Corn-husking machine	L. A. Aspinwall	Albany, N. Y	Apr. 12, 1870 Aug. 16, 1870	4,099
Corn-husking machine	L. A. Aspinwall	Albany, N. Y	Apr. 12, 1870 Nov. 8, 1870	4,174
Corn-husking machine	L. A. Aspinwall	Albany, N. Y	Apr. 12, 1870 May 23, 1871	4,388
Corn-popper	J. H. Bigelow	Worcester, Mass	Aug. 3, 1869 Feb. 8, 1870	3,821
Corn-popper	W. F. Collier, by Howe, Bigelow & Co., assignees.	Worcester, Mass	Jan. 31, 1871 Jan. 9, 1872	4,703
Corn-sheller	A. Adams	Sandwich, Ill	Aug. 6, 1861 Mar. 20, 1866	2,205
Corn-sheller	J. Bowles, by self and S. P. Ross, assignees.	Augusta, Ga., and Pittsburgh, Pa.	May 4, 1869 June 21, 1870	4,036
Corn-sheller	T. D. Burrall	Geneva, N. Y	Dec. 6, 1845 Oct. 10, 1865	2,083
Corn-sheller	N. Drake	Newton, N. J	Apr. 3, 1860 June 12, 1860	980
Corn-sheller	J. J. Johnston	Allegheny, Pa	Apr. 19, 1859 Dec. 11, 1860	1,096
Corn-sheller	J. G. Putnam, by self and J. Schieffelin, jr., assignees.	Tioga, Pa	May 22, 1860 Jan. 19, 1869	3,270
Corn-stalk cutter	G. W. Cole	Farmington, Ill	July 14, 1863 Mar. 8, 1870	3,874
Corner-piece for protecting wooden bodies, Metallic.	E. A. and C. M. Stratton	Greenfield, Mass	Mar. 1, 1870 May 2, 1871	4,365
Corner-strip	G. Corbett	Pittsburgh, Pa	Sept. 24, 1872 Dec. 10, 1872	5,179
Cornices, Machine for rolling	A. Johnson, by W. H. and A. Johnson, assignees.	Cairo, N. Y	Dec. 22, 1857 Nov. 1, 1870	4,171
Cornices to windows, Mode of attaching	A. Peple	East Billerica, Mass	Mar. 22, 1870 July 19, 1870	4,077
Corpse, Preserving	J. D. Nietsche	Somerset, Ohio	Sept. 24, 1867 June 1, 1869	3,470
Corpse-preserving case	J. S. Waterman	Boston, Mass	Apr. 7, 1868 Apr. 15, 1873	5,355
Corset	C. D. Rutherford, by D. H. Fanning, assignee.	Brooklyn, N. Y., and Worcester, Mass.	Dec. 11, 1866 June 6, 1871	4,415
Corset, Child's	H. G. Emery and M. C. Fuller, by H. G. Emery, assignee.	Boston, Mass	Mar. 26, 1872 May 7, 1872	4,891
Corset-fastening	M. P. Bray, by self and the Shelton and Osborn Manufacturing Company, assignees.	New Haven and Derby, Conn.	Mar. 22, 1870 Apr. 9, 1872	4,858
Corset skirt-supporter	L. H. Foy, by J. H. and L. H. Foy, assignees, (mesne.)	Boston, Mass	Sept. 15, 1863 June 18, 1867	2,653
Corset skirt-supporter	L. H. Foy, by J. H. and L. H. Foy, assignees, (mesne.)	Boston, Mass	Sept. 15, 1863 June 18, 1867	2,654
Corset, Skirt-supporting	L. H. Foy, by self and J. H. Foy, assignees, (mesne.)	New Haven, Conn	Sept. 15, 1863 Mar. 26, 1872	4,831
Corset, Skirt-supporting	C. A. Griswold	Willimantic, Conn	July 10, 1866 June 20, 1871	4,427
Corset-spring	S. H. Barnes, by F. L. Barnes, administratrix.	New York, N. Y	July 17, 1866 May 12, 1868	2,929
Corset-spring	S. H. Barnes, by F. L. Barnes, administratrix.	New York, N. Y	July 17, 1866 June 29, 1869	3,520
Corset-spring	S. H. Barnes, by F. L. Barnes, executrix.	New York, N. Y	July 17, 1866 Aug. 31, 1869	3,624

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Invention.	Inventor.	Residence.	Date.	No.
Corset-spring	S. H. Barnes, by F. L. Barnes, executrix.	New York, N. Y	July 17, 1866 Nov. 5, 1872	5,130
Corset-spring	S. H. Barnes, by F. L. Egbert, executrix.	New York, N. Y	July 17, 1866 Jan. 7, 1873	5,216
Cosmetic	J. M. Wilson	Seguin, Tex	Feb. 25, 1868 Oct. 20, 1868	3,166
Cotton and hay press	R. Ball, by W. H. Tappey, W. C. Lumsden, and A. Steel, assignees	Petersburgh, Va	June 28, 1870 July 23, 1872	4,995
Cotton-combing machine	M. D. Whipple, by self, assignee, (mesne.)	Cambridge, Mass	Oct. 26, 1858 Aug. 17, 1869	3,610
Cotton-gin	H. W. Brown, by M. J. Brown, administratrix and assignee, and J. Johnson, jr., F. H. Lummus, and T. Bowen, assignees.	Millville, N. J., and Brooklyn and New York, N. Y.	Mar. 23, 1858 Feb. 24, 1863	1,422
Cotton-gin	L. Campbell, by self and T. W. Brown, assignees.	Columbus, Miss	May 22, 1855 Apr. 2, 1861	1,163
Cotton-gin	T. C. Craven	Greenbush, N. Y	Jan. 27, 1861 May 24, 1864	1,677
Cotton-gin	J. Du Bois, by J. C. Du Bois, assignee.	Millerton, Cal	Apr. 27, 1858 June 28, 1870	4,047
Cotton-gin	F. McCarthy	Putnam County, Fla	July 3, 1840 Apr. 18, 1854	262
Cotton-gin	R. A. L. McCurdy, by D. G. Olmstead, assignee.	Sabine Parish, La., and Vicksburgh, Miss.	June 26, 1855 July 15, 1856	379
Cotton-gin	R. A. L. McCurdy, by D. G. Olmstead, assignee.	Vicksburgh, Miss., and Sabine Parish, La.	June 26, 1855 June 14, 1859	736
Cotton-gin	R. McKenna	White's Station, Tenn	Oct. 18, 1870 Nov. 19, 1872	5,148
Cotton-gin	R. McKenna	White's Station, Tenn	Oct. 18, 1870 Nov. 18, 1873	5,663
Cotton-gin	E. Osgood	New York, N. Y	Dec. 22, 1863 Mar. 8, 1864	1,628
Cotton-gin	D. Pratt, (extended July 14, 1871.)	Prattville, Ala	July 14, 1857 Dec. 12, 1871	4,664
Cotton-gin	H. V. Scattergood	Albany, N. Y	June 25, 1867 June 30, 1868	3,013
Cotton-gin saw	T. C. Craven, by B. H. Jenks, assignee.	Northampton, Mass., and Philadelphia, Pa.	May 30, 1871 Jan. 14, 1873	5,229
Cotton-gin saws, Ribs of	E. Carver	Bridgewater, Mass	June 12, 1838 Nov. 16, 1839	17
Cotton-gins, Constructing and affixing the ribs of saw.	I. Copeland, jr	Bridgewater, Mass	Apr. 8, 1840 Feb. 12, 1842	36
Cotton-ginning and wool-burring machine	S. R. Parkhurst, (extended May 1, 1859.)	West Broomfield, N. J	May 1, 1845 Feb. 12, 1861	1,137
Cotton, Machine for opening	W. C. Jillson and A. B. Palmer	Willimantic, Conn	Dec. 20, 1870 Mar. 28, 1871	4,312
Cotton-openers, &c., Feeding-mechanism for	W. E. Whitehead, by self and A. T. Atherton, assignees.	Miles Platting, England, and Lowell, Mass.	Dec. 20, 1870 Jan. 23, 1872	4,722
Cotton opening and cleaning machine	J. E. Van Winkle	Paterson, N. J	June 2, 1863 Apr. 6, 1869	3,363
Cotton-picker	G. A. Howe	Brooklyn, N. Y	Dec. 4, 1855 Dec. 26, 1865	2,137
Cotton-picker	G. A. Howe	Brooklyn, N. Y	Dec. 4, 1855 Dec. 26, 1865	2,138
Cotton-picking machine	W. E. Prall	Washington, D. C	Feb. 27, 1866 Dec. 18, 1866	2,424
Cotton-press	N. Chapman	Mystic River, Conn	Aug. 8, 1854 Jan. 8, 1856	338
Cotton-press	C. J. Fay	North Lincoln, Me	Jan. 31, 1854 July 17, 1855	318
Cotton-press	M. M. Jones	Morrisville, N. Y	May 15, 1860 Mar. 11, 1873	5,319
Cotton-press	P. B. Tyler	New Orleans, La	Jan. 10, 1845 May 1, 1847	92
Cotton-press	P. Williams, by R. A. and J. L. Williams.	Winona, Miss	Jan. 21, 1868 Apr. 4, 1871	4,327
Cotton-press, Steam	A. Baldwin, by the Compressing Company, assignee.	New York, N. Y	May 17, 1870 May 28, 1872	4,913
Cotton-seed huller	P. P. J. Martin	Paris, France	July 31, 1860 Feb. 8, 1870	3,831
Cotton-seed-hulling machine	W. R. Fee, (extended August 11, 1871.)	Cincinnati, Ohio	Aug. 11, 1857 Aug. 26, 1873	5,550
Countersink	S. L. Abbott	Deering, Me	July 25, 1871 Feb. 13, 1872	4,754
Coupling and steering apparatus	J. McCreary	Middletown, Pa	July 23, 1872 Oct. 28, 1873	5,630
Coupling and steering apparatus, Combined	W. Frick, by C. H. Frick, assignee.	Middletown, Pa	Sept. 29, 1868 July 23, 1872	5,000
Cracker-machine	J. Fox	Lansingburgh, N. Y	Feb. 1, 1859 May 4, 1869	3,415
Cracker-machine	J. E. Hawkins, by self and J. C. Horton, assignees.	Lansingburgh and New York, N. Y.	June 25, 1867 Mar. 16, 1869	3,326
Cracker-machine	J. McCollum	New York, N. Y	Mar. 23, 1852 May 31, 1859	730
Cradle	F. Chichester, by self and L. A. Chichester, assignees.	Milwaukee, Wis., and Phœnicia, N. Y.	July 22, 1873 Dec. 16, 1873	5,683
Cradle	L. A. Chichester	Poughkeepsie, N. Y	Oct. 12, 1869 July 22, 1873	5,496
Cradle	L. Sperry and L. Robinson, by L. and A. Sperry, assignees.	East Windsor Hill and New Haven, Conn.	July 20, 1869 Mar. 18, 1873	5,331
Crank-pin box	T. Welch	Churchville, N. Y	Aug. 1, 1865 Feb. 4, 1868	2,857
Crate-bar	D. Lasher, by L. B. Tupper, assignee.	New York, N. Y	Sept. 11, 1860 Apr. 23, 1867	2,573
Cream-freezer	E. C. Seaman	Philadelphia, Pa	Oct. 3, 1848 Nov. 30, 1852	226

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Invention.	Inventor.	Residence.	Date.	No.
Cream from whey, Extracting	K. Egger	South Cortland, N. Y	Sept. 25, 1866 Mar. 12, 1867	2,505
Crib, Horse	H. Eddy	North Bridgewater, Mass	Jan. 6, 1857 Apr. 8, 1862	1,300
Crib, Horse	H. Eddy	North Bridgewater, Mass	Aug. 26, 1862 May 30, 1871	4,405
Crimping-machine	S. G. Cabell, by F. B. Cabell, assignee.	Quincy, Ill	July 17, 1866 Mar. 1, 1870	3,856
Crimping-machine	J. P. Jamison	New York, N. Y	May 15, 1866 Feb. 26, 1867	2,497
Croquet-table	H. R. Heyl	Philadelphia, Pa	June 14, 1870 Sept. 13, 1870	4,118
Crucible for melting steel, &c	G. Nimmo, by A. Pickering, C. R. Vickery, C. R. Atwood, and the Phœnix Manufacturing Company, assignees.	Boston and Taunton, Mass	Aug. 1, 1865 Oct. 24, 1871	4,608
Crucible for metallic baths	B. S. Stokes	Manchester, N. H	July 25, 1865 June 11, 1867	2,642
Crucibles, Manufacture of black-lead	G. Nimmo	Jersey City, N. J	May 31, 1864 May 21, 1867	2,621
Crucibles, Process of repairing	W. F. Sherman	Bucksport, Me	Feb. 16, 1869 July 6, 1869	3,534
Culinary boiler	E. Whiteley	Boston, Mass	Apr. 8, 1856 July 28, 1868	3,058
Culinary pot	J. S. Kidd and M. L. Melville	Brooklyn, N. Y	July 16, 1872 Jan. 21, 1873	5,246
Cultivator	J. Armstrong, jr	Elmira, Ill	Dec. 26, 1865 Mar. 30, 1869	3,348
Cultivator	T. F. Bertrand and P. Sames	Rockford, Ill	Jan. 1, 1867 Mar. 28, 1871	4,309
Cultivator	T. F. Bertrand and P. Sames	Rockford, Ill	Jan. 1, 1867 Oct. 10, 1871	4,581
Cultivator	A. R. Blood, A. Hathaway, and V. R. Beach.	Independence, Iowa	June 30, 1868 May 3, 1870	3,945
Cultivator	J. H. Brinton	Thornbury Township, Pa	Dec. 15, 1868 June 11, 1872	4,939
Cultivator	P. Dennis	Bemus Heights, N. Y	Feb. 23, 1858 Aug. 4, 1863	1,515
Cultivator	W. A. and E. C. Dryden, by A. Adams, assignee.	Sandwich, Ill	July 30, 1867 Feb. 7, 1871	4,252
Cultivator	J. Dundas	Nemaha County, Nebr	Feb. 8, 1859 Oct. 16, 1866	2,380
Cultivator	C. M. and D. E. Hall, said D. E. assignor to said C. M. Hall.	Uniontown, Ill	Mar. 27, 1860 Oct. 14, 1873	5,601
Cultivator	J. Harris	Janesville, Wis	Feb. 23, 1869 Mar. 19, 1872	4,812
Cultivator	J. Harris	Janesville, Wis	Feb. 23, 1869 Mar. 19, 1872	4,813
Cultivator	R. A. Leeper and Z. B. Kidder, by Dills, Hern & Co., assignees.	San José and Atlanta, Ill	Feb. 12, 1861 June 13, 1865	1,996
Cultivator	T. McQuiston	Morning Sun, Ohio	Oct. 18, 1859 May 16, 1871	4,383
Cultivator	R. M. Melton	Criglersville, Va	May 31, 1859 Apr. 16, 1872	4,875
Cultivator	D. J. Noble	New Boston, Ill	Mar. 20, 1866 July 16, 1867	2,683
Cultivator	C. P. Norton, by I. P. Pillsbury, assignee.	Prairie City, Iowa, and Monmouth, Ill.	Oct. 18, 1870 Aug. 26, 1873	5,557
Cultivator	L. Packard	Galesburgh, Ill	Aug. 9, 1859 July 18, 1871	4,474
Cultivator	W. B. Raper, by J. Jackson, assignee.	Carthage, Ill	Jan. 11, 1870 July 30, 1872	5,018
Cultivator	R. B. Robbins	Adrian, Mich	Aug. 5, 1873 Dec. 2, 1873	5,676
Cultivator	J. S. and I. Rowell	Beaver Dam, Wis	July 3, 1866 Mar. 31, 1868	2,909
Cultivator	A. C. Smith	Fayetteville, N. C	Oct. 17, 1871 Aug. 19, 1873	5,547
Cultivator	I. R. Smith, by J. Gerber, assignee.	Rockford, Ill	Apr. 24, 1860 Apr. 26, 1870	3,932
Cultivator	B. Tinkham, by Hapgood & Co., assignees.	Cameron and Chicago, Ill	Dec. 11, 1860 Jan. 10, 1871	4,231
Cultivator	B. Tinkham, by Hapgood & Co., assignees.	Cameron and Chicago, Ill	Dec. 11, 1860 Oct. 17, 1871	4,600
Cultivator	F. J. Underwood, by B. D. Buford, assignee.	Rock Island, Ill	Dec. 29, 1868 Dec. 12, 1871	4,665
Cultivator	W. S. Weir, jr	Monmouth, Ill	Dec. 23, 1862 Oct. 24, 1871	4,610
Cultivator	W. S. Weir, jr	Monmouth, Ill	Feb. 7, 1865 July 25, 1871	4,489
Cultivator	J. A. and S. S. Woodward and T. Mason.	Sandwich, Ill	Sept. 15, 1868 July 6, 1869	3,541
Cultivator and harrow, Combined	E. D. and O. B. Reynolds	North Bridgewater, Mass	Jan. 24, 1865 June 8, 1869	3,490
Cultivator and plow, Combined	L. R. Wright	Schenectady, N. Y	Aug. 11, 1868 Aug. 12, 1873	5,532
Cultivator, Corn	A. Kinyon	Amboy, Ill	Dec. 20, 1864 July 25, 1871	4,485
Cultivator, Horse hoe	A. Webb, by R. B. Dunn and J. C. Flint, assignees, (mesne.)	Bangor, Me	Aug. 8, 1865 Dec. 17, 1867	2,812
Cultivator-teeth	D. Matteson and T. P. Williamson.	Stockton, Cal	Apr. 9, 1867 Aug. 25, 1868	3,097
Cultivator-teeth	D. B. Rogers	Pittsburgh, Pa	Nov. 1, 1845 Sept. 20, 1859	815
Cultivator-teeth	D. B. Rogers, (extended November 1, 1859.)	Allegheny, Pa	Nov. 1, 1845 Feb. 11, 1862	1,274

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Invention.	Inventor.	Residence.	Date.	No.
Cultivator-teeth	C. H. Sayre and G. Klinck, by C. H. Sayre and the Remington Agricultural Works, assignees, (mesne.)	Utica, N. Y	Feb. 12, 1856 June 1, 1869	3,477
Cupola and other furnaces	P. W. Mackenzie, by A. Smith and J. M. Sayre, assignees, (mesne.)	Jersey City, N. J., and New York, N. Y.	Aug. 25, 1857 Feb. 10, 1863	1,403
Cupola and other furnaces	P. W. Mackenzie, by A. Smith and J. M. Sayre, assignees, (mesne.)	Jersey City, N. J., and New York, N. Y.	Aug. 25, 1857 Dec. 27, 1864	1,843
Cupola-furnace	J. and T. Insull	New Haven, Conn	May 8, 1866 Feb. 12, 1867	2,479
Cupola-furnaces, &c	C. Truesdale, by self and W. Resor & Co., assignees.	Cincinnati, Ohio	May 1, 1866 Aug. 6, 1867	2,724
Curry-comb	W. Beach	Philadelphia, Pa	Mar. 13, 1849 Feb. 12, 1850	161
Curry-comb	W. Beach	Philadelphia, Pa	Mar. 13, 1849 Dec. 9, 1856	412
Curry-comb	C. W. Saladee	Putnam, Ohio	Dec. 27, 1864 Jan. 24, 1865	1,854
Curtain-fixture	E. F. Briggs	Boston, Mass	May 19, 1863 July 11, 1865	2,026
Curtain-fixture	C. Eaton	New York, N. Y	Oct. 22, 1872 Sept. 23, 1873	5,576
Curtain-fixture	H. H. Phillips	Buffalo, N. Y	Feb. 27, 1872 May 14, 1872	4,901
Curtain-fixture	L. C. Prindle, by self and H. L. Hull, assignees.	Chicago, Ill	May 16, 1871 Nov. 5, 1872	5,135
Curtain-fixture	L. A. Tripp, deceased, by the Salem Shade-Roller Manufacturing Company, assignee, (mesne.)	Salem, Mass	Aug. 6, 1867 June 3, 1873	5,439
Curtain-fixture	L. White, by S. S. Putnam & Co., assignees.	Hartford, Conn., and Roxbury, Mass.	Jan. 15, 1856 May 22, 1860	965
Curtain fixture, Window	R. B. Burchell	Brooklyn, N. Y	Aug. 7, 1860 Feb. 26, 1861	1,144
Curtain fixture, Window	S. S. Putnam	Boston, Mass	Apr. 15, 1851 Mar. 31, 1857	443
Curtain or shade fixture	W. Campbell, by N. Campbell, assignee.	New York, N. Y	Oct. 11, 1864 Jan. 17, 1871	4,234
Cut-nails from Muntz's metal	S. L. Crocker	Taunton, Mass	Apr. 17, 1849 Aug. 1, 1854	273
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 May 13, 1851	200
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	758
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	759
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	760
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	761
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	762
Cut-off and working-valve, Steam-engine	G. H. Corliss	Providence, R. I	Mar. 10, 1849 July 12, 1859	763
Cut-off gear	G. H. Corliss	Providence, R. I	July 29, 1851 July 26, 1859	780
Cut-off gear for steam-engines	W. L. Colburn, by A. D. Crombie, L. Colburn, and J. M. D. Greene, assignees, (mesne.)	Baltimore, Md., and Funkville, Pa.	Mar. 1, 1864 Aug. 7, 1866	2,327
Cut-off gearing, Variable	J. E. McKay	New York, N. Y	Sept. 12, 1871 Nov. 21, 1871	4,640
Cut-off-valve gear for steam-engines	W. L. Colburn, by A. D. Crombie, L. Colburn, and J. M. D. Greene, assignees, (mesne.)	Baltimore, Md., and Funkville, Pa.	Mar. 1, 1864 Aug. 7, 1866	2,328
Cut-off valves, Operating	G. H. Reynolds, by self and D. B. Hinkley, assignees, M. A. Hinkley, administratrix.	Mystic Bridge, Conn	Feb. 3, 1857 Oct. 16, 1866	2,381
Cutlery	M. Rubel	Chicago, Ill	May 26, 1868 July 27, 1869	3,571
Cutlery handle, Table	J. W. Gardner	Shelburne Falls, Mass	Feb. 1, 1859 Mar. 8, 1859	671
Cutlery, Table	M. Smith	Meriden, Conn	Oct. 3, 1848 Dec. 12, 1848	126
Cutting and sewing oval seams, Mechanism for	A. Judson	Newark, N. J	Sept. 10, 1867 Nov. 21, 1871	4,639
Cutting-boards	R. C. Hussey	Milford, Mass	Aug. 28, 1866 Feb. 26, 1867	2,496
Cutting irregular forms, Machine for	I. S. Barber, by R. J. Marcher, assignee.	Boston, Mass., and New York, N. Y.	May 15, 1855 Dec. 18, 1860	1,103
Cutting irregular forms, Machine for	I. S. Barber, by R. J. Marcher, assignee.	Boston, Mass., and New York, N. Y.	May 15, 1855 Sept. 10, 1861	1,226
Cylinder-polisher	G. Cowing	Seneca Falls, N. Y	Apr. 14, 1863 June 12, 1866	2,282
D.				
Damper for hot-air furnaces	A. H. Mershon	Philadelphia, Pa	May 5, 1868 Jan. 2, 1872	4,695
Damper for stoves, Ventilating	J. Magee, by self and W. J. Towne, assignees.	Chelsea and Newton, Mass.	May 20, 1856 Nov. 18, 1862	1,355
Damper, Stove-pipe	R. M. Breckenridge	West Meriden, Conn	Aug. 7, 1866 Jan. 21, 1873	5,239
Damper, Stove-pipe	G. B. Halsted	Brooklyn, N. Y	Nov. 12, 1867 Nov. 22, 1870	4,183
Dental engine	J. B. Morrison, by Johnston Bros., assignees.	Saint Louis, Mo	Feb. 7, 1871 Nov. 12, 1872	5,143
Dental instrument	I. A. Salmon	Boston, Mass	Feb. 26, 1867 Oct. 21, 1873	5,623

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Invention.	Inventor.	Residence.	Date.	No.
Dental plates, Atmospheric	N. T. Folsom	Laconia, N. H.	Jan. 1, 1867 Mar. 7, 1871	4,290
Dental plates, &c., Composition for	G. F. J. Colburn, by W. M. Welling, assignee.	Newark, N. J.	July 23, 1867 Sept. 16, 1873	5,572
Dental plates, Material for forming	J. A. McClelland	Louisville, Ky	Apr. 28, 1868 Dec. 28, 1869	3,778
Dentist's tool-rack	I. A. Salmon	Boston, Mass.	Feb. 26, 1867 Feb. 8, 1870	3,832
Dentures, Artificial	J. Guttman	Great Falls, N. H.	Mar. 6, 1866 Dec. 4, 1866	2,411
Deodorizing and destroying gases from offal-treating establishments, Process and apparatus for.	J. J. Storer	Boston, Mass	Sept. 3, 1872 Dec. 23, 1873	5,703
Deodorizing-apparatus for closets	H. Moule and H. J. Girdlestone, by the Earth-Closet Company, assignee.	Hartford, Conn	June 15, 1869 Oct. 4, 1870	4,137
Deodorizing water-closets	G. E. Waring, jr., by the Earth-Closet Company, assignee.	Newport, R. I., and Hartford, Conn.	June 1, 1869 Mar. 12, 1872	4,803
Deodorizing water-closets	G. E. Waring, jr., by the Earth-Closet Company, assignee.	Newport, R. I., and Hartford, Conn.	June 1, 1869 Mar. 12, 1872	4,804
Desk and seat, School	C. W. Sherwood	Chicago, Ill	Nov. 6, 1866 Feb. 11, 1868	2,865
Desk and seat, School	C. W. Sherwood	Chicago, Ill	Nov. 6, 1866 Feb. 11, 1868	2,866
Desk, Folding	A. Chandler and S. F. Estell	Davenport, Iowa, and Richmond, Ind.	Feb. 16, 1869 May 25, 1869	3,456
Desk, School	H. L. Andrews	Chicago, Ill	Sept. 15, 1868 Jan. 30, 1872	4,723
Desk, School	C. H. Loomis	New Philadelphia, Ohio	June 21, 1870 Nov. 29, 1870	4,190
Desk, School	J. F. Piehl	Richmond, Ind	Aug. 16, 1870 Dec. 24, 1872	5,199
Desk, School-teacher's	W. C. Carter and J. P. Emery, by J. P. Emery and A. F. Miller, assignees, (mesne.)	Galva, Ill	Sept. 26, 1871 Oct. 22, 1872	5,107
Desk seat, School	G. W. Hildreth	Lockport, N. Y	June 5, 1866 Feb. 21, 1871	4,268
Detergent-compound	W. Berrey, by H. B. Richmond, assignee.	Boston, Mass	Mar. 5, 1870 May 9, 1871	4,370
Dextrine, sugar, &c., Manufacture of	T. A. Hoffmann	Beardstown, Ill	May 25, 1858 June 13, 1865	1,995
Diamond-protector	J. Dickinson	Brooklyn, N. Y	Sept. 3, 1861 May 19, 1863	1,475
Diaper	J. C. Hempel	Baltimore, Md	June 15, 1869 June 13, 1871	4,424
Diaper-pin	J. Heilmann, by I. Sturn, assignee.	New York, N. Y	July 21, 1857 Nov. 10, 1857	507
Die-press	J. Mays and E. W. Bliss	Brooklyn, N. Y	Jan. 28, 1868 Dec. 15, 1868	3,231
Dip-pipe of gas-apparatus, Sealing	R. B. Chapman, by J. C. Chapman, F. J. Davis, and J. F. Farnum, assignees, (mesne.)	Waltham, Mass	Aug. 1, 1871 Mar. 12, 1872	4,797
Direct-acting engine	T. Thatcher	Danville, Pa	Dec. 1, 1863 May 22, 1866	2,256
Direct-acting engines, Operating valves in	W. H. Guild and W. F. Garrison.	Brooklyn, N. Y	Mar. 27, 1855 July 29, 1856	382
Dish-cloth holder, Spring	W. J. Johnson, by H. Johnson, assignee, (mesne.)	Chicago, Ill	Feb. 21, 1860 Jan. 1, 1867	2,442
Disinfecting foul air in vessels, Apparatus for	A. Peteler	New Brighton, N. Y	Apr. 9, 1861	1,654
Disks, Securing cutters to rotary	J. Newton, by H. Disston and J. E. Atwood, assignees, (mesne.)	Philadelphia, Pa., and Trenton, N. J.	June 19, 1855 Aug. 13, 1867	2,728
Distillation	J. F. Collins	New York, N. Y	Apr. 19, 1864 Oct. 30, 1866 Nov. 20, 1866	2,396
Distillation of oils from coal	D. Alter and S. A. Hill, by selves, J. T. Johnson, W. F. Johnson, G. S. Selden, and J. L. Russell, assignees.	Freeport and Pittsburgh, Pa.	Apr. 27, 1858 Feb. 8, 1859	663
Distilling-apparatus	C. A. Krechler	Stockholm, Sweden	July 10, 1849 Feb. 26, 1850	162
Distilling coal, &c., Method of	J. Howarth	Salem, Mass	Sept. 27, 1859 Jan. 19, 1864	1,605
Distilling coal-oil, &c., Apparatus for	H. W. C. Tweddle	Pittsburgh, Pa	Feb. 4, 1862 Nov. 27, 1866	2,404
Distilling essential oils, Tub for	B. P. Van Marter	Lyons, N. Y	Jan. 19, 1869 Aug. 17, 1869	3,612
Distilling hydrocarbon-oils	W. Archer, by self and W. P. Donner, assignees.	New York, N. Y	Sept. 6, 1864 June 13, 1865	1,989
Distilling petroleum, &c., Apparatus and process of.	A. H. Tait and J. W. Avis, by C. Pratt, assignee, (mesne.)	New York, N. Y	Mar. 20, 1866 May 2, 1871	4,366
Distilling petroleum, &c., Apparatus for	C. H. Hall	Binghamton, N. Y	June 26, 1866 Jan. 29, 1867	2,470
Distilling petroleum, &c., Apparatus for	A. H. Tait and J. W. Avis, by C. Pratt, assignee, (mesne.)	New York, N. Y	Mar. 19, 1867 May 2, 1871	4,367
Distilling rock-oil and other hydrocarbons, Process for.	E. F. Prentiss and R. A. Robertson, by E. F. Prentiss, W. D. Philbrick, and W. J. Parsons, assignees.	Philadelphia, Pa., and Boston, Mass.	Mar. 8, 1864 July 17, 1866	2,316
Distilling rock-oil and other hydrocarbons, Process for.	E. F. Prentis and R. A. Robertson, by E. F. Prentiss, W. D. Philbrick, and W. J. Parsons, assignees.	Philadelphia, Pa., and Boston, Mass.	Mar. 8, 1864 July 17, 1866	2,317
Distilling, separating, and purifying petroleum, Process and apparatus for.	E. G. Kelley and A. H. Tait, by C. Pratt, assignee, (mesne.)	New York, N. Y., Jersey City, N. J., and New York, N. Y.	June 18, 1861 May 9, 1871	4,375
Distilling turpentine	A. K. Lee	Galveston, Tex	Sept. 24, 1872 Apr. 15, 1873	5,351

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Invention.	Inventor.	Residence.	Date.	No.
Ditching and grading machine	W. J. Wauchope	Brookfield, Ill	Feb. 19, 1867 Dec. 12, 1871	4,676
Ditching-machine	H. C. Ingraham	Tecumseh, Mich	Oct. 23, 1866 Nov. 5, 1867	2,795
Ditching-machine	D. Whisler	Union Township, Ohio	Dec. 31, 1867 May 5, 1868	2,923
Dividers	O. E. Weatherhead, by A. A., G. L., and S. W. Cooke, assignees.	Ashland, Mass	Dec. 17, 1867 Feb. 18, 1873	5,290
Dock, Floating dry	S. Loveland	New York	Feb. 5, 1847 May 23, 1848	115
Dock, Floating dry	J. Thomas	Elisabethtown, N. J	Dec. 20, 1837 May 1, 1849	135
Door-guard, Elastic	W. N. Clark	Chester, Conn	Nov. 17, 1857 Feb. 10, 1863	1,399
Door-lock	J. H. Butterworth, by G. D. Baldwin, assignee, (extended April 11, 1860.)	Dover, N. J., and New York, N. Y.	Apr. 11, 1846 June 4, 1861	1,193
Door-lock	J. P. Sherwood	Sandy Hill, N. Y	Dec. 17, 1842 Oct. 7, 1856	401
Door-lock	J. P. Sherwood, by C. Adams, assignee.	Sandy Hill and Pittsburgh, Pa.	Dec. 17, 1842 May 13, 1851	201
Door locks or latches, Check-bolt of	A. Bingham	Boston, Mass	Oct. 17, 1842 July 8, 1843	51
Door-plate	J. W. Bliss	Hartford, Conn	July 13, 1858 Oct. 16, 1860	1,066
Door-plate, Index	N. Ames, by E. M. Montague, assignee.	Saugus Centre and Boston, Mass.	July 31, 1860 Feb. 11, 1868	2,860
Door-spring	E. P. Torrey and W. B. Tilton, by A. J. and H. E. Storms, assignees.	Nyack and New York, N. Y.	Sept. 8, 1857 Feb. 10, 1863	1,404
Doors, Hanging	G. W. Holly	Low Moor, Iowa	Oct. 16, 1866 Aug. 20, 1867	2,738
Dough and cutting crackers and biscuit, Machine for rolling.	W. R. Nevins	New York	Mar. 2, 1836 May 9, 1848	112
Dough-kneader	J. C. Loveland	Springfield, Vt	Jan. 16, 1866 June 5, 1866	2,265
Dough-kneading machine	G. R. Baker	Saint Louis, Mo	Oct. 10, 1865 Sept. 25, 1866	2,363
Dough or paste, Aërating	E. Fitzgerald	New York, N. Y	Oct. 8, 1861 Aug. 18, 1863	1,524
Dovetailing machine, Miter	F. A. Gleason, by J. M. Nichols, assignee, (mesne.)	Rome and Brooklyn, N. Y	Mar. 7, 1863 Aug. 30, 1864	1,754
Draft-accelerator or cowl for steamers	P. C. Guion	Cincinnati, Ohio	Nov. 4, 1856 May 26, 1857	465
Draft-regulator	J. Briggs	Roxbury, Mass	Feb. 16, 1864 May 17, 1864	1,671
Draft-regulator and ventilator	G. Chilson	Boston, Mass	Apr. 29, 1862 Aug. 16, 1864	1,739
Drain-pipes, Machine for making	B. S. Pierce and M. R. Pierce	New Bedford, Mass., and New York, N. Y.	Apr. 19, 1859 Feb. 28, 1865	1,897
Drain-pipes, Machine for making	B. S. Pierce and M. R. Pierce	New Bedford, Mass., and Woodstock, N. Y.	Apr. 19, 1859 Jan. 14, 1868	2,841
Drain-pipes, Machine for making	B. S. Pierce and M. R. Pierce	New Bedford, Mass., and Woodstock, N. Y	Apr. 19, 1859 Apr. 27, 1869	3,413
Drawer or tray	M. Fitzgibbons, by self and R. S. Jennings, assignees.	New York, N. Y	Aug. 24, 1869 Nov. 9, 1869	3,715
Drawer-pull label-holder	J. A. Evarts and P. Cinquini, by Bradley & Hubbard, assignees.	West Meriden, Conn	Apr. 11, 1871 May 6, 1873	5,395
Drawers	H. Heath, by H. G. Fisk, T. R. Clark, and T. J. Flagg, assignees.	New York, N. Y	Feb. 4, 1868 July 4, 1871	4,455
Drawing-machines, Applying pressure to top rollers of.	N. E. Hale	Nashua, N. H	Nov. 8, 1859 Feb. 3, 1863	1,391
Dredge-box	A. F. Tripp, by Sidney, Shepard & Co., assignees.	Buffalo, N. Y	Aug. 16, 1870 Oct. 31, 1871	4,615
Dredging-crane	G. Wood and J. King, by selves and W. Lawrence, assignees.	Philadelphia, Pa	Nov. 9, 1858 Dec. 17, 1861	1,246
Dredging-machine	E. B. Bishop	New Orleans, La	Apr. 13, 1858 July 14, 1868	3,028
Dredging-machine	J. H. McLean	Saint Louis, Mo	July 9, 1867 Feb. 4, 1868	2,853
Dress-facing	W. H. Gallup	Troy, N. Y	Apr. 29, 1873 July 15, 1873	5,492
Dress-frame, Lady's	J. R. Palmenberg	New York, N. Y	Jan. 10, 1860 Feb. 7, 1860	894
Dress-spring, Lady's	S. J. Sherman	Brooklyn, N. Y	Feb. 25, 1862 Mar. 20, 1866	2,208
Drill	H. H. Packer	Boston, Mass	June 29, 1858 Jan. 2, 1866	2,140
Drill-bit	W. H. Grier and R. H. Boyd, by H. T. Love, assignee.	New York, N. Y	May 23, 1865 Sept. 29, 1868	3,142
Drilling and bolt-tapping machines	C. W. Coe	Fentonville, Mich	Jan. 20, 1863 Feb. 19, 1867	2,487
Drilling-jars, Construction of	E. Guilford, by J. C. Bryan, assignee, (mesne.)	Titusville, Pa	June 16, 1868 June 22, 1869	3,510
Drilling machine, Steam	J. W. Fowle, (extended March 11, 1865.)	Boston, Mass	Mar. 11, 1851 June 5, 1866	2,275
Drum, Stove-pipe	B. J. Hobson, by self and W. H. Richardson, assignees.	Covington, Ky., and Cincinnati, Ohio.	Oct. 3, 1871 May 28, 1872	4,918
Dryer	B. R. Hawley	Normal, Ill	Nov. 17, 1868 July 16, 1872	4,991
Dryer	F. H. Smith	Baltimore, Md	Feb. 26, 1861 June 30, 1868	3,017
Drying and preserving vegetable and animal substances.	C. Alden, by self and the Alden Fruit-Preserving Company, assignees.	Newburgh, N. Y	Mar. 15, 1870 Oct. 17, 1871	4,592

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Drying-apparatus	F. I. Norton, by self and W. H. Cloud, assignees.	Fremont, Ohio	Apr. 28, 1868 Mar. 16, 1869	3,327
Drying-apparatus	E. Y. Robbins, by self, assignee, (mesne.)	Cincinnati, Ohio	July 19, 1864 Jan. 1, 1867	2,432
Drying apparatus, Steam	W. Ryner, by self and J. C. Hopewell, assignees.	Philadelphia, Pa., and Flemington, N. J.	Aug. 27, 1867 June 9, 1868	2,978
Dust-pan	J. H. Rohrman	Philadelphia, Pa	June 7, 1859 Aug. 6, 1867	2,721
Dye-colors, Manufacture of	M. Howe and H. R. Stevens	Boston, Mass	Oct. 13, 1863 May 16, 1865	1,958
Dye-colors, Manufacture of	M. Howe and H. R. Stevens	Boston, Mass	Oct. 13, 1863 May 16, 1865	1,959
Dye for coloring wool	G. W. Talbot, by A. Knight and G. W. Talbot, assignees.	Providence, R. I	Feb. 1, 1870 June 7, 1870	4,023
Dye-vat	T. Sampson	Providence, R. I	Nov. 8, 1870 Oct. 15, 1872	5,103
Dyes from anthracine	C. Graebe and C. Liebermann	Frankfort-on-the-Main and Berlin, Prussia.	Oct. 5, 1869 Apr. 4, 1871	4,321
Dyeing and printing textile fabrics and yarns with aniline black.	J. Lightfoot, by J. J. M. Pack, assignee.	Burnley, England	May 19, 1863 Feb. 6, 1872	4,746
Dying fabrics with aniline black	J. Lightfoot, by J. J. M. Pack, assignee.	Burnley, England	May 19, 1863 Feb. 6, 1872	4,747
Dyeing, &c., Process of treating fish-water for use in.	J. B. Herreshoff	Bristol, R. I	Dec. 15, 1863 Feb. 16, 1864	1,618
Dyeing yarn from the beam, Machine for	W. Spencer	Lowell, Mass	Sept. 25, 1838 May 28, 1840	20
E.				
Earth-closet	H. Moule and H. J. Girdlestone, by Earth-Closet Company, assignee.	Hartford, Conn	June 15, 1869 Oct. 4, 1870	4,138
Earthen-pipe-molding machine	P. McIntyre	Norwich, Conn	Dec. 7, 1869 Apr. 9, 1872	4,856
Edge-plane, Shoemaker's	I. A. Dunham	North Bridgewater, Mass.	Sept. 22, 1857 July 4, 1871	4,454
Egg-beater	E. P. and J. F. Monroe, by E. P. Monroe, assignee.	New York, N. Y., and Fitchburgh, Mass.	Apr. 19, 1859 Oct. 16, 1860	1,062
Egg-carrier	O. T. Bedell, by W. D. Taber, P. P. Josef, and E. Striber, assignees, (mesne.)	New York, N. Y	July 4, 1865 Sept. 23, 1873	5,575
Egg-carrier	A. H. Bryant	Philadelphia, Pa	Mar. 17, 1868 Nov. 2, 1869	3,698
Egg-carrier	A. H. Bryant	Chicago, Ill	June 14, 1870 May 6, 1873	5,392
Egg-carrier	A. H. Bryant	New York, N. Y	July 16, 1872 Feb. 25, 1873	5,293
Egg-carrier	W. D. Taber, by P. P. Josef and E. Striber, assignees.	Buffalo, N. Y	Nov. 12, 1872 Feb. 25, 1873	5,300
Egg-pan and cake-baker	N. Waterman, by the Russell and Erwin Manufacturing Company, assignee.	New Britain, Conn	Apr. 5, 1859 June 19, 1866	2,289
Egg-pan and cake-baker	N. Waterman, by the Russell and Erwin Manufacturing Company, assignee.	New Britain, Conn	Apr. 5, 1859 Jan. 8, 1867	2,450
Egg stand and boiler	E. P. Woods and D. Sherwood, by C. H. Latham, assignee.	Lowell, Mass	Nov. 12, 1867 Feb. 4, 1873	5,269
Egg stand and boiler	E. P. Woods and D. Sherwood, by C. H. Latham, assignee.	Lowell, Mass	Nov. 12, 1867 Feb. 4, 1873	5,270
Egg stand and boiler	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	Lowell, Mass	Nov. 12, 1867 July 8, 1873	5,483
Elastic fabric, Corded	W. Smith, (extended April 5, 1867.)	New York, N. Y	Apr. 5, 1853 June 30, 1868	3,014
Elastic-tube compression-clasp	W. Bunce, by self and E. A. Day, assignees.	Oberlin, Ohio	Mar. 28, 1871 Oct. 29, 1872	5,113
Electric bath	M. W. House	Cleveland, Ohio	Feb. 18, 1862 Jan. 13, 1863	1,386
Electro-magnetic alarm	A. R. Pope	Somerville, Mass	June 21, 1853 June 8, 1858	566
Electro-magnetic engine	J. P. Tirrell, by E. Gassett, assignee.	Charlestown and Boston, Mass.	Aug. 29, 1871 Nov. 7, 1871	4,632
Electro-magnetic signal	S. F. B. Morse	New York	June 20, 1840 Jan. 15, 1846	79
Electro-magnetic signal	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840 June 13, 1848	117
Electro-magnets, Construction of	H. M. Paine, by the Paine Electro-Magnetic Engine Company, assignee, (mesne.)	Newark, N. J	May 17, 1870 Jan. 24, 1871	4,237
Electrotype-plate	S. P. Knight, (extended May 25, 1872.)	Brooklyn, N. Y	May 25, 1858 Aug. 27, 1872	5,044
Elevator	M. Hanford	Boston, Mass	Feb. 1, 1870 Feb. 13, 1872	4,751
Elevator	N. D. Hinman	Stepney Depot, Conn	Nov. 29, 1864 Aug. 20, 1867	2,751
Elevator	E. T. Hope, by S. I. Thursby, assignee.	Philadelphia, Pa., and Brooklyn, N. Y.	Aug. 18, 1868 Aug. 26, 1873	5,556
Elevator	H. S. Stewart	Newark, N. J	Dec. 12, 1871 Feb. 4, 1873	5,268
Elliptic cushion, Railway-car	S. R. Jones	York, Pa	Apr. 27, 1858 Oct. 26, 1858	615
Elliptic springs, Mode of manufacturing heads for	J. Palmer	Concord, N. H	Sept. 3, 1867 July 21, 1868	3,046
Embalming dead bodies and carcasses	G. W. Scollay	Saint Louis, Mo	Jan. 22, 1867 July 16, 1867	2,691
Emery sticks and wheels, Composition for the manufacture of.	T. J. Mayall, by J. H. Cheever, assignee.	Roxbury, Mass., and New York, N. Y.	May 17, 1859 Mar. 18, 1862	1,288

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Emery-wheels and grinding and polishing surfaces, Forming.	G. E. Van Derburgh, by the New York Quartz Company, assignees, (mesne.)	New York, N. Y	Jan. 7, 1862 Mar. 5, 1867	2,501
Enameling moldings, Machine for	R. Marcher	New York, N. Y	July 26, 1859 Apr. 3, 1860	940
Enameling moldings, Machinery for	R Marcher	New York, N. Y	Oct. 21, 1851 Mar. 15, 1859	674
Enameling picture-frames, Machine for	J. Sperry and C. W. Sherwood, by O. L. Gardner, assignee.	New York, N. Y	Apr. 2, 1861 Jan. 26, 1864	1,609
Engraving and carving machine	T. W. Minter	New York, N. Y	Oct. 29, 1872 June 17, 1873	5,458
Engraving calico-printers' rollers, Machine for	J. and T. Hope, by selves and H. Le Favour, assignees, (mesne,) (extended August 21, 1869.)	Providence County, R. I	Aug. 21, 1855 Feb. 22, 1870	3,849
Envelope	R. K. Kuhn and T. O. Atkinson	Doylestown, Pa	Feb. 11, 1873 Oct. 7, 1873	5,592
Envelope-machine	G. H. Reay, by self and L. Negbaur, assignees, (mesne.)	New York, N. Y	Aug. 25, 1863 Mar. 26, 1867	2,559
Envelope-machine	T. V. Waymoth, by H. C. Berlin and G. H. Jones, assignees.	New York, N. Y	Sept. 25, 1866 Oct. 22, 1867	2,787
Envelope-making machine	E. W. Goodale	Clinton, Mass	Oct. 9, 1855 Apr. 16, 1861	1,170
Envelopes, Machine for gumming and printing	T. V. Waymoth, by H. C. Berlin and G. H. Jones, assignees.	New York, N. Y	June 12, 1866 Sept. 25, 1866	2,366
Envelopes, Machine for gumming and printing	T. V. Waymoth, by H. C. Berlin and G. H. Jones, assignees.	New York, N. Y	June 12, 1866 May 21, 1867	2,616
Epaulet	J. S. Smith	New York, N. Y	Apr. 12, 1859 Nov. 26, 1861	1,238
Equilibrium-spring	C. Shea	Newark, N. J	Oct. 12, 1869 May 17, 1870	3,982
Eraser and pencil-sharpener	A. G. Shaver	Hartford, Conn	Mar. 8, 1859 Aug. 30, 1859	805
Eraser and pencil sharpener	A. G. Shaver	New Haven, Conn	Mar. 8, 1859 Apr. 26, 1864	1,660
Evaporating and clarifying pan, Saccharine-juice	C. Jacobs	Columbus, Ohio	Aug. 6, 1861 Feb. 24, 1863	1,418
Evaporating-apparatus	J. McCracken	Bloomfield, N. J	Mar. 13, 1855 Dec. 27, 1859	872
Evaporating furnace, Sugar-juice	L. Lefebre, (additional improvement Jan. 24, 1860.)	New Orleans, La	Nov. 23, 1858 Mar. 20, 1860	931
Evaporating liquids, Process and apparatus for	J. J. Johnston, by J. Campbell and C. Seibert, assignees.	Columbiana, Ohio, and Allegheny, Pa.	Nov. 14, 1865 Sept. 9, 1873	5,570
Evaporating-pan for cane-juice	D. M. Cook	Mansfield, Ohio	June 22, 1858 Dec. 20, 1859	867
Evaporating-pan for sugar-juice and solutions	W. Hedges, by P. W. Gates, T. Chalmers, and D. R. Fraser, assignees, (mesne.)	Chicago, Ill	Nov. 29, 1859 Oct. 28, 1862	1,350
Evaporating pan, Saccharine-liquid	F. G. Butler, by self and J. B. Williams, assignees.	Bellows Falls, Vt	Mar. 7, 1871 Aug. 29, 1871	4,528
Evaporator and condenser	E. Lynch	Brooklyn, N. Y	July 18, 1848 Mar. 11, 1851	194
Excavating-machine	O. S. Chapman	Canton, Mass	Apr. 16, 1867 June 21, 1870	4,038
Excavating-machine	O. S. Chapman	Canton, Mass	Apr. 16, 1867 June 21, 1870	4,039
Excavator, Manure	A. R. Hurst	Chambersburgh, Pa	Aug. 29, 1854 Apr. 3, 1860	939
Exercising-lift	R. Forward	Cincinnati, Ohio	May 14, 1872 July 23, 1872	4,909
Exhaust-nozzle for steam-engine	R. Norris, by J. Sanders, administrator.	Harrisburgh, Pa	Nov. 24, 1868 May 25, 1869	3,465
Expansive bit	W. A. Clark	Bethany, Conn	May 11, 1858 June 22, 1869	3,516
Expansive bit	W. A. Clark	Woodbridge, Conn	May 11, 1858 Nov. 16, 1869	3,733
Expansive bit	W. A. Clark	New Haven, Conn	May 11, 1858 Dec. 12, 1871	4,668
Explosive compound	A. Nobel, by the Giant Powder Company, assignee, (mesne.)	Hamburg, Germany, and San Francisco, Cal.	May 26, 1868 Oct. 21, 1873	5,619
Explosive compound	A. Noble, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Aug. 14, 1866 Apr. 2, 1867	2,537
Explosive compounds, Process of producing	A. Noble, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Aug. 14, 1866 Apr. 2, 1867	2,538
Extension-table	C. P. Lenz	Poughkeepsie, N. Y	Sept. 7, 1869 May 3, 1870	3,949
Extension-table	F. R. Wolfinger	Chicago, Ill	Nov. 5, 1867 Mar. 9, 1869	3,324
Extension-table, Fall-leaf	J. Dourson	Columbus, Ohio	Mar. 16, 1869 Apr. 25, 1871	4,351
Extension-table slide	M. E. Carter and E. Mets, by M. E. Carter and Hayden & Hahn, assignees, (mesne.)	Syracuse and Rochester, N. Y.	Sept. 6, 1864 Apr. 4, 1871	4,317
Extension-table slide	S. J. Genung	Waterloo, N. Y	Sept. 7, 1869 Dec. 21, 1869	3,771
Extension-table slide	H. Olds	Syracuse, N. Y	Sept. 10, 1867 Dec. 14, 1869	3,761
Extracts, Making	A. Steers	Medina, N. Y	Mar. 11, 1856 Jan. 2, 1866	2,142
Eye-glass	G. A. Cummings, by C. Parker, assignee.	Providence, R. I., and Meriden, Conn.	July 30, 1867 Mar. 31, 1868	2,908
Eyelet for lacing shoes	J. Autenrieth, by C. Goodyear, assignee.	New York, N. Y	Jan. 6, 1863 Feb. 20, 1866	2,176
Eyelet-machine	W. R. Landfear, by the Hartford Eyelet Company, assignee, (mesne.)	Hartford, Conn	Mar. 6, 1866 Nov. 18, 1873	5,662

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Eyelet-machine	T. K. Reed and H. F. Packard, by T. K. Reed and C. E. Howard, assignees.	North Bridgewater and West Bridgewater, Mass.	July 22, 1862 July 19, 1864	1,729
Eyelet-machine	T. K. Reed and H. F. Packard, by T. K. Reed and C. E. Howard, assignees.	North Bridgewater and West Bridgewater, Mass.	July 22, 1862 July 19, 1864	1,730
Eyelet-machine	J. F. Richards, by the American Eyelet Company, assignee.	Attleborough, Mass	Oct. 4, 1864 Nov. 5, 1872	5,136
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1868	2,875
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1868	2,876
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1867	2,877
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1868	2,878
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1868	2,879
Eyeleting-machine	N. Ames and J. E. Gowen, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 Feb. 25, 1868	2,880
Eyeleting-machine	L. Hall, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 June 2, 1868	2,959
Eyeleting-machine	L. Hall, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 June 2, 1868	2,960
Eyeleting-machine	L. Hall, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 June 2, 1868	2,961
Eyeleting-machine	L. Hall, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 14, 1867 June 2, 1868	2,962
F.				
Fabrics, Machine for rolling	T. H. Murphy	New Orleans, La	May 17, 1859 Aug. 6, 1872	5,029
Fan and parasol	W. H. White, by G. Mallory	Bridgeport, Conn	May 15, 1866 Oct. 22, 1867	2,788
Fan, Wheat	D. Clow	Port Byron, N. Y	June 10, 1846 Oct. 30, 1847	104
Fan, Wheat	D. Clow	Port Byron, N. Y	June 10, 1846 May 16, 1848	114
Fan, Wheat	D. Clow	Port Byron, N. Y	Oct. 30, 1847 May 16, 1848	113
Fanning-mill	G. E. Clarke, by Z. G. Simmons, assignee.	Kenosha, Wis	Mar. 14, 1871 Apr. 9, 1872	4,853
Fanning-mill	E. Michael by H. Ogborn, assignee.	La Porte and Richmond, Ind.	Nov. 12, 1867 June 15, 1869	3,504
Fanning-mill, grain and seed separator	H. Ogborn	Richmond, Ind	Nov. 12, 1867 June 15, 1869	3,503
Fare-box	J. Blackadder, by J. B. Slawson, assignee.	New Orleans, La	Sept. 24, 1867 July 23, 1872	4,996
Fare-box	W. H. McLellan, by J. B. Slawson, assignee, (mesne.)	New Orleans, La., and New York, N. Y.	Apr. 16, 1867 Apr. 13, 1869 Dec. 17, 1872	5,194
Fare-box	J. B. Slawson	New York, N. Y	Aug. 7, 1866 Apr. 2, 1872	4,850
Fare-box for cars, &c	W. H. McLellan, by J. B. Slawson, assignee, (mesne.)	New York, N. Y	Apr. 16, 1867 Apr. 13, 1869	3,376
Fare-box, Omnibus	J. S. Reeves, by J. B. Slawson, assignee.	New Orleans, La	Feb. 23, 1858 Aug. 3, 1858	577
Fare box, Passenger	J. B. Slawson	New Orleans, La	July 28, 1857 May 4, 1858	550
Fare box, Passenger	J. B. Slawson	New York, N. Y	July 28, 1857 Jan. 24, 1871	4,240
Fare-box, Vehicle	J. B. Slawson	New York, N. Y	July 5, 1870 Nov. 28, 1871	4,648
Fare on street-railway cars, Collecting	J. H. Dennis	Louisville, Ky	Dec. 17, 1861 Jan. 14, 1862	1,258
Farm-gate	A. C. Teel	Girard, Ill	Dec. 1, 1863 July 2, 1867	2,667
Farmer's boiler	A. N. Merrill	Batavia, Ill	Jan. 18, 1870 July 5, 1870	4,062
Fatty substances, Process of extracting	C. F. A. Simonin and E. W. Coffin, by W. Coffin, assignee.	Glendale, N. J	Apr. 19, 1870 July 12, 1870	4,067
Fatty substances, Process of extracting	C. F. A. Simonin and E. W. Coffin, by W. Adamson, assignee, (mesne.)	Philadelphia, Pa., Glendale, N. J., and Philadelphia, Pa.	Apr. 19, 1870 Aug. 8, 1871	4,508
Faucet	A. Fuller	Cincinnati, Ohio	Oct. 16, 1855 July 5, 1859	752
Faucet	A. Fuller	New York, N. Y	Aug. 30, 1859 Sept. 22, 1868	3,135
Faucet	J. Powell	Cincinnati, Ohio	Mar. 22, 1859 July 5, 1859	753
Faucet	J. Powell	Cincinnati, Ohio	Mar. 22, 1859 Aug. 23, 1859	801
Faucet	J. Powell	Cincinnati, Ohio	Sept. 6, 1859 Apr. 11, 1871	4,338
Faucet	M. Robbins and J. Powell, by J. Powell, assignee.	Cincinnati, Ohio	Dec. 21, 1858 Feb. 21, 1860	905
Faucet	E. A. Sterry	Norwich, Conn	June 12, 1855 June 7, 1870	4,022
Faucet	W. H. Trissler	Cleveland, Ohio	May 3, 1870 June 28, 1870	4,054
Faucet	O. Zwietusch	Milwaukee, Wis	July 16, 1872 Oct. 1, 1872	5,086
Faucet, Measuring	I. Kinman	Freeport, Ill	May 3, 1859 Mar. 5, 1861	1,148
Feed-water apparatus for steam-boilers	G. W. Rains	Newburgh, N. Y	Apr. 24, 1860 July 24, 1860	1,016

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Invention.	Inventor.	Residence.	Date.	No.
Feed-water heater and filter	J. Armstrong	Bucyrus, Ohio	Sept. 8, 1868 Feb. 15, 1870	3,834
Feed-water heater and filter	E. R. Stilwell	Dayton, Ohio	Oct. 4, 1864 Jan. 23, 1866	2,159
Feed-water heater and filter	E. R. Stilwell	Dayton, Ohio	Oct. 4, 1864 Jan. 23, 1866	2,160
Feed-water heater and filter	E. R. Stilwell	Dayton, Ohio	Oct. 4, 1864 Aug. 24, 1869	3,618
Feed-water heater and filter for steam-boilers	J. Armstrong	Toledo, Ohio	June 22, 1869 Sept. 9, 1873	5,569
Feed-water heater for boilers	S. Stucky	New Albany, Ind	July 28, 1868 Feb. 16, 1869	3,305
Feed-water pipe	J. Doyle, by self and A. Reybold, assignees.	Baltimore, Md., and Delaware City, Del.	Jan. 3, 1871 Apr. 18, 1871	4,345
Feed-water pipe	J. Doyle, by self and A. Reybold, assignees.	Baltimore, Md., and Delaware City, Del.	Jan. 3, 1871 Apr. 18, 1871	4,346
Felly bending and setting machine	E. Reynolds, (extended July 11, 1849.)	Haddonfield, N. J	July 17, 1835 Jan. 1, 1851	184
Felt-cloth, Machinery for manufacturing	T. R. Williams, by J. B. Hyde, assignee, (mesne.)	New York, N. Y	Dec. 14, 1840 May 6, 1851	198
Felt-cloth, Machinery for manufacturing	T. R. Williams, by J. B. Hyde, assignee, (mesne.)	New York, N. Y	Dec. 14, 1840 May 6, 1851	199
Felt fabrics, &c., Machinery for making	H. S. Miller	Cincinnati, Ohio	Mar. 5, 1839 Apr. 24, 1849	134
Felted fabric	M. A. Johnson	Lowell, Mass	Jan. 5, 1864 May 22, 1866	2,251
Felting for coats, hats, &c	M. Osborne, (extended May 28, 1856.)	New York, N. Y	May 28, 1842 Nov. 30, 1858	631
Felting-machine	R. Eickemeyer, by J. T. Waring, assignee.	Yonkers, N. Y	Mar. 16, 1869 Apr. 12, 1870	3,916
Female-supporter	A. D. Reeves	Portland, Me	Apr. 1, 1862 July 7, 1868	3,023
Fence	T. E. King	Painesville, Ohio	June 26, 1866 June 4, 1867	2,638
Fence	I. L. Landis	Lancaster, Pa	July 23, 1872 July 29, 1873	5,511
Fence, Farm	C. W. Reeder	Chillicothe, Mo	July 6, 1869 May 17, 1870	3,980
Fence, Portable field	J. G. Hunt	Cincinnati, Ohio	Dec. 16, 1856 June 30, 1857	474
Fence-post	R. Ramsey	New Wilmington, Pa	Dec. 10, 1867 May 26, 1868	2,945
Fence, Wire	H. Jenkins	Brooklyn, N. Y	Feb. 13, 1849 Sept. 2, 1862	1,338
Fences, Constructing wire	J. W. Rappleye	Farmer Village, N. Y	July 4, 1871 Dec. 16, 1873	5,688
Fences, Ornamental connection of parts of iron	H. Jenkins	Cincinnati, Ohio	Jan. 13, 1852 Sept. 6, 1859	807
Fermenting and oxidizing mash, malt, &c	R. D Heureuse	San Francisco, Cal	Aug. 6, 1867 July 21, 1868	3,045
Ferrules, Machine for making wire	H. O. Lothrop, by self and A. H. Gilman, assignees.	Milford, Mass	Oct. 19, 1869 June 20, 1871	4,431
Ferry-boat or flying bridge, Line	W. A. Jordan	Thibodeaux, La	Aug. 5, 1856 June 16, 1857	472
Fertilizer	S. O. Doris	Philadelphia, Pa	Dec. 24, 1861 Jan. 28, 1862	1,261
Fertilizer	D. A. Ter Hoeven	Philadelphia, Pa	June 23, 1868 June 28, 1870	4,052
Fertilizer	D. A. Ter Hoeven	Philadelphia, Pa	June 23, 1868 June 28, 1870	4,053
Fertilizer-attachment	C. C. Foster	Odessa, Del	Apr. 28, 1868 Aug. 3, 1869	3,587
Fertilizers, Machine for reducing cracklings, &c., for.	A. Smith	Cincinnati, Ohio	Nov. 26, 1867 Feb. 14, 1871	4,265
Fertilizers or guano from fish, Manufacture of	O. Lugo	Baltimore, Md	Dec. 14, 1869 Feb. 15, 1870	3,840
Fertilizers, Preparing animal-matter for	A. Smith	Cincinnati, Ohio	Jan. 1, 1867 Mar. 12, 1867	2,507
Fetters and hopples	R. N. Eagle	Washington, D. C	Apr. 7, 1863 Mar. 19, 1867	2,514
Fiber from cane	B. A. Lavender and H. Lowe, by S. C. Long, F. Schumacher, and J. Warner, assignees, (mesne,) (extended April 4, 1868.)	Baltimore, Md., and Cincinnati, Ohio.	Apr. 4, 1854 June 9, 1868	2,983
Fiber from waste felted fabrics, Obtaining	J. F. Greene, by American Water-Proof Cloth Company, assignee, (mesne.)	Brooklyn, N. Y	Apr. 12, 1859 Oct. 10, 1865	2,086
Fibrous and textile substances, Apparatus for washing and bleaching.	J. A. Jillson and H. Whinfield, by J. G. Ford, assignee, (mesne.)	Philadelphia, Pa	Oct. 9, 1855 July 24, 1866	2,320
Fibrous material, Machine for surface-sizing	W. Fuzzard, by self and J. Hatch, assignees.	Chelsea and Malden, Mass	Jan. 12, 1864 Apr. 5, 1864	1,640
Fifth-wheel-bending machine	C. Kieser, by E. Ames, assignee.	Baltimore, Md	July 30, 1861 May 28, 1872	4,919
File-blanks, flyers, &c., Machine for rolling, shaping, and forging metallic.	J. Dodge, by D. Blake, assignee.	Waterford, N. Y	May 1, 1866 Mar. 31, 1868	2,904
File-cutting machine	M. D. Whipple, by the Whipple File Manufacturing Company, assignee, (mesne.)	Cambridge, Mass	Oct. 7, 1856 Feb. 21, 1865	1,881
File, Paper	W. A. Amberg	Chicago, Ill	July 6, 1869 July 16, 1872	4,989
File, Paper	W. Burnet, by W. R. Clough, and N. W. and H. P. Kendall, assignees, (mesne.)	New York and Brooklyn, N. Y.	Jan. 10, 1865 Oct. 8, 1872	5,088
File, Paper	L. P. Keech, by J. B. Smith and E. P. Keech, assignees.	New York, N. Y	Mar. 26, 1872 Aug. 6, 1872	5,025

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File, Paper	E. J. Smith and B. H. Cheever, by E. J. Smith, assignee, (mesne.)	Washington, D. C	Apr. 14, 1868 Apr. 9, 1872	4,864
File, Paper	H. E. Woodbury	Washington, D. C	Aug. 8, 1854 May 12, 1868	2,930
Filter	J. Kedzie	Rochester, N. Y	Jan. 10, 1854 June 16, 1863	1,498
Filter	J. Kedzie	Rochester, N. Y	Jan. 10, 1854 May 10, 1864	1,664
Filter for liquids under pressure	T. R. Sinclaire, by the Sinclaire Rectifying-Machine Company, assignee.	New York, N. Y	Nov. 14, 1871 Oct. 15, 1872	5,104
Filter, Sirup	J. L. Smith, by Marvin, Washburn & Co., assignees.	Alton, Ill	Apr. 3, 1866 Oct. 6, 1868	3,156
Finger-ring, Extension	S. Friend and G. Seiler	New York, N. Y	Dec. 21, 1858 Feb. 22, 1859	668
Fire alarm	C. Dion	Montreal, Canada	Apr. 3, 1866 Dec. 4, 1866	2,409
Fire-alarm	J. R. Tunnicliffe, by J. O. Fowler, jr., assignee.	Hudson, Wis	Apr. 22, 1862 Sept. 12, 1871	4,554
Fire-alarm signal and apparatus	A. Allen	Rochester, N. Y	June 1, 1869 June 7, 1870	4,012
Fire-alarm signal and apparatus	A. Allen	Rochester, N. Y	June 1, 1869 June 7, 1870	4,013
Fire-annihilator	C. T. Jerome	Minneapolis, Minn	July 9, 1867 Jan. 14, 1868	2,839
Fire-arm	L. Colt	Hartford, Conn	Feb. 25, 1836 Oct. 24, 1848	124
Fire-arm	W. W. Hubbell	Philadelphia, Pa	July 1, 1844 Mar. 11, 1851	193
Fire-arm	J. H. Merrill, by the Merrill Patent Fire-arm Manufacturing Company, assignees.	Baltimore, Md	July 20, 1858 Mar. 26, 1861	1,156
Fire-arm	J. H. Merrill, by the Merrill Patent Fire-arm Manufacturing Company.	Baltimore, Md	July 20, 1858 Mar. 26, 1861	1,157
Fire-arm	J. H. Merrill, by the Merrill Patent Fire-arm Manufacturing Company, assignees.	Baltimore, Md	July 20, 1858 Mar. 26, 1861	1,158
Fire-arm	J. H. Merrill, by the Merrill Patent Fire-arm Manufacturing Company, assignees.	Baltimore, Md	July 20, 1858 Mar. 26, 1861	1,159
Fire-arm	H. Smith and D. B. Wesson	Norwich, Conn	Feb. 14, 1854 Oct. 10, 1854	279
Fire-arm, Breech-loading	G. R. Bacon, by Burnside Rifle Company, assignee.	North Providence, R. I	July 21, 1863 Mar. 15, 1864	1,634
Fire-arm, Breech-loading	K. V. Barnekov, by self and G. W. Greene, assignees.	Cornwall, N. Y	June 14, 1870 Mar. 28, 1871	4,308
Fire-arm, Breech-loading	F. E. Boyd and P. S. Tyler	Boston, Mass	Jan. 21, 1868 Dec. 29, 1868	3,245
Fire-arm, Breech-loading	A. E. Burnside, by Burnside Rifle Company, assignee.	Providence, R. I	Mar. 25, 1856 Mar. 10, 1863	1,429
Fire-arm, Breech-loading	B. Burton, by self and W. G. Ward, assignees.	Brooklyn and New York, N. Y.	Dec. 20, 1859 Dec. 21, 1869	3,770
Fire-arm, Breech-loading	B. Burton, by self and W. G. Ward, assignees.	Brooklyn and New York, N. Y.	Aug. 11, 1868 Nov. 2, 1869	3,699
Fire-arm, Breech-loading	L. Geiger, by C. C. Alger, assignee, (mesne.)	New York, N. Y	Jan. 27, 1863 Apr. 17, 1866	2,231
Fire-arm, Breech-loading	W. C. Hicks	New York, N. Y	Mar. 10, 1857 May 9, 1865	1,952
Fire-arm, Breech-loading	W. C. Hicks	Summit, N. J	Mar. 10, 1857 Jan. 18, 1870	3,798
Fire-arm, Breech-loading	W. C. Hicks	Summit, N. J	Mar. 10, 1857 Mar. 1, 1870	3,860
Fire-arm, Breech-loading	W. C. Hicks, (extended March 10, 1871.)	Summit, N. J	Mar. 10, 1857 Sept. 9, 1873	5,564
Fire-arm, Breech-loading	B. F. Joslyn	Worcester, Mass	Aug. 28, 1855 Mar. 3, 1857	433
Fire-arm, Breech-loading	W. R. Landfear, by C. Callaghan, assignee.	Boston, Mass	Sept. 6, 1864 Apr. 30, 1867	2,581
Fire-arm, Breech-loading	R. S. Lawrence, by E. H. Ashcroft, assignee.	Windsor, Vt., and Boston, Mass.	Jan. 6, 1852 May 17, 1864	1,670
Fire-arm, Breech-loading	E. Lindner	New York, N. Y	Mar. 29, 1859 Oct. 2, 1860	1,053
Fire-arm, Breech-loading	E. Lindner	New York, N. Y	Mar. 29, 1859 Oct. 2, 1860	1,054
Fire-arm, Breech-loading, (Division A)	J. V. Meigs	Lowell, Mass	Aug. 18, 1868 June 3, 1873	5,433
Fire-arm, Breech-loading	W. H. and G. W. Miller	West Meriden, Conn	Dec. 26, 1865 Oct. 1, 1867	2,768
Fire-arm, Breech-loading	J. D. S. Newell, by self, A. G. Brice, E. Tomatis, and T. Pickles, assignees.	New Orleans, La	Apr. 6, 1869 Oct. 19, 1869	3,680
Fire-arm, Breech-loading	H. O. Peabody	Boston Mass	July 22, 1862 Mar. 13, 1866	2,197
Fire-arm, Breech-loading	J. Rider, by self and E. Remington & Sons, assignees.	Newark, Ohio, and Ilion, N. Y.	Dec. 8, 1863 May 3, 1864	1,663
Fire-arm, Breech-loading	J. Rider, by self and E. Remington & Sons, assignees.	Newark, Ohio, and Ilion, N. Y.	Feb. 11, 1868 Dec. 31, 1872	5,213
Fire-arm, Breech-loading	B. S. Roberts	United States Army	Sept. 23, 1862 Sept. 5, 1865	2,067
Fire-arm, Breech-loading	B. S. Roberts	United States Army	Sept. 23, 1862 Sept. 5, 1865	2,068
Fire-arm, Breech-loading	B. S. Roberts	United States Army	Sept. 23, 1862 May 3, 1870	3,951
Fire-arm, Breech-loading	B. S. Roberts	United States Army	Sept. 23, 1862 May 3, 1870	3,952

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Fire-arm, Breech-loading	B. S. Roberts	United States Army	Sept. 23, 1862 May 3, 1870	3,953
Fire-arm, Breech-loading	B. S. Roberts	United States Army	June 11, 1867 July 20, 1869	3,562
Fire-arm, Breech-loading	B. S. Roberts	United States Army	June 11, 1867 Nov. 9, 1869	3,722
Fire-arm, Breech-loading	C. Sharps	Philadelphia, Pa	Jan. 25, 1859 Feb. 12, 1867	2,481
Fire-arm, Breech-loading	C. Sharps, by Sharps' Rifle Company, assignee, (extended August 25, 1862.)	Cincinnati, Ohio, and Hartford, Conn.	Sept. 12, 1848 July 5, 1864	1,720
Fire-arm, Breech-loading	C. M. Spencer, by Spencer Repeating-Rifle Company, assignee, (mesne.)	West Manchester, Conn., and Boston, Mass.	July 29, 1862 Apr. 12, 1864	1,652
Fire-arm, Breech-loading	J. Stillman, by E. Whitney, assignee.	Springfield, Mass., and New Haven, Conn.	Oct. 17, 1865 June 25, 1872	4,957
Fire-arm, Breech-loading	W. M. Storm	New York, N. Y	July 8, 1856 Jan. 1, 1867	2,445
Fire-arm, Breech-loading	W. M. Storm	New York, N. Y	July 8, 1856 Jan. 1, 1867	2,446
Fire-arm, Breech-loading	J. C. Symmes, by W. N. Ely, assignee.	Stratford, Conn	Nov. 16, 1858 May 3, 1870	3,946
Fire-arm, Breech-loading	F. J. Vittum and E. M. Stevens, by A. B. Ely, assignee.	Newton, Mass	Oct. 22, 1861 Sept. 28, 1869	3,633
Fire-arm, Breech-loading	R. White	Lowell, Mass	Apr. 3, 1855 May 1, 1866	2,236
Fire-arm, Breech-loading	J. M. Whittemore	Augusta, Me	Oct. 1, 1872 Nov. 26, 1872	5,167
Fire-arm, Breech-loading	S. W. Wood	Cornwall, N. Y	Apr. 1, 1862 Apr. 2, 1872	4,842
Fire-arm, Breech-loading and repeating	H. Smith and D. B. Wesson, by Winchester Repeating-Arms Company, assignee, (mesne,) (extended February 14, 1868.)	Springfield, Mass., and New Haven, Conn.	Feb. 14, 1854 Dec. 30, 1873	5,710
Fire-arm, Breech-loading repeating	C. Sharps	Philadelphia, Pa	Jan. 25, 1859 June 18, 1861	1,199
Fire-arm lock	E. Allen	Grafton, Mass	Nov. 11, 1837 Jan. 15, 1844	60
Fire-arm lock	E. Allen	Norwich, Conn	Nov. 11, 1837 Aug. 3, 1844	64
Fire-arm, Magazine	V. Fogerty, by self, R. E. Robbins, and F. W. Andrews, assignees, (mesne.)	West Roxbury and Boston, Mass.	Feb. 21, 1865 July 9, 1867	2,669
Fire-arm, Magazine	J. Gray, by self, S. S. Bucklin, and W. G. Langdon, assignees, (mesne.)	Medford and Malden, Mass., and Providence, R. I.	Dec. 20, 1864 May 22, 1866	2,249
Fire-arm, Magazine	B. T. Henry, by the Winchester Arms Company, assignee, (mesne.)	New Haven, Conn	Oct. 16, 1860 Dec. 8, 1868	3,227
Fire-arm, Magazine	E. Stabler	Sandy Spring, Md	Mar. 14, 1865 May 23, 1865	1,965
Fire-arm, Many-barreled	C. Sharps	Philadelphia, Pa	Jan. 25, 1859 Feb. 12, 1867	2,480
Fire-arm, Repeating	W. H. Morris and C. L. Brown, by selves and R. White, assignees.	New York and Sing Sing, N. Y., and Lowell, Mass.	Jan. 24, 1860 Aug. 1, 1871	4,496
Fire-arm, Repeating	R. White	Springfield, Mass	Apr. 3, 1855 Oct. 27, 1863	1,557
Fire-arm, Repeating	R. White	Springfield, Mass	Apr. 3, 1855 Oct. 27, 1863	1,558
Fire-arm, Repeating	R. White	Springfield, Mass	Apr. 3, 1855 Oct. 27, 1863	1,559
Fire-arm, Revolving	E. Allen	Worcester, Mass	Sept. 7, 1858 Aug. 16, 1864	1,737
Fire-arm, Revolving	E. Allen	Worcester, Mass	Sept. 7, 1858 Aug. 16, 1864	1,738
Fire-arm, Revolving	E. Allen	Worcester, Mass	July 3, 1860 Feb. 4, 1862	1,268
Fire-arm, Revolving	J. W. Cochran	New York, N. Y	Nov. 10, 1863 Mar. 27, 1866	2,211
Fire-arm, Revolving	S. Crispin	New York, N. Y	Oct. 3, 1865 May 8, 1866	2,238
Fire-arm, Revolving	W. C. Dodge, by H. Smith and D. B. Wesson, assignees.	Washington, D. C., and Springfield, Mass.	Jan. 17, 1865 July 25, 1871	4,483
Fire-arm, Revolving	W. H. Elliot	Plattsburgh, N. Y	May 29, 1860 June 18, 1867	2,650
Fire-arm, Revolving	W. H. Elliot	Plattsburgh, N. Y	Oct. 1, 1861 Apr. 18, 1865	1,936
Fire-arm, Revolving	W. H. Elliot	Plattsburgh, N. Y	Oct. 1, 1861 Apr. 18, 1865	1,937
Fire-arm, Revolving	W. H. Elliot	Plattsburgh, N. Y	Oct. 1, 1861 Apr. 18, 1865	1,938
Fire-arm, Revolving	W. C. Ellis and J. N. White, by E. H. Plant, H. Reynolds, A. P. Plant, and A. Hotchkiss, assignees.	Springfield, Mass., New Haven, Conn., Springfield, Mass., and Southington, Conn.	July 12, 1859 Aug. 25, 1863	1,528
Fire-arm, Revolving	J. Ells	Pittsburgh, Pa	Apr. 25, 1854 Feb. 1, 1859	652
Fire-arm, Revolving	J. Ells, by W. S. Laveley and J. M. Cooper, assignees.	Pittsburgh, Pa	Aug. 1, 1854 Sept. 6, 1859	806
Fire-arm, Revolving	D. Moore, by the Moores' Patent Fire-Arms Company, assignee.	Brooklyn, N. Y	Apr. 28, 1863 June 7, 1864	1,693
Fire-arm, Revolving	D. Moore, by the Moores' Patent Fire-Arms Company.	Brooklyn, N. Y	Apr. 28, 1863 June 7, 1864	1,694
Fire-arm, Revolving	E. K. Root	Hartford, Conn	Dec. 25, 1855 Nov. 1, 1859	846

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Invention.	Inventor.	Residence.	Date.	No.
Fire-arm, Revolving	J. Rupertus	Philadelphia, Pa	July 19, 1864 Oct. 28, 1873	5,631
Fire-arm Revolving	F. P. Slocum, by the Brooklyn Fire-Arms Company, assignee, (mesne.)	Brooklyn, N. Y	Apr. 13, 1864 Dec. 20, 1864	1,839
Fire-arm, Revolving	H. Smith and D. B. Wesson	Springfield, Mass	July 5, 1859 Oct. 9, 1860	1,059
Fire-arm, Revolving	J. Warner, by J. J. Greenough, assignee.	New York, N. Y	June 24, 1856 Apr. 10, 1866	2,223
Fire-arm, Revolving	R. White	Springfield, Mass	Apr. 13, 1858 Oct. 25, 1864	1,802
Fire-arm, Revolving	R. White	Springfield, Mass	Apr. 13, 1858 Apr. 4, 1865	1,928
Fire-arm, Revolving	R. White	Lowell, Mass	Aug. 10, 1869 June 25, 1872	4,958
Fire-arm, Revolving	R. White	Lowell, Mass	Sept. 30, 1873 Dec. 16, 1873	5,691
Fire-arm, Self-loading	A. Ball	Worcester, Mass	June 23, 1863 Mar. 15, 1864	1,635
Fire-arm, Self-loading	G. W. Hughes, by Burnside Rifle Company, assignees.	Bloomington, Ill	Nov. 15, 1864 May 2, 1865	1,043
Fire-arm, Self-loading	C. M. Spencer, by the Spencer Repeating-Rifle Company, assignees, (mesne.)	Boston, Mass	Mar. 6, 1860 May 1, 1866	2,235
Fire-arm swivel-loop	J. Rider, by self and E. Remington & Sons, assignees.	Newark, Ohio, and Ilion, N. Y.	Feb. 11, 1868 Dec. 24, 1872	5,200
Fire-arm, Trigger-operating revolving	S. W. Marston, by J. M. Cooper, assignee.	New York, N. Y., and Pittsburgh, Pa.	Jan. 7, 1851 Aug. 21, 1860	1,029
Fire-arm, Trigger-operating revolving-breech	S. W. Marston, by J. M. Cooper, assignee.	New York, N. Y., and Pittsburgh, Pa.	Jan. 7, 1851 July 26, 1859	783
Fire-arms and appurtenances therefor, Movable breeches for.	B. Chambers	Washington, D. C	July 31, 1849 Apr. 19, 1853	236
Fire-arms, Base pin and lever of revolving	W. H. Elliot	Plattsburgh, N. Y	Dec. 17, 1861 July 5, 1864	1,715
Fire-arms, Concealed trigger for	J. Pecare and J. M. Smith	New York, N. Y	Dec. 4, 1849 Aug. 13, 1850	172
Fire-engine	L. Button and R. Blake	Waterford, N. Y	Nov. 30, 1858 July 12, 1859	755
Fire-engine	J. N. Dennisson, by the Gould Machine Company, assignee, (mesne.)	Newark, N. J	Feb. 7, 1865 May 26, 1868	2,954
Fire-engine, Steam	E. R. and H. S. Cole	Pawtucket, R. I	July 7, 1868 Mar. 30, 1869	3,342
Fire-escape	R. Wyatt, by American Fire-Escape and Fireman's Ladder Company, assignee.	New York, N. Y	June 20, 1865 Aug. 20, 1867	2,735
Fire-extinguisher	W. H. Bate and G. Pinkham	Medford and Cambridge, Mass.	Mar. 30, 1869 Aug. 6, 1872	5,021
Fire-extinguisher	W. Kitson	Lowell, Mass	Oct. 20, 1863 Oct. 18, 1864	1,796
Fire-extinguisher, Automatic	R. Lapham, by P. P. Todd, assignee, (mesne.)	New York, N. Y	June 11, 1867 Apr. 9, 1872	4,855
Fire-extinguisher, Railway, &c	H. C. Stewart and R. T. Bradley, by W. P. Van Deursen and W. C. Davis, assignees.	Cincinnati, Ohio	Mar. 29, 1870 May 24, 1870	3,997
Fire, Extinguishing	P. F. Carlier and A. A. C. Vignon, by A. A. C. Vignon and D. Miles, administrators.	Cambridge, Mass., and Paris, France.	Apr. 13, 1869 July 16, 1872	4,994
Fire-kindling, Composition	E. Bellinger	Mohawk, N. Y	Dec. 13, 1859 Aug. 7, 1866	2,326
Fire-pipe for buildings, Stationary	H. Palmieri, by G. Monges, assignee.	New York, N. Y	Mar. 4, 1873 Oct. 14, 1873	5,608
Fire-place	C. Dodge, by J. B. Ryan, assignee.	Cincinnati, Ohio	Mar. 18, 1856 July 23, 1867	2,698
Fire-place	W. D. Guseman	Morgantown, W. Va	June 30, 1863 May 19, 1868	2,934
Fire-place	C. A. Littlefield, by self and D. Boyle, assignees.	Covington, Ky	Sept. 11, 1860 Sept. 26, 1865	2,074
Fire-place	A. J. Redway	Cincinnati, Ohio	May 7, 1867 Aug. 20, 1867	2,740
Fire-place heater	H. H. Welch	Athens, Ohio	Aug. 8, 1865 July 23, 1867	2,699
Fire-place heater, Base-burning	B. C. Bibb and H. Angee, by B. C. Bibb, D. Stuart, and R. Peterson, assignees.	Baltimore, Md., and Philadelphia, Pa.	Apr. 30, 1861 June 11, 1872	4,941
Fire-place heater, Base-burning	D. Stuart and L. Bridge, by D. Stuart and R. Peterson, assignees.	Philadelphia, Pa	June 23, 1868 May 16, 1871	4,387
Fire-place heaters, Screen for base-burning	D. Stuart and L. Bridge, by D. Stuart and R. Peterson, assignees.	Philadelphia, Pa	June 23, 1868 May 31, 1870	4,009
Fire-place lining	C. Truesdale, by self and W. Resor & Co, assignees.	Cincinnati, Ohio	June 22, 1869 June 7, 1870	4,024
Fire-plug	J. L. Lowry	Pittsburgh, Pa	Feb. 22, 1859 Aug. 14, 1860	1,026
Fire-plug	J. L. Lowry	Pittsburgh, Pa	Feb. 22, 1859 July 20, 1872	5,017
Fires, Lighting, heating, and extinguishing	J. Kidd	New York, N. Y	Jan. 23, 1872 June 25, 1872	4,955
Fish for food, Preparing	G. H. Heron, by E. P. Fowler, assignee, (mesne.)	Washington, D. C	Nov. 5, 1867 Jan. 16, 1872	4,714
Flax, hemp, &c., Cleaning and separating the fibers of.	G. W. Billings	New York, N. Y	Mar. 8, 1864 Sept. 13, 1864	1,761
Flock to felt rubber goods, Machine for applying	I. F. Williams	Bristol, R. I	Nov. 26, 1861 June 4, 1872	4,957

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Invention.	Inventor.	Residence.	Date.	No.
Flock-fabric, Manufacture of	E. L. Simpson, by the Simpson Water-Proof Manufacturing Company, assignees, (mesne.)	Monroe, Conn., and New York, N. Y.	May 24, 1863 May 31, 1864	1,688
Floor for cars and buildings	R. Montgomery	New York, N. Y	Aug. 7, 1860 July 6, 1869	3,543
Floor, Water-proof	T. New	New York, N. Y	Apr. 18, 1871 Jan. 23, 1872	4,719
Flooring, Hollow-tile	B. Kreischer	New York, N. Y	Mar. 21, 1871 Dec. 3, 1872	5,174
Flour-bolt	J. C. Blythe, by self, M. Johnson, and J. S. and C. W. G. Nobles, assignees.	Perry, N. Y	Aug. 7, 1866 June 1, 1869	3,472
Flour-bolt	J. M. Clark	Philadelphia, Pa	July 26, 1859 Oct. 4, 1859	833
Flour-bolt screen	D. Landis	Lancaster, Pa	Oct. 23, 1860 Aug. 19, 1862	1,328
Flour, Bolting	E. Bradfield	Rochester, N. Y	Sept. 15, 1846 Oct. 12, 1858	612
Flour from bran, Machinery for separating	I. Frost and J. Monroe	Albion, Mich	Feb. 27, 1849 Mar. 13, 1855	302
Flour from bran, Machinery for separating	I. Frost and J. Monroe, by H. A. Burr, I. D. Condit, A. Swift, D. Barnum, and J. M. Carr, assignees, (mesne.)	Albion, Mich., and New York, N. Y.	Feb. 27, 1849 May 11, 1858	555
Flour from bran, Machinery for separating	I. Frost and J. Monroe, by A. Swift, assignee, (mesne.)	Albion, Mich., and Cincinnati, Ohio.	Feb. 27, 1849 Feb. 25, 1862	1,280
Flour-mill, Friction-bolt for	L. S. Reynolds	Indianapolis, Ind	Mar. 29, 1859 Mar. 31, 1863	1,443
Flour-packer	N. Kinman, (extended October 30, 1863.)	Cambria, N. Y	Oct. 30, 1849 Apr. 26, 1864	1,639
Flour-packer	S. Taggart	Indianapolis, Ind	Aug. 2, 1859 Nov. 7, 1871	4,626
Flour-sifter	L. S. Nourse, by H. A. Hildreth and W. J. Johnson, assignees.	Barre, Mass	Jan. 3, 1871 Jan. 21, 1873	5,248
Flouring-mill	D. S. Wagener	Penn Yan, N. Y	Sept. 25, 1855 Mar. 13, 1860	930
Flouring-mill	D. S. Wagener	Penn Pan, N. Y	Sept. 25, 1855 Feb. 5, 1861	1,136
Flouring-mill	J. Weis	Bordentown, N. J	Jan. 29, 1856 June 16, 1857	473
Flouring-mills, Distributing-apparatus for	A. T. Clark	Lancaster, Pa	June 30, 1857 Aug. 4, 1857	481
Flouring, Process of	D. P. Bonnell	Tecumseh, Mich	Aug. 14, 1849 July 5, 1853	245
Fluid-meter	N. Aubin	Montreal, Canada	Aug. 19, 1862 Apr. 14, 1868	2,918
Fluting and sad iron	M. H. Knapp, by self and E. F. York, assignees.	Fulton, N. Y	Aug. 2, 1870 June 27, 1871	4,443
Fluting-iron, (Division B)	J. Hewitt	Pittsburgh, Pa	Jan. 28, 1873 Apr. 15, 1873	5,338
Fluting-machine	S. G. Cabell, by F. B. Cabell and S. R. Knox, assignees, (mesne.)	Quincy, Ill	Nov. 10, 1868 Nov. 28, 1871	4,653
Fluting-machine	H. H. Cole	New York, N. Y	June 12, 1866 Apr. 25, 1871	4,349
Fluting-machine	G. E. King	New York, N. Y	Feb 26, 1867 June 23, 1868	3,000
Fluting-machine	S. R. Knox	New York, N. Y	Nov. 20, 1866 Apr. 26, 1870	3,938
Fluting-machine	S. R. Knox and W. D. Corrister, by S. R. Knox, assignee.	New York, N. Y	Apr. 3, 1866 Mar. 1, 1870	3,861
Fluting-machine	J. W. Madden and J. Dodsworth, said Dodsworth by J. Hewitt, assignee, (mesne.)	Buffalo, N. Y	June 18, 1872 May 20, 1873	5,415
Flutter-wheel buckets, Applying water to	D. Rankin	Augusta County, Ga	July 11, 1854 Sept. 26, 1854	277
Fly-trap	J. B. Fuller and G. W. Pierce	Worcester, Mass	Apr. 16, 1850 Sept. 7, 1858	597
Fly-wheel, &c., Metallic	N. K. Wade and J. Kaye	Pittsburgh, Pa	Sept. 4, 1860 July 22, 1862	1,326
Folding-chair	J. A., W. F., and J. N. Dann	New Haven, Conn	Jan. 6, 1863 Feb. 23, 1864	1,623
Folding-chair	B. J. Harrison and J. Condie	New York, N. Y	July 17, 1866 Mar. 10, 1868	2,891
Folding-chair	F. M. Holmes	Boston, Mass	Jan. 31, 1871 Feb. 28, 1871	4,280
Folding-chair	J. D. Merriam, by E. W. Vaill, assignee.	Worcester, Mass	Jan. 6, 1863 May 17, 1870	3,986
Folding-chair	J. H. Swan, by J. G. English and E. F. Mersick, assignees, (mesne.)	New Haven, Conn	Aug. 21, 1860 Aug. 30, 1864	1,750
Folding-table	J. W. Wayne and J. R. Miller	Cincinnati, Ohio	July 12, 1864 Jan. 24, 1865	1,855
Font-fixture	J. H. Landell	Newark, N. J	June 4, 1861 Dec. 17, 1861	1,245
Food, Composition of paste for articles of	R. M. Livingston	Mobile, Ala	June 4, 1867 Aug. 6, 1867	2,720
Food, Desiccating articles of	M. B. Southwick	Saint Hilaire, Canada	Sept. 15, 1853 Aug. 30, 1864	1,753
Food made from beans, pease, &c	S. R. Andres	Troy, N. Y	July 25, 1861 Sept. 9, 1862	1,340
Food, Mode of preparing concentrated	J. H. Schenck	Saint Louis, Mo	Nov. 22, 1862 May 2, 1865	1,945
Food, Preparing wheat and other grain for	R. B. Fitts, by the Nutrio Manufacturing Company, assignee, (mesne.)	Philadelphia, Pa	June 13, 1871 Nov. 11, 1873	5,654
Food, Preparing wheat, corn, and other grain for	R. B. Fitts, by the Nutrio Manufacturing Company, assignee, (mesne.)	Philadelphia, Pa	July 18, 1871 Nov. 11, 1873	5 655

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Forge-fire	J. Evans	New Haven, Conn	Mar. 24, 1863 Sept. 29, 1863	1,544
Forging-apparatus, Portable	J. M. Cayce, by A. Thomas, assignee.	Franklin, Tenn	Aug. 20, 1867 Mar. 22, 1870	3,894
Friction coupling, Double	J. Hendy	San Francisco, Cal	Oct. 11, 1859 Mar. 25, 1873	5,335
Fruit and vegetable crusher	R. Daniels	Woodstock, Vt	Feb. 21, 1871 May 28, 1872	4,915
Fruit and vegetable dryer	M. P. Smith	Baltimore, Md	Sept. 13, 1870 Mar. 5, 1872	4,792
Fruit-basket	H. Carpenter	Williamsburgh, N. Y	Nov. 7, 1871 July 16, 1872	4,982
Fruit-basket	L. Carpenter	Saint Joseph, Mich	May 3, 1870 Oct. 4, 1870	4,145
Fruit-basket	S. R. Conover, by J. A. Mount, assignee.	New York, N. Y	Oct. 1, 1872 Apr. 22, 1873	5,361
Fruit-basket	J. K. Park, by the American Basket Company, assignee, (mesne.)	Marlborough, N. Y., and New Britain, Conn.	May 1, 1860 Sept. 23, 1873	5,579
Fruit-box	T. B. Doolittle, by T. B. Smith and B. N. Cornings, assignees, (mesne.)	Ansonia and New Britain, Conn.	June 19, 1866 May 4, 1869	3,425
Fruit-box	N. Hallock	Flushing, N. Y	Sept. 7, 1858 Jan. 1, 1867	2,441
Fruit box or basket	J. W. Hayes	Newark, N. J	Aug. 12, 1856 Mar. 10, 1868	2,894
Fruit-can	W. W. Lyman	West Meriden, Conn	Dec. 28, 1858 June 16, 1868	2,988
Fruit-can	W. W. Lyman	West Meriden, Conn	June 10, 1862 Mar. 28, 1865	1,920
Fruit-cans, Construction of	J. F. Merrill	Cincinnati, Ohio	July 5, 1870 Feb. 6, 1872	4,735
Fruit-cans, Sealing	J. Sprate, by J. F. Griffen, assignee.	Cincinnati, Ohio, and New York, N. Y.	July 18, 1854 Dec. 22, 1863	1,593
Fruit-dryer	J. P. Miller	Somerville, N. J	Nov. 15, 1870 Aug. 1, 1871	4,495
Fruit-frame	C. Stone	Ravenna, Ohio	Feb. 11, 1868 Nov. 2, 1869	3,710
Fruit-gatherer	V. H. Lyon	Plainfield, Ind	Mar. 3, 1868 Aug. 4, 1868	3,060
Fruit-jar	E. M. Davis, by H. H. and B. F. Collins and H. Wright, assignees.	Pittsburgh, Pa	Oct. 27, 1868 Sept. 14, 1869	3,637
Fruit-jar	J. Focer, by T. H. and S. A. Whitney, assignees.	Glassborough, N. J	June 12, 1866 Dec. 28, 1869	3,781
Fruit-jar	N. S. Gilbert, by S. B. Rowley, assignee.	Philadelphia, Pa	Dec. 17, 1861 Sept. 1, 1868	3,111
Fruit-jar	C. G. Imlay, by S. B. Rowley, assignee, (mesne.)	Philadelphia, Pa	May 23, 1865 Mar. 2, 1869	3,321
Fruit-jar	T. G. Otterson, by S. B. Rowley, assignee, (mesne.)	Millville, N. J., and Philadelphia, Pa.	Nov. 4, 1862 June 9, 1868	2,977
Fruit-jar	T. G. Otterson, by S. B. Rowley, assignee.	Philadelphia, Pa	Nov. 4, 1862 Dec. 20, 1870	4,211
Fruit-jar	H. E. Shaffer	Rochester, N. Y	Aug. 31, 1869 Dec. 28, 1869	3,780
Fruit-jar	H. E. Shaffer	Rochester, N. Y	Nov. 2, 1869 July 4, 1871	4,460
Fruit-jar	J. J. Squire	New London, Conn	Sept. 26, 1865 Aug. 11, 1868	3,080
Fruit-jars, Sealing	E. Harris, by W. W. Lyman, assignee, (mesne.)	West Meriden, Conn	Feb. 9, 1864 Jan. 22, 1867	2,463
Fruits to dry, saccharify, and preserve them, Treating.	C. Alden, by self and Alden Fruit-Preserving Company, assignees.	Newburgh, N. Y	Mar. 15, 1870 Mar. 7, 1871	4,287
Fruits, vegetables, and meats, Drying	F. H. Smith, by self and I. Simmons, assignees.	Baltimore, Md	Feb. 26, 1861 July 11, 1871	4,468
Fruits, vegetables, &c., Drying	F. H. Smith, by M. P. Smith, assignee, (mesne.)	Baltimore, Md	Feb. 26, 1861 Mar. 26, 1872	4,834
Fuel, Artificial	B. F. Penny, by T. B. Curtis, assignee.	Rochester and New York, N. Y.	Feb. 7, 1871 July 9, 1872	4,967
Fuel for producing heat and light, Process and apparatus for using liquid.	T. S. Dickerson and R. M. Whipple.	Chicago, Ill	May 3, 1870 Mar. 18, 1873	5,326
Fur-set box	J. W. Aiken and J. H. Stone, by F. Crane, assignee, (mesne.)	Philadelphia, Pa., Hamilton, Canada, and Bloomfield, N. J.	Nov. 12, 1867 June 3, 1873	5,430
Furnace	D. Harger	Des Moines, Iowa	Nov. 5, 1867 Oct. 21, 1873	5,614
Furnace draft, Regulating hot-air	A. H. Mershon	Philadelphia, Pa	May 29, 1866 Nov. 21, 1871	4,644
Furnace for burning wet fuel	M. Thompson	New Orleans, La	Apr. 10, 1855 Oct. 7, 1856	398
Furnace for burning wet fuel	M. Thompson	New York, N. Y	Apr. 10, 1855 Mar. 31, 1857	446
Furnace or heat generator and radiator	G. Chilson	Boston, Mass	Sept. 26, 1854 Sept. 27, 1864	1,782
Furniture, &c., Stud-fastening for	T. J. Close	Philadelphia, Pa	Feb. 9, 1869 Feb. 27, 1872	4,768
G.				
Gaiter	G. W. Ludlow	Elizabeth, N. J	Apr. 21, 1863 Nov. 10, 1863	1,567
Gaiter, shoe, and boot, Water-proof	T. C. Wales, by the Goodyear Metallic Rubber Shoe Company, assignee.	Naugatuck, Conn	Feb. 2, 1858 June 26, 1866	2,298
Gaiters, Machinery for goring	J. Walden, by G. Platts, assignee.	Newark, N. J	May 7, 1872 July 15, 1873	5,488

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Galvanic battery	E. A. Hill	Chicago, Ill	Aug. 18, 1863 Mar. 12, 1867	2, 502
Galvanic batteries, Liquid for	D. H. Fitch, jr	Litchfield, Ill	June 16, 1863 Sept. 15, 1863	1, 537
Garments, Instrument for drafting	U. L. Leete	New Haven, Conn	Sept. 6, 1870 Jan. 3, 1871	4, 225
Garments, Instrument for drafting	U. L. Leete	New Haven, Conn	Sept. 6, 1870 Jan. 3, 1871	4, 226
Gas and utilizing waste therefrom, Purifying illuminating.	R. J. Everett, by W. H. Adams, assignee.	Bridgeport, Conn	Apr. 23, 1872 July 23, 1872	4, 998
Gas and water pipe joint	C. W. Isbell, by E. Gwyn, assignee.	Tiffin, Ohio	July 24, 1860 May 25, 1869	3, 459
Gas-apparatus	C. Deavs	New York, N. Y	June 25, 1867 July 21, 1868	3, 042
Gas-apparatus	E. A. Pond and M. S. Richardson.	Rutland, Vt	Mar. 27, 1866 Jan. 15, 1867	2, 455
Gas-apparatus	J. H. Steiner	Cincinnati, Ohio	Apr. 9, 1872 May 7, 1872	4, 895
Gas, Apparatus for making water	W. H. Gwynne	White Plains, N. Y	Mar. 11, 1862 June 30, 1863	1, 504
Gas, Apparatus for making water	W. H. Gwynne	White Plains, N. Y	Mar. 11, 1862 June 30, 1863	1, 505
Gas, Apparatus for manufacture of	L. D. Gale, by W. J. Nichols, A. C. Rand, and R. H. Brown, assignees, (mesne.)	New York, N. Y	Nov. 8, 1859 Mar. 8, 1870	3, 872
Gas, Apparatus for manufacture of illuminating	E. Jones, by the American Coal Gas-Light Improvement Company, assignee.	Boston, Mass	June 27, 1871 Mar. 12, 1872	4, 800
Gas, Apparatus for manufacture of illuminating	J. C. Tiffany	Portsmouth, N. H	Nov. 26, 1872 Mar. 11, 1873	5, 324
Gas, Apparatus for mixing	A. Walton	Philadelphia, Pa	Apr. 15, 1862 Feb. 17, 1863	1, 413
Gas, Apparatus for naphthalizing	E. H. Ashcroft	Boston, Mass	June 5, 1860 Aug. 14, 1860	1, 024
Gas fire-log	A. H. Mershon, by G. B. Mershon, assignee.	Philadelphia, Pa	May 7, 1872 Feb. 11, 1873	5, 278
Gas-fittings, Machine for reaming and tapping	H. A. Chapin	Springfield, Mass	July 1, 1856 Dec. 23, 1856	419
Gas from hydrocarbons, Manufacture of	J. Kidd	New York, N. Y	Aug. 23, 1870 Oct. 25, 1870	4, 168
Gas from petroleum, &c., Manufacture and application of.	T. S. Dickerson, by R. M. Whipple, assignee.	Chicago, Ill	Oct. 12, 1869 Mar. 18, 1873	5, 327
Gas from retorts, Apparatus for exhausting	J. Kidd	New York, N. Y	Jan. 23, 1872 June 4, 1872	4, 929
Gas-generator	N. Aubin	Albany, N. Y	Jan. 8, 1856 Apr. 5, 1859	680
Gas-generator	J. J. Ensley, by T. D. Ledyard, assignee, (mesne.)	Toronto, Canada	Aug. 28, 1866 May 28, 1867	2, 628
Gas-generator	P. Kelly, by B. Best, assignee	Dayton, Ohio	July 6, 1869 Apr. 19, 1870	3, 924
Gas generator and carbureter	C. F. Dunderdale	New York, N. Y	June 1, 1869 Nov. 30, 1869	3, 748
Gas-generator, Steam	H. S. Maxim	New York, N. Y	Nov. 26, 867 May 3, 1870	3, 950
Gas-heater	W. F. Shaw	Boston, Mass	Feb. 26, 1856 Oct. 28, 1856	407
Gas heating or cooking apparatus	W. F. Shaw	Boston, Mass	Nov. 4, 1856 May 29, 1860	968
Gas-holder	S. H. and W. J. Wood, by M. R. Cook, assignee, (mesne.)	Jersey City, N. J	Nov. 6, 1855 Jan. 23, 1866	2, 149
Gas, Illuminating	L. L. Hill	Hudson, N. Y	June 17, 1862 June 16, 1863	1, 497
Gas-light globe	T. Trudeau	Ottawa, Canada	July 25, 1871 Nov. 7, 1871	4, 633
Gas, Machine for the manufacture of pneumatic	A. D. Bell, by J. W. Stow, assignee.	San Francisco, Cal	Feb. 28, 1871 May 7, 1872	-4, 890
Gas, Making illuminating	N. Aubin	Albany, N. Y	Jan. 8, 1856 Apr. 5, 1859	679
Gas, Manufacture of	L. D. Gale, by W. J. Nichols, A. C. Rand, and R. H. Brown, assignees, (mesne.)	New York, N. Y	Nov. 8, 1859 Mar. 8, 1870	3, 873
Gas, Manufacture of illuminating	F. King	Richmond, Va	Feb. 11, 1868 July 4, 1871	4, 457
Gas, Manufacture of illuminating	L. Stevens	Washington, D. C	Feb. 23, 1869 Mar. 23, 1869	3, 338
Gas, Manufacture of illuminating	A. W. Wilkinson, by self, and P. H. Stevens, assignees.	New York, N. Y	Feb. 6, 1872 Mar. 19, 1872	4, 821
Gas, Manufacture of illuminating	A. W. Wilkinson, by self, and P. H. Stevens, assignees.	New York, N. Y	Feb. 6, 1872 Nov. 19, 1872	5, 149
Gas-meter	C. C. Lloyd	Philadelphia, Pa	June 20, 1854 Mar. 19, 1861	1, 153
Gas-meter, Dry	A. A. Croll	London, England	Feb. 22, 1853 Oct. 5, 1858	610
Gas on steamboats, &c., Apparatus for supplying	N. Treadwell	New York, N. Y	Sept. 25, 1866 May 7, 1867	2, 593
Gas-pipe fittings, Machine for finishing	C. C. Walworth, by Malleable Iron Fittings Company, assignee, (mesne.)	Boston, Mass., and Brandford, Conn.	Oct. 7, 1856 Aug. 30, 1864	1, 752
Gas, Production of illuminating	J. M. Sanders	Cincinnati, Ohio	July 27, 1858 Mar. 27, 1860	936
Gas-purifier	P. Munzinger, by Morris, Tasker & Co., assignees.	Philadelphia, Pa	Mar. 30, 1869 Jan. 9, 1872	4, 707
Gas-purifiers, Wooden sieve for	W. Combe, by N. O. Hauxhurst, assignee.	New York, and Manat Hill, N. Y.	Oct. 21, 1862 Jan. 27, 1863	1, 389
Gas-regulator	S. Bidwell, by the New York Car and Steamboat Gas Company, assignees, (mesne.)	Chicago, Ill., and New York, N. Y.	Sept. 21, 1858 July 31, 1860	1, 018

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Gas-regulator	W. Kidder	New York, N. Y	Oct. 12, 1852 June 28, 1853	244
Gas-regulator	W. Mallerd	Bridgeport, Conn	Oct. 12, 1858 Mar. 20, 1860	932
Gas-retort	J. Chilcott	Brooklyn, N. Y	Jan. 17, 1865 June 20, 1865	2,060
Gas-retorts, Air-tight joint for	C. F. Dieterich and A. Schüssler.	New York, N. Y	June 6, 1871 May 14, 1872	4,900
Gas-retorts, Tight joint for	N. Aubin	Albany, N. Y	Jan. 8, 1856 Apr. 5, 1859	681
Gas-tube joint	C. Monson	New Haven, Conn	Jan. 19, 1858 Mar. 9, 1858	536
Gas-works, Hydraulic mains of	I. N. Stanley	Brooklyn, N. Y	Aug. 7, 1866 Dec. 17, 1867	2,815
Gases for fuel, &c., Manufacture of inflammable	W. Elmer	New York, N. Y	Aug. 23, 1870 Feb. 18, 1873	5,284
Gaseous bodies, Machinery for compressing	W. A. Royce, (extended May 26, 1871.)	Newburgh, N. Y	May 26, 1857 Dec. 24, 1872	5,201
Gaseous bodies, Machinery for compressing	W. A. Royce, (extended May 26, 1871.)	Newburgh, N. Y	May 26, 1857 Dec. 24, 1872	5,202
Gasifying fuel for heating, &c	W. Elmer	New York, N. Y	Feb. 23, 1869 Feb. 18, 1873	5,283
Gasoliers and drop-lights, Apparatus for suspending.	S. B. H. Vance, by Mitchell, Vance & Co., assignees.	New York, N. Y	Nov. 5, 1867 Jan. 17, 1871	4,236
Gate	J. Johnson	Geneseo, N. Y	Mar. 6, 1860 Jan. 8, 1861	1,121
Gate	E. Kemper	Thorn Township, Ohio	Jan. 24, 1862 Sept. 10, 1867	2,764
Gate-opening apparatus, Electro-magnetic	W. Robinson	Brooklyn, N. Y	July 19, 1870 Feb. 21, 1871	4,274
Gates, Apparatus for opening and closing	S. G. Dugdale	Richmond, Ind	Oct. 11, 1853 Jan. 31, 1854	257
Gates, Closing and opening	W. G. Philips	Newport, Del	Mar. 7, 1854 Aug. 21, 1855	324
Gearing	S. W. and J. F. Palmer, by the Metropolitan Washing-Machine Company.	Auburn, N. Y., and Middlefield, Conn.	May 8, 1866 Apr. 21, 1868	2,920
Glass, Embellishment of	E. Ingraham	Bristol, Conn	Nov. 29, 1870 June 27, 1871	4,441
Glass for mirror and reflector, Silvering	H. B. Walker, by W. A. Walker, assignee.	New York, N. Y	Dec. 14, 1869 July 18, 1871	4,477
Glass, Manufacture of flint	H. Trumbull	Jersey City, N. J	July 3, 1860 Nov. 20, 1860	1,081
Glass-mold	M. Sweeney, J. E. Mathews, and T. Hartley.	Wheeling, W. Va	Jan. 30, 1866 Nov. 3, 1868	3,181
Glass-molds, Machine for operating	W. C. King	Pittsburgh, Pa	May 9, 1871 Sept. 26, 1871	4,571
Glass-pressing mold	H. Dillaway	Sandwich, Mass	Aug. 21, 1841 May 1, 1855	308
Glass, Process of flattening window	J. J. Adams	Winslow, N. Y	Apr. 21, 1832 Aug. 6, 1842	44
Glass, &c., to metal, Attaching	J. Laird, by T. G. Clinton, assignee.	Cincinnati, Ohio	May 22, 1849 Nov. 22, 1853	251
Glass-ware, Manufacture of	J. S. and T. B. Atterbury	Pittsburgh, Pa	Mar. 3, 1868 Apr. 6, 1869	3,357
Glass-ware, Manufacture of hollow	J. S. and T. B. Atterbury and J. Reddick, by J. S. and T. B. Atterbury, assignees.	Pittsburgh, Pa	June 3, 1862 July 20, 1869	3,555
Glass-ware, Manufacture of hollow	J. S. and T. B. Atterbury and J. Reddick, by J. S. and T. B. Atterbury, assignees.	Pittsburgh, Pa	June 3, 1862 July 20, 1869	3,556
Glass-ware with handles, Manufacturing	J. S. and T. B. Atterbury	Pittsburgh, Pa	June 30, 1868 Sept. 15, 1868	3,116
Globe, Solar-time	T. R. Timby	Saratoga Springs, N. Y	July 7, 1863 Aug. 18, 1863	1,525
Glove	R. D. Burr	Kingsborough, N. Y	Aug. 4, 1868 Feb. 28, 1871	4,278
Glue	G. Guenther	Chicago, Ill	June 4, 1867 June 9, 1868	2,972
Glue, Machinery or apparatus for drying	G. Guenther	Chicago, Ill	June 4, 1867 June 9, 1868 Sept. 22, 1868	3,130
Glue, Manufacture of	H. Fleck, by W. A. Fleck, assignee.	Philadelphia, Pa	May 18, 1869 Oct. 19, 1869	3,677
Glue, Manufacture of	E. Goddard, by T. P. Milligan, and T. Higgins.	Brooklyn, N. Y	Oct. 4, 1864 July 12, 1870	4,072
Glue, Manufacture of	G. Guenther	Chicago, Ill	June 4, 1867 June 9, 1868	2,971
Glue, Manufacture of	G. Guenther, by self and E. H. Neymann, assignees.	Chicago, Ill., and New York, N. Y.	Dec. 14, 1869 Mar. 22, 1870	3,834
Glue, Mode of drying	G. Guenther	Chicago, Ill	June 4, 1867 Sept. 22, 1868	3,129
Gold and silver from waste solutions, Apparatus for recovering.	J. Shaw	Bridgeport, Conn	July 8, 1862 July 9, 1872	4,969
Gold and silver from waste solutions, Apparatus for recovering.	J. Shaw, by the Shaw and Wilcox Company, assignee, (mesne.)	Bridgeport, Conn	July 8, 1862 June 15, 1869	3,506
Gold and silver from waste solutions, Process of recovering.	J. Shaw	Bridgeport, Conn	July 8, 1862 July 9, 1872	4,970
Gold and silver from waste solutions, Recovering	J. Shaw	Bridgeport, Conn	July 8, 1862 June 14, 1870	4,030
Gold and silver grinding and amalgamating machine.	W. H. Hepburn and G. K. Peterson.	San Francisco, Cal	Apr. 19, 1864 Nov. 29, 1864	1,827
Governor	C. P. Bowen	Silver City, Idaho	Oct. 31, 1871 June 4, 1872	4,931
Governor	J. Degnon	Cleveland, Ohio	Aug. 7, 1866 Apr. 6, 1869	3,339

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Governor, Hydraulic	J. E. Gillespie, by the Gillespie Governor Company, assignee.	Boston, Mass	Jan. 7, 1862 Dec. 4, 1866	2,410
Governor, Steam-engine	A. Brown	New York, N. Y	Nov. 7, 1865 Aug. 27, 1867	2,753
Governor, Steam-engine	G. W. Clark	Council Bluffs, Iowa	Nov. 14, 1871 Jan. 28, 1873	5,258
Governor, Steam-engine	R. W. Gardner	Quincy, Ill	Aug. 14, 1860 Sept. 5, 1865	2,064
Governor, Steam-engine	R. K. Huntoon, by self and J. A. Lynch, assignees, (mesne.)	Boston, Mass	Dec. 4, 1866 Dec. 14, 1869	3,759
Governor, Steam-engine	J. Judson	Rochester, N. Y	Mar. 4, 1851 Feb. 28, 1865	1,889
Governor, Steam-engine	J. Judson	Rochester, N. Y	Nov. 19, 1861 Dec. 5, 1871	4,655
Governor, Steam-engine	S. H. Miller	Hanovertown, Ohio	Sept. 11, 1860 Mar. 4, 1862	1,285
Governor, Steam-engine	C. T. Porter	New York, N. Y	July 13, 1858 June 21, 1859	740
Governor, Steam-engine	T. Silver	New York, N. Y	Apr. 26, 1859 July 25, 1865	2,039
Grain and seed winnower	G. Westinghouse	Schenectady, N. Y	Mar. 4, 186[illegible] Dec. 16, 1862	1,366
Grain-binder	S. J. Wallace	Carthage, Ill	Apr. 12, 1864 Aug. 14, 1866	2,336
Grain-binder, Automatic	R. D. Brown	Covington, Ind	Apr. 7, 1863 Feb. 21, 1865	1,875
Grain-cleaner	W. Ager	Washington, D. C	July 13, 1869 Jan. 11, 1870	3,788
Grain-cleaner	W. Ager	Washington, D. C	July 13, 1869 Jan. 11, 1870	3,789
Grain-cleaning machine	W. H. Orr, by W. M. Griffith and Co., assignees.	Martin's Ferry, Ohio	July 13, 1858 Nov. 1, 1859	845
Grain-cradle	M. R. Flanders	Parishville, N. Y	June 28, 1859 Jan. 8, 1861	1,118
Grain, Decorticating	W. Ager	Washington, D. C	July 13, 1869 July 4, 1871	4,451
Grain-decorticating machine	W. Ager	Washington, D. C	July 13, 1869 Jan. 11, 1870 July 4, 1871	4,452
Grain-drill	B. F. Field	Sheboygan Falls, Wis	June 3, 1862 Nov. 3, 1863	1,560
Grain-drill	J. Ingels	Milton, Ind	Jan. 6, 1863 May 17, 1870	3,976
Grain-drill	B. Kuhns	Dayton, Ohio	July 4, 1871 June 3, 1873	5,432
Grain-drill	L. Moore, (extended April 18, 1862.)	Ypsilanti, Mich	Apr. 18, 1848 Feb. 3, 1863	1,393
Grain-drill	L. Moore, (extended April 18, 1862.)	Ypsilanti, Mich	Apr. 18, 1848 Feb. 3, 1863	1,394
Grain-drill	L. Moore, (extended April 18, 1862.)	Ypsilanti, Mich	Apr. 18, 1848 Feb. 3, 1863	1,395
Grain-drill	W. P. Penn, J. Geiss, and J. Brosius.	Belleville, Ill	June 27, 1865 June 4, 1867	2,640
Grain-drill	J. H. Thomas, P. P. Mast, and C. O. Gardiner, by J. H. Thomas, and P. P. Mast, assignees.	Springfield, Ohio	Aug. 3, 1869 Aug. 2, 1870	4,091
Grain-drill	L. Wight, by self and O. G. Ewing, assignees.	Whitewater and La Grange, Wis.	Mar. 14, 1871 Aug. 1, 1871	4,499
Grain-drill lifting-apparatus	C. E. Patric	Macedon, N. Y	Dec. 17, 1867 Oct. 27, 1868	3,172
Grain-dryer	J. Massey	New York, N. Y	Apr. 17, 1849 Sept. 11, 1855	328
Grain-dryer	S. Schuyler	Brooklyn, N. Y	Jan. 22, 1861 Mar. 17, 1863	1,434
Grain-dryer	M. C. Cogswell and A. G. Williams.	Buffalo, N. Y	Feb. 18, 1862 Jan. 6, 1863	1,376
Grain-dryer	M. C. Cogswell and A. G. Williams.	Buffalo, N. Y	Feb. 18, 1862 Jan. 6, 1863	1,377
Grain-dryer	M. C. Cogswell and A. G. Williams.	Buffalo, N. Y	Feb. 18, 1862 Jan. 6, 1863	1,378
Grain-dryer	M. C. Cogswell and A. G. Williams.	Buffalo, N. Y	Feb. 18, 1862 Jan. 6, 1863	1,379
Grain-drying	H. G. Bulkley	Kalamazoo, Mich	Mar. 2, 1852 June 27, 1854	267
Grain-elevator	F. Taggart, L. S. Chichester, and C. W. Mills, by L. S. Chichester, G. H. Nichols, and C. W. Mills, assignees, (mesne.)	Brooklyn, N. Y	June 27, 1865 Nov. 24, 1868	3,206
Grain-separator	J. B. Barcalo	Tuscarora, N. Y	Dec. 9, 1862 Aug. 11, 1863	1,519
Grain-separator	M. J. Barcalo	Tuscarora, N. Y	June 23, 1863 Oct. 27, 1861	1,554
Grain-separator	J. L. Booth	Rochester, N. Y	Sept. 20, 1859 Nov. 29, 1864	1,826
Grain-separator	J. L. Booth	Rochester, N. Y	Apr. 8, 1851 Nov. 18, 1862	1,354
Grain-separator	J. L. Booth	Rochester, N. Y	Sept. 20, 1859 Sept. 25, 1860	1,045
Grain-separator	L. Butler	Cobleskill, N. Y	June 3, 1837 Mar. 15, 1839	7
Grain-separator	J. Farguson	Dubuque, Iowa	Nov. 5, 1861 Nov. 10, 1863	1,566
Grain-separator	P. Geiser, (extended October 19, 1866.)	Greencastle, Pa	Oct. 19, 1852 Feb. 19, 1867	2,484

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Grain-separator	J. Gray	Milwaukee, Wis	Dec. 22, 1863 Oct. 18, 1864	1,793
Grain-separator	A. Higley	Warren, Ohio	Dec. 3, 1861 May 3, 1864	1,662
Grain-separator	C. B. Hutchings	Rochester, N. Y	Nov. 20, 1860 June 23, 1863	1,502
Grain-separator	J. A. Krake	Alden, N. Y	Nov. 27, 1855 Oct. 4, 1864	1,786
Grain-separator	J. R. Moffitt	Saint Louis, Mo	Nov. 30, 1852 Mar. 23, 1858	540
Grain-separator	J. R. Moffitt	Piqua, Ohio	Nov. 30, 1852 May 17, 1859	715
Grain-separator	J. R. Moffitt	Piqua, Ohio	Nov. 30, 1852 May 17, 1859	716
Grain-separator	J. R. Moffitt	Piqua, Ohio	Nov. 30, 1852 May 17, 1859	717
Grain-separator	J. R. Moffitt	Piqua, Ohio	Dec. 1, 1857 May 17, 1859	718
Grain-separator	J. R. Moffitt	Piqua, Ohio	Dec. 1, 1857 May 17, 1859	719
Grain-separator	H. Montgomery and S. Howes, by E., H., and M. E. Montgomery, assignees.	Silver Creek, N. Y	Feb. 22, 1859 Oct. 31, 1865	2,098
Grain-separator	H. Montgomery and S. Howes, by S. Howes, A. and N. Babcock, and C. Ewell, assignees, (mesne.)	Silver Creek, N. Y	Feb. 22, 1859 Sept. 12, 1871	4,546
Grain-separator	J. Nash, by self and A. K. Cutts, assignees.	Janesville, Wis	Sept. 27, 1859 July 23, 1861	1,215
Grain-separator	C. Roberts and J. Cox, by C. Aultman, assignee, (mesne.)	Mansfield, Ohio	Mar. 25, 1856 June 15, 1869	3,502
Grain-separator	C. G. and W. Stoll, by W. W. Stoll, assignee, (mesne.)	Brooklyn, N. Y	Apr. 24, 1866 May 24, 1870	3,992
Grain-separator	B. T. Trimmer	Rochester, N. Y	July 27, 1858 Sept. 29, 1863	1,545
Grain-separator	G. B. Turner and J. A. Vaughn, by G. B. Turner, assignee.	Cuyahoga Falls, Ohio	Apr. 9, 1861 Apr. 19, 1870	3,923
Grain-separator	J. Van Houten	Mount Morris, N. Y	Dec. 22, 1863 Apr. 19, 1864	1,657
Grain-separator	J. A. Vaughn	Cuyahoga Falls, Ohio	Apr. 24, 1860 Jan. 8, 1861	1,120
Grain-separator	J. A. Vaughn	Cuyahoga Falls, Ohio	Apr. 24, 1860 June 11, 1861	1,195
Grain-separator	J. A. Vaughn	Cuyahoga Falls, Ohio	Apr. 24, 1860 June 11, 1861	1,196
Grain separator and cleaner	W. M. Arnall	Sperryville, Va	May 1, 1860 July 10, 1860	1,000
Grain separator and scourer	S. Howes and G. E. Throop, by selves, A. and N. Babcock, and C. Ewell, assignees, (mesne.)	Silver Creek, Syracuse, and Silver Creek, N. Y.	Mar. 16, 1858 Mar. 5, 1872	4,793
Grain-separator and thrashing machine	A. T. Dunbar and A. McNaught	Alba, Pa	Feb. 5, 1867 Mar. 16, 1869	3,332
Grain-separators, Shoe for	H. Aldridge	Michigan City, Ind	May 24, 1859 July 31, 1860	1,017
Grain thrashing and separating machine	C. Roberts, by C. Aultman, assignee, (mesne.)	Mansfield, Ohio	Apr. 16, 1861 June 8, 1869	3,486
Grain to different bins, Distributing	C. S. Hamilton	Fond du Lac, Wis	June 21, 1864 Feb. 20, 1866	2,178
Grass and grain cutting machine	W. F. Ketchum, by L. R. Ketchum, executrix, (extended February 10, 1866.)	Buffalo, N. Y	Feb. 10, 1852 July 14, 1868	3,033
Grass and grain cutting machine	W. F. Ketchum, by L. R. Ketchum, executrix, (extended February 10, 1866.)	Buffalo, N. Y	Feb. 10, 1852 July 14, 1868	3,034
Grass-cutting machine	C. H. McCormick	Chicago, Ill	Sept. 21, 1858 June 5, 1860	975
Grass-cutting machine	C. H. McCormick	Chicago, Ill	Sept. 21, 1858 June 5, 1860	976
Grass-cutting machine	C. H. McCormick	Chicago, Ill	Sept. 21, 1858 June 5, 1860	977
Grass, &c., Machine for preparing sisal	G. E. Hopkins and W. B. Shedd	Boston, Mass	Dec. 20, 1870 Dec. 12, 1871	4,671
Grate	D. G. Littlefield	Albany, N. Y	Oct. 9, 1860 Apr. 22, 1862 Oct. 10, 1871	4,586
Grate	J. Old	Pittsburgh, Pa	Mar. 16, 1869 June 21, 1870	4,042
Grate	G. L. Smith	Brooklyn, N. Y	Mar. 29, 1864 Sept. 21, 1869	3,644
Grate-bar	J. R. Smith	Salem, Mass	Nov. 5, 1867 Aug. 8, 1871	4,511
Grate-bar	P. and A. Umholtz	Tremont, Pa	Sept. 24, 1872 Dec. 31, 1872	5,214
Grate-bar	S. Vanayckel	Titusville, Pa	Oct. 31, 1854 June 9, 1868	2,980
Grate-bar, Stove	G. P. Gardiner, by P. P. Stewart, assignee.	Albany and Troy, N. Y	Nov. 18, 1851 May 31, 1864	1,685
Grate, Furnace	C. Kugler, by J. W. Stanton, A. J. Alexander, J. F. Davis, and J. T. Scofield, assignees, (mesne.)	Barnesville, Ohio	Apr. 23, 1872 July 30, 1872	5,014
Grate, Furnace	E. Laregen	Cologne, Prussia	Nov. 14, 1865 Sept. 3, 1867	2,760
Grate, Furnace	E. S. Renwick	Millburn, N. J	Aug. 18, 1868 May 10, 1870	3,967
Grate, Furnace	A. Winterburn	Albany, N. Y	Nov. 3, 1863 Sept. 26, 1865	2,078

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Grate, Stove	W. Hailes	Albany, N. Y	Nov. 18, 1862 Aug. 11, 1863	1,521
Grate, Stove	E. Moneuse and L. Duparquet	New York, N. Y	July 7, 1868 Jan. 18, 1870	3,800
Grate, Stove	I. Smith, by S. H. Ransom & Company, assignees.	Albany, N. Y	Nov. 27, 1860 Dec. 16, 1862	1,365
Grater, Nutmeg	J. L. and D. H. Coles	New York, N. Y	July 28, 1868 Sept. 22, 1868	3,134
Griddle	E. A. Jeffery, by self, assignee, (mesne.)	Trappe, Md	Aug. 27, 1867 Jan. 26, 1869	3,276
Gridiron	O. F. Morrill	Chelsea, Mass	Dec. 6, 1859 Nov. 10, 1863	1,568
Gridiron, griddle, and frying-utensil, Combined	S. Lee	Taunton, Mass	Aug. 29, 1871 Oct. 31, 1871	4,619
Grinding-mill	S. A. Bantz and W. Andrews	Frederick, Md	Dec. 4 1849 Oct. 15, 1850	180
Grinding-mill	E. P. Baugh	Philadelphia, Pa	Mar. 7, 1865 Apr. 30, 1867	2,577
Grinding-mill	N. Burr	Batavia, Ill	Aug. 7, 1860 Feb. 6, 1872	4,741
Grinding-mill	N. Burr	Batavia, Ill	Aug. 7, 1860 Feb. 6, 1872	4,742
Grinding-mill	N. Burr	Batavia, Ill	Aug. 24, 1869 Feb. 6, 1872	4,739
Grinding-mill	N. Burr	Batavia, Ill	Aug. 24, 1869 Feb. 6, 1872	4,740
Grinding-mill	A. Felton	Troy, N. Y	Jan. 2, 1855 Jan. 29, 1856	347
Grinding-mill	E. Harrison	New Haven, Conn	June 6, 1854 Nov. 16, 1858	625
Grinding-mill	G. Sanford	Poughkeepsie, N. Y	Mar. 9, 1858 Mar. 1, 1859	670
Grinding-mill	A. Verbeck, by S. Wells, assignee, (mesne.)	Sterling, Ill	Sept. 20, 1870 Sept. 10, 1872	5,056
Grinding-mill, Portable	L. Scott	Saint Louis, Mo	May 16, 1854 July 10, 1855	316
Grinding tools, Machinery for	W. Hovey	Worcester, Mass	Sept. 23, 1845 June 19, 1847	96
Grindstone-journal-box	T. W. Brown, by Harbster Brothers & Co., assignees, (mesne.)	Boston, Mass., and Reading, Pa.	Oct. 16, 1866 Mar. 28, 1871	4,310
Grist-mill and cotton-seed huller, Combined	J. W. Smith	Columbus, Ga	Apr. 25, 1871 June 27, 1871	4,446
Grist-mill grinding-plate	H. Shaw and W. D. Leavitt	New Orleans, La	July 14, 1868 Sept. 15, 1868	3,122
Gum and palate, Artificial	J. A. Cummings, by the Dental Vulcanite Company, assignee.	Boston, Mass	June 7, 1864 Jan. 10, 1865	1,848
Gum and palate, Artificial	J. A. Cummings, by the Dental Vulcanite Company, assignee.	Boston, Mass	June 7, 1864 Mar. 21, 1865	1,904
Gun-barrels, Manufacture of	J. H. Burton, by J. T. Ames, assignee.	Leeds, England	Mar. 20, 1860 Dec. 26, 1871	4,686
Gun, Blast	C. Kirchhof	Newark, N. J	Apr. 21, 1868 July 27, 1869	3,569
Gun-carriage	J. B. Eads	Saint Louis, Mo	Aug. 17, 1869 July 18, 1871	4,471
Gun-carriage	J. B. Eads	Saint Louis, Mo	Aug. 17, 1869 July 18, 1871	4,472
Gun-carriage	J. W. Wilson	New York, N. Y	Mar. 1, 1870 Oct. 11, 1870	4,154
Gun-lock	J. Hults	Berlin Township, Ohio	May 16, 1854 July 4, 1854	270
Gun, Magazine	E. H. Graham	Manchester, N. H	Oct. 4, 1853 Jan. 8, 1861	1,123
Gun, Magazine, repeating, and needle	E. Lindner	New York, N. Y	June 27, 1854 Dec. 23, 1856	415
Gun, Magazine, repeating, and needle	E. Lindner	New York, N. Y	June 27, 1854 Dec. 23, 1856	416
Gun, Walking-stick	J. Buckman, jr	New York, N. Y	Aug. 4, 1857 Feb. 16, 1858	527
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Sept. 15, 1863	1,536
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Nov. 8, 1864	1,808
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Nov. 8, 1864	1,809
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Nov. 8, 1864	1,810
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Nov. 8, 1864	1,811
Guns and gun-towers, Operating	J. B. Eads	Saint Louis, Mo	Mar. 31, 1863 Nov. 8, 1864	1,812
Gunpowder, Machine for manufacturing	P. A. Oliver	New York, N. Y	Apr. 7, 1868 Nov. 24, 1868	3,209
Gunstocks, Machine for boring and drilling	J. G. Pusey, by the New York Engraving and Carving Company, assignee, (mesne.)	New York, N. Y	Feb. 17, 1863 Dec. 4, 1866	2,413
H.				
Hair-crimper	W. F. George, by A. A. Livingston, assignee.	New York, N. Y	Jan. 29, 1861 Sept. 15, 1863	1,539
Hair for ladies' head-dresses, Imitation	L. F. Shaw	New York, N. Y	Oct. 26, 1869 June 14, 1870	4,031
Halter-ring	L. C. Chase	Boston, Mass	Apr. 30, 1861 July 28, 1863	1,514
Hame, Harness	W. H. Bustin	Boston, Mass	Apr. 27, 1869 Apr. 30, 1872	4,883

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Hame, Harness	J. Holt and S. G. Cheever	Boston, Mass	Apr. 30, 1867 July 30, 1872	5,012
Hame-making machine	H. Burt and J. T. Hedden	Newark, N. J	Feb. 17, 1857 Jan. 4, 1859	644
Hame-tug clip	J. B. Welpton	Tabor, Iowa	Apr. 2, 1872 Apr. 22, 1873	5,376
Hammer, Power	J. Palmer	Concord, N. H	Jan. 9, 1872 Apr. 29, 1873	5,381
Hammer, Power	T. Shaw, by P. S. Justice, assignee.	Philadelphia, Pa	Feb. 27, 1866 Nov. 27, 1866	2,398
Hammer, Steam	R. R. Taylor	Reading, Pa	Jan. 1, 1861 May 21, 1861	1,191
Hammer, Tack	T. A. Conklin	New Britain, Conn	Dec. 10, 1867 Feb. 23, 1869	3,308
Hammer, Trip	J. C. Butterfield and J. Hay	Chicago, Ill	Oct. 18, 1870 July 18, 1871	4,470
Hammer, Trip	B. Hotchkiss, by self, assignee, (mesne.)	New Haven, Conn	June 14, 1859 Nov. 6, 1866	2,389
Hams, Composition for covering	H. Billings	Beardstown, Ill	Apr. 9, 1850 Mar. 25, 1851	195
Handcuff	W. V. Adams, by G. W. Reed, assignee.	New York, N. Y	June 17, 1862 Apr. 5, 1864	1,650
Hand-stamp	B. B. Hill	Chicopee, Mass	Nov. 6, 1866 Apr. 19, 1870	3,927
Harness for horses	J. Rouse	Palmyra, N. Y	Sept. 27, 1859 Apr. 4, 1871	4,325
Harness-holdback	J. C. Covert	Townsendville, N. Y	Oct. 1, 1867 Nov. 12, 1872	5,141
Harness-loop	A. M. Osborn	Girard, Pa	Aug. 15, 1871 Apr. 16, 1872	4,871
Harness, Machine for creasing and blacking leather for.	A. Stempel	New York, N. Y	Nov. 2, 1858 May 31, 1859	731
Harness-pad	J. Hughes	Newark, N. J	June 22, 1869 Oct. 28, 1873	5,628
Harness-pad	J. Hughes	Newark, N. J	Feb. 18, 1868 Oct. 28, 1873	5,629
Harness-ring	H. N. Eames, by H. R. Olmstead and R. W. Jones, assignees.	Newport and Syracuse, N. Y.	Mar. 1, 1870 Mar. 14, 1871	4,295
Harness-saddle	J. T. Denniston	Lyons, N. Y	Nov. 20, 1846 Sept. 9, 1856	394
Harness-saddle	A. H. Gazlay, by O. B. North & Co., assignees, (mesne.)	New Britain, Conn	Mar. 14, 1848 Oct. 28, 1856	408
Harness-saddle	G. Marshall	Indiana, Pa	Nov. 5, 1867 Oct. 15, 1872	5,101
Harness-saddle tree	S. E. Tompkins and J. Maclure, by S. E. Tompkins, assignee.	Sing Sing, N. Y., and Newark, N. J.	Feb. 1, 1859 Jan. 2, 1872	4,699
Harness, Securing buckles and rings to	R. B. Anderson	Oneida, Ill	June 23, 1868 Dec. 1, 1868	3,216
Harness-snap	R. W. Jones	Syracuse, N. Y	Nov. 3, 1863 June 7, 1864	1,691
Harness-trimmings	J. Bauer	Newark, N. J	July 4, 1871 Oct. 10, 1871	4,580
Harness-trimmings, Manufacture of rubber-coated	A. Albright	Newark, N. J	Feb. 13, 1872 Nov. 26, 1872	5,155
Harness-trimmings, Manufacture of rubber-coated	A. Albright	Newark, N. J	Feb. 13, 1872 Nov. 26, 1872	5,156
Harrow	F. Granger	Lockport, Ill	July 17, 1866 Nov. 20, 1866	2,395
Harrow	S. S. Hogle	Cleveland, Ohio	Mar. 17, 1857 Aug. 30, 1859	802
Harrow	D. W. Shares	Hamden, Conn	Jan. 27, 1857 Mar. 12, 1861	1,150
Harrow, Rotary	O. D. Barrett	Washington, D. C	Oct. 4, 1859 Oct. 15, 1867	2,780
Harrow, Seeding	H. Hewitt, by W. A. Sanford, assignee.	San Francisco, Cal., and Potsdam, N. Y.	Mar. 27, 1860 Mar. 19, 1861	1,151
Harrow teeth, Rotary	J. F. Chase	Westbrook, Me	Mar. 28, 1871 July 11, 1871	4,464
Harvester	S. S. Allen, by J. R. Parsons, assignee of executors, (extended April 7, 1871.)	Hoosick Falls, N. Y	Apr. 7, 1857 Oct. 10, 1871	4,582
Harvester	S. and J. H. Barley	Longwood, Mo	June 19, 1860 Jan. 22, 1861	1,130
Harvester	L. M. Batty, by M. G. Hubbard, assignee.	Syracuse, N. Y	Sept. 19, 1865 Apr. 27, 1869	3,406
Harvester	L. M. Batty, by M. G. Hubbard, assignee.	Syracuse, N. Y	Sept. 19, 1865 Apr. 27, 1869	3,407
Harvester	L. M. Batty, by W. K. Miller, assignee.	Canton, Ohio	Sept. 19, 1865 Sept. 17, 1872	5,058
Harvester	L. M. Batty, by W. K. Miller, assignee.	Canton, Ohio	Jan. 31, 1871 Mar. 11, 1873	5,316
Harvester	T. Berry, by J. F. Seiberling, assignee.	Louisburgh, Ky., and Akron, Ohio.	June 22, 1858 Jan. 16, 1872	4,710
Harvester	T. Berry, by J. F. Seiberling, assignee.	Louisburgh, Ky., and Akron, Ohio.	June 22, 1858 Jan. 16, 1872	4,711
Harvester	O. Billings	Elyria, Ohio	Nov. 12, 1861 Aug. 19, 1873	5,538
Harvester	J. W. Bope	Saint Louis, Mo	Jan. 17, 1865 May 28, 1867	2,625
Harvester	T. Brett	Geneva, Ohio	Nov. 17, 1863 July 23, 1867	2,693
Harvester	C. R. Brinckerhoff	Batavia, N. Y	May 24, 1859 May 22, 1860	966
Harvester	C. B. Brown, by J. H. Myers, assignee, (extended July 11, 1868.)	Philadelphia, Pa	July 11, 1854 June 8, 1869	3,493

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Harvester	R. Brown	Newark, Ohio	June 18, 1861 Sept. 20, 1864	1,769
Harvester	A. C. Brownlich, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Jan. 4, 1859 Apr. 30, 1867	2,582
Harvester	A. C. Brownlich, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Jan. 4, 1859 Apr. 30, 1867	2,583
Harvester	R. Bryson	Schenectady, N. Y	Apr. 8, 1862 Aug. 27, 1867	2,735
Harvester	T. D. Burrall	Geneva, N. Y	Mar. 18, 1856 Apr. 12, 1859	690
Harvester	J. Butter	Buffalo, N. Y	Feb. 7, 1860 June 13, 1871	4,420
Harvester	J. S. Butterfield, by A. J. Holman, assignee.	Philadelphia, Pa	Mar. 2, 1858 Jan. 15, 1867	2,452
Harvester	J. S. Butterfield, by A. J. Holman, assignee.	Philadelphia, Pa	Mar. 2, 1858 Jan. 15, 1867	2,453
Harvester	W. and I. Cogswell, jr., by W. Cogswell and W.H.W.Cushman, assignees, (mesne.)	Ottawa, Ill	Dec. 6, 1859 June 20, 1865	2,007
Harvester	S. Comfort, jr., by A. R. Reese, assignee.	Morrisville, Pa., and Phillipsburgh, N. J.	Apr. 1, 1856 Mar. 19, 1867	2,582
Harvester	A. J. Cook, by C. Wheeler, jr., assignee.	Enon, Ohio, and Poplar Ridge, N. Y.	May 28, 1854 July 5, 1864	1,722
Harvester	A. J. Cook, by C. Wheeler, jr., assignee.	Enon, Ohio, and Poplar Ridge, N. Y.	May. 28, 1854 July 5, 1864	1,723
Harvester	C. Crook	New Hope, Pa	May 5, 1857 May 4, 1858	548
Harvester	C. Crook, by J. I. Hendryx, assignee, (mesne.)	Cooperstown, N. Y	May 5, 1857 Apr. 20, 1869	3,393
Harvester	C. Crook, by J. I. Hendryx, assignee, (mesne.)	Cooperstown, N. Y	May 5, 1857 Apr. 20, 1859	3,394
Harvester, (Division A)	C. Crook, by M. G. Hubbard, assignee, (extended May 5, 1871.)	New Hope, Pa	May 5, 1857 May 27, 1873	5,428
Harvester, (Division B)	C. Crook, by M. G. Hubbard, assignee, (extended May 5, 1871.)	New Hope, Pa	May 5, 1857 May 27, 1873	5,429
Harvester	B. Densmore, by D. M. Osborne and W. A. Kirby, assignees.	Sweden, Auburn, and Buffalo, N. Y.	Feb. 10, 1852 Jan. 28, 1862	1,262
Harvester	J. A. Dodge	Auburn, N. Y	June 26, 1866 Mar. 31, 1868	2,905
Harvester	R. Dutton	Dayton, Ohio	Apr. 27, 1858 Aug. 27, 1861	1,224
Harvester	R. Dutton	Brooklyn, N. Y	Mar. 19, 1861 Sept. 13, 1864	1,762
Harvester	R. Dutton	Brooklyn, N. Y	Mar. 19, 1861 Sept. 13, 1864	1,763
Harvester	R. Dutton	New York, N. Y	Mar. 19, 1861 Aug. 8, 1865	2,047
Harvester	R. Dutton	Yonkers, N. Y	Feb. 12, 1861 Sept. 20, 1870	4,124
Harvester	R. Dutton	Yonkers, N. Y	Feb. 12, 1861 Sept. 20, 1870	4,125
Harvester	R. Dutton	Yonkers, N. Y	Mar. 19, 1861 Oct. 4, 1870	4,139
Harvester	R. Dutton	Yonkers, N. Y	Feb. 12, 1861 Dec. 27, 1870	4,217
Harvester	M. Easterbrook, jr	Geneva, N. Y	May 22, 1866 Sept. 4, 1866	2,348
Harvester	G. Esterly, (extended March 24, 1871.)	Whitewater, Wis	Mar. 24, 1857 Oct. 29, 1872	5,115
Harvester	G. Esterly, by J. F. Seiberling, assignee.	Akron, Ohio	Apr. 19, 1859 May 3, 1870	3,955
Harvester	G. Esterly, by J. F. Seiberling, assignee.	Akron, Ohio	Apr. 19, 1859 May 3, 1870	3,956
Harvester	G. Esterly, by J. F. Seiberling, assignee.	Akron, Ohio	Apr. 19, 1859 May 3, 1870	3,957
Harvester	H. Fisher, by C. Aultman, assignee, (mesne.)	Canton, Ohio	Jan. 26, 1864 Mar. 30, 1869	3,349
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Apr. 17, 1855 May 23, 1865	1,967
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Apr. 17, 1855 May 23, 1855	1,968
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Apr. 17, 1855 May 23, 1865	1,969
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Apr. 17, 1855 May 23, 1865	1,970
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	Apr. 17, 1855 May 23, 1865	1,971
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	July 20, 1852 May 23, 1865	1,972
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	July 20, 1852 May 23, 1865	1,973
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	July 20, 1852 May 23, 1865	1,974
Harvester	E. B. Forbush, by C. Wheeler, jr., assignee, (mesne.)	Poplar Ridge, N. Y	July 20, 1852 May 23, 1865	1,975
Harvester, (Division A)	T. N. Foster, by H. H. Doubleday, assignee.	South Pass, Ill	Oct. 2, 1860 Oct. 14, 1873	5,606
Harvester, (Division B)	T. N. Foster, by H. H. Doubleday, assignee.	South Pass, Ill	Oct. 2, 1860 Oct. 14, 1873	5,607
Harvester	W. Gage, by self and A. Whiteley, assignees.	Buffalo, N. Y., and Springfield, Ohio.	Sept. 16, 1856 Sept. 22, 1868	3,128
Harvester	W. Gage, by self and A. Whiteley, assignees.	Buffalo, N. Y., and Springfield, Ohio.	Sept. 16, 1856 Nov. 10, 1868	3,189
Harvester	C. W. Glover, by J. G. Perry, assignee, (mesne.)	Roxbury, Conn., and Kingston, R. I.	Oct. 14, 1856 July 28, 1868	3,055

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Invention.	Inventor.	Residence.	Date.	No.
Harvester	J. Gove	Brattleborough, Vt	Dec. 27, 1859 Jan. 15, 1861	1,129
Harvester	M. Hallenbeck, by A. Blaker, assignee.	Phillipsburgh, N. J	Apr. 17, 1860 July 2, 1872	4,960
Harvester	R. Hoffheins	Dover, Pa	Nov. 3, 1863 Feb. 28, 1865	1,888
Harvester	R. Hoffheins	Dover, Pa	Nov. 3, 1863 Nov. 7, 1865	2,102
Harvester	R. Hoffheins	Dover, Pa	May 20, 1862 Apr. 10, 1866	2,224
Harvester	R. Hoffheins	Dover, Pa	Nov. 3, 1863 Feb. 19, 1867	2,490
Harvester	L. B. Hoit and M. Laflin, by M. Laflin, assignee.	Cedar Falls, Iowa, and Chicago, Ill.	July 20, 1869 Mar. 5, 1872	4,782
Harvester	H. L. Hopkins	Eaton, N. Y	Dec. 17, 1861 July 2, 1867	2,664
Harvester	S. Hull, by self and W. Van Anden, assignees.	Poughkeepsie, N. Y	Nov. 16, 1858 Apr. 28, 1863	1,466
Harvester	S. Johnston	Syracuse, N. Y	Nov. 4, 1862 Jan. 19, 1869	3,267
Harvester	E. Jones	Chester Cross Roads, Ohio	Mar. 27, 1860 Aug. 23, 1864	1,743
Harvester	E. Jones	Chester Cross Roads, Ohio.	Mar. 27, 1860 Aug. 23, 1864	1,744
Harvester	E. Jones	Chester Cross Roads, Ohio.	Mar. 27, 1860 Aug. 23, 1864	1,745
Harvester	P. H. Kells, by T. H. Dodge, assignee.	Hudson, N. Y., and Washington, D. C.	Mar. 24, 1854 Aug. 13, 1861	1,220
Harvester	P. H. Kells, by T. H. Dodge, assignee.	Hudson, N. Y., and Washington, D. C.	Mar. 21, 1854 Aug. 13, 1861	1,221
Harvester	P. H. Kells, by T. H. Dodge, assignee.	Hudson, N. Y., and Washington, D. C.	Mar. 21, 1854 Aug. 13, 1861	1,222
Harvester	P. H. Kells, by T. H. Dodge, assignee.	Hudson, N. Y., and Washington, D. C.	Mar. 21, 1854 Aug. 13, 1861	1,223
Harvester	W. A. Kerby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y.	Nov. 15, 1859 July 9, 1861	1,211
Harvester	W. F. Ketchum, by the Ketchum Harvesting-Machine Company, assignee, (mesne.)	Buffalo, N. Y	June 29, 1858 July 25, 1871	4,484
Harvester	W. F. Ketchum, by the Ketchum Harvesting-Machine Company, assignee, (mesne,) (extended February 10, 1866.)	Buffalo, N. Y	Feb. 10, 1852 Dec. 12, 1871	4,672
Harvester	W. F. Ketchum, by the Ketchum Harvesting-Machine Company, assignee, (mesne,) (extended February 10, 1866.)	Buffalo, N. Y	Feb. 10, 1852 Dec. 12, 1871	4,673
Harvester	F. Landon, by Huntley, Bowman & Co., assignees.	Brockport, N. Y	Nov. 13, 1860 Apr. 16, 1861	1,171
Harvester	F. Landon, by Huntley, Bowman & Co., assignees.	Brockport, N. Y	Nov. 13, 1860 Apr. 16, 1861	1,172
Harvester	H. R. Lavey, by C. R. Cook, assignee.	Buffalo, N. Y	May 1, 1866 Apr. 20, 1869	3,369
Harvester	S. A. Lindsay, by C. Aultman, assignee, (mesne.)	Canton, Ohio	Aug. 2, 1859 Jan. 1, 1867	2,439
Harvester	F. T. Lomont and J. Grojean, by W. K. Miller, assignee, (mesne.)	Massillon and Canton, Ohio.	Mar. 27, 1860 June 11, 1872	4,944
Harvester	J. Long, by W. N. Whiteley, J. Fassler, and O. S. Kelly, assignees, (mesne.)	Springfield, Ohio	Dec. 29, 1857 June 25, 1867	2,660
Harvester	J. Long, by W. N. Whiteley, J. Fassler, and O. S. Kelly, assignees, (mesne.)	Springfield, Ohio	Dec. 29, 1857 June 25, 1867	2,661
Harvester	C. M. Lufkin, by H. H. Smith, assignee, (mesne.)	Carlisle, Pa	Sept. 8, 1857 Nov. 27, 1866	2,399
Harvester	C. M. Lufkin, by H. H. Smith, assignee, (mesne.)	Carlisle, Pa	Sept. 8, 1857 Nov. 27, 1866	2,400
Harvester	C. M. Lufkin, by H. H. Smith, assignee, (mesne.)	Carlisle, Pa	Sept. 8, 1857 Nov. 27, 1866	2,401
Harvester	C. M. Lufkin, by H. H. Smith, assignee, (mesne.)	Carlisle, Pa	Sept. 8, 1857 Nov. 27, 1866	2,402
Harvester	C. M. Lufkin, by H. H. Smith, assignee, (mesne.)	Carlisle, Pa	Sept. 8, 1857 Nov. 27, 1866	2,403
Harvester	T. N. Lupton, by R. T. Campbell, assignee.	Washington, D. C	May 8, 1855 Oct. 23, 1866	2,382
Harvester	J. J. and H. F. Mann, by H. F. Mann, assignee, (extended June 3, 1870.)	Pittsburgh, Pa	June 3, 1856 Feb. 28, 1871	4,281
Harvester	J. H. Manny	Rockford, Ill	Nov. 23, 1852 Jan. 2, 1855	292
Harvester	J. H. Manny	Rockford, Ill	Oct. 17, 1854 Feb. 19, 1856	354
Harvester	J. P. Manny	Rockford, Ill	July 14, 1857 June 29, 1869	3,524
Harvester	J. P. Manny	Rockford, Ill	July 14, 1857 June 29, 1869	3,525
Harvester	J. P. Manny	Rockford, Ill	July 14, 1857 June 29, 1869	3,526
Harvester	J. P. Manny	Rockford, Ill	July 14, 1857 Aug. 3, 1869	3,580
Harvester	J. P. Manny	Rockford, Ill	July 14, 1857 Aug. 3, 1869	3,581
Harvester	P. Manny	Waddam's Grove, Ill	Apr. 7, 1857 Mar. 27, 1860	935

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Invention.	Inventor.	Residence.	Date.	No.
Harvester	J. S. Marsh	Lewisburgh, Pa	Feb. 10, 1863 Sept. 11, 1866	2,354
Harvester	N. F. Mathewson, by J. E. Atwood, assignee, (mesne.)	Bloomington, Ill	Apr. 6, 1869 Oct. 8, 1872	5,093
Harvester	W. P. Maxson, by C. Wheeler, jr., assignee.	Auburn, N. Y.	Sept. 9, 1856 May 25, 1869	3,467
Harvester	D. S. McNamara	Troy, N. Y.	June 30, 1857 Nov. 22, 1864	1,824
Harvester	D. S. McNamann, by G. M. Selden, assignee.	North Hoosic and Troy, N. Y.	Sept. 28, 1858 May 7, 1861	1,179
Harvester	D. S. McNamann, by G. M. Selden, assignee.	North Hoosic and Troy, N. Y.	Sept. 28, 1858 May 7, 1861	1,180
Harvester	D. S. McNamann, by G. M. Selden, assignee.	North Hoosic and Troy, N. Y.	Sept. 28, 1858 May 7, 1861	1,181
Harvester	D. S. McNamann, by G. M. Selden, assignee.	North Hoosic and Troy, N. Y.	Sept. 28, 1858 May 7, 1861	1,182
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	764
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	765
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	766
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	767
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	768
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	769
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	770
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	777
Harvester	L. Miller, by C. Aultman & Co., assignees.	Canton, Ohio	May 4, 1858 July 19, 1859	778
Harvester	W. K. Miller	Canton, Ohio	Feb. 8, 1859 June 5, 1866	2,266
Harvester	W. K. Miller	Canton, Ohio	Feb. 8, 1859 June 5, 1866	2,267
Harvester	W. K. Miller	Canton, Ohio	Feb. 8, 1859 June 5, 1866	2,268
Harvester	W. K. Miller	Canton, Ohio	Feb. 8, 1859 June 5, 1866	2,269
Harvester	W. K. Miller	Canton, Ohio	Feb. 8, 1859 June 5, 1866	2,270
Harvester	W. K. Miller	Canton, Ohio	July 2, 1861 June 26, 1866	2,294
Harvester	W. K. Miller	Canton, Ohio	July 2, 1861 June 26, 1866	2,295
Harvester	W. K. Miller	Canton, Ohio	July 2, 1861 June 26, 1866	2,296
Harvester	J. E. Newcomb, by J. F. Seiberling, assignee of executrix, (extended January 9, 1869.)	Akron, Ohio	Jan. 9, 1855 June 1, 1869	3,484
Harvester	C. Newhall	Hinsdale, N. H.	July 29, 1862 Mar. 16, 1869	3,331
Harvester	F. Nishwitz	Brooklyn, N. Y.	Feb. 16, 1858 Mar. 5, 1861	1,149
Harvester	F. Nishwitz	Brooklyn, N. Y.	Feb. 16, 1858 Apr. 13, 1869	3,371
Harvester	F. Nishwitz	Brooklyn, N. Y.	Feb. 16, 1858 Apr. 13, 1869	3,372
Harvester	F. Nishwitz	Brooklyn, N. Y	Feb. 21, 1865 June 8, 1869	3,495
Harvester	F. Nishwitz	Brooklyn, N. Y.	Feb. 21, 1865 June 8, 1869	3,496
Harvester	F. Nishwitz	Brooklyn, N. Y.	Feb. 21, 1865 June 8, 1869	3,497
Harvester	D. R. Paiste, by self, assignee, (mesne.)	Willistown, Pa	June 5, 1866 Jan. 26, 1869	3,277
Harvester	A. Palmer and S. G. Williams	Brockport, N. Y., and Janesville, Wis.	July 1, 1851 Apr. 10, 1855	305
Harvester	A. Palmer and S. G. Williams, by selves, W. H. Seymour, and D. S. Morgan, assignees.	Brockport, N. Y., and Janesville, Wis.	July 1, 1851 Jan. 1, 1861	1,109
Harvester	A. Palmer and S. G. Williams, by selves, W. H. Seymour, and D. S. Morgan, assignees.	Brockport, N. Y., and Janesville, Wis.	July 1, 1851 Jan. 1, 1861	1,110
Harvester	A. Palmer and S. G. Williams, by D. S. Morgan and W. H. Seymour, assignees, (mesne.)	Brockport, N. Y.	July 1, 1851 May 31, 1864	1,682
Harvester	H. A. Parkhurst, by C. H. McCormick, assignee, (mesne.)	Chicago, Ill	Feb. 23, 1858 May 18, 1869	3,447
Harvester	H. A. Parkhurst, by C. H. McCormick, assignee, (mesne.)	Chicago, Ill	Feb. 23, 1858 July 6, 1869	3,537
Harvester	H. A. Parkhurst, by C. H. McCormick, assignee, (mesne.)	Chicago, Ill	Feb. 23, 1858 July 6, 1869	3,538
Harvester	E. G. Passmore	Philadelphia, Pa	Apr. 10, 1866 Apr. 20, 1869	3,396
Harvester	F. S. Pease	Buffalo, N. Y.	Nov. 14, 1848 Dec. 18, 1849	153
Harvester	W. P. Penn	Belleville, Ill.	Sept. 10, 1861 May 16, 1865	1,961
Harvester	J. G. Perry	Kingston, R. I	Feb. 2, 1869 May 31, 1870	4,008
Harvester	J. Pine	Troy, N. Y	Oct. 22, 1861 Dec. 30, 1873	5,714

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Invention.	Inventor.	Residence.	Date.	No.
Harvester	N. Platt, by W. H. Seymour and D. S. Morgan, assignees.	Ottawa, Ill., and Brockport, N. Y.	June 12, 1849 May 23, 1854	265
Harvester	N. Platt, by W. H. Seymour and D S Morgan, assignees.	Ottawa, Ill., and Brockport, N. Y.	June 12, 1849 Aug. 31, 1858	590
Harvester	N. Platt, by W. H. Seymour and D. S. Morgan, assignees.	Ottawa, Ill., and Brockport, N. Y.	June 12, 1849 Aug. 31, 1858	591
Harvester	N. Platt, by W. H. Seymour and D. S. Morgan, assignees.	Ottawa, Ill., and Brockport, N. Y.	June 12, 1849 Aug. 31, 1858	592
Harvester	N. Platt, by W. H. Seymour and D. S. Morgan, assignees.	Ottawa, Ill., and Brockport, N. Y.	June 12, 1849 Aug. 31, 1858	593
Harvester	J. Powers and E. M. Smith, by M. Vance & Co., assignees, (mesne.)	New York, N. Y	Jan. 14, 1862 Feb. 23, 1864	1,626
Harvester	S. N. Pusse, by O. F. Smith, assignee.	Williamsport, Pa	Dec. 27, 1859 Apr. 20, 1869	3,398
Harvester	A. Rank	Salem, Ohio	Nov. 5, 1867 Oct. 6, 1868	3,155
Harvester	A. Rank, by Ætna Manufacturing Company, assignee.	Salem, Ohio	Feb. 12, 1867 Aug. 31, 1869	3,627
Harvester	S. Ray and M. R. Shalters, by J. F. Seiberling, assignee.	Alliance and Akron, Ohio	Apr. 19, 1859 Mar. 26, 1872	4,824
Harvester	S. Ray and M. R. Shalters, by J. F. Seiberling, assignee.	Alliance and Akron, Ohio	Apr. 19, 1859 Mar. 26, 1872	4,825
Harvester	S. Ray and M. R. Shalters, by J. F. Seiberling, assignee.	Alliance and Akron, Ohio	Apr. 19, 1859 Mar. 26, 1872	4,826
Harvester	L. C. Reese	Phillipsburgh, N. J	Apr. 10, 1860 May 29, 1866	2,259
Harvester	J. Reily	Hart Prairie, Wis	Nov. 20, 1855 Jan. 29, 1856	348
Harvester	J. F. Seiberling	Akron, Ohio	Oct. 15, 1861 July 21, 1868	3,049
Harvester	J. F. Seiberling	Akron, Ohio	Oct. 15, 1861 June 1, 1869	3,478
Harvester	J. F. Seiberling	Doylestown, Ohio	Oct. 15, 1861 June 14, 1864	1,698
Harvester	J. F. Seiberling	Doylestown, Ohio	Oct. 15, 1861 June 14, 1864	1,699
Harvester	J. F. Seiberling	Doylestown, Ohio	Oct. 15, 1861 June 14, 1864	1,700
Harvester	J. F. Seiberling	Doylestown, Ohio	Oct. 15, 1861 June 14, 1864	1,701
Harvester	J. F. Seiberling	Doylestown, Ohio	Oct. 15, 1861 June 14, 1864	1,702
Harvester	E. M. Smith, by Mitchell, Vance & Co., assignees.	New York, N. Y	Feb. 23, 1864 June 23, 1868	3,006
Harvester	T. I. Stealey, by R. T. Campbell, assignee.	Washington, D. C	Dec. 15, 1857 Feb. 12, 1867	2,483
Harvester	W. S. Stetson	Baltimore, Md	Apr. 5, 1859 Oct. 25, 1859	842
Harvester	W. S. Stetson	Baltimore, Md	Apr. 5, 1859 Oct. 25, 1859	843
Harvester	W. S. Stetson	Baltimore, Md	Apr. 5, 1859 Oct. 25, 1859	844
Harvester	W. S. Stetson	Auburn, N. Y	Mar. 3, 1868 Aug. 18, 1868	3,003
Harvester	J. Swartz	Buffalo, N. Y	Nov. 14, 1854 June 3, 1862	1,313
Harvester	J. Swartz	Buffalo, N. Y	Nov. 14, 1854 June 3, 1862	1,314
Harvester	J. Swartz	Buffalo, N. Y	Nov. 14, 1854 June 3, 1862	1,315
Harvester	P. Sylla and A. Adams, by selves, assignees, (mesne.)	Elgin and Sandwich, Ill.	Sept. 20, 1853 May 14, 1867	2,608
Harvester	C. Tinker and J. A. Sprague, by E. Jones, assignee.	Cleveland, Ohio	Aug. 4, 1857 May 23, 1865	1,964
Harvester	J. S. Troxel, by W. N. Whiteley, assignee.	Springfield, Ohio	May 11, 1852 June 11, 1867	2,643
Harvester	S. W. Tyler	Greenwich, N. Y	Jan. 26, 1858 Nov. 13, 1860	1,076
Harvester	H. Waterman, (extended August 28, 1869.)	Williamsburgh, N. Y	Aug. 28, 1855 Jan. 31, 1871	4,251
Harvester	J. J. Weeks, by A. Whiteley, assignee, (mesne.)	Oyster Bay, N. Y., and Springfield, Ohio.	Sept. 26, 1856 Aug. 23, 1864	1,746
Harvester	J. J. Weeks, by A. Whiteley, assignee, (mesne.)	Oyster Bay, N. Y., and Springfield, Ohio.	Sept. 26, 1854 Aug. 23, 1864	1,747
Harvester	J. V. A. Wemple	Quincy, Mich	Apr. 19, 1859 May 12, 1868	2,931
Harvester	C. Wheeler, jr.	Auburn, N. Y	Dec. 5, 1854 May 14, 1867	2,610
Harvester	C. Wheeler jr.	Auburn, N. Y	Feb. 6, 1855 May 28, 1867	2,632
Harvester	C. Wheeler, jr.	Auburn, N. Y	Mar. 12, 1861 June 11, 1872	4,945
Harvester	C. Wheeler, jr.	Auburn, N. Y	Mar 12, 1861 June 11, 1872	4,946
Harvester	A. Whiteley by W. N. Whiteley, assignee.	Springfield, Ohio	Apr. 24, 1855 Aug. 30, 1864	1,737
Harvester	A. Whiteley, by W. N. Whiteley, assignee.	Springfield, Ohio	Apr. 24, 1855 Aug. 30, 1864	1,738
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,775
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,776
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,777
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,778
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,779

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Invention.	Inventor.	Residence.	Date.	No.
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,780
Harvester	H. Willard and R. Ross, by J. A. Saxton, assignee, (mesne.)	Vergennes, Vt., and Canton, Ohio.	Nov. 3, 1857 Sept. 27, 1864	1,781
Harvester	R. M. Williams	Rockville, Md	Oct. 12, 1869 May 3, 1870	3,958
Harvester	M. Young, jr	Frederick, Md	Sept. 21, 1858 Dec. 13, 1859	866
Harvester	M. Young, jr	Frederick, Md	Sept. 21, 1858 July 19, 1859	779
Harvester	M. Young, jr., by A. J. Holman, assignee, (mesne.)	Philadelphia, Pa	July 9, 1861 Jan. 15, 1867	2,454
Harvester	M. Young, jr., by C. H. and L. J. McCormick, assignees.	Chicago, Ill	Sept. 21, 1858 May 17, 1870	3,977
Harvester and binder	J. E. Neserr, by H. Baldwin, jr., assignee.	Buffalo, N. Y., and Washington, D. C.	Aug. 27, 1853 July 3, 1860	998
Harvester and binder	J. E. Neserr, by H. Baldwin, jr., assignee.	Buffalo, N. Y., and Washington, D. C.	Aug. 27, 1853 July 3, 1860	999
Harvester, Clover, &c	J. Hinton	Pack's Ferry, Va	May 22, 1849 Aug. 13, 1850	173
Harvester, Clover and grass seed	T. S. Steadman, by W. N. Whiteley, jr., assignee.	Murray, N. Y., and Springfield, Ohio.	May 23, 1854 June 19, 1860	985
Harvester, Clover and grass seed	T. S. Steadman, by W. N. Whiteley, jr., assignee.	Murray, N. Y., and Springfield, Ohio.	May 23, 1854 June 19, 1860	986
Harvester, Clover and grass seed	T. S. Steadman, by W. N. Whiteley, jr., assignee.	Murray, N. Y., and Springfield, Ohio.	May 23, 1854 June 19, 1860	987
Harvester, Clover and grass seed	T. S. Steadman, by W. N. Whiteley, jr., assignee.	Murray, N. Y., and Springfield, Ohio.	May 23, 1854 June 20, 1865	2,009
Harvester, Clover and grass seed	T. S. Steadman, by B. F. Wright, assignee, (mesne.)	Springfield Township, Ohio	May 23, 1854 June 5, 1866	2,279
Harvester, Corn	G. Geer	Douglas, Ill	June 2, 1863 Jan. 1, 1867	2,440
Harvester, Corn	R. C. Mauck and W. T. McGahey.	McGaheyville, Va	Apr. 22, 1856 Nov. 2, 1858	618
Harvester crank-pin and box	T. Welch	Churchville, N. Y	Aug. 1, 1865 Feb. 11, 1868	2,868
Harvester-cutter	C. W. Glover, by J. G. Perry, assignee, (mesne.)	Roxbury, Conn., and Kingston, R. I.	July 15, 1856 Oct. 20, 1868	3,163
Harvester-cutter	G. Stone	Beloit, Wis	Jan. 8, 1856 Aug. 13, 1867	2,732
Harvester-cutter	C. Wheeler, jr	Poplar Ridge, N. Y	Sept. 2, 1856 May 7, 1867	2,594
Harvester-cutter-bar connection	G. W. D. Culp and W. J. Keeney.	Allensville, and Florence, Ind.	Aug. 25, 1863 May 14, 1867	2,602
Harvester-cutter-bar connection	G. W. D. Culp and W. J. Keeney.	Allensville, and Florence, Ind.	Aug. 25, 1863 May 14, 1867	2,603
Harvester-cutter-bar connection	G. W. D. Culp and W. J. Keeney.	Allensville, and Florence, Ind.	Aug. 25, 1863 May 14, 1867	2,604
Harvester-cutter finger	J. H. Manny	Rockford, Ill	Apr. 19, 1853 Jan. 2, 1855	291
Harvester-cutter grinder	E. F. Keeling	Amwell, Ohio	Aug. 13, 1861 Nov. 9, 1869	3,719
Harvester-cutters, Arrangement for controlling	J. H. Manny	Rockford, Ill	Sept. 23, 1851 July 2, 1855	288
Harvester-cutters, Raising and lowering	J. F. Barrett, by C. Wheeler, jr., assignee, (mesne.)	Auburn, N. Y	July 10, 18[illegible]5 May 14, 1867	2,611
Harvester cutting-device	H. Green	Ottawa, Ill	Mar. 21, 1854 May 25, 1858	561
Harvester cutting-device	H. Green	Ottawa, Ill	Mar. 21, 1854 May 25, 1858	564
Harvester-dropper	J. E. Newcomb, by J. F. Seiberling, assignee of executrix, (extended January 9, 1869.)	Akron, Ohio	Jan. 9, 1855 June 1, 1869	3,485
Harvester-frames, Attaching trucks to	J. H. Manny	Rockford, Ill	Sept. 23, 1851 Jan. 2, 1855	287
Harvester, Grain	T. D. Burrall	Geneva, N. Y	Apr. 5, 1853 Apr. 26, 1859	695
Harvester, Grain	T. D. Burrall	Geneva, N. Y	Apr. 5, 1853 Apr. 26, 1859	696
Harvester, Grain and grass	C. B. Brown, by C. Aultman & Co., assignees.	Griggsville, Ill., and Canton, Ohio.	Dec. 7, 1852 May 1, 1860	951
Harvester, Grain and grass	C. B. Brown, by C. Aultman & Co., assignees.	Griggsville, Ill., and Canton, Ohio.	Dec. 7, 1852 May 1, 1860	952
Harvester, Grain and grass	J. E. Brown and S. S. Bartlett	Woonsocket, R. I	Jan. 2, 1855 Jan. 1, 1861	1,111
Harvester, Grain and grass	J. E. Brown and S. S. Bartlett by selves and T. H. Dodge, assignees.	Woonsocket, and Providence, R. I., and Washington, D. C.	Jan. 2, 1855 Feb. 25, 1862	1,281
Harvester, Grain and grass	J. E. Brown and S. S. Bartlett, by selves and T. H. Dodge, assignees.	Woonsocket, and Providence, R. I., and Washington, D. C.	Jan. 2, 1855 Feb. 25, 1862	1,282
Harvester, Grain and grass	J. E. Brown and S. S. Bartlett, by selves and T. H. Dodge, assignees.	Woonsocket, and Providence, R. I., and Washington, D. C.	Jan. 2, 1855 Feb. 25, 1862	1,283
Harvester, Grain and grass	S. Colburn, by C. Wheeler, jr., assignee.	Ansonia, Conn., and Poplar Ridge, N. Y.	July 3, 1855 June 7, 1864	1,695
Harvester, Grain and grass	S. Colburn, by C. Wheeler, jr., assignee.	Ansonia, Conn., and Poplar Ridge, N. Y.	July 3, 1855 June 7, 1864	1,696
Harvester, Grain and grass	E. B. Forbush	Buffalo, N. Y	July 20, 1852 July 8, 1856	376
Harvester, Grain and grass	E. B. Forbush	Buffalo, N. Y	July 20, 1852 Apr. 19, 1859	692
Harvester, Grain and grass	E. B. Forbush	Buffalo, N. Y	Apr. 17, 1855 Apr. 26, 1859	707

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Invention.	Inventor.	Residence.	Date.	No.
Harvester, Grain and grass	E. B. Forbush	Buffalo, N. Y	Mar. 18, 1856 Apr. 19, 1859	693
Harvester, Grain and grass	J. H. Manny	Rockford, Ill	Oct. 17, 1854 Mar. 6, 1855	298
Harvester, Grain and grass	J. H. Manny	Rockford, Ill	Oct. 17, 1854 Mar. 6, 1855	299
Harvester, Grain and grass	J. H. Manny	Rockford, Ill	Oct. 17, 1854 Mar. 6, 1855	300
Harvester, Grain and grass	R. T. Osgood, by C. Wheeler, jr., assignee.	Orland, Me., and Poplar Ridge, N. Y.	Feb. 17, 1852 Dec. 24, 1861	1,250
Harvester, Grain and grass	R. T. Osgood, by C. Wheeler, jr., assignee.	Orland, Me., and Poplar Ridge, N. Y.	Feb. 17, 1852 Dec. 24, 1861	1,251
Harvester, Grain and grass	R. T. Osgood, by C. Wheeler, jr., assignee.	Orland, Me., and Poplar Ridge, N. Y.	Feb. 17, 1852 Dec. 24, 1861	1,252
Harvester, Grain and grass	B. T. Roney, by J. R. Parsons, assignee.	Philadelphia, Pa., and Hoosick Falls, N. Y.	Mar. 11, 1856 Sept. 20, 1864	1,770
Harvester, Grain and grass	W. H. Seymour	Brockport, N. Y	Dec. 14, 1852 Dec. 1, 1857	511
Harvester, Grain and grass	W. H. Seymour	Brockport, N. Y	Dec. 14, 1852 Dec. 1, 1857	512
Harvester, Grain and grass	W. H. Seymour	Brockport, N. Y	Dec. 14, 1852 Dec. 1, 1857	513
Harvester, Grain and grass	J. Swartz	Buffalo, N. Y	Nov. 12, 1854 June 5, 1860	970
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	721
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	722
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	723
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	724
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	725
Harvester, Grain and grass	P. Sylla and A. Adams, by C. Aultman & Co., assignees.	Elgin, Ill., and Canton, Ohio	Sept. 20, 1853 May 17, 1859	726
Harvester, Grain and grass	J. Urmy	Wilmington, Del	July 24, 1855 Jan. 3, 1860	882
Harvester, Grain and grass	J. Urmy, by D. M. Osborne, assignee.	Wilmington, Del., and Auburn, N. Y.	July 24, 1855 Jan. 3, 1860	883
Harvester, Grain and grass	J. Urmy, by D. Urmy and J. Manz, assignees.	Wilmington, Del	July 24, 1855 Apr. 27, 1869	3,411
Harvester, Grain and grass	J. Urmy, by D. Urmy and J. Manz, assignees.	Wilmington, Del	July 24, 1855 Apr. 27, 1869	3,412
Harvester, Grain and grass	J. J. Weeks, by A. Whiteley, assignee, (mesne.)	Springfield, Ohio	Sept. 26, 1854 June 27, 1865	2,017
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	875
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	876
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	877
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	878
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	879
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	880
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Dec. 5, 1854 Jan. 3, 1860	881
Harvester, Grain and grass	C. Wheeler, jr	Poplar Ridge, N. Y	Feb. 6, 1855 June 5, 1860	971
Harvester, Grain and grass	A. Whiteley	Springfield, Ohio	Sept. 19, 1854 Apr. 3, 1855	304
Harvester, Grain and grass	A. Whiteley	Springfield, Ohio	Feb. 5, 1856 Mar. 11, 1856	358
Harvester, Grass	J. Haines	Pekin, Ill	Sept. 4, 1855 Apr. 13, 1858	545
Harvester, Grass	J. Haines, by J. Haines, administrator.	Pekin and Tazewell County, Ill.	Sept. 4, 1855 June 16, 1868	2,986
Harvester, Grass	J. Haines, by J. Haines, administrator.	Pekin and Tazewell County, Ill.	Sept. 4, 1855 June 23, 1868	2,997
Harvester, Grass	J. Haines, by J. Haines, administrator.	Pekin and Tazewell County, Ill.	Sept. 4, 1855 June 23, 1868	2,998
Harvester, Grass	W. F. Ketchum	Buffalo, N. Y	Feb. 10, 1852 Feb. 28, 1854	259
Harvester, Grass	W. F. Ketchum	Buffalo, N. Y	Feb. 10, 1852 June 2, 1857	466
Harvester, Grass	J. S. and D. Lake, by J. A. Saxton, assignee, (mesne.)	Smith's Landing, N. J., and Canton, Ohio.	July 20, 1852 Jan. 1, 1861	1,114
Harvester, Grass	J. S. and D. Lake, by J. A. Saxton, assignee, (mesne.)	Smith's Landing, N. J., and Canton, Ohio.	July 20, 1852 Jan. 1, 1861	1,115
Harvester, Grass	J. S. and D. Lake, by J. A. Saxton, assignee, (mesne.)	Smith's Landing, N. J., and Canton, Ohio.	July 20, 1852 Jan. 1, 1861	1,116
Harvester, Grass	J. S. and D. Lake, by J. A. Saxton, assignee, (mesne.)	Smith's Landing, N. J., and Canton, Ohio.	July 20, 1852 Jan. 1, 1861	1,117
Harvester, Grass	J. H. Maydole and A. H. Morse, by A. W. Morse, assignee.	Eaton, N. Y	Feb. 6, 1855 Apr. 2, 1861	1,168
Harvester guard-finger	W. A. Wood	Hoosick Falls, N. Y	July 1, 1856 Apr. 21, 1863	1,459
Harvester guard-finger	W. A. Wood	Hoosick Falls, N. Y	July 1, 1856 Apr. 21, 1863	1,460

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Invention.	Inventor.	Residence.	Date.	No.
Harvester, Hemp	O. Farra, by J. A. Farra, assignee.	Jessamine County, Ky	May 14, 1872 Nov. 12, 1872	5,142
Harvester-pitman	J. W. Doty	Lockport, N. Y	Oct. 30, 1866 Aug. 18, 1868	3,084
Harvester-pitman	G. W. Harrison, by self, S. Foster, and S. S. Olds, assignees, (mesne.)	Lansing, Mich	Sept. 26, 1871 Sept. 24, 1872	5,068
Harvester-pitman connection	J. W. Doty	Lockport, N. Y	Oct. 30, 1866 June 7, 870	4,017
Harvester-pitman connection	H. L. Wanzer	New York, N. Y	July 2, 1867 Nov. 12, 1867	2,798
Harvester-rake	L. M. Batty, by W. K. Miller, assignee.	Canton, Ohio	Sept. 19, 1865 Sept. 17, 1872	5,059
Harvester-rake	C. B. Brown, by J. H. Myers, assignee, (extended July 11, 1868.)	Philadelphia, Pa	July 11, 1854 June 8, 1869	3,494
Harvester-rake	R. Bryson	Schenectady, N. Y	Apr. 8, 1862 May 21, 1867	2,620
Harvester-rake	C. F. Davis	Auburn, N. Y	May 22, 1866 Nov. 19, 1867	2,800
Harvester-rake	J. Dick, jr., by self and E. Glen, assignees, (mesne.)	Oshawa County, Ontario, and Rochester, N. Y.	Oct. 9, 1866 Sept. 22, 1868	3,127
Harvester-rake	C. G. Dickinson, by J. R. Parsons, assignee, (mesne.)	Poughkeepsie and Hoosick Falls, N. Y.	Feb. 1, 1859 May 9, 1871	4,377
Harvester-rake	O. Dorsey	Dorseyville, Md	Mar. 4, 1856 Oct. 23, 1860	1,067
Harvester-rake	O. Dorsey	Newark, Ohio	Mar. 4, 1856 June 9, 1868	2,982
Harvester-rake	J. C. Durborow	Ellicott City, Md	June 9, 1868 May 23, 1871	4,395
Harvester-rake	S. A. Lindsay, by C. Aultman, assignee, (mesne.)	Canton, Ohio	Dec. 11, 1860 Jan. 1, 1867	2,438
Harvester-rake	S. Miller	Urbana, Ohio	July 15, 1851 Nov. 21, 1854	284
Harvester-rake	A. Rank	Salem, Ohio	Nov. 2, 1869 Aug. 2, 1870	4,089
Harvester-rake	A. R. Reese	Phillipsburgh, N. J	Feb. 16, 1864 Jan. 22, 1867	2,464
Harvester-rake	A. R. Reese	Phillipsburgh, N. J	May 1, 1866 Jan. 22, 1867	2,465
Harvester-rake	A. R. Reese, W. Gould, and N. Lake, by A. R. Reese, assignee, (mesne.)	Phillipsburgh, N. J	Nov. 5, 1861 Jan. 29, 1867	2,469
Harvester-rake	J. Richardson, by W. A. Wood, assignee.	Hoosick Falls, N. Y	June 19, 1855 May 12, 1863	1,472
Harvester-rake	J. L. Rohrer	Upper Leacock Township, Pa.	Dec. 3, 1867 July 21, 1868	3,047
Harvester-rake	H. H. Scoville, by self and J. A. Scoville, assignees.	Oakland, Cal	Apr. 12, 1859 Dec. 6, 1870	4,194
Harvester-rake	W. T. Shaw and J. Manz, by S. Johnston, assignee.	Wilmington, Del., and Syracuse, N. Y.	Nov. 22, 1864 June 23, 1868	2,999
Harvester-rake	S. S. and J. G. Sherman	McHenry, Ill	Mar. 6, 1866 Jan. 15, 1867	2,457
Harvester-rake	D. M. Swartz and J. Kreamer, by C. Aultman, assignee.	Millheim, Pa., and Canton, Ohio.	May 12, 1863 June 23, 1868	2,996
Harvester-rake	I. C. Twining, by A. J. Holman, assignee, (mesne.)	Philadelphia, Pa	Aug. 14, 1860 Feb. 2, 1869	3,284
Harvester-rake	I. Van Doren, by A. J. Holman, assignee, (mesne.)	Philadelphia, Pa	Sept. 22, 1857 Feb. 18, 1862	2,871
Harvester-rake	C. J. Arlington, by C. Wheeler, jr., assignee.	Auburn, N. Y	July 7, 1868 May 14, 1872	4,905
Harvester-rake	T. S. Whitenack, by L. C. Reese assignee.	Phillipsburgh, N. J	Feb. 5, 1861 Jan. 15, 1867	2,456
Harvester-rake	M. Young, jr., by C. H. and L. J. McCormick, assignees.	Chicago, Ill	June 28, 1859 May 17, 1870	3,978
Harvester rake and reel, Combined	S. Johnston, by self, assignee, (mesne.)	Buffalo, N. Y	Feb. 7, 1865 May 26, 1868	2,951
Harvester rake and reel, Combined	M. Young, jr., by C. H. and L. J. McCormick, assignees.	Chicago, Ill	Sept. 18, 1860 May 17, 1870	3,979
Harvester rake, Grain	J. Atkins	Chicago, Ill	Dec. 21, 1852 Oct. 31, 1854	282
Harvester rake, Grain	J. Atkins, by W. Wright, assignee, (mesne.)	Chicago, Ill	Dec. 21, 1852 Mar. 8, 1864	1,632
Harvester rake, Grain	J. Atkins, by W. Wright, assignee, (mesne.)	Chicago, Ill	Dec. 21, 1852 Mar. 8, 1864	1,633
Harvester raking-attachment	R. D. Brown	Covington, Ind	Apr. 7, 1863 Feb. 21, 1865	1,876
Harvester raking attachment	R. D. Brown	Covington, Ind	Apr. 7, 1863 May 23, 1865	1,963
Harvester raking-attachment	H. Foresman, by O. H. Burdick, assignee.	Enon, Ohio, and Auburn, N. Y	May 13, 1856 June 16, 1863	1,496
Harvester raking-attachment	J. A. St. John, by W. H. Seymour, D. S. Morgan, S. G. Williams, and H. Palmer, assignees, (mesne.)	Janesville, Wis., and Brockport, N. Y.	May 25, 1858 Dec. 18, 1860	1,104
Harvester-reel	J. H. Keller, by self, D. F. Luse, and J. F. Seiberling Reaper Company, assignees, (mesne.)	Boalsburgh, Pa	Nov. 1, 1870 Nov. 7, 1871	4,629
Harvester-reel	J. S. Troxel, by W. N. Whiteley, assignee.	Springfield, Ohio	May 11, 1858 Aug. 20, 1867	2,743
Harvester-reels, Mode of supporting	T. Q. Sinsley, by R. T. Campbell, assignee.	Washington, D. C	Dec. 15, 1857 Nov. 6, 1866	2,388
Harvester-seat	N. F. Mathewson, by J. E. Atwood, assignee, (mesne.)	Bloomington, Ill	Apr. 6, 1869 Oct. 8, 1872	5,094
Harvester spring-seat	T. Brett	Geneva, Ohio	Feb. 27, 1872 Apr. 9, 1872	4,859

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Invention.	Inventor.	Residence.	Date.	No.
Harvester track-cleaner	W. F. Ketchum	Buffalo, N. Y	May 17, 1858 Mar. 26, 1861	1,162
Harvester with leading-truck	J. H. Manny	Rockford, Ill	Sept. 23, 1851 Jan. 2, 1855	289
Harvester, Frame-construction of triangular	J. H. Manny	Rockford, Ill	Sept. 23, 1851 Jan. 2, 1855	290
Harvesters, Track-clearer for grass	A. H. Whiteley	Springfield, Ohio	Aug. 22, 1854 Jan. 8, 1856	341
Harvesting-machine	J. Haines	Pekin, Ill	Mar. 27, 1849 Nov. 6, 1855	331
Harvesting-machine	J. L. Hardeman, by W. N. Whiteley, assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 20, 1850 May 26, 1863	1,485
Harvesting-machine	J. L. Hardeman, by W. N Whiteley, assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 20, 1850 May 26, 1863	1,486
Harvesting-machine	W. A. Kirby	Buffalo, N. Y	Sept. 2, 1856 Mar. 15, 1859	673
Harvesting-machine	W. A. Kirby	Auburn, N. Y	Sept. 2, 1856 Nov. 17, 1868	3,198
Harvesting-machine	W. A. Kirby	Auburn, N. Y	Sept. 2, 1856 Nov. 17, 1868	3,199
Harvesting-machine	W. A. Kirby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y	July 2, 1861 June 9, 1863	1,492
Harvesting-machine	W. A. Kirby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y	July 2, 1861 June 9, 1863	1,493
Harvesting-machine	W. A. Kirby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y	July 2, 1861 June 9, 1863	1,494
Harvesting-machine	W. A. Kirby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y	July 2, 1861 June 9, 1863	1,495
Harvesting-machine	W. A. Kirby, by self and D. M. Osborne, assignees.	Buffalo and Auburn, N. Y	July 2, 1861 Dec. 20, 1864	1,838
Harvesting-machine	D. J. Marvin	Stockton, Cal	Nov. 15, 1864 Dec. 3, 1867	2,809
Harvesting-machine	S. Ray and M. R. Shalters, by J. F. Seiberling, assignee.	Doylestown, Ohio	Apr. 19, 1859 Apr. 17, 1866	2,230
Harvesting-machine	J. Reilly	White Pigeon, Mich	Nov. 20, 1855 Oct. 31, 1865	2,099
Harvesting-machine	W. N. Whiteley, jr	Springfield, Ohio	Nov. 25, 1856 June 25, 1861	1,203
Harvesting-machine	W. N. Whiteley, jr	Springfield, Ohio	Nov. 25, 1856 Feb. 2, 1864	1,614
Harvesting-machine	W. N. Whiteley, jr	Springfield, Ohio	Nov. 25, 1856 Feb. 2, 1864	1,615
Hat	J. P. Beatty	Norwalk, Conn	Mar. 23, 1869 Mar. 1, 1870	3,855
Hat	J. P. Beatty	Norwalk, Conn	Mar. 23, 1869 Feb. 28, 1871	4,277
Hat	G. Johnson	Philadelphia, Pa	Dec. 27, 1850 Dec. 17, 1872	5,188
Hat and bonnet box	O. A. Dailey	Washington, D. C	Mar. 14, 1865 Aug. 1, 1865	2,040
Hat-body	A. B. Taylor, by H. A. Burr, assignee, (mesne.)	New York, N. Y	Mar. 18, 1856 Aug. 21, 1860	1,030
Hat-body-stretching machine	R. Eickemeyer, by the Eickemeyer Hat-Blocking Machine Company, assignee.	Yonkers, N. Y	Feb. 28, 1865 Dec. 1, 1868	3,217
Hat-bodies, Machine for felting	H. L. Randall, by I. D. Condit	Roxbury, Conn., and Millburn, N. J.	Apr. 21, 1857 Apr. 15, 1862	1,301
Hat-bodies, Machine for manufacturing	L. E. Hopkins, by I. S. Taylor and E. Sturdevant, administrators of assignees.	New York, N. Y., and Danbury, Conn.	Dec. 7, 1852 June 30, 1857	476
Hat-bodies, Machine for planking	P. Emmons, by A. Spencer and A. E. Laing, assignees.	New York, N. Y	Apr. 19, 1853 May 27, 1856	369
Hat-bodies, Machinery for felting	W. Fuzzard	Charlestown, Mass	Feb. 13, 1855 July 10, 1855	314
Hat-bodies, Machinery for making	W Fosket	Meriden, Conn	Jan. 23, 1846 Mar. 23, 1858	538
Hat-bodies, Machinery for making	H. A. Wells, by C. St. John, H. A. Burr, A. H. Wright, and J. M. Riblet, assignees.	New York, N. Y	Apr. 25, 1846 Sept. 30, 1856	396
Hat-bodies, Machinery for making	H. A. Wells, by E. Wells, administrator, (extended by Commissioner April 25, 1860, by Congress April 25, 1867.)	Brooklyn, N. Y	Apr. 25, 1846 May 19, 1868	2,942
Hat-bodies, Manufacturing	H. A. Wells, by H. A. Burr, assignee, (mesne,) (extended April 25, 1860.)	New York, N. Y	Apr. 25, 1846 Dec. 4, 1860	1,086
Hat-bodies, Manufacturing	H. A. Wells, by H. A. Burr, assignee, (mesne,) (extended April 25, 1860.)	New York, N. Y	Apr. 25, 1846 Dec. 4, 1860	1,087
Hat-bodies, Manufacturing	H. A. Wells, by H. A. Burr, assignee, (mesne,) (extended April 25, 1860.)	New York, N. Y	Apr. 25, 1846 June 17, 1862	1,318
Hat-bodies, Manufacturing	H. A. Wells, by C. St. John, H. A. Burr, A. H. Wright, and J. M. Riblet, assignees.	New York, N. Y	Apr. 25, 1846 Oct. 7, 1856	400
Hat-brims, Setting or ironing	F. Degan	New York	Aug. 31, 1842 Dec. 31, 1845	77
Hat, Cork	A. C. Crondal	New York, N. Y	Nov. 8, 1864 Jan. 23, 1866	2,150
Hat, Felt	J. T. Waring	Yonkers, N. Y	Aug. 6, 1872 Dec. 17, 1872	5,192
Hat lining and tip	T. W. Bracher	New York, N. Y	Jan. 10, 1871 July 25, 1871	4,482
Hat-stand and other clothes-hanging apparatus	J. B. Wickersham	New York, N. Y	June 2, 1857 Mar. 8, 1864	1,630
Hat, Ventilated	W. F. Warburton	Philadelphia, Pa	Dec. 11, 1860 Sept. 8, 1863	1,535
Hat-ventilator	J. McMannus	New York, N. Y	Jan. 3, 1860 Mar. 13, 1860	937

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Hats, bonnets, &c., Fabric for	H. Loewenberg, by Modena Hat Company, assignee, (mesne.)	New York, N. Y	Feb. 28, 1865 Apr. 30, 1867	2,587
Hats, Machine for forming the brims of felt	W. A. Fenn	Rochester, N. Y	Apr. 14, 1857 Jan. 17, 1871	4,235
Hatchway	J. D. Sinclair, by E. A. Lambert, W. S. Harris, and N. B. Rhodes, assignees, (mesne.)	Brooklyn, N. Y	Nov. 24, 1868 Apr. 29, 1873	5,387
Hay and cotton press	J. C. Baldwin	Staunton, Va	Feb. 22, 1839 July 6, 1839	10
Hay and cotton press	S. W. Bullock	Williamsburgh, N. Y	Mar. 24, 1842 Aug. 14, 1844	65
Hay and cotton press	I. James	Mattoon, Ill	Feb. 16, 1864 May 9, 1865	1,954
Hay and manure fork	L. D. Pitcher	Dixon, Ill	May 25, 1869 Feb. 11, 1873	5,279
Hay-cutting machine	F. H. Willson and D. T. Willson, by D. T. Willson and D. Fleming and C. H. Willson, executors.	Philadelphia and Harrisburgh, Pa.	Nov. 6, 1860 Sept. 10, 1872	5,049
Hay-elevating fork	T. T. Jarrett, by B. F. Hisert, assignee.	Horsham, Pa., and Greenville, N. Y.	May 30, 1854 Apr. 18, 1865	1,939
Hay-elevating fork	N. Palmer	Greenville, N. Y	Sept. 30, 1862 Mar. 3, 1863	1,423
Hay-elevator	F. F. Fowler	Crane Township, Ohio	Apr. 17, 1860 Sept. 9, 1862	1,341
Hay-elevator	F. F. Fowler	Crane Township, Ohio	Apr. 17, 1860 Feb. 14, 1865	1,869
Hay-elevator	F. F. Fowler	Crane Township, Ohio	Apr. 17, 1860 Feb. 14, 1865	1,870
Hay-elevator	E. W. Seymour and G. W. Gregory, by G. W. Gregory, assignee.	Binghamton, N. Y	June 9, 1863 Feb. 2, 1864	1,613
Hay-elevator	E. L. Walker	Benford's Store, Pa	Sept. 6, 1864 Dec. 18, 1866	2,429
Hay for pressing, Cutting	O. and C. Waste, by C. Waste, assignee.	Cameron, Ill	Jan. 26, 1864 May. 31, 1864	1,689
Hay-fork, Horse	J. S. Brown	Washington, D. C	July 17, 1866 Nov. 6, 1866	2,391
Hay-fork, Horse	J. S. Brown	Washington, D. C	July 17, 1866 Nov. 6, 1866	2,392
Hay-fork, Horse	B. F. Gladding, by E. P. Gleason, assignee.	New York, N. Y	Feb. 9, 1869 Nov. 2, 1869	3,700
Hay-fork, Horse	S. and D. A. Harris	Shippensburgh, Pa	Apr. 23, 1867 June 16, 1868	2,987
Hay-fork, Horse	A. J. Laird, by M. J. Laird, administratrix.	Middletown, Pa	Aug. 21, 1866 Feb. 4, 1868	2,850
Hay-fork, Horse	J. K. O'Neil	Kingston, N. Y	June 12, 1866 Mar. 8, 1870	3,876
Hay-fork, Horse	S. Raymond	Venice, N. Y	Nov. 11, 1862 June 5, 1866	2,273
Hay-fork, Horse	S. Rogers	Pittsburgh, Pa	Jan. 24, 1865 May 29, 1866	2,260
Hay-fork, Horse	A. B. Sprout	Picture Rocks, Pa	May 1, 1866 Dec. 17, 1867	2,818
Hay-fork, Horse	A. B. Sprout	Hughesville, Pa	Apr. 23, 1867 Dec. 17, 1867	2,817
Hay-gathering machine	F. F. Fowler	Crane Township, Ohio	Jan. 22, 1861 July 14, 1863	1,511
Hay-hoisting machine	J. S. Lloyd	Salem, N. J	Apr. 24, 1860 Sept. 18, 1866	2,360
Hay-knife	P. O. Soper	San Francisco, Cal	Jan. 29, 1867 Feb. 25, 1868	2,884
Hay, Machine for raking and loading	J. Smith	Condit, Ohio	June 3, 1856 July 22, 1856	381
Hay-making machine	J. C. Stoddard	Worcester, Mass	Dec. 6, 1859 Sept. 11, 1860	1,042
Hay-press	L. Dederick	Albany, N. Y	July 14, 1863 July 17, 1866	2,315
Hay-rake, Horse	A. T. Barnes, by the Tiffin Agricultural Works, assignee.	Tiffin, Ohio	Mar. 24, 1868 Oct. 26, 1869	3,685
Hay-rake, Horse	N. M. Barnes	Tiffin, Ohio	July 19, 1870 Jan. 17, 1871	4,232
Hay-rake, Horse	B. J. Downing	Mitchell, Iowa	Sept. 30, 1873 Dec. 23, 1873	5,704
Hay-rake, Horse	W. Emmons	Sandwich, Ill	Apr. 13, 1869 Apr. 26, 1870	3,937
Hay-rake, Horse	R. Pratt	Maple Township, Pa	Jan. 8, 1856 Feb. 28, 1865	1,893
Hay-rake, Horse	R. Pratt	Maple Township, Pa	Jan. 8, 1856 Feb. 28, 1865	1,894
Hay rake, Horse	R. Pratt	Maple Township, Pa	Jan. 8, 1856 Feb. 28, 1865	1,895
Hay-rake, Horse	M. Raezer, by A. Brown, assignee, (mesne.)	Worcester, Mass	Nov. 29, 1859 May 3, 1870	3,960
Hay-rake, Horse	G. S. Reynolds, by J. H. Shireman, assignee.	York, Pa	May 10, 1859 Sept. 20, 1870	4,128
Hay-rake, Horse, (Division A)	H. W. Sabin, by C. E. Cox, executrix, (extended by Commissioner December 3, 1864 and by act of Congress June 8, 1872.)	West Somerset, N. Y	Dec. 3, 1850 Jan. 21, 1873	5,242
Hay-rake, Horse, (Division B)	H. W. Sabin, by C. E. Cox, executrix, (extended by Commissioner December 3, 1864, and by act of Congress June 8, 1872.)	West Somerset, N. Y	Dec. 3, 1850 Jan. 21, 1873	5,243

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Invention.	Inventor.	Residence.	Date.	No.
Hay-rake, Horse, (Division C)	H. W. Sabin, by C. E. Cox, executrix, (extended by Commissioner December 3, 1864, and by act of Congress June 8, 1872.)	West Somerset, N. Y	Dec. 3, 1850 Jan. 21, 1873	5,244
Hay-rake, Horse, (Division D)	H. W. Sabin, by C. E. Cox, executrix, (extended by Commissioner December 3, 1864, and by act of Congress June 8, 1872.)	West Somerset, N. Y	Dec. 3, 1850 Jan. 21, 1873	5,245
Hay raker and loader	H. Baker	Cortland, N. Y	July 3, 1866 Apr. 7, 1868	2,911
Hay raker and loader	H. Baker, by R. K. Sanford, assignee.	Cortland and Volney, N. Y	July 3, 1866 Mar. 1, 1870	3,854
Hay-spreader	E. W. Bullard	Barre, Mass	May 21, 1861 June 16, 1868	2,992
Hay-spreader	T. C. Craven	Albany, N. Y	Dec. 8, 1868 Jan. 5, 1869	3,250
Hay-spreader	J. C. Stoddard	Worcester, Mass	June 28, 1859 June 1, 1869	3,481
Hay spreader and elevator, Combined	T. C. Craven, by self and W. H. Davis, assignees.	Albany and New York, N. Y.	Dec. 19, 1865 Mar. 13, 1866	2,192
Head-block	D. Lane	Montpelier, Vt	July 9, 1861 Feb. 6, 1872	4,745
Head-block	E. H. Stearns	Erie, Pa	Sept. 1, 1868 Nov. 7, 1871	4,625
Head-coverings, Fabric for	C. F. Bosworth	Milford, Conn	June 9, 1863 May 16, 1871	4,381
Head-light, Gasoline	J. B. Terry, by the American Railway Gas-Light Company, assignee, (mesne.)	New York, N. Y	Dec. 24, 1867 June 15, 1869	3,507
Head-light, Locomotive	J. Stuber, by J. Carton, assignee.	Utica, N. Y	May 20, 1856 July 16, 1867	2,680
Head-light, Locomotive	A. C. Vaughan	Philadelphia, Pa	Nov. 26, 1867 June 1, 1869	3,471
Heat, Mode of generating	W. Hartell and J. Lancaster, by T. R. Hartell, assignee.	Philadelphia, Pa	Nov. 23, 1852 Nov. 2, 1858	616
Heated-liquid engine	J. S. Baldwin	Newark, N. J	Dec. 5, 1871 Apr. 16, 1872	4,868
Heater	G. W. Williamson	Gouldsborough, Pa	Jan. 25, 1859 Mar. 31, 1863	1,445
Heating-apparatus	T. S. Clogston	Boston, Mass	Dec. 13, 1864 Jan. 14, 1868	2,832
Heating-furnace, &c	W. Von Faber du Faur, by C. E. Detmold, assignee.	Wasseralfingen, Europe, and New York, N. Y.	Apr. 16, 1842 Jan. 23, 1845	67
Heel, Boot and shoe	C. H. Helms	Poughkeepsie, N. Y	Mar. 12, 1861 Aug. 16, 1864	1,740
Heel cutting and finishing machine, Shoe	W. F. Edson, by the McKay Heeling Machine Company, assignee, (mesne,) (additional improvement July 24, 1863.)	Boston, Mass	Sept. 6, 1859 Mar. 26, 1867	2,527
Heel-cutting machine	O. G. Crichett, by D. Whittemore, assignee.	Stoneham, Mass	June 21, 1864 Jan. 30, 1872	4,724
Heel-stiffener	A. B. Ely	Newton, Mass	Dec. 31, 1867 June 9, 1868	2,969
Heel-stiffener	D. E. Hayward, by A. B. Ely and C. Wild, assignees.	Brooklyn, N. Y	Oct. 27, 1863 Oct. 8, 1867	2,770
Heel-stiffener	D. E. Hayward, by A. B. Ely and C. Wild, assignees.	Brooklyn, N. Y	Oct. 27, 1863 Oct. 8, 1867	2,771
Heel-stiffener	D. E. Hayward, by W. F. Spinney and C. W. Melcher, assignees, (mesne.)	Melrose and Lynn, Mass	Oct. 27, 1863 Oct. 8, 1872	5,089
Heel-trimming apparatus	L. Coté, by self and C. E. Seymour, assigneees.	Saint Hyacinthe and Montreal, Canada.	Nov. 15, 1870 July 16, 1872	4,973
Heel trimming machine, Boot and shoe	E. J. Beane	Providence, R. I	June 14, 1864 July 25, 1871	4,481
Heel trimming machinery, Boot and shoe	C. H. Helms, by J. W. Brooks, trustee and assignee, (mesne.)	Poughkeepsie, N. Y	Mar. 12, 1861 May 27, 1873	5,424
Heels, Machine for attaching and finishing boot	H. Saloshinsky, by the McKay Heeling-Machine Company, assignee, (mesne.)	Boston, Mass	Jan. 31, 1860 Mar. 26, 1867	2,531
Heels to boots and shoes and polishing same, Machinery for attaching.	G. W. Ellis and C. W. Glidden, by J. W. Brooks, trustee and assignee, (mesne.)	Stoneham, Mass	Oct. 7, 1862 May 20, 1873	5,413
Heels to boots and shoes, Machine for nailing	G. W. Ellis, by J. W. Brooks, assignee, (mesne.)	Lynn, Mass	Dec. 22, 1863 Oct. 1, 1872	5,079
Hemp-cutter	J. L. Hardeman, by W. N. Whiteley, jr., assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 21, 1855 Nov. 13, 1860	1,077
Hemp-cutting machine	J. L. Hardeman, by W. N. Whiteley, assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 20, 1850 June 18, 1861	1,200
Hemp-cutting machine	J. L. Hardeman, by W. N. Whiteley, assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 20, 1850 June 18, 1861	1,201
Hemp-cutting machine	J. L. Hardeman, by W. N. Whiteley, assignee, (mesne.)	Arrow Rock, Mo., and Springfield, Ohio.	Aug. 20, 1850 June 18, 1861	1,202
Hemp, &c., Preparing and spinning	M. Day	Roxbury, Mass	Apr. 30, 1840 Mar. 13, 1844	61
Hides and skins, Compound for treating	L. F. Robertson	West Farms, N. Y	Apr. 21, 1868 May 26, 1868	2,947
Hides and skins, Compound for treating	L. F. Robertson	Morrisania, N. Y	Apr. 21, 1868 Mar. 1, 1870	3,864
Hides, Apparatus for scraping and working	H. Lampert	Rochester, N. Y	Dec. 18, 1866 Feb. 15, 1870	3,839
Hides, Depilating	J. E. Siebel	Chicago, Ill	July 4, 1871 Sept. 12, 1871	4,549
Hides for the manufacture of various articles, Preparing.	W. H. Towers, by New England Vulcanite Hide Company, assignee.	Boston, Mass	Aug. 21, 1866 June 25, 1867	2,662

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Hinge, (Design)	F. T. Fracker, by P. and F. Corbin, assignees.	New Britain, Conn	Jan. 26, 1869 Jan. 18, 1870	3,803
Hinge	C. Parker	Meriden, Conn	Apr. 13, 1852 Aug. 28, 1855	326
Hinge, Blind	J. Plant	Washington, D. C	Apr. 24, 1847 May 15, 1847	94
Hinge, Butt	J. F. Townsend, by self and P. P. Pratt, assignees.	Westfield and Buffalo, N. Y	Nov. 4, 1862 Feb. 3, 1863	1,396
Hinge of rolling iron shutters	A. L. Johnson	Baltimore, Md	June 25, 1850 Apr. 24, 1855	307
Hinge, Spring	J. S. Smith, by C. E. Stanley, assignee.	Cleveland, Ohio	May 19, 1857 Aug. 6, 1867	2,725
Hinge, Spring	J. S. Smith, by C. E. Stanley, assignee.	Cleveland, Ohio	May 19, 1857 Oct. 8, 1867	2,775
Hinge, Stove-door	C. J. Woolson	Cleveland, Ohio	Mar. 16, 1852 Apr. 28, 1863	1,468
Hoe	T. R. Timby	Saratoga Springs, N. Y	Mar. 5, 1867 Apr. 16, 1867	2,562
Hoe	E. Warren	Ceresco, Mich	May 10, 1870 July 4, 1871	4,461
Hoe-blanks, Manufacture of	N. Brand	Leonardsville, N. Y	Feb. 26, 1861 May 26, 1863	1,481
Hoe-blanks, Manufacture of	N. Brand	Leonardsville, N. Y	Feb. 26, 1861 May 26, 1863	1,482
Hoe, Horse	M. Chandler, by R. B. Dunn, and J. C. Flint, assignees, (mesne.)	East Corinth and Bangor, Me.	Jan. 14, 1862 Dec. 3, 1867	2,808
Hogs from rooting, Device to prevent	G. O. and W. L. Nixon	Sandyville, Ohio	Feb. 18, 1868 July 7, 1868	3,021
Hoisting-apparatus	G. Ambrose, by self and E. Hagan, (assignees.)	New York, N. Y	May 23, 1865 Aug. 17, 1869	3,596
Hoisting-apparatus	H. Black, by the Warrior Mower Company, assignee.	Little Falls, N. Y	Sept. 11, 1866 Jan. 25, 1870	3,811
Hoisting-apparatus	J. Lemman	Cincinnati, Ohio	July 17, 1860 July 31, 1866	2,325
Hoisting-apparatus	E. G. Otis, by Otis, Brothers & Co., assignees.	Yonkers, N. Y	Jan. 15, 1861 Feb. 21, 1871	4,269
Hoisting-apparatus	E. G. Otis, by Otis, Brothers & Co., assignees.	Yonkers, N. Y	Jan. 15, 1861 Feb. 21, 1871	4,270
Hoisting-apparatus	E. G. Otis, by Otis, Brothers & Co., assignees.	Yonkers, N. Y	Jan. 15, 1861 Feb. 21, 1871	4,271
Hoisting-apparatus, Coal-barge, &c	J. A. Preston, by the American Coal-Barge Company, assignee, (mesne.)	New Haven, Conn	Sept. 24, 1867 Mar. 12, 1872	4,801
Hoisting-block	J. A. Burr., by Burr & Co., assignees.	Brooklyn, and New York, N. Y.	Oct. 18, 1870 Dec. 27, 1870	4,215
Hoisting-device	J. J. Doyle	New York, N. Y	Jan. 8, 1861 Dec. 24, 1872	5,204
Hoisting-machine	W. G. Brower	New Brunswick, N. J	May 25, 1858 June 13, 1865	1,990
Hoisting-machine	W. Miller	Cincinnati, Ohio	May 12, 1863 June 20, 1865	2,003
Hoisting-machine	W. Miller	Cincinnati, Ohio	May 12, 1863 Sept. 5, 1865	2,065
Hoisting-machine	W. Miller	Cincinnati, Ohio	July 4, 1865 Sept. 5, 1865	2,066
Hoisting-machine	W. Miller	Cincinnati, Ohio	July 4, 1865 Apr. 19, 1870	3,922
Hoisting-machine	H. J. Reedy	Cincinnati, Ohio	June 9, 1868 Feb. 21, 1871	4,273
Hominy-mill	J. B. Gowdy and J. A. Welsh, by R. E. Richardson, assignee, (mesne.)	Xenia, Ohio	Aug. 11, 1857 Mar. 28, 1865	1,919
Hominy-mill	T. Hudnut	Terre Haute, Ind	Dec. 26, 1871 Aug. 5, 1873	5,520
Hoop-clasp, Metallic	J. R. Speer	Pittsburgh, Pa	Dec. 1, 1857 Feb. 19, 1867	2,491
Hoop-cutting machine	J. Thompson, by M. Reed, assignee.	Rochester, N. Y.	Nov. 17, 1863 Apr. 23, 1867	2,574
Hoop-machine	J. and S. Sawyer, by the American Hoop-Machine Company.	Fitchburgh, Mass	May 6, 1856 Apr. 16, 1861	1,173
Hoop-skirt	T. B. De Forest and T. S. Gilbert, by A. K. Young, assignee, (mesne.)	Birmingham, Conn	Feb. 18, 1868 Mar. 25, 1873	5,334
Hoop-skirt	G. Mallory	Watertown, N. Y	Oct. 19, 1858 Feb. 18, 1862	1,276
Hoop-skirt	S. A. Moody	New York, N. Y	May 10, 1864 Feb. 14, 1865	1,872
Hoop-skirt	C. Neumann	New York, N. Y	Nov. 1, 1859 June 14, 1864	1,703
Hoop-skirt	W. S. Ryerson	Philadelphia, Pa	Aug. 27, 1867 Jan. 14, 1868	2,842
Hoop-skirt	W. H. Towers, by the Vertical Hoop-Skirt Company, assignee.	Boston, Mass	Nov. 17, 1868 Mar. 28, 1871	4,316
Hoop-skirt, Skeleton	C. Neumann	New York, N. Y	Nov. 1, 1859 June 26, 1860	901
Hoop-skirts, Machine for making	C. Neumann, by self, assignee, (mesne.)	New York, N. Y	Aug. 16, 1859 Mar. 19, 1861	1,155
Hops, Method of preserving the aromatic principle of.	E. D. Brainard	Albany, N. Y	July 27, 1869 Oct. 12, 1869	3,667
Hops, &c., Training	L. H. Whitney	Vallejo, Cal	Dec. 4, 1866 Aug. 20, 1867	2,752
Horn molding and clarifying apparatus	E. F. Coffin, by Carr, Brown & Co., assignees.	Newburyport, Mass	Apr. 5, 1870 Apr. 16, 1872	4,873
Horse-clipping machine	P. Adie	London, England	June 30, 1868 Dec. 21, 1869	3,767

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Invention.	Inventor.	Residence.	Date.	No.
Horse-cover, Ventilated	C. P. Eager, by P. B. Eager, assignee.	Boston, Mass	Dec. 14, 1869 Apr. 26, 1870	3,936
Horse-grooming apparatus	J. J. Greenough	Syracuse, N. Y	Aug. 29, 1871 Oct. 7, 1873	5,589
Horse-power	H. Aldridge, by C. Aultman, assignee, (mesne.)	Elizabethtown, N. Mex., and Canton, Ohio.	Sept. 17, 1867 May 16, 1871	4,379
Horse-power	A. W. Gray	Middletown, Vt	Sept. 9, 1856 July 1, 1862	1,322
Horse-power	J. H. Kleppinger	Cherryville, Pa	June 23, 1868 Apr. 2, 1872	4,839
Horse-power	S. Perry, by self and A. Perry, assignees, (mesne.)	Newport, N. Y	July 21, 1863 June 4, 1867	2,635
Horse-power	J. A. Pitts, by J. Brayley and M. Pitts, administrators.	Buffalo, N. Y	July 4, 1854 May 14, 1861	1,185
Horse-power	C. Roberts and J. A. Throp	Three Rivers, Mich	Dec. 8, 1868 Dec. 14, 1869	3,763
Horse-power	H. Smith	Shelby Station, Tenn	Nov. 7, 1871 Jan. 7, 1873	5,226
Horse-power	E. Totman	Columbus, Pa	Mar. 14, 1865 Aug. 6, 1867	2,723
Horse-power	J. S. Upton	Battle Creek, Mich	Feb. 5, 1861 July 2, 1861	1,206
Horse-power	W. H. Wiley	Fredonia, N. Y	Nov. 12, 1867 July 28, 1868	3,059
Horse-power, Double-geared	C. Russell	Massillon, Ohio	May 1, 1855 Apr. 15, 1862	1,302
Horse-power, Endless-chain	G. Westinghouse	Central Bridge, N. Y	June 13, 1854 July 10, 1855	317
Horse-power, Endless-chain	G. Westinghouse	Schenectady, N. Y	June 13, 1854 Feb. 14, 1860	900
Horse-power, Endless-chain	A. Wheeler and W. C. Wheeler, by A. Wheeler and A. F. Wheeler, executor.	Albany, N. Y	July 8, 1841 May 22, 1855	310
Horse-power for driving machinery	S. H. Little	Gettysburgh, Pa	June 11, 1841 July 1, 1841	33
Horse-power, Mounted	M. B. Erskine	Racine, Wis	Sept. 13, 1870 June 13, 1871	4,423
Horse-power, Portable	J. A. Taplin	Fishkill, N. Y	Dec. 30, 1841 Jan. 24, 1854	256
Horse-power, Reversible	P. H. Kells	Hudson, N. Y	July 8, 1856 Oct. 28, 1856	406
Horse-powers, harvesters, &c., Casting the driving-wheels of.	E. P. Russell	Manlius, N. Y	Aug. 15, 1865 July 30, 1867	2,702
Horse-rake	S. E. Ament	Oswego, Ill	Feb. 9, 1864 Aug. 6, 1867	2,710
Horse-rake	E. L. Bergstresser by C. M. Titus, assignee, (mesne.)	Hublersburgh, Pa., and Ithaca, N. Y.	Aug. 26, 1862 May 19, 1868	2,937
Horse-rake	A. W. Coates	Alliance, Ohio	Aug. 27, 1867 May 25, 1869	3,457
Horse-rake	G. Deal	Wilmot, Ohio	July 10, 1866 Feb. 4, 1868	2,848
Horse-rake	S. L. Denney	Christiana, Pa	Aug. 4, 1863 Sept. 11, 1866	2,353
Horse-rake	C. Furst, D. Bradley, and J. Lacey.	Chicago, Ill	Apr. 15, 1862 Aug. 11, 1863	1,520
Horse-rake	C. Garver	Middleton, Pa	Dec. 7, 1858 June 29, 1869	3,522
Horse-rake	J. D. Jones	Columbiana, Ohio	May 9, 1865 Oct. 8, 1867	2,772
Horse-rake	W. King, by J. L. King, and W. W. Watson, assignees.	Springfield, Ill	Apr. 9, 1867 Sept. 22, 1868	3,136
Horse-rake	N. Martz, by A. R. Reese, assignee.	Phillipsburgh, N. J	Feb. 26, 1856 July 23, 1867	2,694
Horse-rake	M. Morgan, by A. R. Reese, assignee of A. Morgan, administratrix.	Phillipsburgh, N. J	Aug. 24, 1858 Dec. 1, 1868	3,219
Horse-rake	J. I. Munroe	Woburn, Mass	Mar. 19, 1867 Apr. 13, 1869	3,370
Horse-rake	G. Pierce	Ercildown, Pa	Nov. 29, 1859 Mar. 22, 1864	1,640
Horse-rake	G. Pierce	Ercildown, Pa	Nov. 29, 1859 Mar. 28, 1865	1,921
Horse-rake	R. Pratt	Marple Township, Pa.	Jan. 8, 1856 Jan. 23, 1866	2,156
Horse-rake	M. Reezer, by A. R. Reese, assigneee, (mesne.)	Phillipsburgh, N. J	Oct. 5, 1858 Jan. 5, 1869	3,255
Horse-rake	H. W. Sabin, by C. Mason, R. W. Fenwick, and D. C. Lawrence, assignees, (mesne,) (extended December 3, 1864.)	Washington, D. C	Dec. 3, 1850 Mar. 28, 1865	1,912
Horse-rake	H. W. Sabin, by C. Mason, R. W. Fenwick, and D. C. Lawrence, assignees, (mesne,) (extended December 3, 1864.)	Washington, D. C	Dec. 3, 1850 Mar. 28, 1865	1,913
Horse-rake	H. W. Sabin, by C. Mason, R. W. Fenwick, and D. C. Lawrence, assignees, (mesne,) (extended December 3, 1864.)	Washington, D. C	Dec. 3, 1850 Mar. 28, 1865	1,914
Horse-rake	H. W. Sabin, by C. Mason, R. W. Fenwick, and D. C. Lawrence, assignees, (mesne,) (extended December 3, 1864.)	Washington, D. C	Dec. 3, 1850 Mar. 28, 1865	1,915
Horse-rake	D. P. Sharp	Ithaca, N. Y	Dec. 12, 1865 May 18, 1869	3,450
Horse-rake	J. H. Shireman	East Berlin, Pa	Sept. 9, 1862 Dec. 6, 1864	1,832
Horse-rake	A. B. Sprout	Hughesville, Pa	Nov. 25, 1862 May 30, 1865	1,978

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Horse-rake	A. B. Sprout	Hughesville, Pa	Jan. 17, 1865 July 18, 1865	2,032
Horse-rake	A. B. Sprout	Hughesville, Pa	June 6, 1865 Jan. 16, 1866	2,148
Horse-rake	J. J. Squire, by A. R. Reese, assignee.	Phillipsburgh, N. J	Dec. 23, 1856 Feb. 16, 1869	3,303
Horse-rake	T. J. Steffe, by A. R. Reese, assignee.	Phillipsburgh, N. J	Sept. 20, 1859 July 20, 1869	3,561
Horse-rake	D. Strock	Chambersburgh, Pa	Sept. 11, 1860 Nov. 24, 1868	3,213
Horse-rake	C. W. Warner	Williston, Vt	Nov. 15, 1864 Sept. 4, 1866	2,352
Horse-rake	G. Whitcomb	Port Chester, N. Y	Oct. 5, 1858 June 16, 1868	2,994
Horse-rake	G. Whitcomb	Port Chester, N. Y	Oct. 5, 1858 June 16, 1868	2,995
Horse-rake	D. B. Woodward, by H. R. Hawkins, assignee.	Akron, Ohio	Feb. 19, 1861 June 16, 1868	2,993
Horseshoe	G. T. Chapman	New York, N. Y	Feb. 25, 1868 Feb. 8, 1870	3,822
Horseshoe	J. W. Hodges, by self and P. Murquiondo, assignees.	Baltimore, Md	July 4, 1865 Feb. 13, 1866	2,172
Horseshoe	O. A. Howe	New York, N. Y	Sept. 15, 1863 Oct. 11, 1864	1,790
Horseshoe	O. P. Macgill, by self and T. Poultney, assignees.	Brooklandville, Md	Apr. 11, 1865 Apr. 16, 1867	2,560
Horseshoe-irons, Machine for rolling	W. W. Lewis	Cincinnati, Ohio	Feb. 1, 1859 Mar. 30, 1869	3,354
Horseshoe-making machine	H. Burden	Troy, N. Y	June 30, 1857 June 13, 1865	1,998
Horseshoe-making machine	O. A. Howe, by the Howe Horseshoe and Machine Company, assignee.	New York, N. Y	Sept. 22, 1868 Mar. 28, 1871	4,315
Horseshoe-making machine	B. Mee	Troy, N. Y	June 9, 1863 Nov. 29, 1864	1,829
Horseshoe-making machine	C. H. Perkins	Providence R. I	June 1, 1850 Mar. 3, 1863	1,424
Horseshoe-making machine	T. R. Taylor	Brooklyn, N. Y	Apr. 3, 1860 Apr. 21, 1863	1,458
Horseshoe-nail-making machine	A. Whittemore	Cambridgeport, Mass	Aug. 14, 1860 Oct. 9, 1860	1,060
Horseshoe-nails, Finishing	S. E. Chase, by the Globe Nail Company, assignee.	Boston, Mass	June 9, 1868 Dec. 31, 1872	5,207
Horseshoe-nails, Machine for finishing	H. A. Wills, by J. A. Wills and L. S. Kingsland, assignees.	Vergennes, Vt	Jan. 16, 1872 Jan. 21, 1873	5,249
Horseshoe-pad	J. Haseltine, by S. Adlam, jr., assignee, (mesne.)	Charlestown, Mass	July 25, 1865 Apr. 9, 1867	2,543
Horseshoe toe-calk	G. Custer	Monroe, Mich	Apr. 12, 1870 May 7, 1872	4,889
Horses, Device for shearing and clipping	R. T. Smith and J. K. Priest, by R. T. Smith, W. Earl, J. K. Priest, and J. G. Blunt, assignees.	Nashua, N. H	Dec. 10, 1867 June 7, 1870	4,021
Horses, Sun-shield for	H. D. McGovern	Brooklyn, N. Y	Oct. 24, 1871 June 17, 1873	5,456
Horses to shoe them, Apparatus for raising and securing the legs of.	J. P. Champion	Phelps, N. Y	Nov. 5, 1867 Sept. 1, 1868	3,104
Hose, belting, &c., Making India-rubber	J. B Forsyth, by self, assignee, (mesne.)	Roxbury, Mass	Sept. 13, 1864 Mar. 13, 1866	2,191
Hose carriage	R. Perrine and S. M. Stewart	Rochester, N. Y	Apr. 18, 1865 Aug. 13, 1872	5,032
Hose-coupling	W. H. Bliss and R. B. Lawton, by W. H. Bliss, assignee.	Newport, R. I	Feb. 22, 1859 Dec. 21, 1869	3,768
Hose-coupling	J. C. Cooke, by A. F. Allen, assignee.	Bridgeport, Conn., and Providence, R. I.	Nov. 30, 1858 Apr. 18, 1871	4,344
Hose-coupling	J. C. Cooke, by self and A. F. Allen, assignees.	Bridgeport, Conn., and Providence, R. I.	Nov. 30, 1858 Oct. 24, 1871	4,605
Hose-coupling	R. J. Falconer	Washington, D. C	June 7, 1853 Feb. 27, 1866	2,181
Hose-coupling	L. M. Ferry, by E. Gaylord, assignee, (mesne.)	Chicopee, Mass	Oct. 7, 1856 May 21, 1861	1,186
Hose-coupling	L. M. Ferry, by E. Gaylord, assignee, (mesne.)	Chicopee, Mass	Oct. 7, 1856 Nov. 24, 1863	1,571
Hose-coupling	N. N. McLeod, by A. Brodnax, and R. B. Gray, assignees, (mesne.)	Saint Louis, Mo., Mont Clair, N. J., and Brooklyn, N. Y.	May 24, 1859 Aug. 4, 1868	3,062
Hose, Manufacture of India-rubber	T. J. Mayall	Roxbury, Mass	Nov. 29, 1859 Oct. 22, 1872	5,111
Hose, Manufacture of rubber or gutta-percha	E. L. Perry and C. Manheim, by the Combination Rubber Company and the Gutta-Percha Rubber Manufacturing Company, assignees.	New York, N. Y	July 6, 1869 Oct. 4, 1870	4,148
Hose-pipe, Coating	C. H. Hinckley, by the New York Rubber Company, assignee.	Stonington, Conn., and New York.	Sept. 29, 1857 June 5, 1860	969
Hose, Textile	L. B. Cooley and J. C. Cooke, by L. B. Cooley, S. Babcock, and B. G. Cooley, assignees, (mesne.)	Middletown, Conn	Mar. 16, 1858 Aug. 31, 1858	595
Hose, tubing, &c., of rubber, Manufacture of	J. Schenck	Brooklyn, N. Y	May 25, 1869 Feb. 15, 1870	3,842
Hosiery, Manufacturing	W. H. McNary	Brooklyn, N. Y	Dec. 21, 1856 Feb. 17, 1857	428
Hot-air engine	A. K. Rider	New York, N. Y	July 16, 1872 Mar. 25, 1873	5,340
Hot-air engine	P. Shaw, by Shaw's Union Air-Engine Company, assignee.	Boston, Mass	Nov. 26, 1861 Feb. 23, 1869	3,313

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Invention.	Inventor.	Residence.	Date.	No.
Hot-air engine	S. Wilcox, jr	Westerly, R. I	Nov. 20, 1869 Apr. 25, 1865	1,942
Hot-air furnace	D. G. Littlefield	Albany, N. Y	Oct. 9, 1860 Apr. 22, 1862	1,303
Hot-air furnace	O. Paddock	Watertown, N. Y	Nov. 27, 1860 Nov. 24, 1863	1,574
Hot-air furnace	O. Paddock	Watertown, N. Y	Nov. 27, 1860 Nov. 24, 1863	1,575
Hot-air furnace	E. Webster, by Allen & Willard, assignees.	Hartford, Conn	June 12, 1866 Mar. 23, 1869	3,340
Hot-air furnace	F. A. Woodson	Anna, Ill	Feb. 2, 1869 May 4, 1869	3,424
Hot-air-pipe evaporator	G. F. J. Colburn	Newark, N. J	Jan. 22, 1861 Apr. 2, 1861	1,165
Hot-air register	C. F. Tuttle	Williamsburgh, N. Y	Jan. 23, 1849 May 1, 1849	136
Hot-air register	C. F. Tuttle, by E. A. and W. Tuttle and J. S. Bailey, assignees, (mesne.)	New York, N. Y	Jan. 23, 1849 Oct. 14, 1862	1,346
Hot-air register	E. A. Tuttle	Brooklyn, N. Y	Jan. 3, 1854 Feb. 17, 1863	1,412
Hot-air register	W. Young, by the Tuttle and Bailey Manufacturing Company, assignee.	Easton, Pa., and New York, N. Y.	Apr. 25, 1871 Feb. 27, 1872	4,773
Hot-water apparatus	J. Brown	New York, N. Y	May 30, 1854 Aug. 14, 1855	321
Hot-water apparatus, Mode of regulating the temperature of.	T. T. Tasker	Philadelphia, Pa	Dec. 5, 1854 May 15, 1866	2,246
House decoration, furniture, &c	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,089
Houses and other buildings, Construction and finishing of.	J. K. Mayo, by self, and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,088
Housing hook, Self	J. R. Henshaw, by the Middletown Tool Company, assignee, (mesne.)	Middletown, Conn	Oct. 26, 1854 Feb. 6, 1866	2,166
Hub, Carriage-wheel	H. Delano	Skaneateles, N. Y	Oct. 28, 1837 Sept. 25, 1829	14
Hub, Carriage-wheel	J. H. Harper	Pittsburgh, Pa	Mar. 7, 1871 Dec. 10, 1872	5,182
Hub, Carriage-wheel	A. Warner, by E. Hall & Co., assignees, (mesne.)	Hamden and Wallingford, Conn.	Feb. 5, 1867 Nov. 21, 1871	4,642
Hub, Vehicle	A. Warner, by E. Hall & Co., assignees, (mesne)	Belvidere, N. J	Feb. 5, 1867 Apr. 22, 1873	5,366
Hubs, Casting boxes for wheel	T. Ellis, by self and W. A. and A. D. Ellis, assignees.	Philadelphia, Pa	Dec. 6, 1859 May 1, 1860	950
Hulling and scouring-machine	O. P. Stevens	Cleveland, Ohio	July 1, 1863 Mar. 28, 1865	1,923
Hut, Portable	A. Derrom	Paterson, N. J	July 9, 1861 Aug. 23, 1864	1,741
Hut, Portable	A. Derrom	Paterson, N. J	July 9, 1861 Aug. 23, 1864	1,742
Hydrant	W. Bailey	Troy, N. Y	July 4, 1865 Oct. 18, 1870	4,155
Hydrant	J. G. Murdock	Cincinnati, Ohio	May 26, 1863 May 11, 1869	3,434
Hydrant	W. P. Newhall, by D. D. Nash and H. A. Davison, assignees, (mesne.)	New York, N. Y., and Bergen County, N. J.	Dec. 4, 1866 Sept. 17, 1872	5,064
Hydrant	W. Race and S. R. C. Mathews, by S. R. C. Mathews, assignee.	Lockport, N. Y., and Philadelphia, Pa.	Jan. 26, 1858 July 18, 1871	4,475
Hydrant	W. Race and S. R. C. Mathews, by S. R. C. Mathews, assignee, (extended January 26, 1872.)	Lockport, N. Y., and Philadelphia, Pa.	Jan. 26, 1858 Apr. 30, 1872	4,887
Hydrant	C. L. Stacy	Cincinnati, Ohio	Oct. 4, 1859 June 6, 1865	1,985
Hydrant and fire-plug	S. H. Davies	Cincinnati, Ohio	July 18, 1840 Feb. 4, 1843	49
Hydrants, Waste-device for	J. Culver, by J. Regester, W. G. Webb, J. L. Roche, and J. McCart, assignee.	Baltimore, Md	Apr. 22, 1856 Sept. 27, 1859	828
Hydrocarbon-vapor apparatus	P. S. Pease	Buffalo, N. Y	Mar. 13, 1860 Mar. 10, 1868	2,893
Hydrocarbon vapor generating and burning apparatus.	J. Kidd	New York, N. Y	Jan. 10, 1871 May 21, 1872	4,910
Hydrocarbon-vapor with air, Apparatus for combining.	O. P. Drake	Boston, Mass	Aug. 30, 1864 Nov. 15, 1864	1,819
Hydrocarbon-vapors, Apparatus for charging air or gas with.	E. H. Covel, (extended May 31, 1873.)	Brooklyn, N. Y	May 31, 1859 June 24, 1873	5,465
Hydrocarbons, Burning	J. R. Caldwell, by self, A. L. Murphy, T. M. Coane, J. N. Withers, and T. Caldwell, assignees.	Philadelphia, Pa	Sept. 12, 1871 Feb. 6, 1872	4,743
I.				
Ice-cream freezer	B. G. Martin	Williamsburgh, N. Y	Mar. 1, 1870 Nov. 15, 1870	4,177
Ice-cream freezer	H. B. Masser, (additional improvement Jan. 1, 1850.)	Sunbury, Pa	Dec. 12, 1848 June 28, 1859	751
Ice-chambers, &c., Construction of	E. D. Brainard	Albany, N. Y	Jan. 14, 1868 June 27, 1871	4,437
Ice hoisting and storing apparatus	H. Van Steenburgh and J. Egnor, by selves and P. Burhyle, assignees.	Catskill, N. Y	Nov. 30, 1858 Oct. 23, 1860	1,069
Ice in rivers and harbors, Method of obstructing	P. Voorhis	New York, N. Y	Apr. 16, 1867 Nov. 5, 1867	2,796

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Ice-machine	F. P. E. Carré, by J. B. J. Mignon and H. S. Rouart, assignees.	Saint Pierre Les Nemours and Paris, France.	Oct. 2, 1860 Feb. 18, 1873	5,287
Ice-machine	S. B. Martin and J. M. Beath	San Francisco, Cal	May 28, 1872 July 16, 1872	4,992
Ice-machine	C. Piagge, by self and T. C. Glazier, assignees.	New York, N. Y	Aug. 23, 1870 Aug. 22, 1871	4,525
Ice-machine	F. Windhausen, by L. Schneider, C. T. Buddecke, and J. A. Blaffer, assignees.	Brunswick, Germany, and New Orleans, La.	Mar. 22, 1870 Oct. 17, 1871	4,603
Ice, Manufacture of	F. P. E. Carré, by J. B. J. Mignon, and H. S. Rouart, assignees.	Saint Pierre Les Nemours and Paris, France.	Oct. 2, 1860 Feb. 18, 1873	5,288
Illuminating-apparatus	G. Cuppers, by S. Raynor, A. E. Fox, and R. G. Berford, assignees, (mesne.)	Brooklyn, N. Y	Nov. 28, 1871 Oct. 15, 1872	5,098
Implement-handle	T. R. Timby	Saratoga Springs, N. Y	Mar. 5, 1867 Apr. 16, 1867	2,563
India-rubber and steel spring, Combined	R. T. Bussell, by the National Spring Company, assignee, (extended November 29, 1870.)	New York, N. Y	Nov. 29, 1853 Dec. 13, 1870	4,202
India-rubber cloth, Process for rolling	F. D. Hayward and J. C. Bickford, by F. D. Hayward and I. E. Sanborn, assignees, (extended March 19, 1864.)	Malden and Boston, Mass	Mar. 19, 1850 Mar. 20, 1866	2,207
India-rubber cloth, Process for rolling	F. D. Hayward and J. C. Bickford, by F. D. Hayward and I. E. Sanborn, assignees, (extended March 9, 1864.)	Malden and Boston, Mass.	Mar. 19, 1850 June 5, 1866	2,262
India-rubber fabric, Manufacture of	N. Goodyear, by H. B. Goodyear, administrator, (extended May 13, 1859.)	New York, N. Y	May 3, 1845 Sept. 13, 1859	812
India-rubber goods by means of zinc-compounds, Manufacture of.	H. G. Tyer and J. Helm	New Brunswick, N. J	Jan. 30, 1849 Aug. 7, 1849	141
India-rubber goods by means of zinc-compounds, Manufacture of.	H. G. Tyer and J. Helm, by H. H. Day, assignee.	New Brunswick, N. J., and New York, N. Y.	Jan. 30, 1849 May 24, 1859	727
India-rubber hollow articles, Making	C. Goodyear, by C. Goodyear, jr., executor, (extended April 25, 1862.)	New York, N. Y	Apr. 25, 1848 Feb. 13, 1866	2,169
India-rubber hollow articles, Making	C. Goodyear, by C. Goodyear, jr., executor, (extended April 25, 1862.)	New York, N. Y	Apr. 25, 1848 Feb. 13, 1866	2,170
India rubber, Manufacture of	C. Goodyear	New Haven, Conn	June 15, 1844 Dec. 25, 1849	156
India rubber, Manufacture of	N. Goodyear, by H. B. Goodyear, administrator.	New York, N. Y	May 6, 1851 May 18, 1858	556
India rubber, Manufacture of	N. Goodyear, by H. B. Goodyear, administrator.	New York, N. Y	May 6, 1851 May 18, 1858	557
India rubber, Manufacture of	D. Hayward, by J. S. Carew, assignee of C. Swan, executor, (extended August 29, 1868.)	Norwich, Conn	Aug. 29, 1854 July 6, 1869	3,531
India rubber, Process for rolling	F. D. Hayward and J. C. Bickford, by F. D. Hayward and I. E. Sanborn, assignees, (extended March 19, 1864.)	Malden and Boston, Mass	Mar. 19, 1850 June 5, 1866	2,263
India-rubber rolls to metallic shaft, Fastening	G. J. Colby	Waterbury, Vt	Apr. 1, 1862 June 13, 1865	1,992
India-rubber rollers, Manuf.cture of	J. B. Forsyth	Roxbury, Mass	Nov. 13, 1866 May 7, 1867	2,589
India-rubber rollers, Manufacture of	J. B. Forsyth	Boston, Mass	Nov. 13, 1866 Jan. 31, 1871	4,244
India rubber with cotton-fiber, Felting	C. Goodyear	New Haven, Conn	June 15, 1844 Dec. 25, 1849	157
Induction-coil apparatus and circuit-breaker	C. G. Page, by P. W. Page, administratrix, and the Western Union Telegraph Company, assignee.	Washington, D. C., and New York, N. Y.	Apr. 14, 1868 Oct. 10, 1871	4,588
Inhaler	W. H. Cutler	Buffalo, N. Y	Feb. 4, 1873 June 17, 1873	5,449
Inhaler	N. J. Donaldson	Worcester, Mass	Jan. 14, 1873 July 15, 1873	5,491
Inhalation, Compound for treating catarrh, &c., by	D. Slade	Chicago, Ill	Mar. 21, 1871 June 27, 1871	4,445
Ingot-mold	A. L. Holley	Brooklyn, N. Y	July 30, 1872 Mar. 11, 1873	5,318
Ingot-mold stopper	A. L. Holley	Brooklyn, N. Y	July 30, 1872 Mar. 11, 1873	5,317
Inking roller, pad, and other printing-purposes, Composition for.	L. Francis and F. W. Letmate, by L. Francis and C. H. Loutrel, assignees.	New York, N. Y	June 21, 1864 Nov. 26, 1867	2,805
Inkstand	H. L. Andrews	Chicago, Ill	Mar. 31, 1868 Sept. 7, 1869	3,634
Inkstand	S. Darling	Providence, R. I	Jan. 9, 1866 Dec. 13, 1870	4,197
Inkstand	A. P. Griffing	East Cambridge, Mass	Feb. 4, 1862 Mar. 25, 1862	1,293
Inkstand	O. H. Jadwin	Catbondale, Pa	Nov. 23, 1858 Feb. 24, 1863	1,419
Inkstand	T. Rohjohn	New York, N. Y	Aug. 25, 1857 May 24, 1859	729
Inkstand	J. W. Ross	Boston, Mass	Apr. 30, 1861 Mar. 8, 1864	1,629
Inkstand	W. H. Towers	Boston, Mass.	Oct. 2, 1860 June 2, 1863	1,489
Inkstand, Barometer	T. S. Hudson	East Cambridge, Mass	June 4, 1861 Nov. 15, 1864	1,820
Inkstand, Barometer	T. S. Hudson	East Cambridge, Mass	June 4, 1861 May 14, 1867	2,607

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Invention.	Inventor.	Residence.	Date.	No.
Inkstand, Fountain	F. Draper	East Cambridge, Mass	Jan. 7, 1851 Apr. 2, 1861	1,164
Inkstands, Manufacture of	T. S. Hudson	East Cambridge, Mass	Aug. 24, 1869 May 10, 1870	3,964
Insect-destroying and disinfecting compound	A. McDougall, by J. S. Millar, assignee, (mesne.)	Manchester, England, and Montreal, Canada.	July 16, 1867 Feb. 18, 1873	5,292
Insulator	L. A. Cauvet	New York, N. Y	July 25, 1865 Feb. 22, 1870	3,847
Insulator, Telegraph	W. E. Simonds	Hartford, Conn	Nov. 26, 1867 June 8, 1869	3,499
Insulator, Telegraph-wire	D. Brooks	Philadelphia, Pa	Nov. 29, 1864 Aug. 6, 1867	2,717
Iron and steel, Coating	C. Usher, by S. B. Hewitt, jr., and L. P. Jones, assignees.	Eagle Grove and Iowa Falls, Iowa.	Mar. 5, 1867 May 24, 1870	3,989
Iron and steel, Furnace for manufacture of	H. Ross and J. H. Clemens	Pittsburgh, Pa	Aug. 22, 1871 Oct. 24, 1871	4,609
Iron and steel, Manufacture of	J. Jameson	Philadelphia, Pa	June 29, 1869 Nov. 7, 1871	4,622
Iron and steel, Manufacture of	J. Ralston, A. L. Thomas, and W. Parkinson, by selves, W. A. Shoemaker, and G. E. Buckley, assignees.	Schuylkill County and Philadelphia, Pa.	Mar. 23, 1869 Dec. 21, 1869	3,775
Iron and steel, Manufacture of	R. Yeilding, by F. W. Isham and E. Yeilding, assignees.	Detroit, Mich	Oct. 13, 1868 June 20, 1871	4,434
Iron and steel, Plating, tempering, and hardening.	E. Savage, by the American Metal Company, assignee, (mesne.)	West Meriden, Conn	Dec. 26, 1865 July 10, 1866	2,308
Iron and steel, Process and apparatus for puddling.	J. G. Blunt, by M. H. Insley, assignee.	Leavenworth, Kans	July 16, 1872 Apr. 22, 1873	5,367
Iron and steel, Process for refining	J. Absterdam, by the First National Refined Iron and Steel Manufacturing Company, assignee.	New York, N. Y	Jan. 23, 1866 Dec. 28, 1868	3,249
Iron and steel, Refining and tempering	A. H. Siegfried, by self and G. B. Garman, assignees.	South Bend, Ind	Apr. 11, 1871 Aug. 8, 1871	4,507
Iron by blasts of air, Refining	C. Shunk	Canton, Ohio	May 17, 1859 Feb. 10, 1863	1,401
Iron chips, turnings, &c., Mode of melting and aggregating.	E. C. Haserick	Lake Village, N. H	Mar. 13, 1866 May 22, 1866	2,250
Iron exposed to water, Preventing corrosion of	R. Lighthall, by C. Godfrey and R. Lighthall, assignees.	New York and Brooklyn, N. Y.	Dec. 7, 1869 June 28, 1870	4,048
Iron, &c., Furnace for treating	J. Green, by self, T. H. and H. Willson, C. R. Adams, and S. Munn, assignees.	Norristown and Philadelphia, Pa., and Hackensack, N. J.	Mar. 26, 1867 Nov. 3, 1868	3,178
Iron in the hearth of blast-furnaces, Refining	C. Shunk	Canton, Ohio	May 17, 1859 Aug. 16, 1859	798
Iron into cast-steel and other combinations of iron and carbon, Process for refining and converting cast.	E. and P. E. Martin	Paris, France	Dec. 10, 1867 Aug. 25, 1868	3,096
Iron into steel by means of hydrocarbon-vapor, Apparatus for converting.	T. R. Scowden	Cincinnati, Ohio	Aug. 13, 1872 Nov. 26, 1872	5,165
Iron into steel, Converting	T. J. Barron, by the Barron's Patent Steel Manufacturing Company, assignee.	New York, N. Y	Jan. 1, 1867 Apr. 12, 1870	3,930
Iron, Manufacture of	W. Kelly	Eddyville, Ky	June 23, 1857 Nov. 3, 1857	305
Iron, Manufacture of	D. Stewart	Kittanning, Pa	Dec. 17, 1867 July 13, 1869	3,553
Iron, Manufacture of	J. D. Williams	Allegheny City, Pa	Aug. 8, 1865 Sept. 19, 1865	2,073
Iron, Manufacture of bar	W. H. Perry	Sharon, Pa	Aug. 6, 1861 Jan. 4, 1870	3,787
Iron, Manufacture of malleable	A. Dickerson	Newark, N. J	Mar. 13, 1847 Aug. 21, 1847	101
Iron, Manufacture of sheet	W. D. Wood	McKeesport, Pa	Apr. 8, 1873 July 1, 1873	5,474
Iron, Manufacturing and refining	C. Shunk	Youngstown, Ohio	Feb. 12, 1856 May 31, 1864	1,686
Iron, Mode of purifying cast	S. W. Kirk, by self and C. E. Stotsenbury, assignees.	Coatesville, Pa., and Wilmington, Del.	Mar. 24, 1863 Aug. 10, 1869	3,594
Iron pipes, Employing centrifugal force in casting.	T. J. Lovegrove	Baltimore, Md	Dec. 26, 1848 Mar. 23, 1858	539
Iron, Refining	C. Shunk	Canton, Ohio	July 12, 1859 Feb. 10, 1863	1,402
Iron, Refining	C. Shunk	Youngstown, Ohio	Feb. 12, 1856 May 31, 1864 Nov. 28, 1865	2,118
Iron, Refining	C. Shunk	Philadelphia, Pa	Feb. 12, 1856 July 14, 1868	3,036
Iron, Steam-apparatus for forging, stamping, and cutting.	J. Nasmyth	Great Britain	June 9, 1842 Sept. 10, 1845	86
Ironing-table	F. Liller, by S. Meinetsberger and F. W. Merryman, assignees, (mesne.)	Baltimore, Md	July 16, 1872 Oct. 29, 1872	5,119
Ivory, Artificial	W. M. Welling, (extended August 4, 1871.)	New York, N. Y	Aug. 4, 1857 July 30, 1872	5,019
J.				
Jars, cans, &c., Stopping	W. D. Ludlow, by J. F. Griffin, assignee.	New York, N. Y	Aug. 6, 1861 May 19, 1863	1,477
Jelly-glass	W. Doyle	Birmingham, Pa	Mar. 4, 1873 Apr. 15, 1873	5,356
Journal-bearing	S. Croll, by self, R. T. Barrett, and E. T. Flush, assignees.	Philadelphia, Pa	Mar. 12, 1872 May 26, 1872	4,914
Journal-box	P. S. Devlan	Elizabethport, N. J	Sept. 25, 1860 July 9, 1861	1,203
Journal-box	P. S. Devlan	Elizabethport, N. J	Sept. 25, 1860 July 9, 1861	1,203
Journal-box	D. H. Dotterer	Chicago, Ill	May 7, 1861 Nov. 4, 1862	1,359

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Journal-box	H. H. Thayer, by J. A. Woodbury, assignee, (extended September 7, 1872.)	Sandwich, Mass	Sept. 7, 1858 Mar. 11, 1873	5,323
Journal-box, Glass	E. Campbell	Columbus, Ohio	Aug. 21, 1855 Aug. 25, 1857	485
Journal-box, Railway	R. C. Wright	Meadville, Pa	Nov. 14, 1865 Aug. 14, 1866	2,338
Journal-box, Railway-car	R. McWilliams, by S. W. Hoffman and A. J. Frederick, assignees, (mesne.)	Philadelphia, Pa	July 19, 1859 Oct. 25, 1859	841
Journal-box, Self-lubricating	W. W. Crane	Auburn, N. Y	Apr. 28, 1868 Dec. 3, 1872	5,170
Journal-box, Self-lubricating	J. Duff, by self and E. B. Pierce, assignees.	Peoria, Ill	June 8, 1869 Aug. 8, 1871	4,502
Journal-box, Self-lubricating	P. P. Lane, by Lane & Bodley, assignees.	Cincinnati, Ohio	Nov. 26, 1867 Aug. 31, 1869	3,623
Journals of cars, locomotives, &c., Bearings and oil-cups for.	J. H. Tims	Newark, N. J	Oct. 31, 1859 June 13, 1844	63
Jug-tops, Construction of	H. Wright, by self and H. H. and B. F. Collins, assignees.	Pittsburgh, Pa	Sept. 24, 1867 Apr. 21, 1868	2,921
K.				
Kaleidoscope	C. G. Bush, by self and J. W. Hoard, assignees.	Boston, Mass	Sept. 30, 1873 Nov. 11, 1873	5,649
Kettle, Brass	H. W. Hayden, by the Waterbury Brass Company, assignee, (extended December 16, 1865.)	Waterbury, Conn	Dec. 16, 1851 May 24, 1870	3,896
Kettles and attachments of bails, Providing projections for.	D. Stuart	Philadelphia, Pa	Oct. 3, 1871 Apr. 9, 1872	4,865
Kettles, Grinding the inner surface of cast-iron	C. C. Bradley, jr	Syracuse, N. Y	Feb. 24, 1857 May 1, 1860	954
Kettles, Machine for making	H. W. Hayden, (extended December 16, 1865.)	Waterbury, Conn	Dec. 16, 1851 Feb. 13, 1866	2,171
Kettles, Machine for making	H. W. Hayden, by the Waterbury Brass Company, assignee, (extended December 16, 1865.)	Waterbury, Conn	Dec. 16, 1851 May 24, 1870	3,995
Kettles, Making brass	O. W. Minard	Waterbury, Conn	Apr. 15, 1856 Nov. 29, 1859	858
Kettles, Making brass	F. J. Seymour, by the Waterbury Brass Company, assignee.	Waterbury, Conn	May 13, 1856 May 14, 1861	1,183
King-bolt, Railway-car-truck	S. W. Murray and B. P. Lamason.	Milton, Pa	Apr. 25, 1871 Aug. 19, 1873	5,546
Kitchen-boiler, (Design)	W. B. Scaife	Pittsburgh, Pa	July 12, 1870 May 23, 1871	4,393
Knife	I. Merritt, by self, assignee, (mesne.)	Abington, Mass	June 7, 1859 Mar. 19, 1867	2,520
Knife and fork cleaner	S. Brackett	Fall River, Mass	Apr. 10, 1860 Feb. 5, 1861	1,134
Knife-polisher	R. Shaler, by W. H. Horstman, assignee.	Madison, Conn., and New York, N. Y.	Nov. 28, 1848 Aug. 10, 1858	580
Knife-sharpener	J. Meyer, jr	New York, N. Y	May 14, 1867 Sept. 10, 1867	2,762
Knives, Grinding and polishing	J. Dodge, by self and D. Blake, assignees.	Waterford and Albany, N. Y.	Oct. 12, 1858 May 31, 1859	733
Knitting-machine	J. B. and W. Aiken, by J. B. Aiken, assignee, (mesne.)	Franklin, N. H	July 8, 1856 Dec. 18, 1866	2,419
Knitting-machine	N. P. Aikin	Troy, N. Y	July 13, 1858 May 3, 1859	709
Knitting-machine	W. and J. B. Aiken, by J. B. Aiken, assignee, (mesne.)	Franklin and Manchester, N. H.	Sept. 11, 1855 Mar. 13, 1860	926
Knitting-machine	J. Hollen, by J. Nesmith, assignee, (mesne,) (extended July 16, 1864.)	Blair County, Pa	July 16, 1850 Apr. 10, 1866	2,225
Knitting-machine	M. Marshall, by self, W. Aldrick, and L. B. Tyng, assignees.	Lowell, Mass	Mar. 15, 1853 Oct. 25, 1864	1,801
Knitting-machine	J. Pepper	Holderness, N. H	July 17, 1855 Sept. 15, 1863	1,538
Knitting-machine	J. Pepper, by the Pepper Knitting-Machine Company, assignee, (mesne,) (extended July 17, 1869.)	Boston, Mass	July 17, 1855 Mar. 29, 1870	3,901
Knitting-machine	M. L. Roberts	Mount Vernon, Ohio	Feb. 12, 1861 Dec. 22, 1868	3,242
Knitting-machine	W. A. Tangeman	Lockland, Ohio	Jan. 5, 1869 Aug. 26, 1873	5,552
Knitting-machine	C. Tompkins	Troy, N. Y	Dec. 24, 1856 Apr. 24, 1860	948
Knitting-machine	C. Tompkins and J. Johnson	Troy, N. Y	Sept. 18, 1855 May 15, 1860	963
Knitting-machine burr	M. Van Auken, by J. Warner, assignee.	Amsterdam, N. Y	June 23, 1863 Sept. 12, 1871	4,555
Knitting machine, Circular	J. Pepper	Holderness, N. H	Dec. 5, 1854 Oct. 27, 1863	1,555
Knitting-machine needle	J. H. Lane and C. D. House, by O. G. Neal and J. F. Adams, assignees.	Lake Village, N. H	Dec. 7, 1869 Oct. 8, 1872	5,091
Knitting machine, Stocking	H. Burt, by the Newark Patent Hosiery Company, assignee, (mesne,) (extended September 23, 1857.)	Boston, Mass, and Newark, N. J.	Sept. 23, 1843 Feb. 28, 1860	915
Knitting machine, Stocking	H. Burt, by the Newark Patent Hosiery Company, assignee, (mesne,) (extended September 23, 1857.)	Boston, Mass, and Newark, N. J.	Sept. 23, 1843 Feb. 28, 1860	916

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Invention.	Inventor.	Residence.	Date.	No.
Knitting machines, Take-up for circular	H. Brockway, by C. Thompkins, assignee.	Troy, N. Y	Nov. 8, 1864 Nov. 20, 1866	2,397
Knitting-needles, Machine for making	T. Sands	Gilford, N. H	June 23, 1863 Nov. 15, 1864	1,821
Knob, Bank and safe door	L. Lillie	Troy, N. Y	July 5, 1859 Apr. 24, 1866	2,233
Knob, Curtain	C. Z. Kroh	Tiffin, Ohio	Aug. 29, 1865 June 7, 1870	4,019
Knob, Door	E. Day	Rockford, Ill	Jan. 12, 1869 Apr. 23, 1872	4,878
Knob, Door, (Division B)	C. Rebstock and J. Ottner, by the Bridgeport Electro-Casting Company, assignee, (mesne.)	Bridgeport, Conn	Jan. 14, 1873 June 10, 1873	5,445
Knob shank, Door	L. R. Livingston, J. J. Roggen, and C. Adams.	Pittsburgh, Pa	July 7, 1846 Oct. 1, 1850	179
Knobs, Mold for casting, (Division A)	C. Rebstock and J. Ottner, by the Bridgeport Electro-Casting Company, assignee, (mesne.)	Bridgeport, Conn	Jan. 14, 1873 June 10, 1873	5,444
Knobs to screws, Mode of attaching	C. H. Thurston	Marlborough, N. H	May 5, 1868 Oct. 28, 1873	5,633
Knobs to spindles, Attaching	M. Andrew	Melbourne, Australia	Apr. 12, 1870 Sept. 6, 1870	4,114
Knobs to spindles, Attaching	G. N. Cummings, by J. E. Parker and H. J. P. Whipple, assignees.	Meriden and West Meriden, Conn.	July 22, 1862 Mar. 29, 1864	1,645
Knobs to spindles, Attaching	E. Parker	New Britain, Conn	May 5, 1863 Nov. 9, 1869	3,720
Knobs to spindles, Attaching door	E. Parker	Meriden, Conn	May 5, 1863 June 21, 1864	1,707
Knobs to spindles, Attaching door	D. Skidmore	Seneca Falls, N. Y	July 15, 1862 May 19, 1868	2,941
Knobs to spindles, Fastening door	D. Skidmore	Seneca Falls, N. Y	July 15, 1862 Feb. 5, 1867	2,473
L.				
Labels for periodicals, &c., Accountant	R. Dick	Buffalo, N. Y	Oct. 4, 1859 May 31, 1864	1,679
Labels to bottles, Attaching	W. N. Walton, by E. E. Walton, assignee, (mesne.)	Newark, N. J	Sept. 23, 1862 May 28, 1867	2,630
Ladder, Step	J. H. Balsley	Dayton, Ohio	Jan. 7, 1862 June 27, 1865	2,010
Ladder, Step	C. Hays, by Kip Manufacturing Company, assignee.	Waukesha, Wis	Jan. 31, 1865 June 17, 1873	5,451
Ladder, Step	C. H. Udell	Chicago, Ill	June 8, 1869 Mar. 22, 1870	3,895
Lamp	J. Adair	Pittsburgh, Pa	July 31, 1860 Oct. 6, 1863	1,548
Lamp	J. E. Ambrose, by S. T. Ambrose, assignee.	Middletown, N. Y., and Passaic, N. J.	Apr. 23, 1861 Mar. 14, 1865	1,900
Lamp	J. E. Ambrose, by S. T. Ambrose and E. Miller, assignees, (mesne.)	Colorado Springs, Colo., and Meriden, Conn.	Oct. 16, 1860 May 20, 1873	5,412
Lamp	L. J. Atwood, by self, assignee, (mesne.)	Waterbury, Conn	Oct. 13, 1863 June 30, 1868	3,019
Lamp	L. Bailey and R. Thayer, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	May 4, 1858 Feb. 25, 1868	2,882
Lamp	W. W. Batchelder	New York, N. Y	Dec. 28, 1858 Feb. 8, 1859	659
Lamp	C. W. Cahoon	Portland, Me	Dec. 3, 1861 Feb. 25, 1868	2,874
Lamp	C. W. Cahoon, by Cahoon Manufacturing Company, assignee, (mesne.)	Portland, Me	Feb. 19, 1861 Aug. 9, 1864	1,735
Lamp	M. L. Callender, by A. J. Walker, assignee, (mesne.)	New York, N. Y	June 6, 1865 Feb. 26, 1867	2,493
Lamp	D. H. Chamberlin, by W. W. Blackmar, assignee, (mesne.)	Boston, Mass	May 8, 1855 Mar. 19, 1867	2,509
Lamp	M. A. Dietz	Brooklyn, N. Y	May 3, 1859 Aug. 30, 1859	802
Lamp	M. A. Dietz	Brooklyn, N. Y	Sept. 8, 1858 Sept. 4, 1860	1,032
Lamp	J. S. Fish, by T. H. White, assignee.	Cleveland, Ohio	Apr. 26, 1870 Nov. 19, 1872	5,146
Lamp	W. Fulton	Cranberry, N. J	Aug. 3, 1858 Sept. 13, 1859	810
Lamp	W. Fulton	Cranberry, N. J	Aug. 3, 1858 Sept. 13, 1859 Sept. 25, 1860	1,047
Lamp	H. Halvorson, by R. S. Merrill, assignee.	Nashua, N. H	Sept. 20, 1859 June 6, 1871	4,413
Lamp	H. Halvorson, by R. S., W. B., and J. Merrill, assignees, (mesne.)	Nashua, N. H	Sept. 20, 1859 Dec. 5, 1871	4,660
Lamp	E. F. Jones	Boston, Mass	May 4, 1858 Jan. 11, 1859	648
Lamp	C. A. Kleemann	Erfurt, Prussia	Mar. 10, 1863 Aug. 4, 1868	3,068
Lamp	C. A. Kleemann	Erfurt, Prussia	Mar. 10, 1863 Mar. 29, 1870	3,900
Lamp	C. A. Kleemann, deceased, by C. F. A. Hinrichs, assignee of K. Kleemann, executrix.	Brooklyn, N. Y	Mar. 10, 1863 Dec. 30, 1873	5,708
Lamp	C. B. and S. S. Mann	Baltimore, Md	May 16, 1871 Sept. 26, 1871	4,572
Lamp	R. S. Merrill	Irasburgh, Vt	June 14, 1859 Mar. 2, 1869	3,315

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Lamp	A. H. North, by R. S., W. B., and J. Merrill.	Hartford, Conn., and Boston, Mass.	Apr. 5, 1859 Feb. 28, 1871	4,284
Lamp	P. Plant, by H. Taylor, assignee, (mesne.)	Washington, D. C., and Poughkeepsie, N. Y.	Apr. 6, 1858 June 9, 1868	2,973
Lamp	P. Plant, by H. Taylor, assignee, (mesne.)	Washington, D. C., and Poughkeepsie, N. Y.	Apr. 6, 1858 June 9, 1868	2,974
Lamp	C. Reichmann, by R. S. Merrill and W. Carleton, assignees.	Philadelphia, Pa., and Boston, Mass.	Sept. 21, 1858 Aug. 11, 1868	3,082
Lamp	E. B. Requa	Jersey City, N. J	May 6, 1862 June 2, 1863	1,488
Lamp	J. T. Van Kirk and W. M. Fulton.	Philadelphia, Pa., and Elizabeth, N. J.	Nov. 29, 1859 Jan. 5, 1864	1,601
Lamp	H. B. Wellman, by C. F. A. Hinrichs, assignee.	Indianapolis, Ind	Jan. 7, 1868 Nov. 5, 1872	5,139
Lamp	L. White, by R. S., W. B., and J. Merrill, assignees, (mesne.)	Waterbury, Conn., and Boston, Mass.	Sept. 13, 1859 Mar. 14, 1871	4,304
Lamp	T. S. Williams and P. S. Page	Boston, Mass	May 19, 1863 July 9, 1867	2,678
Lamp-black	J. G. Mini	Philadelphia, Pa	Nov. 13, 1844 Aug. 24, 1854	223
Lamp-chimney	E. and E. D. Dithridge	Pittsburgh, Pa	Oct. 8, 1861 Nov. 22, 1870	4,182
Lamp-chimney	W. L. Fish	Newark, N. J	June 17, 1862 Dec. 23, 1862	1,368
Lamp-chimney	W. L. Fish	Newark, N. J	June 17, 1862 Jan. 5, 1864	1,596
Lamp-chimney	E. B. Requa, by the Requa Patent Concave Burner and Chimney Company, assignee.	New York, N. Y	Feb. 24, 1863 Dec. 27, 1870	4,221
Lamp-chimney	M. Sweeney, by Sweeney, Bell & Co., assignees.	Wheeling, W. Va	June 23, 1868 Oct. 6, 1868	3,149
Lamp, Coal-oil	W. O. B. Merrill	Philadelphia, Pa	June 10, 1862 Jan. 6, 1863	1,373
Lamp, Coal-oil	J. Ridge	Richmond, Ind	Apr. 15, 1862 Feb. 4, 1868	2,855
Lamp, Coal-oil	J. Ridge, by Holmes, Booth, & Haydens, assignees, (mesne.)	Waterbury, Conn	Apr. 15, 1862 Aug. 10, 1869	3,595
Lamp, Gas	H. G. Sickels, by G. H. Bechtel, assignee, (mesne.)	Philadelphia, Pa	Aug. 7, 1849 May 31, 1859	734
Lamp, Glass	D. C. Ripley, by Ripley & Co., assignees.	Pittsburgh, Pa	Jan. 7, 1868 July 41, 1868	3,935
Lamp, Glass	D. C. Ripley, by Ripley & Co., assignees.	Pittsburgh, Pa	Jan. 7, 1868 Aug. 11, 1868	3,078
Lamp, Hanging	G. Bohner	Chicago, Ill	Apr. 30, 1872 Aug. 19, 1873	5,534
Lamp-heater	W. N. White	Winchendon, Mass	Nov. 1, 1870 Nov. 7, 1871	4,627
Lamp, Lard	I. N. Coffin	Washington, D. C	Mar. 17, 1857 Mar. 16, 1858	537
Lamp, Locomotive	J. Stuber and F. Frank, by J. Mayhew and T. S. Kay, assignees.	Buffalo, N. Y	Apr. 23, 1861 Dec. 19, 1865	2,128
Lamp, Locomotive	I. A. Williams	Utica, N. Y	Oct. 10, 1854 Oct. 27, 1857	503
Lamp, Locomotive	I. A. Williams	Utica, N. Y	Apr. 29, 1862 Dec. 19, 1865	2,133
Lamp, Locomotive-head-light	P. Budenbach, by J. Radley, A. McAlister, and R. S. Aikman, assignees, (mesne.)	New York, N. Y	Mar. 24, 1863 June 15, 1869	3,508
Lamp-chimney, Mica	J. Y. Humphrey, by L. Morning, assignee.	Philadelphia and Montgomery County, Pa.	July 17, 1860 May 13, 1862	1,308
Lamp, Safety-derrick	J. Dillen	Petroleum Centre, Pa	May 3, 1870 Oct. 29, 1872	5,114
Lamp-shade	T. B. Doolittle, by G. Doolittle, G. H. Dimond, and T. Wallace, jr., assignees, (mesne.)	Bridgeport and Ansonia, Conn.	Mar. 10, 1868 Aug. 31, 1869	3,625
Lamp-shade	J. Emery	Bucksport, Me	July 9, 1867 June 30, 1868	3,016
Lamp-shade	C. St. John, by C. B. Curtiss, assignee, (mesne.)	Bridgeport, Conn	July 4, 1865 May 25, 1869	3,458
Lamp-shade	C. and A. C. Wilhelm	Philadelphia, Pa	May 3, 1859 Aug. 14, 1860	1,025
Lamp tops, rivets, &c., Die for making	L. C. White, by C. D. Leet, D. Smith, J. M. Hall, and C. R. Farmer, assignees, (mesne.)	Springfield, Mass	Sept. 7, 1852 June 5, 1866	2,264
Lamp trimmer and shears	W. B. Barnard	Waterbury, Conn	Dec. 27, 1864 Mar. 27, 1866	2,209
Lamp, Vapor	A. M. Mace	Springfield, Mass	June 22, 1858 Sept. 4, 1860	1,034
Lamp-wick	S. Rust	New York	Apr. 4, 1843 Aug. 16, 1845	76
Lamp-wick feeder	G. Cade	Long Branch, N. J	Apr. 5, 1870 May 16, 1871	4,385
Lamps, Regulating flow of oil to wick of carcel	A. Coates	New York, N. Y	Mar. 25, 1856 Jan. 4, 1859	643
Lantern	W. H. Bonnell, by self and H. Parmelee, assignees.	Buffalo, N. Y	Nov. 16, 1869 Apr. 11, 1871	4,331
Lantern	W. H. Bonnell, by self and H. Parmelee, assignees.	Buffalo, N. Y	Nov. 16, 1869 Apr. 11, 1871	4,332
Lantern	C. Gersten, by W. Westlake and J. F. Dane, assignees.	New York, N. Y	Jan. 25, 1859 Sept. 17, 1867	2,765
Lantern	C. Gersten, by W. Westlake and J. F. Dane, assignees.	New York, N. Y	Jan. 25, 1859 Sept. 17, 1867	2,766

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Lantern	J. H. Irwin, by self and J. F. Griffin, assignees.	Chicago, Ill	Nov. 4, 1862 Jan. 10, 1865	1,850
Lantern	E. N. Jenkins	Chicago, Ill	July 24, 1866 Jan. 15, 1867	2,462
Lantern	J. H. Miltimore	Chicago, Ill	Aug. 8, 1865 Apr. 9, 1867	2,555
Lantern	F. Morandi	Boston, Mass	Feb. 5, 1856 Feb. 11, 1868	2,861
Lantern	H. and J. Sangster	Buffalo, N. Y	June 10, 1851 Aug. 21, 1855	325
Lantern	S. Sargent, by A. B. Ely, assignee, (mesne.)	Newton, Mass	Sept. 17, 1861 Apr. 9, 1867	2,557
Lantern	W. Westlake	Chicago, Ill	Sept. 26, 1865 Feb. 13, 1866	2,175
Lantern	W. Westlake, by J. E. Cross, J. F. Dane, and W. Westlake, assignees.	Chicago, Ill.	Dec. 12, 1865 May 8, 1866	2,239
Lantern	W. Westlake, by self, J. E. Cross, and J. F. Dane, assignees.	Chicago, Ill	July 18, 1865 Aug. 14, 1866	2,337
Lantern	W. Westlake, by self, J. F. Dane, and J. P. Covert, assignees.	Chicago, Ill	Apr. 26, 1864 Nov. 23, 1869	3,747
Lantern	W. Westlake, by self, J. F. Dane, and J. P. Covert, assignees, (mesne.)	Chicago, Ill	July 18, 1865 Aug. 14, 1866 Oct. 17, 1871	4,604
Lantern, Coal-oil	A. P. Knapp and E. Miller, by S. Sargent, A. P. Knapp, and E. Miller, assignees, (mesne.)	Watertown, Mass	Sept. 17, 1861 Jan. 23, 1866	2,158
Lantern, Coal-oil	M. Miller, by W. H. Racey, assignee, (mesne.)	Brooklyn and New York, N. Y.	Aug. 17, 1858 Jan. 6, 1863	1,374
Lantern, Magic	L. J. Marcy	Philadelphia, Pa	July 6, 1869 Oct. 28, 1873	5,638
Lantern, Magic	L. J. Marcy	Philadelphia, Pa	Apr. 28, 1868 Dec. 16, 1873	5,686
Lanterns, Fastening	C. Mounin and W. M. Booth	Buffalo, N. Y	Aug. 1, 1854 Jan. 30, 1855	295
Lanterns, Machine for making	W. Westlake	Chicago, Ill	Apr. 25, 1865 Apr. 17, 1866	2,232
Lap-joint	H. Underwood, by P. Howell & Sons, assignees.	Hartford, Conn	Feb. 9, 1858 Jan. 1, 1867	2,433
Lard, &c., Apparatus for stirring, mixing, heating, cooling, and evaporating.	G. B. Williams, by E. M. Allen, assignee.	New York, N. Y	Feb. 5, 1867 Nov. 10, 1868	3,183
Lard-cooler	G. C. Cassard, by self and L. and J. L. Cassard, assignees.	Baltimore, Md	June 16, 1868 Apr. 6, 1869	3,358
Lard for storage and transportation, Process of putting up.	C. L. Tucker	Chicago, Ill	July 2, 1867 July 14, 1868	3,039
Lard, Manufacture and preservation of	C. L. Tucker	Chicago, Ill	July 2, 1867 July 14, 1868	3,037
Lard, Manufacture of	C. L. Tucker	Chicago, Ill	July 2, 1867 July 14, 1868	3,038
Lard-packages	C. L. Tucker	Chicago, Ill	July 2, 1867 May 2, 1871	4,369
Lard-stirring machine	W. J. Wilcox	New York, N. Y	Jan. 20, 1863 Nov. 17, 1868	3,196
Last	A. Taylor	Osawatomie, Kans	Nov. 5, 1867 Feb. 25, 1868	2,885
Last, Shoe	W. J. B. Mills, by D. C. Taylor, assignee.	Philadelphia, Pa	Jan. 30, 1872 Mar. 26, 1872	4,828
Lasting boots and shoes, Hand-nailer for	W. E. Fischer, by C. H. Trask and F. Gould, assignees, (mesne.)	Boston and Lynn, Mass	June 1, 1869 July 1, 1873	5,475
Lasting boots and shoes, Machine for	J Purinton, jr., by G. B. Martin, W. Wells, and R. Millard, assignees.	Lynn, Danvers, and Boston, Mass., and Poughkeepsie, N. Y.	Oct. 4, 1859 Jan. 6, 1863	1,382
Latch and lock, Combined	N. Petre, by self, assignee, (mesne.)	New York, N. Y	July 30, 1867 May 4, 1869	3,420
Latch, Door	F. W. Dean	Tremont, Ill	Aug. 17, 1869 Oct. 19, 1869	3,675
Latch, Door	M. T. Lincoln, by Russell and Erwin Manufacturing Company, assignee, (mesne.)	New Britain, Conn	May 31, 1864 June 22, 1869	3,519
Latch, Door and gate	J. A. Park	White House, N. J	Feb. 12, 1867 June 9, 1868	2,976
Latch, Gate	J. Bull, by Van Wagoner & Williams, assignees.	Galesburgh, Ill., and New York, N. Y.	Dec. 3, 1867 Nov. 25, 1873	5,668
Latch, Gate	R. A. Leeds	Stamford, Conn	Sept. 25, 1866 Nov. 30, 1869	3,751
Latch, Knob	A. M. Hill, by C. A. Miller, assignee, (mesne.)	Branford, Conn., and Philadelphia, Pa.	June 11, 1861 Jan. 5, 1864	1,597
Latch, Knob	W. T. Munger, by self and J. A. Leggat, assignees.	Branford, Conn	Apr. 3, 1866 Sept. 18, 1866	2,361
Latch, Knob	H. C. Storrs	New York, N. Y	Jan. 21, 1868 May 11, 1869	3,429
Latch, Knob	R. S. Webb	New Britain, Conn	Nov. 15, 1864 Dec. 19, 1865	2,131
Latch, Reversible	B. Mallory	New Haven, Conn	May 5, 1863 Mar. 1, 1870	3,862
Latch, Reversible knob	H. H. Elwell, by the Norwalk Lock Company, assignee.	South Norwalk, Conn	July 21, 1863 Apr. 5, 1870	3,909
Latch, Reversible knob	H. H. Elwell, by Russell and Erwin Manufacturing Company, assignee, (mesne.)	South Norwalk and New Britain, Conn.	Mar. 27, 1866 Sept. 20, 1870	4,126
Latch, Reversible knob	C. R. Fisher, by Russell and Erwin Manufacturing Company, assignee.	New Britain, Conn	Aug. 4, 1868 May 24, 1870	3,990
Latch, Reversible knob	H. M. Ritter, by M. Greenwood & Co., assignees.	Cincinnati, Ohio	May 7, 1867 Aug. 3, 1869	3,578

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Lath-machine	H. C. Smith, by J. C. Brown, assignee, (extended September 28, 1866.)	Brooklyn, N. Y	Sept. 28, 1852 Feb. 11, 1868	2,858
Lathing, Metallic	I. V. Holmes	New York, N. Y	Jan. 26, 1869 Oct. 5, 1869	3,661
Lathing-surface, Continuous sheet-metal	J. B. Cornell	New York, N. Y	May 13, 1856 Aug. 3, 1858	576
Lathe, Turning	L. R. Faught	Philadelphia, Pa	Dec. 4, 1866 May 23, 1871	4,390
Lathe, Turning	N. Harper	Newark, N. J	Feb. 14, 1865 June 13, 1865	1,994
Lead, Manufacture of white	H. S. Hannen, by D. C. Colby, T. Woods, and B. F. Pine, assignees.	Washington, D. C., and Philadelphia, Pa.	July 21, 1868 July 19, 1870	4,074
Lead-pipes, Manufacture of tin-lined	W. A. Shaw, by P. Naylor, assignee.	New York, N. Y	Feb. 18, 1868 Nov. 23, 1869	3,744
Lead pipes or tubes, Manufacturing	J. and C. Hanson, by B., jr., and H. B. Tatham.	Huddersfield, England, and Philadelphia, Pa.	Mar. 29, 1841 Mar. 14, 1846	82
Lead, &c., Process of utilizing the waste products of combustion for the manufacture of white.	H. Hannen, by self, T. Woods, and B. F. Pine, assignees.	Philadelphia, Pa	Feb. 9, 1869 Oct. 26, 1869	3,688
Leather and hides, Mode of stretching and preparing.	I. W. Dawson	Newark, N. J	June 25, 1867 Oct. 29, 1867	2,791
Leather buffing, whitening, and polishing machine	A. W. Pratt, by W. A. Perkins, assignee, (mesne.)	Salem, Mass	May 4, 1869 Aug. 29, 1871	4,534
Leather, Coloring tanned	B. H. Lightfoot	Philadelphia, Pa	Dec. 22, 1863 Sept. 10, 1872	5,053
Leather, Creasing, slicking, and skiving	C. C. Bellows	New Ipswich, N. H	Oct. 23, 1866 July 16, 1867	2,685
Leather-cutting machine	C. S. Stearns, by C. F. Davis, T. Corey, and S. and R. Boyd, assignees.	Marlborough, Mass	Sept. 25, 1866 May 24, 1870	3,987
Leather-finishing machine	C., T. F., and J. W. Weston	Salem, Mass	Sept. 25, 1855 Oct. 18, 1859	839
Leather goods, Water-proof	S. La Forge	Cleveland, Ohio	Feb. 28, 1860 May 15, 1860	961
Leather, Manufacture of	C. J. Tinnerholm, by J. C. White, assignee.	Quincy, Ill	Feb. 13, 1872 Feb. 25, 1873	5,301
Leather, Manufacture of rubber-coated	H. W. Joslin, by J. J. Fields and A. H. King, assignees, (mesne.)	New York, N. Y	Nov. 6, 1866 Sept. 8, 1868	3,112
Leather-punching machine	J. M. Bent	Wayland, Mass	Oct. 16, 1866 June 2, 1868	2,956
Leather-rolling machine	J. Whitney	Winchester, Mass	Mar. 24, 1863 Sept. 13, 1870	4,122
Leather-rolling machine	J. Whitney, by self and N. J. Simonds, assignees.	Winchester, Mass	Mar. 24, 1863 Sept. 19, 1871	4,562
Leather-scouring machine	P. E. Hummel, by P. Jewel & Sons, assignees.	Hartford, Conn	June 16, 1857 Mar. 19, 1867	2,518
Leather-scraping machine	J. T. Barnstead, by G. L. Newcomb and J. Perkins, assignees, (mesne.)	Peabody, Salem, and Peabody, Mass.	Mar. 22, 1870 Feb. 14, 1871	4,258
Leather splitting and stripping machine	C. S. Stearns, by self and T. Corey, assignees.	Marlborough, Mass	Feb. 9, 1864 July 7, 1868	3,026
Leather-splitting machine	J. A. Safford	Boston, Mass	Feb. 2, 1864 May 9, 1865	1,956
Leather-splitting machine	J. A. Safford	Boston, Mass	Mar. 19, 1861 Dec. 5, 1865	2,123
Leather-splitting machine	A. H. Van Gieson, by self and E. A. Smith, assignees, (mesne.)	Newark, N. J	July 8, 1862 Sept. 13, 1864	1,767
Leather-stretching mechanism	I. W. Dawson	Newark, N. J	June 25, 1867 Oct. 29, 1867	2,790
Leather-stuffing composition	R. Andrews, by S. B. Pierce, S. S. Johnson, R. Andrews, and R. N. Austin, assignees.	Milwaukee, Wis.	May 25, 1869 Nov. 2, 1869	3,706
Leather-stuffing, Process of treating tar for the manufacture of.	R. Andrews, by S. B. Pierce, S. S. Johnson, R. Andrews, and R. N. Austin, assignees.	Milwaukee, Wis	May 25, 1869 Nov. 2, 1869	3,707
Leather, Treating	J. Burrill, by E. H. Ashcroft, J. A. Johnson, and A. S. Moore, assignees, (mesne.)	Lynn, Mass	May 3, 1864 Jan. 3, 1865	1,845
Leather, Treating tanned	B. H. Lightfoot	Philadelphia, Pa	Nov. 17, 1863 May 28, 1872	4,920
Leather, Treating tanned	B. H. Lightfoot	Philadelphia, Pa	June 14, 1864 July 30, 1872	5,016
Leather, Treating tanned	B. H. Lightfoot	Philadelphia, Pa	June 14, 1864 Nov. 11, 1873	5,652
Leather, Treatment of	N. C. Russell	Gloversville, N. Y	Aug. 17, 1869 Feb. 1, 1870	3,816
Leather-work, Nail for	S. W. Baldwin, by G. McKay, assignee.	Boston, Mass	Sept. 27, 1864 Feb. 9, 1869	3,294
Leg, Artificial	D. Bly	Rochester, N. Y	May 17, 1859 July 3, 1860	994
Leg, Artificial	D. Bly	Rochester, N. Y	May 17, 1859 Dec. 23, 1862	[illegible]
Leg, Artificial	D. Bly	Rochester, N. Y	May 17, 1859 July 12, 1864	1,724
Leg, Artificial	R. H. Nicholas and D. Bly, by D. Bly, assignee.	Rochester, N. Y	July 28, 1857 July 7, 1863	1,510
Leg, Artificial	D. D. Parmelee	New York, N. Y	Feb. 10, 1863 Mar. 21, 1865	1,907
Leg, Artificial	D. D. Parmelee	New York, N. Y	Feb. 10, 1863 Mar. 21, 1865	1,908
Lens, Fluid	S. Kakales	New York, N. Y	Apr. 24, 1860 June 26, 1860	989
Letter-box, Post-office	L. Yale, jr., by S. N. Brooks, administrator.	Bernardstown, Mass	Sept. 19, 1871 July 9, 1872	4,963

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Level, Spirit	S. I. Sherman	New York, N. Y	July 19, 1853 July 1, 1856	374
Life-boat, Folding	C. Locher	New York, N. Y	Jan. 2, 1855 Sept. 16, 1856	395
Life-preserver to vest, Mode of attaching	R. L. Nelson	Ocala, Fla	Nov. 21, 1854 Feb. 7, 1860	893
Life-preserving apparatus	J. B. Stoner, by self, L. Mendelson, and T. Cremmelin, assignees.	New York, N. Y	Feb. 4, 1868 Dec. 15, 1868	3,232
Life-preserving raft	L. Taggart	Philadelphia, Pa	Jan. 26, 1858 Mar. 2, 1858	535
Life-preserving stool	H. T. Pratt	New York, N. Y	Mar. 15, 1870 May 27, 1873	5,425
Lifting-jack	J. D. Otstot	Springfield, Ohio	Dec. 17, 1872 Jan. 28, 1873	5,263
Light to resemble daylight, Making artificial	D. H. Gillet	New York, N. Y	July 19, 1864 Mar. 28, 1865	1,918
Lightning-rod	N. Brittan	Chicago, Ill	July 19, 1864 May 14, 1867	2,601
Lightning-rod	W. Hall	Dubuque, Iowa	Oct. 18, 1859 Mar. 3, 1868	2,888
Lightning-rod	L. King, by self and N. E. Smith, assignees.	East Cleveland, Ohio	Aug. 29, 1865 Apr. 25, 1871	4,355
Limb, Artificial	A. Mennel	New York, N. Y	Dec. 20, 1864 Apr. 3, 1866	2,218
Lime-kiln	R. Donaldson	Mount Nebo, Pa	Feb. 19, 1861 May 19, 1863	1,476
Lime-kiln	C. D. Page	Rochester, N. Y	Dec. 7, 1858 Mar. 8, 1870	3,877
Liquid-cooler	A. Fischer	New York, N. Y	May 15, 1856 June 26, 1866	2,292
Liquid-cooler	V. Hall, by B. M. King, executrix.	New York, N. Y	Sept. 20, 1859 Nov. 22, 1859	854
Liquid-meter	J. Mason	Paterson, N. J	Sept. 15, 1868 Oct. 1, 1872	5,084
Liquid-meter	F. Wagner, by J. F. De Navarro, assignee, (mesne.)	New York, N. Y	Jan. 25, 1870 June 21, 1870	4,040
Liquids, Apparatus and process for evaporating	J. J. Sherman	Albany, N. Y	Feb. 16, 1869 May 11, 1869	3,427
Liquids, Apparatus and process for evaporating	J. J. Sherman	Albany, N. Y	Feb. 16, 1869 May 11, 1869	3,428
Liquids, Vessel for holding	J. Stimpson, by J. M. Colburn, administratrix.	Baltimore, Md	Oct. 17, 1854 June 9, 1868	2,981
Lock	W. H. Akins	Dryden, N. Y	May 13, 1856 Nov. 8, 1864	1,806
Lock	R. B. Burchell	Brooklyn, N. Y	Sept. 11, 1866 Dec. 18, 1866	2,420
Lock	H. W. Covert, by M. Briggs, assignee.	Rochester, N. Y	Sept. 15, 1857 July 12, 1864	1,725
Lock	P. S. Felter	Cincinnatus, N. Y	Dec. 17, 1861 Jan. 23, 1866	2,151
Lock	J. L. Hall, by Hall's Safe and Lock Company, assignee	Cincinnati, Ohio	May 5, 1863 June 7, 1870	4,018
Lock	L. F. Munger	Rochester, N. Y	July 14, 1857 Apr. 2, 1861	1,167
Lock	L. F. Munger	Rochester, N. Y	Feb. 22, 1859 Dec. 12, 1871	4,674
Lock	N. Petré	New York, N. Y	July 30, 1867 Oct. 19, 1869	3,681
Lock	T. L. Pye	New York, N. Y	Sept. 28, 1858 Oct. 16, 1860	1,063
Lock	F. Rudolph, by R. Vollschwitz and J. J. Schlaepfer, assignees, (mesne.)	New York, N. Y	July 25, 1865 Apr. 10, 1866	2,222
Lock	J. Sargent	Rochester, N. Y	Aug. 28, 1866 Jan. 2, 1872	4,696
Lock	L. Yale, jr	Shelburne Falls, Mass	May 14, 1861 Apr. 28, 1863	1,469
Lock	L. Yale, jr	Shelburne Falls, Mass	May 14, 1861 Apr. 28, 1863	1,470
Lock	L. Yale, jr., by S. N. Brooks, administrator.	Bernardston, Mass	Nov. 9, 1858 Nov. 5, 1872	5,131
Lock and detector	J. H. Lyon	New York, N. Y	Sept. 13, 1859 Nov. 8, 1859	849
Lock and detector	J. H. Lyon	New York, N. Y	Sept. 13, 1859 Oct. 31, 1871	4,620
Lock and latch	W. S. Kirkham, by C. A. Miller, assignee.	Branford, Conn., and Philadelphia, Pa.	Mar. 15, 1859 Dec. 9, 1862	1,362
Lock and latch	W. S. Kirkham, by C. A. Miller, assignee.	Branford, Conn., and Philadelphia, Pa.	June 11, 1861 Jan. 27, 1863	1,390
Lock-nut	P. L. Gibbs	Dunleith, Ill	Oct. 26, 1869 June 6, 1871	4,412
Lock-nut	J. H. Gridley, by H. L. Purdie.	Washington, D. C	Feb. 26, 1867 Apr. 25, 1871	4,354
Lock-nut	J. Miller, jr	Marshalltown, Iowa	Nov. 1, 1870 Feb. 28, 1871	4,283
Lock-nut	A. Roff	Southport, Conn	Apr. 13, 1869 Sept. 14, 1869	3,639
Lock-nut washer	D. Elliot and E. Seely	New York, N. Y	Feb. 4, 1868 Sept. 28, 1869	3,652
Lock-seal	F. W. Brooks, by the American Seal-Lock Company, assignee.	New York, N. Y	Feb. 15, 1870 Apr. 16, 1872	4,872
Locket	C. G. Bloomer	Wickford, R. I	Apr. 28, 1857 Nov. 15, 1859	851
Locket-rim	C. G. Bloomer	Wickford, R. I	Apr. 28, 1857 Nov. 15, 1859	850

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Invention.	Inventor.	Residence.	Date.	No.
Locomotive-engine running-gear	S. Norris	Philadelphia, Pa	Sept. 26, 1854 Mar. 2, 1858	534
Locomotive-engine running-gear	S. Norris	Philadelphia, Pa	Sept. 26, 1854 Nov. 22, 1859	856
Locomotive fire-box	R. and T. Winans	Baltimore, Md	May 9, 1854 June 16, 1857	470
Locomotive, Increasing traction in	C. W. T. Krausch	Philadelphia, Pa	Jan. 29, 1867 Apr. 9, 1867	2,552
Locomotive running-gear	T. H. Neal	Pittsburgh, Pa	June 30, 1863 Feb. 16, 1864	1,620
Locomotive running-gear, Street	I. C. Story, by self and G. W. Skaats, assignees.	Cincinnati, Ohio	Nov. 21, 1865 Mar. 13, 1866	2,200
Locomotive steam-engine	A. F. Smith	Norwich, Conn	Apr. 5, 1864 Apr. 2, 1867	2,536
Locomotive-tender	R. and T. Winans	Baltimore, Md	May 23, 1854 June 16, 1857	471
Locomotive-tenders with water at railway-stations, Apparatus for supplying.	B. M. Van Derveer, by J. Wilkeson, assignee, (mesne.)	Buffalo, N. Y	Apr. 27, 1858 May 25, 1869	3,468
Locomotive-wheel	J. R. Richardson	Max Meadows, Va	July 19, 1870 Jan. 23, 1872	4,721
Locomotive-wheel	J. R. Richardson	Max Meadows, Va	July 19, 1870 Nov. 18, 1873	5,665
Locomotive-wheels, Apparatus for applying chalk to.	N. Sehner, by self, J. H. Seymour, and A. R. Appleman, assignees.	Hagerstown, Md	Feb. 27, 1872 May 28, 1872	4,924
Log-turning machine	E. C. Dicey	Whitehall, Mich	Aug. 27, 1872 Dec. 17, 1872	5,187
Log-turning machine	E. Tarrant, by A. Rodgers, assignee.	Muskegon, Mich	Aug. 25, 1868 July 15, 1873	5,487
Loom	E. W. Brown, by M. A. Furbush and G. Crompton, assignees.	Fall River, Mass., Philadelphia, Pa., and Worcester, Mass.	July 25, 1854 Mar. 14, 1865	1,901
Loom	C. Duckworth	Mount Carmel, Conn	June 28, 1853 July 4, 1865	2,018
Loom	C. Duckworth	Mount Carmel, Conn	June 28, 1853 July 4, 1865	2,019
Loom	W. W. Dutcher	Milford, Mass	June 27, 1846 Apr. 21, 1857	454
Loom	A. Frey	New York, N. Y	May 7, 1861 Jan. 20, 1863	1,387
Loom	W. V. Gee, by the Nashawannock Manufacturing Company, assignee, (mesne.)	New Haven, Conn., and East Hampton, Mass	Feb. 27, 1855 Sept. 15, 1857	494
Loom	J. Greenhalgh, by G. Crompton, assignee, (extended November 2, 1866.)	Worcester, Mass	Nov. 2, 1852 Jan. 15, 1867	2,451
Loom	B. H. Jenks	Bridesburgh, Pa	Apr. 3, 1855 June 5, 1855	312
Loom	T. Lovelidge	Philadelphia, Pa	Feb. 14, 1860 Dec. 15, 1863	1,589
Loom	B. Oldfield	Newark, N. J	Jan. 23, 1866 Oct. 16, 1866	2,378
Loom	B. Oldfield	Newark, N. J	Jan. 23, 1866 Oct. 16, 1866	2,379
Loom	S. Shepard	Taunton, Mass	July 29, 1862 Aug. 4, 1863	1,517
Loom	J. Shinn, by G. Crompton, assignee, (mesne.)	Worcester, Mass	Apr. 30, 1861 Dec. 29, 1868	3,246
Loom	D. W. Snell and S. S. Bartlett	Woonsocket, R. I	Jan. 13, 1857 Sept. 1, 1857	489
Loom, Brussels	E. B. Bigelow	Boston, Mass	Mar. 20, 1847 Sept. 11, 1849	144
Loom, Brussels carpet, &c	E. B. Bigelow	Clintonville, Mass	Mar. 10, 1849 Oct. 9, 1849	147
Loom, Brussels carpet, &c	E. B. Bigelow	Clintonville, Mass	Mar. 13, 1849 Nov. 20, 1849	150
Loom, Brussels carpet, &c	E. B. Bigelow	Boston, Mass	May 10, 1849 May 5, 1857	461
Loom, Brussels carpet, &c	E. B. Bigelow, (extended March 20, 1861.)	Boston, Mass	Mar. 20, 1847 Aug. 18, 1863	1,523
Loom, Circular	J. V. Reed	New York, N. Y	Mar. 5, 1872 June 4, 1872	4,930
Loom, Figured-fabric	G. Crompton	Worcester, Mass	Nov. 14, 1854 Dec. 28, 1858	639
Loom, Figure or fancy power	W. Crompton, by M. A. Furbush and G. Crompton, assignees, (extended November 25, 1851.)	Hartford, Conn., and Worcester, Mass.	Nov. 25, 1837 Sept. 13, 1853	247
Loom for carpets and other figured fabrics	E. B. Bigelow	Clintonville, Mass	May 1, 1842 Sept. 11, 1849	143
Loom for coach-lace, &c., Power	E. B. Bigelow	Boston, Mass	Apr. 20, 1837 Sept. 26, 1846	87
Loom for figured cloth, Jacquard	A. Calderhead	Philadelphia, Pa	Feb. 3, 1841 May 30, 1851	202
Loom for figured fabrics	C. W. Blanchard	Clinton, Mass	Aug. 3, 1852 Jan. 3, 1854	253
Loom for figured fabrics	R. Gersed	Frankford, Pa	Nov. 16, 1849 July 24, 1855	329
Loom for figured fabrics	M. Marshall, by G. Crompton, assignee.	Lowell and Worcester, Mass.	Dec. 11, 1849 Apr. 24, 1860	947
Loom for pile fabrics	E. B. Bigelow	Boston, Mass	Nov. 15, 1853 Feb. 24, 1857	432
Loom for pile fabrics	E. B. Bigelow	Boston, Mass	Dec. 18, 1855 Mar. 17, 1857	436
Loom for pile fabrics	M. C. Bryant, by E. B. Bigelow, assignee.	Lowell, Mass	Mar. 19, 1850 June 30, 1857	475
Loom for pile fabrics	E. K. Davis, by S. C. Davis, administratrix.	New York, N. Y	Feb. 9, 1869 Apr. 8, 1873	5,347

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Loom for plaids, &c., Power	E. B. Bigelow	Clintonville, Mass	Apr. 10, 1845 Oct. 9, 1849	146
Loom-harness, Machine for making	J. Sladdin	Lawrence, Mass	Aug. 4, 1868 Aug. 8, 1871	4,509
Loom-harness, Machine for making	J. Sladdin	Lawrence, Mass	Aug. 4, 1868 Aug. 8, 1871	4,510
Loom, Lappet	F. W. Newton, by W. L. Pomeroy and J. F. Plummer, assignees, (mesne.)	South Orange, N. J	Dec. 8, 1868 Apr. 22, 1873	5,365
Loom-picker	A. H. Carroll	Baltimore, Md	Apr. 13, 1869 May 25, 1869	3,455
Loom, Power	E. B. Bigelow	Clintonville, Mass	Feb. 18, 1846 Sept. 25, 1849	145
Loom, Power	C. Duckworth	Mount Carmel, Conn	June 28, 1853 Mar. 13, 1866	2,193
Loom, Power	C. Duckworth	Mount Carmel, Conn	June 28, 1853 Mar. 13, 1866	2,194
Loom-shuttle	T. Isherwood	Stonington, Conn	June 6, 1871 Aug. 22, 1871	4,522
Loom-shuttle	L. Litchfield, by L., F. C., and L. M. Litchfield, assignees of administratrix.	Southbridge, Mass	May 1, 1855 Mar. 30, 1869	3,355
Loom-shuttle	L. Litchfield, by L., F. C., and L. M. Litchfield, assignees, (extended May 1, 1869.)	Southbridge, Mass	May 1, 1855 Nov. 16, 1869	3,732
Loom-shuttle boxes, Apparatus for operating	R. B. Goodyear, by J. A. Bowie and C. Carr, assignees.	Philadelphia, Pa	Mar. 13, 1849 June 14, 1853	242
Loom-shuttle boxes, Apparatus for operating	R. B. Goodyear, by self, assignee, (mesne.)	Elkton, Md	Mar. 13, 1849 May 20, 1862	1,310
Loom take-up	C. Gahren, by M. Cohn, assignee.	New York, N. Y	Dec. 10, 1872 Dec. 23, 1873	5,706
Loom-treadle, Operating	R. W. Andrews, (extended January 8, 1867.)	Stafford, Conn	Jan. 8, 1853 May 12, 1868	2,998
Looms for weaving irregular fabrics, Take-up mechanism for.	H. Carstaedt	New York, N. Y	Mar. 30, 1869 Nov. 19, 1872	5,150
Looms, Picker-staff motion for	N. S. Bean, by the Amoskeag Manufacturing Company, assignee.	Manchester, N. H	Jan. 22, 1861 May 28, 1867	2,627
Looms, Picker-staff motion for	N. S. Bean, by the Amoskeag Manufacturing Company, assignee.	Manchester, N. H	Jan. 22, 1861 Aug. 20, 1867	2,749
Looms, Picker-staff motion for	E. H. Graham	Manchester, N. H	Oct. 16, 1860 Oct. 2, 1866	2,367
Looms, Picker-staff motion for	E. H. Graham, by self and W. Rouse, assignees.	Manchester, N. H., and Taunton, Mass.	Oct. 16, 1860 May 28, 1867	2,626
Looms, Roller-temples for	J. Mathis, by H. Kayser, assignee.	New York, N. Y	Apr. 24, 1866 Mar. 26, 1867	2,534
Looms, Throwing shuttles in power	R. P. Cunningham	Abington, Conn	Apr. 25, 1843 Mar. 14, 1846	81
Lounge, Convertible	L. H. Baker	Tarrytown, N. Y	June 23, 1868 Oct. 6, 1868	3,150
Lounge, Folding	J. W. McDonough	Chicago, Ill	Dec. 11, 1866 Feb. 14, 1871	4,261
Low-water alarm for steam-boilers	S. Dustin	Detroit, Mich	Apr. 26, 1859 Mar. 27, 1860	937
Low-water detector for steam-boilers	C. H. Brown	Fitchburgh, Mass	Aug. 7, 1860 May 19, 1863	1,473
Lozenge-cutting machine	W. E. Damant, by self and W. Hessin, assignees.	West Hoboken, N. J	Apr. 11, 1871 Oct. 15, 1872	5,099
Lozenge-cutting machines, Paste-preparing apparatus for.	W. E. Damant, by self and W. Hessin, assignees.	West Hoboken, N. J	Apr. 11, 1871 Oct. 15, 1872	5,100
Lozenge-cutting machines, Paste-preparing apparatus for.	W. E. Damant, by self and W. Hessin, assignees.	West Hoboken, N. J., and Toronto, Canada.	Apr. 11, 1871 Dec. 3, 1872	5,171
Lozenges, Machine for manufacturing	O. R. Chase, by Chase & Co., assignees.	Boston, Mass	July 7, 1863 Nov. 14, 1871	4,634
Lubricating-composition	J. Turner	New York, N. Y	July 7, 1863 Nov. 24, 1863	1,577
Lubricating-composition for machinery, &c.	J. H. Lester, by the Lester Oil Manufacturing Company, assignee.	New York, N. Y	Jan. 30, 1866 Dec. 18, 1866	2,422
Lubricating-compound	P. S. Devlan	Reading, Pa	Jan. 16, 1849 June 14, 1853	241
Lubricating-compound	H. Grogan	Flatbush, N. Y	Aug. 2, 1870 June 27, 1871	4,440
Lubricating-compound	A. Lebkücher	Belleville, Ill	June 25, 1861 Aug. 19, 1862	1,329
Lubricating-compound	J. B. McMunn	Port Jervis, N. Y	Jan. 3, 1860 Nov. 20, 1860	1,080
Lubricating-device	M. Senior, by B. H. Jencks, assignee.	Frankford and Bridesburgh, Pa.	Mar. 17, 1868 June 2, 1868	2,964
Lubricator	J. Broughton, by H. Moore, assignee, (mesne.)	New York, N. Y	Jan. 3, 1865 Oct. 17, 1871	4,593
Lubricator	H. A. Daniels, by the Daniels, Nichols, and Gaylord Manufacturing Company, assignee.	Waterbury, Conn	July 6, 1869 Sept. 27, 1870	4,131
Lubricator	W. T. Garratt	San Francisco, Cal	Nov. 19, 1872 Mar. 18, 1873	5,328
Lubricator	N. W. Pomeroy, by E. Miller, assignee.	Meriden, Conn	Sept. 23, 1856 Oct. 6, 1868	3,154
Lubricator	J. B. Wickersham	Philadelphia, Pa	Sept. 29, 1868 Oct. 17, 1871	4,602
Lubricator	J. B. Wickersham	Philadelphia, Pa	Oct. 22, 1867 Dec. 5, 1871	4,658
Lumber, Process of seasoning	H. B. Beach	Rome, N. Y	Oct. 4, 1870 May 16, 1871	4,381

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Invention.	Inventor.	Residence.	Date.	No.
M.				
Machine-stand	W. B. Bement	Philadelphia, Pa	June 3, 1862 Jan. 6, 1863	1,370
Malt-dryer	W. W. Hughes	Philadelphia, Pa	Aug. 24, 1869 Oct. 14, 1873	5,602
Malt-liquors, Compound for treating	W. Zinsser	New York, N. Y	Dec. 6, 1870 Sept. 10, 1872	5,057
Mantel and front for fire-place	D. K. Innes and W. W. Magill	Cincinnati, Ohio	July 25, 1871 Oct. 31, 1871	4,612
Mantel and front for fire-place	D. K. Innes and W. W. Magill	Cincinnati, Ohio	July 25, 1871 Oct. 31, 1871	4,613
Manual-power machine	I. E. Overpeck	Overpeck's Station, Ohio	Apr. 25, 1865 Sept. 4, 1866	2,350
Manure from offal, flesh, &c., (Division C)	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	Philadelphia, Pa	Sept. 19, 1871 Oct. 21, 1873	5,612
Manure-spreader	J. H. Stevens	East Durham, N. Y	Mar. 25, 1862 Jan. 5, 1864	1,599
Marble-dressing machine	R. P. Bailey, by self and P. D. Babbitt, assignee.	Niagara Falls, N. Y	June 25, 1867 July 5, 1870	4,057
Marble, Manufacture of artificial	G. A. Frear, by self and C. Holland, assignees.	Chicago, Ill	Aug. 9, 1870 Dec. 24, 1872	5,205
Marble-sawing machine	P. J. Forney, by self, C. W. Hayden, and J. L. Kidwell, assignees.	Washington, D. C	Dec. 1, 1868 Apr. 19, 1870	3,931
Marble-sawing machine	J. Poll	Locust Grove, Ohio	Sept. 9, 1856 Dec. 9, 1856	413
Marine structures, Construction of various	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,087
Marker, planter, and cultivator, Corn	E. Barto	Tiffin, Ohio	May 11, 1869 June 28, 1870	4,046
Mash-tun	A. Hammer	New York, N. Y	Jan. 9, 1855 June 20, 1865	2,002
Match-blocks, Machine for matting ends of	H. E. Pierce	Charlemont, Mass	Jan. 10, 1854 Aug. 2, 1859	788
Match-splints, Machinery for splitting	L. Smith, by B. Howard, assignee.	Brandon, Vt., and New York, N. Y.	Mar. 28, 1848 Mar. 11, 1856	359
Match-sticks, Machine for making	F. Zaiss	Philadelphia, Pa	Mar. 18, 1873 Aug. 19, 1873	5,548
Matter, Composition of	G. F. J. Colburn, by W. M. Welling, assignee.	Newark, N. J	Jan. 28, 1868 Oct. 14, 1873	5,596
Matter, Composition of	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	Mar. 8, 1864 Feb. 28, 1565	1,885
Matter, Composition of	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	Mar. 8, 1864 Feb. 28, 1865	1,886
Matter, Composition of	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	May 6, 1862 Feb. 28, 1865	1,887
Matter, Composition of	L. Francis, by self and C. H. Loutrel, assignee.	New York, N. Y	Mar. 8, 1864 Aug. 3, 1869	3,576
Material for various structures	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,085
Matrices, &c., Mode of constructing	J. J. C. Smith	Philadelphia, Pa	Sept. 20, 1859 Apr. 10, 1860	943
Mattress, Spring	E. L. Bushnell	Poughkeepsie, N. Y	Oct. 19, 1869 Aug. 23, 1870	4,103
Mattress, Spring	E. L. Bushnell	Poughkeepsie, N. Y	Oct. 19, 1869 Oct. 31, 1871	4,616
Mattress, Spring	S. P. Kettle	Brooklyn, N. Y	Nov. 8, 1864 Oct. 17, 1865	2,092
Mattress, Spring	R. Stilwell, by self and A. D. Farrell, assignees.	New York, N. Y	Sept. 20, 1864 Aug. 20, 1867	2,742
Mattress-stuffing	H. A. Alden	Matteawan, N. Y	Feb. 16, 1864 Aug. 30, 1864	1,749
Mattress-stuffing	F. A. Lane, by L. S. Lane and E. Kendall, assignees, (mesne.)	Cleveland, Ohio	May 25, 1869 Feb. 4, 1873	5,266
Mattress-stuffing	F. A. Lane, by self, L. S. Lane, and E. Kendall, assignees, (mesne.)	Cleveland, Ohio, and Swanzey, N. H.	May 25, 1869 Apr. 29, 1873	5,379
Mattress, Wire spring	F. B. Wegman, by the Woven-Wire Mattress Company, assignee, (mesne.)	Hartford, Conn	June 16, 1868 Nov. 23, 1869	3,746
Meal, Cooling and drying	J. Deuchfield	Syracuse, N. Y	Apr. 20, 1858 Jan. 16, 1872	4,712
Measure and funnel, Combined	S. R. Dummer	New York, N. Y	Apr. 5, 1864 June 27, 1865	2,012
Measure case, Tape	A. J. Fellows, by N. L. Bradley and W. Hubbard, assignees.	New Haven and Meriden, Conn.	July 14, 1868 July 30, 1872	5,009
Measure, Tape	L. P. Bradley	New Haven, Conn	July 13, 1869 June 13, 1871	4,419
Measure, Tape	A. J. Fellows, by N. L. Bradley and W. Hubbard, assignees.	New Haven and Meriden, Conn.	July 14, 1868 July 30, 1872	5,008
Meat-chopper	C. A. Foster, by Metropolitan Washing-Machine Company, assignee, (mesne.)	Middlefield, Conn	June 5, 1866 July 23, 1867	2,700
Meat-chopping machine	A. F. Spaulding and S. M. Scott, by Metropolitan Washing-Machine Company, assignee, (mesne.)	Middlefield, Conn	Jan. 31, 1865 Apr. 7, 1868	2,913
Meat-chopping machine	A. F. Spaulding and S. M. Scott, by Metropolitan Washing-Machine Company, assignee.	Middlefield, Conn	July 11, 1865 Apr. 7, 1868	2,914
Meat, Curing and packing	J. Atkinson	Hamilton, Canada	Jan. 21, 1873 May 13, 1873	5,410

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Invention.	Inventor.	Residence.	Date.	No.
Meat-cutter	R. V. Jones	Canton, Ohio	Nov. 2, 1858 Aug. 22, 1865	2,055
Meat-cutter	J. G. Perry	South Kingston, R. I.	Feb. 26, 1850 Feb. 25, 1862	1,278
Meat-mincer	A. W. Hale	New York, N. Y.	Mar. 15, 1859 Dec. 26, 1865	2,136
Medicine	C. L. Lege	San Antonio, Tex	June 11, 1867 Apr. 7, 1868	2,912
Medicine, Coffee-antidote	E. D. Saint Cyr	Lowell, Mass	Dec. 5, 1871 Mar. 12, 1872	4,798
Medicine for lung and other diseases	W. Trinder	Philadelphia, Pa	Oct. 8, 1872 Jan. 21, 1873	5,254
Medicine, Hog and chicken cholera	A. C. McMahan	Lincoln, Ill	Aug. 31, 1869 Nov. 16, 1869	3,737
Melodeon	S. A. Jewett	Cleveland, Ohio	Oct. 13, 1857 Apr. 19, 1864	1,653
Melodeon	L. Louis	Providence, R. I	Nov. 18, 1856 Feb. 26, 1867	2,498
Melodeon	L. Louis	Providence, R. I	Nov. 18, 1856 May 26, 1868	2,944
Melodeon	L. Louis, by E. Louis, administratrix, (extended November 18, 1870.)	New York, N. Y.	Nov. 18, 1856 July 25, 1871	4,486
Melodeon	J. A. Rollins, by G. A. Prince, C. E. Bacon, and C. F. S. Thomas, assignees.	Buffalo, N. Y.	June 3, 1856 Aug. 7, 1866	2,330
Melodeon-swell	T. F. Thornton, by G. A. Prince, C. E. Bacon, and C. F. S. Thomas, assignees, (mesne.)	Buffalo, N. Y.	May 22, 1855 July 2, 1867	2,666
Melting and smelting furnace	J. Green, by self, T. H. and H. Willson, C. R. Adams, and S. Munn, assignees.	Norristown and Philadelphia, Pa., and Hackensack, N. J.	Mar. 26, 1867 Nov. 3, 1868	3,177
Metal bars, Machinery for reducing	D. H. Chamberlain, by P. Cooper, assignee, (mesne.)	Boston, Mass	Jan. 18, 1853 May 15, 1855	309
Metal-boring machine	J. Meyer	Brooklyn, N. Y	June 16, 1863 Sept. 13, 1864	1,765
Metal can, case, box, &c., for preserving food, paints, oil, &c.	J. Bouvet, by M. Pinner, assignee.	La Rochelle, France, and New York, N. Y.	June 28, 1864 Nov. 1, 1864	1,804
Metal-pipe-bending machine	J. Perkins and W. H. Burnet	Newark, N. J	Oct. 14, 1856 Sept. 20, 1859	814
Metal-punching machine	G. and D. Fowler, by C. Parker, assignee, (extended April 17, 1869.)	Meriden, Conn	Apr. 17, 1855 Oct. 26, 1869	3,689
Metallic bars, Mode of strengthening the angles of bent.	C. F. Hawley	Kansas City, Mo	June 13, 1871 Jan. 2, 1872	4,694
Metallic-can bottom	H. W. Shepard, by self and R. Seaman, assignees.	Mannsville and New York, N. Y.	Jan. 4, 1870 June 14, 1870	4,032
Metallic oxides, Process of purifying	A. Monnier	Philadelphia, Pa	Mar. 21, 1865 Jan. 1, 1867	2,430
Metallic surfaces, Coating	W. and W. A. Butcher	Philadelphia, Pa	June 29, 1858 Dec. 6, 1859	862
Metallic tubes, Machine for making	J. Ostrander	Richmond, Va	Apr. 4, 1871 Oct. 29, 1872	5,120
Metallic vapors, Machine for collecting and condensing.	F. Formhals	San Francisco, Cal	Jan. 21, 1868 July 21, 1868	3,043
Metallurgic furnaces, Heating	C. E. Detmold	New York	July 15, 1843 Feb. 20, 1845	68
Metallurgic furnaces, Reverberatory and other	J. R. Grout	Detroit, Mich	July 24, 1866 Apr. 9, 1867	2,549
Metallurgic furnaces, Use and application of fuel in.	J. D. Whelpley and J. J. Storer, by T. W. Clark and W. S. Dexter, assignees.	Boston, Mass	Mar. 13, 1866 Mar. 1, 1870	3,857
Meter	J. C. Horton and S. K. Hawkins, by the Manhattan Meter Company, assignee.	New York and Lansingburgh, N. Y.	Sept. 10, 1867 Dec. 20, 1870	4,206
Middlings-purifier	E. N. Lacroix	Minneapolis, Minn	June 3, 1873 Dec. 30, 1873	5,711
Middlings-purifier	E. P. Welch, by J. H., R. W., and H. P. Welch and J. A. Maloney, assignees.	Georgetown, D. C	Feb. 18, 1873 Apr. 1, 1873	5,346
Middlings-separating machine	W. R. Middleton	Cleveland, Ohio	Nov. 1, 1870 Mar. 26, 1872	4,827
Milk-can	G. A. Huggins, by H. W. Shepard, assignee.	Mannsville, N. Y	July 14, 1868 Sept. 28, 1869	3,657
Milk-can	P. Teets, by A. L. and F. L. Hatch, assignees.	New York, N. Y., and Elizabeth and Newark, N. J.	May 28, 1861 Mar. 5, 1872	4,781
Milk-can handle	H. W. Shepard	New York, N. Y.	June 7, 1870 Feb. 11, 1873	5,280
Milk, Concentrating and preserving sweet	G. Borden, jr	Amenia, N. Y	Aug. 19, 1856 May 13, 1862	1,306
Milk, Concentrating and preserving	G. Borden, jr	Amenia, N. Y	Aug. 19, 1856 Feb. 10, 1863	1,398
Milk, Condensing	G. Borden	South East, N. Y.	Aug. 19, 1856 Apr. 17, 1866	2,226
Milk, Condensing	G. Borden	America, N. Y	Aug. 19, 1856 Nov. 14, 1865	2,103
Milk-cooler	A. E. Baldwin	Newark, N. J	Aug. 10, 1869 Oct. 3, 1871	4,573
Milk-cooler	L. T. Hawley	Salina, N. Y.	Mar. 30, 1869 July 20, 1869	3,559
Milk-cooler	W. Peck	Babcock's Grove, Ill	Apr. 23, 1867 Dec. 31, 1867	2,827
Milk-house	H. Peregoy	Mount Carmel, Md	Jan. 3, 1871 Jan. 23, 1872	4,720
Mill	C. B. Hutchinson, by J. B. Brown, assignee.	Peekskill, N. Y	Aug. 7, 1860 Apr. 19, 1870	3,925

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Invention.	Inventor.	Residence.	Date.	No.
Mill	C. B. Hutchinson, by J. B. Brown, assignee.	Peekskill, N. Y	Aug. 7, 1860 Apr. 19, 1870	3, 926
Mill-shafts, Hanging	E. Bancroft, by J. Bancroft, executor.	New York, N. Y	Oct. 9, 1849 May 12, 1857	463
Millstone-dress	J. Sedgebeer	Painesville, Ohio	July 8, 1862 Sept. 27, 1870	4, 135
Millstone-dress	E. S. Snyder	Charlestown, Va	Feb. 10, 1846 June 20, 1854	266
Millstone-dressing machine	S. Golay, by H. B. Sears, assignee.	Liverpool, England	Jan. 21, 1868 Mar. 2, 1869	3, 318
Millstones, Balancing	J. Fairclough	Louisville, Ky	Dec. 21, 1858 Aug. 2, 1859	786
Millstones, Machine for trimming, staffing, and fine-dressing.	J. T. Gilmore, by L. Anderson, assignee.	Painesville, Ohio	Oct. 28, 1862 Feb. 2, 1869	3, 279
Mincing-knife	H. M. Remington	Springfield, Mass	Feb. 12, 1867 June 25, 1867	2, 659
Mining-apparatus, Hydraulic	F. H. Fisher	Nevada City, Cal	Dec. 20, 1870 Dec. 17, 1872	5, 193
Mirrors, Method of making	L. P. Angenard	New York, N. Y	Jan. 31, 1865 Feb. 28, 1865	1, 883
Miter-box	L. W. Langdon	Northampton, Mass	Nov. 15, 1864 Aug. 20, 1872	5, 037
Miter-machine	G. W. La Baw	Jersey City, N. J	May 29, 1855 May 18, 1869	3, 445
Molasses gate and cock	L. Lincoln	Hartford, Conn	Nov. 10, 1841 Jan. 25, 1848	105
Mold and core for casting steel	W. Kelly, by T. C. Coleman, assignee.	Louisville, Ky	Nov. 5, 1872 Oct. 28, 1873	5, 637
Mold-boards, Chill for casting	J. Oliver	South Bend, Ind	Feb. 2, 1869 Mar. 11, 1873	5, 321
Molds	W. Hainsworth, by self and S. M. Loveridge, assignees.	Allegheny and Pittsburgh, Pa.	Dec. 6, 1870 Apr. 18, 1871	4, 347
Molds, Heating	H. Mooers, by R. Barnum & Co., assignees.	Toledo, Ohio, and Salisbury, Conn.	Dec. 3, 1861 Sept. 16, 1862	1, 344
Molding-machine	A. S. Gear	Boston, Mass	Nov. 23, 1869 Apr. 30, 1872	4, 885
Molding-machine	H. B. Smith, (extended July 6, 1872.)	Smithville, N. J	July 6, 1858 Aug. 19, 1873	5, 535
Molding machine, Wood	A. S. Gear	Boston, Mass	Aug. 23, 1870 Apr. 30, 1872	4, 886
Moldings, Cutter for wood	J. Whitworth, by self and W. H. Hawkins, assignees.	Cleveland, Ohio	Dec. 3, 1867 July 14, 1868	3, 040
Moldings, Machine for making	A. T. Serrell	New York, N. Y	May 16, 1848 Jan. 7, 1851 June 21, 1853	243
Moldings, Machinery for making	A. T. Serrell	New York, N. Y	May 16, 1848 Jan. 7, 1851	187
Mop-head	H. Murch, by Colby Bros. & Co., assignees, (mesne,) (extended June 14, 1867.)	Waterbury, Vt	June 14, 1853 June 2, 1868	2, 957
Mop-head	H. Murch, by Colby Bros. & Co., assignees, (mesne,) (extended June 14, 1867.)	Waterbury, Vt	June 14, 1853 June 2, 1868	2, 958
Mop-head	H. Murch, by Colby Bros. & Co., assignees, (mesne,) (extended June 14, 1867.)	Waterbury, Vt	June 14, 1853 Nov. 10, 1868	3, 188
Mop-head	H. Murch, by Colby Bros. & Co., assignees, (mesne,) (extended June 14, 1867.)	Waterbury, Vt	June 14, 1853 Mar. 9, 1869	3, 322
Mop-head	L. Taylor	Springfield, Vt	Feb. 15, 1859 Nov. 10, 1868	3, 192
Mop-head	L. Taylor	Springfield, Vt	Feb. 15, 1859 Nov. 24, 1868	3, 215
Mop-head	L. Taylor	Springfield, Vt	Feb. 15, 1859 Oct. 19, 1869	3, 682
Mop-wringer	W. and W. S. Gillett	Stowe, Vt	Nov. 13, 1866 June 25, 1867	2, 658
Mortar and cement, Preparation of	H. Y. D. Scott	Ealing, England	Nov. 7, 1871 Sept. 24, 1872	5, 073
Mortising-machine	S. S. Bartlett, by self and T. H. Dodge, assignees.	Providence, R. I., and Worcester, Mas.	Sept. 24, 1861 Jan. 17, 1865	1, 852
Mortising-machine	J. Guild	Cincinnati, Ohio	Nov. 30, 1852 Dec. 11, 1855	333
Motion, Apparatus for transmitting	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	Brunswick and Akron, Ohio.	Jan. 30, 1866 July 1, 1873	5, 476
Motion, Converting	C. L. Spencer	New York, N. Y	Mar. 4, 1862 Sept. 29, 1863	1, 546
Motion, Converting	C. L. Spencer	New York, N. Y	Mar. 4, 1862 Sept. 29, 1863	1, 547
Motion, Device for converting reciprocating into intermittent rotary.	H. Ehrenfeld	New York, N. Y	June 21, 1859 Aug. 30, 1859	803
Motion, Device for stopping and changing	F. A. Pratt, by G. S. Lincoln & Co., assignees, (mesne.)	Hartford, Conn	Sept. 4, 1860 Apr. 30, 1867	2, 588
Motion, Mechanism for converting rotary into oscillating.	J. Hornig	Chicago, Ill	Feb. 7, 1865 Nov. 9, 1869	3, 717
Motion, Mode of converting reciprocating into rotary.	T. Williams, by self and D. Heaton, 2d, assignees.	Providence, R. I	Sept. 5, 1860 Feb. 17, 1863	1, 414
Motive-power	J. D. Parrot	Morristown, N. J	Sept. 8, 1863 Dec. 31, 1872	5, 210
Motive-power, Transmitting	R. T. Smith, by self, J. G. Blunt, W. Earl, and J. K. Priest, assignees.	Nashua, N. H	Oct. 23, 1866 Nov. 7, 1871	4, 623
Mousing hook, Self	J. R. Henshaw, by the Middletown Tool Company, assignee, (mesne.)	Middletown, Conn	Oct. 26, 1858 Feb. 11, 1868	2, 867
Movement, Mechanical	S. J. Baird	Waynesborough, Va	Dec. 14, 1869 Mar. 12, 1872	4, 795
Movement, Mechanical	H. J. Case, by self, N. Chapin, and C. Richardson, assignees.	Auburn, N. Y	Apr. 20, 1869 July 26, 1870	4, 078

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Movement, Mechanical	J. L. and D. H. Coles, by selves, S. W. Johnson, S. H. Smith, N. Campbell, A. G. Darwin, and C. Jussen, assignees, (mesne.)	New York, N. Y	Oct. 20, 1868 Dec. 10, 1872	5,178
Mower and harvester	J. H. Manny	Rockford, Ill	Sept. 23, 1851 Jan. 2, 1855	286
Mower, Lawn	J. Arbeiter, by S. Coit, assignee	Hartford, Conn	Apr. 20, 1869 Jan. 4, 1870	3,784
Mower, Lawn	A. M. Hills	Hockanum, Conn	Jan. 28, 1868 July 14, 1868	3,030
Mower, Lawn	A. M. Hills	Hockanum, Conn	Jan. 28, 1868 Mar. 16, 1869	3,330
Mower, Lawn	S. W. Sears	New York, N. Y	Apr. 14, 1868 July 21, 1868	3,048
Mowing and reaping machine	J. W. Mulloy	Amsterdam, N. Y	Dec. 16, 1856 May 10, 1859	714
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	771
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	772
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	773
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	774
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	775
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 July 19, 1859	776
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne)	Canton, Ohio	June 17, 1856 Dec. 10, 1861	1,243
Mowing-machine	C. Aultman and L. Miller, by C. Aultman & Co., assignees, (mesne.)	Canton, Ohio	June 17, 1856 Dec. 10, 1861	1,244
Mowing-machine	E. Ball, by self, assignee, (mesne)	Canton, Ohio	Dec. 1, 1857 Sept. 27, 1859	831
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 Sept. 27, 1859	832
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,007
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,008
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,009
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,010
Mowing-machine	E. Ball, by self, assignee, (mesne,)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,011
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,012
Mowing-machine	E. Ball, by self, assignee, (mesne.)	Canton, Ohio	Dec. 1, 1857 July 17, 1860	1,013
Mowing-machine	G. C. Dolph	West Andover, Ohio	Sept. 8, 1857 Feb. 21, 1860	904
Mowing-machine	J. G. Dunham, by P. V. Staats, assignee, (mesne.)	Raritan, N. J	Dec. 18, 1860 June 11, 1867	2,647
Mowing-machine	J. G. Dunham, by P. V. Staats, assignee, (mesne.)	Raritan, N. J	Dec. 18, 1860 June 11, 1867	2,648
Mowing-machine	R. Dutton, by self and R. L. Allen, assignees, (mesne.)	New York, N. Y	Mar. 15, 1864 Oct. 3, 1865	2,079
Mowing-machine	J. P. Greeley and L. W. Buxton, by selves and T. H. Dodge, assignees.	Boston, Lynn, and Worcester, Mass.	July 21, 1863 May 3, 1870	3,947
Mowing-machine	H. Green	Ottawa, Ill	Mar. 21, 1854 May 25, 1858	562
Mowing-machine	A. M. Hall, by J. A. Saxton, assignee.	West Falmouth, Me., and Canton, Ohio.	Dec. 23, 1856 July 9, 1861	1,210
Mowing-machine	D. K. and J. K. Harris, by W. N. Whiteley, J. Fassler, and O. S. Kelley, assignees.	Allensville, Ind., and Springfield, Ohio.	Nov. 6, 1849 May 26, 1863	1,487
Mowing-machine	E. F. and J. Herrington, by C. C. More, assignee, (mesne.)	Pittstown, N. Y	Apr. 9, 1861 June 4, 1867	2,639
Mowing-machine	S. E. and M. P. Jackson	Boonville, N. Y	Dec. 29, 1857 May 25, 1869	3,460
Mowing-machine	J. W. Thompson, by E. M. Fowler, assignee.	Bay City, Mich	July 15, 1856 Apr. 20, 1869	3,301
Mowing-machine	J. W. Thompson, by E. M. Fowler, assignee.	Bay City, Mich	July 15, 1856 June 29, 1869	3,521
Mowing-machine cutter, Machine for grinding	E. E. Scott, by H. Richardson, assignee, (mesne.)	Auburn and New York, N. Y.	July 30, 1867 Oct. 13, 1868	3,159
Mowing-machine cutter, Machine for grinding	H. Whitall	Woodbury, N. J	May 14, 1867 Sept. 1, 1868	3,109
Mowing-machine gearing	J. V. Strait	Litchfield, Ohio	Oct. 19, 1869 Dec. 13, 1870	4,200
Mowing-machine-reel support	H. Green	Ottawa, Ill	Mar. 21, 1854 May 25, 1858	573
Muff	J. W. Gay, by self, S. W. Kingsbury, E. E. Abbott, A. Hulett, D. H. Lawrence, and J. A. Kingsbury, assignees, (mesne.)	Brooklyn, N. Y	Mar. 1, 1864 Oct. 22, 1872	5,108

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Muff and collar box	J. P. Jones, by J. Crane, assignee.	Bloomfield, N. J	Oct. 26, 1869 Mar. 28, 1871	4,313
Muff, Ear, cheek, and chin	W. P. Ware	Cincinnati, Ohio	July 6, 1858 Feb. 12, 1867	2,482
Music, Apparatus for teaching	L. A. Seward	San Francisco, Cal	Oct. 26, 1869 Oct. 28, 1873	5,632
Musical instruments, Keyed	F. Peabody	Salem, Mass	Nov. 10, 1863 Feb. 7, 1865	1,866
Musical instrument, Reed	J. Carhart	New York, N. Y	Dec. 28, 1846 Aug. 18, 1857	484
Musical instrument, Wind	L. Louis	Boston, Mass	June 10, 1862 Nov. 10, 1868	3,185
Musical instruments, Bellows for	J. Carhart	New York, N. Y	Dec. 28, 1846 June 24, 1856	372
N.				
Nail and tack machine	O. L. Bassett, T. R. Bearse, and W. B. Wilbur.	Taunton, Mass	Oct. 9, 1866 June 18, 1867	2,649
Nail-cutting machine	J. B. Kingham	Dorchester, Mass	Oct. 11, 1864 Mar. 30, 1869	3,353
Nail-cutting machine	W. Wickersham	Boston, Mass	June 26, 1860 Jan. 2, 1866	2,143
Nail-cutting machine	A. P. Winslow	Cleveland, Ohio	Oct. 11, 1870 Dec. 20, 1870	4,214
Nail-extractor	G. J. Capewell	Cheshire, Conn	July 16, 1872 July 29, 1873	5,502
Nail-extractor	J. Tyzick, by J. V. Bogert and J. F. Lowell, assignees, (mesne.)	New York, N. Y., and Boston, Mass.	June 9, 1868 Mar. 23, 1869	3,334
Nail-machine	J. S. King	Raynham, Mass	Oct. 20, 1857 Aug. 2, 1859	787
Nail-machine-feeding device	J. Nolan, by self and E. T. Henry, assignees.	Oxford, N. J	Apr. 5, 1870 Nov. 26, 1872	5,161
Nail-making machine	F. B. Miles and J. Lawrence, by J. Lawrence, assignee.	Philadelphia, Pa	July 16, 1872 Nov. 19, 1872	5,152
Nail-making machine	F. B. Miles and J. Lawrence, by J. Lawrence, assignee.	Philadelphia, Pa	July 16, 1872 Nov. 19, 1872	5,153
Nail or spike, Yellow-metal	S. L. Crocker	Taunton, Mass	Apr. 17, 1849 Feb. 24, 1863	1,415
Nail-plate-feeding machine	J. C. Gould	Boonton, N. J	May 12, 1857 July 10, 1866	2,301
Nails and screws, Attaching ornamental heads to	T. C. Richards	New York, N. Y	Dec. 31, 1867 May 19, 1868	2,936
Nails, Attaching ornamental heads to	F. J. Seymour, by Turner, Seymour & Judds, assignees.	Wolcottville, Conn	June 26, 1866 June 2, 1868	2,967
Nails, Machine for arranging	A. Knowlton, by J. Hill, trustee and assignee.	Boston, Mass	Aug. 22, 1871 Mar. 4, 1873	5,313
Nailing or pegging machine	J. B. Crosby	Boston, Mass	Mar. 2, 1869 July 16, 1872	4,975
Neck-tie	H. Bendix and J. H. Fleisch, by H. Bendix, assignee.	New York, N. Y	Mar. 13, 1866 May 26, 1868	2,943
Neck-tie fastening	D. H. Tierney	Forrestville, Conn	Dec. 15, 1868 June 14, 1870	4,033
Neck-tie holder	J. A. Eshleman	Philadelphia, Pa	Jan. 31, 1865 Jan. 8, 1867	2,448
Neck-tie holder	W. H. Hart, jr	Philadelphia, Pa	Mar. 31, 1868 Oct. 25, 1870	4,162
Neck-ties, Box for packing	W. H. Hart, jr	Philadelphia, Pa	Mar. 31, 1868 Oct. 25, 1870	4,163
Needle	G. Cooper, by C. W. Clifford, assignee, (mesne.)	Thompsonville, Conn	Jan. 20, 1861 Apr. 30, 1872	4,884
Needle case and index	C. D. Wheeler	Bridgeport, Conn	May 17, 1859 Oct. 16, 1860	1,064
Needle-sharpener	A. S. Dinsmore	New York, N. Y	May 25, 1869 Oct. 12, 1869	3,670
Needles, Machine for making	C. O. Crosby	New Haven, Conn	Dec. 28, 1865 Apr. 12, 1870	3,911
Needles, Machine for making	F. Plant, by C. P. S. Hardwell, assignee, (mesne.)	Lake Village, N. H	June 19, 1860 Oct. 15, 1867	2,779
Nets, Machine for making seine	B. Arnold, by W. E. Hooper & Sons, assignees.	Baltimore, Md	Sept. 23, 1862 May 28, 1867	2,622
Nipple valve, Artificial	E. Pratt	New York	Aug. 4, 1845 July 23, 1847	98
Nitro-glycerine compound	A. Nobel, by the United States Blasting-Oil Company, assignee.	Hamburg, Germany, and New York, N. Y.	Oct. 24, 1865 Mar. 19, 1872	4,819
Nitro-glycerine, Crystallizing	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Aug. 14, 1866 Apr. 13, 1869	3,381
Nitro-glycerine, Exploding	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Oct. 24, 1865 Apr. 13, 1869	3,377
Nitro-glycerine, Exploding	A. Nobel, by the United States Blasting-Oil Company, assignee.	Hamburg, Germany, and New York, N. Y.	Oct. 24, 1865 Mar. 19, 1872	4,815
Nitro-glycerine, Exploding	A. Nobel, by the United States Blasting-Oil Company, assignee.	Hamburg, Germany, and New York, N. Y.	Oct. 24, 1865 Mar. 19, 1872	4,816
Nitro-glycerine, Exploding	A. Nobel, by the Atlantic Giant-Powder Company, assignee, (mesne.)	Hamburg, Germany, and San Francisco, Cal.	Oct. 24, 1865 Oct. 21, 1873	5,620
Nitro-glycerine, Exploding	A. Nobel, by the Atlantic Giant-Powder Company, assignee, (mesne.)	Hamburg, Germany, and San Francisco, Cal.	Oct. 24, 1865 Oct. 21, 1873	5,621
Nitro-glycerine, Exploding	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Oct. 24, 1865 Apr. 13, 1869	3,378

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Invention.	Inventor.	Residence.	Date.	No.
Nitro-glycerine, Manufacture of	A. Nobel, by the United States Blasting-Oil Company, assignee.	Hamburg, Germany, and New York, N. Y.	Oct. 24, 1865 Mar. 19, 1872	4,817
Nitro-glycerine, Mode of manufacturing	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Oct. 24, 1865 Apr. 13, 1869	3,379
Nitro-glycerine, Process of manufacturing	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Aug. 14, 1866 Apr. 13, 1869	3,382
Nitro-glycerine, Use of	A. Nobel, by the United States Blasting-Oil Company, assignee.	New York, N. Y	Oct. 24, 1865 Apr. 13, 1869	3,380
Nitro-glycerine, Useful compounds containing	A. Nobel, by the United States Blasting-Oil Company, assignee.	Hamburg, Germany, and New York, N. Y.	Oct. 24, 1865 Mar. 19, 1872	4,818
Nozzle	C. Oyston	Little Falls, N. Y	Aug. 25, 1863 Mar. 13, 1866	2,196
Nozzle for cans	C. Pratt	New York, N. Y	Apr. 20, 1869 Dec. 14, 1869	3,762
Nut and washer machine	H. Carter and J. Rees	Pittsburgh, Pa	Aug. 26, 1851 June 19, 1855	313
Nut-finishing machine	F. P. Pfleghar and W. Schollhorn.	New Haven, Conn	Oct. 25, 1864 June 20, 1865	2,008
Nut-forging machine	E. Paye and S. Hall, by G. Dunham, assignee, (mesne.)	Unionville, Conn	Sept. 8, 1857 Sept. 7, 1869	3,631
Nut-making machine	G. Dunham	Unionville, Conn	June 27, 1865 July 31, 1866	2,324
Nut-making machine	M. H. Foster and H. C. Hart	Unionville, Conn	May 5, 1868 Dec. 8, 1868	3,223
Nut-making machine	J. B. Savage, by the Union Nut Company, assignee.	Unionville, Conn	Dec. 14, 1858 July 21, 1868	3,050
Nut-making machine	W. E. Ward	Port Chester, N. Y	Oct. 7, 1856 Jan. 1, 1867	2,434
Nut-machine	R. H. Cole	Saint Louis, Mo	June 3, 1856 Feb. 21, 1860	902
Nut-machine	R. Griffiths	Philadelphia, Pa	Oct. 30, 1855 Nov. 25, 1856	411
Nut-machine	D. Howell	Louisville, Ky	July 2, 1867 July 6, 1869	3,544
Nut-roaster	D. T. Gale	Poughkeepsie, N. Y	Aug. 18, 1868 Jan. 2, 1872	4,689
Nut-washer, Locking	J. H. Gridley, by H. L. Purdie, assignee.	Washington, D. C	Feb. 26, 1867 Oct. 14, 1851 Feb. 15, 1859	4,406
Nut-washers, &c., Machine for making	W. Kenyon, by J. Wood, assignee, (mesne.)	Steubenville, Ohio, and Pittsburgh, Pa.	Apr. 25, 1871 May 30, 1871	666
Nuts, Making	R. H. Cole	Saint Louis, Mo	June 3, 1856 Feb. 21, 1860	901
Nuts, Manufacture of	J. Ostrander	Richmond, Va	Apr. 4, 1871 Oct. 29, 1872	5,121
Nuts, washers, &c., Machine for making	W. Kenyon, by J. P. Haigh, A. Hartupee, and J. Morrow, assignees.	Steubenville, Ohio	Oct. 14, 1851 Mar. 18, 1856	361
O.				
Oar	W. H. McMillan	New York, N. Y	Apr. 19, 1864 Sept. 13, 1864	1,766
Offal, flesh, entrails, &c., for preservation, manure, &c., Drying, (Division B.)	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	Philadelphia, Pa	Sept. 19, 1871 Oct. 21, 1873	5,611
Offal, flesh, entrails, &c., for preservation, manure, &c., Treating, (Division A.)	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	Philadelphia, Pa	Sept. 19, 1871 Oct. 21, 1873	5,610
Offal, Method of treating	W. Adamson, by J. P., E. P., and D. Baugh, assignees.	Philadelphia, Pa	Feb. 14, 1865 Nov. 28, 1865	2,114
Oil and fat for burning and lubricating, Mode of treating.	S. Lewis	Rochester, N. Y	June 10, 1862 Mar. 29, 1864	1,647
Oil, &c., Apparatus for drawing	P. Noyes	Lowell, Mass	Nov. 2, 1869 Dec. 24, 1872	5,198
Oil-cabinet	M. H. Wiley, by self, T. Miller, and J. H. B. Lang, assignees.	Boston, Mass	Mar. 22, 1870 June 14, 1870	4,035
Oil-can, (Division A)	J. G. Evenden	Chicago, Ill	June 13, 1871 Oct. 14, 1873	5,597
Oil, &c., can, (Division B)	J. G. Evenden	Chicago, Ill	June 13, 1871 Oct. 14, 1873	5,598
Oil-cloth, Printing	J. Albro	Elizabeth, N. J	June 7, 1859 July 3, 1860	992
Oil-cloth, Printing	J. Albro	Elizabeth, N. J	June 7, 1859 July 3, 1860	993
Oil-cup	J. P. Haines	New York, N. Y	July 20, 1869 May 2, 1871	4,361
Oil for paints, Treating linseed and other	D. E. Breinig, by A. S. Breinig, C. Taylor, and J. H. Welles, assignees, (mesne.)	New York, N. Y	Jan. 29, 1867 Sept. 19, 1871	4,557
Oil from vegetable and animal substances, Extraction and manufacture of.	T. Richardson, J. J. Lundy, and R. Irvine, by J. H. Wingfield, assignee.	Milford, Conn	May 31, 1864 Nov. 7, 1871	4,630
Oil from wells, Apparatus for forcing	J. Molyneux, by the Bordentown Machine Company, assignee.	Bordentown, N. J	Apr. 5, 1864 Oct. 4, 1864	1,789
Oil-fountain, Drip-filtering	E. F. Wilder	Lowell, Mass	Mar. 22, 1870 Nov. 8, 1870	4,176
Oil, Preparing a paint	A. Millochan, by self and A. Berney, assignees.	New York, N. Y	Mar. 17, 1863 May 19, 1863	1,480
Oil-press	D. Latourette	Saint Louis, Mo	Oct. 28, 1851 Nov. 22, 1853	250
Oil-press	A. Randel, by J. J. Eckel	New York, N. Y	Mar. 18, 1862 July 22, 1862	1,324

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Invention.	Inventor.	Residence.	Date.	No.
Oil-tank	H. Pierce and J. B. Button, by J. B. Button, assignee.	Cleveland, Ohio	Jan. 22, 1867 Aug. 6, 1867	2,718
Oil-tank and reservoir	W. J. Brundred, by self and G. W. Glass, assignees.	Oil City and Pittsburgh, Pa	Jan. 17, 1871 Aug. 1, 1871	4,492
Oils and gases, Condensing and separating	W. G. W. Jaeger	Baltimore, Md	June 28, 1859 Mar. 14, 1865	1,902
Oiler	J. Broughton	New York, N. Y	Mar. 6, 1866 July 16, 1867	2,686
Oiler for loose pulley	C. A. King, by self and D. B. Wesson, assignees.	Springfield, Mass	Oct. 19, 1869 Apr. 19, 1870	3,928
Oily and fatty matters, Process of extracting	L. S. Robbins, by W. Adamson, assignee, (mesne.)	Rye, N. Y	Mar. 24, 1868 Oct. 3, 1871	4,578
Ordnance, Breech-loading	G. W. Bishop	Brooklyn, N. Y	Sept. 9, 1856 Aug. 16, 1859	791
Ordnance, Breech-loading	E. A. Sutcliffe	New York, N. Y	Aug. 18, 1863 Apr. 22, 1873	5,375
Ordnance, Operating	M. L. Callender and N. W. Northrup, by J. B. Eads, assignee, (mesne.)	Greene, N. Y., and Saint Louis, Mo.	Mar. 17, 1863 Mar. 29, 1864	1,641
Ordnance, Operating	M. L. Callender and N. W. Northrup, by J. B. Eads, assignee, (mesne.)	Greene, N. Y., and Saint Louis, Mo.	Mar. 17, 1863 Mar. 29, 1864	1,642
Ordnance, Operating	M. L. Callender and N. W. Northrup, by J. B. Eads, assignee, (mesne.)	Greene, N. Y., and Saint Louis, Mo.	Mar. 17, 1863 Mar. 29, 1864	1,643
Ordnance, Operating	M. L. Callender and N. W. Northrup, by J. B. Eads, assignee, (mesne.)	Greene, N. Y., and Saint Louis, Mo.	Mar. 17, 1863 Mar. 29, 1864	1,644
Ordnance, Operating	C. Perley	New York, N. Y	Dec. 12, 1865 Aug. 20, 1867	2,739
Ore-crusher	J., G. W., and J. Hamilton and L. E. Hanson, by J., G. W., and J. Hamilton, assignees.	Wheeling, W. Va	May 25, 1869 May 3, 1870	3,948
Ore-crusher	J. W. Rutter	Saint Louis, Mo	Mar. 23, 1869 Sept. 7, 1869	3,633
Ore roasting and treating furnace	C. Stetefeldt	Austin, Nev	Dec. 31, 1867 Jan. 25, 1870	3,807
Ore-roasting furnace	E. P. Hudson, by the Hudson Ore-Refining Company, assignee.	New York, N. Y	June 2, 1868 Sept. 27, 1870	4,132
Ore-roasting furnace	C. Mellinger	Cornwall, Pa	May 19, 1868 Sept. 1, 1868	3,107
Ore separating and cleaning machine	A. W. Schell, by G. Asmus, assignee.	Clausthal, Hanover, and Houghton, Mich.	Mar. 10, 1863 Sept. 1, 1863	1,531
Ore-separating machine	S. R. Krom	New York, N. Y	Sept. 1, 1868 Nov. 3, 1868	3,182
Ore-separating machine	S. R. Krom	New York, N. Y	Sept. 1, 1868 June 20, 1871	4,430
Ore-washing apparatus for hydraulic mining	J. M. Allenwood, by R. R. and J. Craig, assignees.	Timbuctoo, Cal	July 12, 1864 Jan. 28, 1873	5,255
Ores and minerals, Process of roasting, burning, and treating metallic.	J. D. Whelpley and J. J. Storer	Boston, Mass	Jan. 12, 1864 May 7, 1872	4,898
Ores, Apparatus for concentrating metallic	Z. Wheeler	San Francisco, Cal	Sept. 6, 1864 Mar. 2, 1869	3,320
Ores by superheated steam, Furnace for treating	W. E. Hagan, by Hagan Manufacturing Company and W. E. Hagan, assignees, (mesne.)	Troy and New York, N. Y.	Mar. 8, 1864 June 6, 1865	1,988
Ores, Decomposing and desulphurizing	R. Spencer	New York, N. Y	Nov. 8, 1864 July 4, 1865	2,022
Ores, Furnace for decomposing and desulphurizing	R. Spencer	New York, N. Y	Nov. 8, 1864 July 4, 1865	2,021
Ores, Furnace for roasting, burning, smelting, and treating.	J. D. Whelpley and J. J. Storer	Boston, Mass	Jan. 12, 1864 May 7, 1872	4,897
Ores, Grinding and amalgamating	T. Bates	Central City, Colo	May 3, 1870 May 16, 1871	4,380
Ores, Heating	A. C. Van Dyke	Greenupsburgh, Ky	Apr. 24, 1860 Oct. 2, 1860	1,052
Ores in vacuo, Roasting and smelting metallic	J. Absterdam, by the First National Ore Smelting and Desulphurizing Company, assignee.	New York, N. Y	Jan. 23, 1866 Jan. 12, 1869	3,266
Ores, Separating	T. J. Chubb, (extended August 25, 1871.)	Williamsburgh, N. Y	Aug. 25, 1857 Aug. 20, 1872	5,033
Organ	W. Sumner	Worcester, Mass	Feb. 28, 1854 Dec. 14, 1858	635
Organ, Reed	R. Burdett	Erie, Pa	Feb. 11, 1873 July 15, 1873	5,485
Organic materials with air, Treating	R. D'Heureuse	New York, N. Y	Aug. 3, 1869 Apr. 19, 1870	3,921
Ornamenting glass and other vitreous materials	A. Schwitter	New York, N. Y	Sept. 27, 1864 Apr. 9, 1867	2,546
Ornamenting, Mode of	H. Harrop	Hoboken, N. J	Feb. 14, 1865 Apr. 5, 1870	3,903
Oscillating steam-engine	A. Nittinger, jr	Philadelphia, Pa	Aug. 30, 1870 Apr. 15, 1873	5,353
Oven	H. Ball	New York, N. Y	Sept. 23, 1856 Oct. 12, 1869	3,666
Oven	H. Ball	New York, N. Y	Sept. 23, 1856 June 14, 1870	4,026
Oven	I. S. Gold	New York, N. Y	Dec. 16, 1833 Aug. 6, 1838	4
Oven	E. Treadwell, by W. E. Treadwell and W. Hustace, executors.	New York, N. Y	July 19, 1853 Aug. 25, 1857	487
Oven	J. Vale	Beloit, Wis	July 7, 1868 Jan. 11, 1870	3,796

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Oven	J. Vale	Beloit, Wis	July 7, 1868 June 28, 1870	4,055
Oven	J. Vale	Beloit, Wis	July 7, 1868 June 28, 1870	4,056
Oven, Baker's	H. Berdan	New York, N. Y	Oct. 20, 1857 Sept. 11, 1860	1,035
Oven, Baker's	G. C. Jennison, by self and J. Rayney, assignees.	Philadelphia, Pa., and Brooklyn, N. Y.	Feb. 1, 1859 Mar. 5, 1872	4,783
Oven, Baker's	D. McKenzie, by M. A. E. McKenzie, assignee.	Brooklyn, N. Y	May 1, 1860 Apr. 19, 1870	3,929
Oven, Heating elevated	P. A. Palmer	Troy, N. Y	Sept. 24, 1850 Sept. 13, 1859	811
Oven, Rotary	D. A. Kennedy, by self, W. Wadsworth, and E. D. Murray, assignees.	Darien, Wis	July 20, 1869 Sept. 21, 1869	3,646
Overshoe	H. G. Tyer	Andover, Mass	Sept. 3, 1867 Dec. 24, 1867	2,820
Overshoe	H. G. Tyer	Andover, Mass	Sept. 3, 1867 Feb. 7, 1871	4,257
Overshoe-fastening	H. E. Starrett	Lawrence, Kans	Feb. 22, 1870 Feb. 6, 1872	4,748
Overshoe, Rubber	C. Meyer and J. Evans	New York, N. Y., and New Brunswick, N. J.	Feb. 21, 1871 July 16, 1872	4,977
Oyster-dredge	T. P. Sink	Fairton, N. J	Oct. 4, 1859 Feb. 4, 1868	2,856
P.				
Packing-can	N. P. Lindergreen	Boston, Mass	Oct. 13, 1868 Feb. 16, 1869	3,299
Packing for deep wells	A. D. Griffin, by E. F. Griffin, administrator.	Chicago, Ill	Aug. 13, 1867 Aug. 10, 1869	3,591
Packing for journals and other parts of machinery.	C. A. Stevens, by I. D. Clift, assignee.	New York, N. Y	Mar. 29, 1870 Aug. 26, 1873	5,551
Packing for piston-rods and other enginery, Wooden	C. N. Petersen	Chicago, Ill	Jan. 26, 1869 Apr. 20, 1869	3,397
Packing for steam-engines, Manufacture of	J. Glanding, by self, D. H. Wilson, and E. S. Lowry, assignees.	Philadelphia, Pa	Apr. 28, 1868 May 21, 1872	4,907
Packing for steam-pistons, Metallic	D. Lasher	Brooklyn, N. Y	June 30, 1857 Sept. 28, 1858	606
Packing for stuffing steam and other engines	M. Bottichcr, by R. Burr and the Silver Lake Manufacturing Company, assignees, (mesne.)	Philadelphia, Pa., and Newton, Mass.	Oct. 4, 1864 Apr. 30, 1867	2,584
Packing for tubes of condensers	H. Allen	New York, N. Y	July 20, 1858 May 8, 1866	2,237
Packing, Manufacture of elastic	N. Jenkins	Boston, Mass	May 8, 1866 Aug. 3, 1869	3,579
Packing, Piston	O. Collier	Sacramento, Cal	Dec. 28, 1869 Apr. 25, 1871	4,350
Packing, Piston-rod	W. H. Miller	Philadelphia, Pa	Jan. 21, 1868 Oct. 10, 1871	4,587
Packing, Rubber	C. L. Frink, by O. T. Earle, assignee, (mesne.)	Rockville, Conn	May 8, 1866 June 11, 1872	4,942
Packing, Steam-engine	J. L. Bates, by W. H. Miller, assignee.	Providence, R. I., and Philadelphia, Pa.	Nov. 25, 1862 Sept. 1, 1868	3,108
Paddle-wheel buckets, Arrangement of	M. A. Crooker	New York, N. Y	Oct. 28, 1856 Apr. 26, 1859	697
Paddle-wheels, Feathering	W. R. Manley, by Manley Paddle-Wheel Company, assignee.	New York, N. Y	June 24, 1862 May 2, 1865	1,944
Paddle-wheels to canal-boats, Attaching	R. Jane	Otego, N. Y	Nov. 24, 1857 July 3, 1860	995
Padlock	F. Egge, by F. W. Smith, jr., S. R. Wilmot, and G. W. Bassett, assignees.	Bridgeport, Conn., and New York, N. Y.	Feb. 2, 1869 Mar. 15, 1870	3,880
Paging-machine	J. McAdams	Boston, Mass	Aug. 12, 1851 Jan. 26, 1858	523
Pails, Apparatus for graining	J. R. and A. J. Cross	Chicago, Ill	Dec. 27, 1864 June 4, 1867	2,637
Pails, &c., Metallic ear for attaching handles to	T. Evans	Newark, N. J	June 21, 1859 Aug. 4, 1868	3,063
Paint	D. R. Averill	Newburgh, Ohio	July 16, 1867 July 28, 1868	3,051
Paint	D. R. Averill, by self and the Averill Chemical Paint Company, assignees.	New Centreville and New York, N. Y.	July 16, 1867 Aug. 17, 1869	3,597
Paint	D. R. Averill, by self and the Averill Chemical Paint Company, assignees.	New Centreville and New York, N. Y.	July 16, 1867 Aug. 17, 1869	3,598
Paint	D. R. Averill, by self and the Averill Chemical Paint Company, assignees.	New Centreville and New York, N. Y.	July 16, 1867 Aug. 17, 1869	3,599
Paint	D. R. Averill, by self and the Averill Chemical Paint Company, assignees.	New Centreville and New York, N. Y.	July 16, 1867 Aug. 17, 1869	3,600
Paint	D. R. Averill, by self and the Averill Chemical Paint Company, assignees.	New Centreville and New York, N. Y.	July 16, 1867 Aug. 17, 1869	3,601
Paint	D. R. Averill, by the Averill Chemical Paint Company, assignee.	New Centreville, N. Y	July 16, 1867 Dec. 23 1873	5,695
Paint and cement, Fire and water proof	T. Brinkmann	Greeneville, Tenn	Dec. 21, 1869 Mar. 22, 1870	3,881
Paint, &c., Apparatus for straining	L. Bishop, by self and S. Brewer, assignees.	Cortlandville, N. Y	Feb. 20, 1866 June 12, 1866	2,281
Paint-can	H. Miller	Hoboken, N. J	Mar. 26, 1867 May 7, 1867	2,592

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Invention.	Inventor.	Residence.	Date.	No.
Paint-can fastening	J. K. Chace, by S. A. Ilsley and C. L. Northrup, assignees.	New York, N. Y	Apr. 5, 1870 Nov. 7, 1871	4,628
Paint fire-proof, Composition for rendering	J. B. Harris, by J. O. Swinney and A. H. Pollock, assignees, (mesne.)	Glasgow, Mo., and Germantown, Ky.	July 3, 1866 Sept. 14, 1869	3,640
Paint for ships' bottoms	J. G. Tarr and A. H. Wonson	Gloucester, Mass	June 20, 1865 Dec. 18, 1866	2,428
Paint for ships' bottoms	J. G. Tarr and A. H. Wonson	Gloucester, Mass	Nov. 3, 1863 Aug. 6, 1867	2,722
Paint for ships' bottoms	J. G. Tarr and A. H. Wonson	Gloucester, Mass	Nov. 3, 1863 Oct. 17, 1871	4,598
Paint for ships' bottoms	J. G. Tarr and A. H. Wonson	Gloucester, Mass	Nov. 3, 1863 Oct. 17, 1871	4,599
Paint, fruit, &c., can	H. Miller, by the Devoe Manufacturing Company, assignee.	New York, N. Y	June 28, 1864 May 24, 1870	3,993
Paint, Manufacture of	F. W. Gerdes	Allegheny City, Pa	Dec. 13, 1870 Nov. 25, 1873	5,669
Paint-mill	C. Belcher	Newark, N. J	Apr. 7, 1868 Mar. 19, 1872	4,807
Paint-mill	J. W. Masury	New York, N. Y	Oct. 4, 1870 Jan. 16, 1872	4,715
Paint, Ocher for	D. S. Wood	Tiskilwa, Ill	Aug. 23, 1870 Oct. 18, 1870	4,159
Paints, chemicals, fertilizers, &c., Machine for rubbing and mixing.	R. Poole	Baltimore, Md	May 28, 1867 Dec. 15, 1868	3,223
Painting, Material for distemper	H. M. Johnston	New York, N. Y	Feb. 15, 1870 July 29, 1873	5,510
Palm-leaf, &c., for stuffing beds, sofas, and cushions, Application of.	J. C. Smith, by E. Howe, assignee.	Cambridgeport, Mass	Apr. 3, 1835 Mar. 18, 1841	31
Paper and paper-board, Machine for making	J. F. Jones	Rochester, N. Y	Oct. 13, 1863 Mar. 7, 1865	1,898
Paper-bag and envelope machine	J. A. Smith and S. E. Pettee, by the North American Paper-Bag and Envelope Manufacturing Company, assignee.	Clinton and Foxborough, Mass., and Philadelphia, Pa.	May 1, 1855 Apr. 26, 1859	705
Paper-bag machine	J. Arkell and B. and A. Smith	Canajoharie, N. Y	Apr. 25, 1865 Feb. 13, 1872	4,749
Paper-bag machine	E. W. Goodale	Clinton, Mass	May 29, 1855 Sept. 4, 1860	1,033
Paper-bag machine	H. Law	Chatham, N. J	June 14, 1870 July 30, 1872	5,075
Paper-bag machine	B. F. Rice, by C. H. Morgan, L. Whitney, jr., and T. Priest, assignees, (mesne.)	Clinton and Watertown, Mass.	Apr. 28, 1857 Mar. 6, 1860	920
Paper-bag machine	F. Wolle	Bethlehem, Pa	July 6, 1858 Aug. 16, 1859	796
Paper bags, Tool for manufacturing	E. J. Howlett and S. Kirk, by E. J. Howlett, assignee.	Philadelphia, Pa	Feb. 26, 1867 Nov. 9, 1869	3,718
Paper bags, Tool for manufacturing	E. J. Howlett and S. Kirk, by selves, assignees.	Philadelphia, Pa	Feb. 26, 1867 June 14, 1870	4,029
Paper boxes, Machine for making	S. B. Terry, by self and D. S. Robeson, assignees, (mesne.)	Waterbury, Conn., and Philadelphia, Pa.	Sept. 6, 1859 May 17, 1870	3,985
Paper boxes, Making	E. Waters	Troy, N. Y	Feb. 2, 1858 July 9, 1861	1,212
Paper buttons	E. M. Pomeroy	Wallingford, Conn	Sept. 23, 1843 Nov. 24, 1843	58
Paper collar	A. A. Evans, by J. A. Woodbury, assignee.	Boston, Mass	May 26, 1863 July 10, 1866	2,309
Paper collar	A. A. Evans, by J. A. Woodbury, assignee.	Boston, Mass	May 26, 1863 July 10, 1866	2,310
Paper-collar manufacture	G. W. Ray	Springfield, Mass	May 1, 1856 Sept. 22, 1868	3,132
Paper collar, Turned-down enameled	J. H. Hoffman	New York, N. Y	Jan. 24, 1865 July 25, 1865	2,034
Paper collars, Apparatus for folding	A. H. Hook, by G. W. Ray and V. N. Taylor, assignees.	Springfield, Mass	Mar. 7, 1865 Aug. 22, 1865	2,056
Paper collars, Apparatus for folding	A. H. Hook, by G. W. Ray and V. N. Taylor.	Springfield, Mass	Mar. 7, 1865 Nov. 21, 1865	2,110
Paper, &c., Compound for coloring and ornamenting	F. Beck	New York, N. Y	Oct. 4, 1870 Nov. 22, 1870	4,181
Paper-cutting and book-trimming machine	F. J. Austin	New York, N. Y	June 16, 1841 June 22, 1852	218
Paper-cutting machine	E. P. Beckwith, by W. Smith, executor.	South Windham, Conn	Dec. 19, 1865 May 21, 1867	2,619
Paper-cutting machine	H. Law	New York, N. Y	Sept. 16, 1856 July 9, 1867	2,670
Paper-cutting machine	H. Law	Chatham, N. J	Sept. 16, 1856 Nov. 19, 1867	2,803
Paper-cutting machine	H. Law	Chatham, N. J	Apr. 5, 1864 July 29, 1873	5,503
Paper-cutting machine	G. A. Walker, by W. G. Ely, assignee.	Boston, Mass., and Norwich, Conn.	Aug. 22, 1871 June 24, 1873	5,463
Paper-cutting machine	T. C. Robinson, by G. H. Sanborn, assignee.	New York, N. Y	Nov. 23, 1869 Aug. 2, 1870	4,090
Paper, Die for cutting out ornamental forms of	A. Dolkescamp, by J. J. Nichols, assignee.	Brooklyn and New York, N. Y.	Mar. 25, 1873 Oct. 28, 1873	5,635
Paper, &c., Fiber from cane for	B. A. Lavender and H. Lowe, by K. Lowe and W. McTeer, assignees, (mesne,) (extended April 4, 1868.)	Baltimore, Md	Apr. 4, 1854 Aug. 31, 1869	3,629
Paper-folding machine	C. Chambers, jr	Philadelphia, Pa	Oct. 7, 1856 July 26, 1870	4,079
Paper-folding machine	C. Chambers, jr., (extended October 7, 1870.)	Philadelphia, Pa	Oct. 7, 1856 Feb. 21, 1871	4,266
Paper-folding machine	C. Chambers, jr	Philadelphia, Pa	Nov. 15, 1859 Aug. 12, 1873	5,533
Paper-folding machine	W. H. and J. Milliken, by S. C. Forsaith, assignee, (mesne.)	Manchester, N. H	Feb. 26, 1861 Jan. 4, 1870	3,785

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Invention.	Inventor.	Residence.	Date.	No.
Paper-folding machine	J. North, by S. T. Bacon, assignee, (mesne.)	Middletown, Conn., and Boston, Mass.	Apr. 15, 1856 July 27, 1858	574
Paper-folding machine	J. North, by S. T. Bacon, assignee, (mesne.)	Middletown, Conn., and Boston, Mass.	Apr 15, 1856 Feb. 8, 1859	661
Paper-folding machine	E. N. Smith, by the American Paper-Folding Company, assignee, (mesne.)	West Brookfield, Mass	Nov. 27, 1849 Jan. 7, 1851	189
Paper-folding machine	E. N. Smith, by S. T. Bacon, assignee, (mesne.)	Springfield and Boston, Mass.	May 19, 1857 Feb. 8, 1859	660
Paper-folding machine	E. N. Smith, by S. T. Bacon, assignee, (mesne.)	West Brookfield and Boston, Mass.	Nov. 27, 1849 Feb. 8, 1859	662
Paper-folding machine	G. K. Snow	Watertown, Mass	Oct. 15, 1850 Apr. 3, 1860	941
Paper-folding machine	A. Washburn	Medina, Ohio	Nov. 26, 1872 July 29, 1873	5,516
Paper-folding machine and printing-press, Combined.	W. H. and J. Milliken, by S. C. Forsaith, assignee, (mesne.)	Manchester, N. H	Feb. 26, 1861 Jan. 4, 1870	3,786
Paper-folding machinery	C. O. Crosby, by C. A. Durgin, assignee.	New York, N. Y	Dec. 23, 1856 Oct. 26, 1869	3,687
Paper from wood	C. Watt and H. Burgess, by W. F. Ladd and M. L. Keen, assignees, (mesne.)	London, England, New York, N. Y., and Philadelphia, Pa.	July 18, 1854 Oct. 5, 1858	608
Paper, Machine for cleaning rags for manufacturing.	G. Spafford, by J. Campbell, assignee.	Windham, Conn., and New York, N. Y.	Sept. 2, 1840 June 11, 1850	171
Paper, &c., Machine for drying	E. L. Perkins	Roxbury, Mass	June 7, 1859 Oct. 9, 1860	1,056
Paper, Machine for drying and pressing	J. North	Middletown, Conn	Apr. 14, 1857 May 19, 1857	464
Paper, Machine for polishing enameled	S. Shepherd and A. M. George, by S. Shepherd and J. Greeley, assignees, (mesne.)	Nashua, N. H	July 17, 1866 Nov. 17, 1868	3,203
Paper, Machine for sizing	J. Ames	Springfield, Mass	Dec. 1, 1837 Oct. 22, 1840	27
Paper, Making thick	S. G. Levis	Kellysville, Pa	Feb. 14, 1854 Oct. 22, 1867	2,789
Paper, Making thick	S. G. Levis, by J. C. Beach, assignee, (extended February 14, 1868.)	Kellysville, Pa	Feb. 4, 1854 Mar. 14, 1871	4,300
Paper, Manufacture of	A. C. Auer de Welsbach, by R. L. Delisseo, assignee.	New York, N. Y	Apr. 21, 1863 Sept. 25, 1866	2,365
Paper, Manufacture of	J. B. Read, by the Okra Paper Company, assignee.	New York, N. Y	Dec. 26, 1865 Apr. 5, 1870	3,907
Paper, &c., Manufacture of water-proof	R. O. Lowrey	Salem, N. Y	Dec. 10, 1867 May 19, 1868	2,940
Paper, pasteboard, &c., Manufacture of tarred	H. F. Evans	Beloit, Wis	Feb. 2, 1869 July 27, 1869	3,567
Paper-polisher, Composition	H. T. Cushman	North Bennington, Vt	June 1, 1869 Aug. 17, 1869	3,604
Paper, Process of producing refined wood-pulp for the manufacture of.	H. Voelter, by A. Pagenstecher, assignee.	Heidenheim, Germany, and New York, N. Y.	May 22, 1866 Apr. 23, 1872	4,881
Paper-pulp	J. A. Roth, by J. B. Brown, assignee.	Peekskill, N. Y	Aug. 15, 1865 Nov. 7, 1865	2,100
Paper-pulp, Apparatus for bleaching	H. L. Jones and D. S. Farquharson, by the Hydrostatic Paper Company, assignee, (mesne.)	Rochester, N. Y	Mar. 13, 1866 Oct. 23, 1866	2,384
Paper-pulp, Apparatus for the manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	June 21, 1859 July 3, 1860	996
Paper-pulp, Apparatus for the manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	June 21, 1859 Aug. 13, 1867	2,730
Paper-pulp engine	S. L. Gould	Skowhegan, Me	Oct. 24, 1871 July 16, 1872	4,976
Paper-pulp from straw, Manufacture of	A. K. Eaton	New York, N. Y	Mar. 22, 1864 Dec. 20, 1870	4,203
Paper, Pulp from wood for the manufacture of	C. Watt and H. Burgess, by W. F. Ladd and M. L. Keene, assignees, (mesne.)	London, England, New York, N. Y., and Philadelphia, Pa.	July 18, 1854 Apr. 7, 1863	1,448
Paper-pulp, Grinding	J. Kingsland, jr	Franklin, N. J	Dec. 23, 1856 June 28, 1859	744
Paper-pulp, Grinding	J. Kingsland, jr	Franklin, N. J	Dec. 16, 1856 June 28, 1859	745
Paper-pulp, Grinding	J. Kingsland, jr	Franklin, N. J	Dec. 23, 1856 Jan. 6, 1863	1,381
Paper-pulp, Machine for grinding and sizing	J. Jordan, jr., and T. Eustice, by J. Jordan, jr., H. Keney, and G. Warren & Co., assignees.	Hartford, Conn., and Boston, Mass.	May 18, 1858 Dec. 4, 1860	1,088
Paper-pulp, Machinery for grinding	J. Kingsland, jr	Franklin, N. J	Dec. 16, 1856 Jan. 6, 1863	1,380
Paper-pulp, Manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	June 21, 1859 July 3, 1860	997
Paper-pulp, Manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	Mar. 20, 1860 Dec. 15, 1863	1,591
Paper-pulp, Manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	Nov. 22, 1859 July 2, 1867	2,665
Paper-pulp, Manufacture of	J. B. Palser and G. Howland	Fort Edward, N. Y	June 21, 1859 Aug. 13, 1867	2,731
Paper-pulp, Preparation of straw for	J. B. Palser and G. Howland	Fort Edward, N. Y	June 21, 1859 Dec. 15, 1863	1,590
Paper-pulp, Process of treating wood and other vegetable substances in the manufacture of.	C. Watt and H. Burgess, by W. F. Ladd and M. L. Keene, assignees, (mesne.)	London, England, New York, N. Y., and Philadelphia, Pa.	July 18, 1854 Apr. 7, 1863	1,449
Paper-pulp, Reducing wood fiber to	H. Voelter, by A. Pagenstecher, assignee.	Curtisville, Mass	Aug. 10, 1858 Apr. 6, 1869	3,361
Paper-pulp, Reducing wood to	H. Voelter, by A. Pagenstecher, assignee, (extended August 29, 1870.)	Heidenheim, Würtemberg, and New York, N. Y.	Aug. 10, 1856 June 6, 1871	4,418

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Invention.	Inventor.	Residence.	Date.	No.
Paper-pulp, Treating wood, straw, &c., for the manufacture of.	H. L. Jones and D. S. Farquharson, by the Hydrostatic Paper Company, assignee, (mesne.)	Rochester, N. Y	June 5, 1866 Oct. 23, 1866	2, 383
Paper-stock, Apparatus for treating	G. Sinclair	Leith, Scotland	Jan. 10, 1871 Feb. 27, 1872	4, 771
Paper-stock from certain plants, Manufacture of	J. Pickles, by J. S Sturgis and T. Keech, assignees.	Wigan, England, and New York, N. Y.	June 15, 1869 Aug. 22, 1871	4, 524
Paper-stock, Machine for washing	H. W. Peaslee	Malden Bridge, N. Y	Jan. 23, 1835 Jan. 8, 1856	340
Paper-stock, Manufacture of	H. Betts	Norwalk, Conn	Aug. 1, 1865 Dec. 15, 1868	3, 228
Paper-stock-washing machine	H. W. Peaslee	Malden Bridge, N. Y	Jan. 23, 1855 Mar. 19, 1867	2, 515
Paper-strip, Machine for folding and cording the edges of.	J. E. Coffin, by A. T. Denison and E. P. Furlong, assignees.	Mechanic's Falls, Me	Nov. 17, 1868 July 13, 1869	3, 547
Paper-stuff, Preparation of	J. T. Coupier and M. A. C. Meltier, by C. S. Buchanan.	Paris, France, and New York, N. Y.	May 7, 1851 Mar. 25, 1862	1, 295
Paper twine, Machine for cutting paper for	J. B. Wortendyke	Godwinville, N. J	Sept. 13, 1864 Nov. 22, 1864	1, 825
Paper twine, &c., Machine for making	J. B. Wortendyke	Godwinville, N. J	May 24, 1864 Nov. 8, 1864	1, 817
Paper twine, &c., Machine for making	J. B. Wortendyke	Godwinville, N. J	May 24, 1864 Nov. 8, 1864	1, 818
Paper washer	E. S. Hanna	Pittsburgh, Pa	Oct. 3, 1871 May 20, 1873	5, 422
Paraffine, &c., Process and apparatus for purifying	F. Lambe	London, England	Apr. 19, 1870 May 23, 1871	4, 397
Parer, Apple	A. G. Batchelder	Lowell, Mass	Mar. 2, 1869 May 17, 1870	3, 970
Parer, Apple	J. D. Brown, by J. F. Monroe, assignee, (mesne.)	Fitchburgh, Mass	May 6, 1856 Aug. 21, 1866	2, 339
Parer, Apple	C. P. Carter	Ware, Mass	Oct. 16, 1849 Aug. 12, 1856	385
Parer, Apple	H. Keyes, by J. H. Lockey and W. M. Howland, assignees.	Leominster, Mass	Dec. 16, 1856 July 21, 1863	1, 513
Paring-knife	J. J. Lebeau	Cincinnati, Ohio	July 10, 1866 Aug. 30, 1870	4, 112
Paste, Machine and process for making	G. G. Noah	Boston, Mass	Jan. 7, 1868 Feb. 18, 1873	5, 289
Pasteboard, Apparatus for the manufacture of	H. L. Palmer, by E. W. O'Neill and M. Fitzgibbons, assignees.	Stillwater, N. Y	Mar. 2, 1869 June 18, 1872	4, 951
Pasteboard, Apparatus for the manufacture of	H. L. Palmer, by E. W. O'Neill and M. Fitzgibbons, assignees.	Stillwater, N. Y	Mar. 2, 1869 July 1, 1873	5, 471
Pasteboard, Manufacture of hollow globes, &c., from.	E. Weissenborn, by J. Schedler, assignee.	Hudson City, N. J	Nov. 24, 1868 July 16, 1872	4, 981
Pavement	H. M. Stow	San Francisco, Cal	Dec. 10, 1867 Jan. 19, 1869	3, 274
Pavement, Cellular iron	S. H. Titus and O. Des Granges	Saint Louis, Mo	Oct. 13, 1857 May 1, 1860	957
Pavement, Composition	H. L. Cranford	Brooklyn, N. Y	Aug. 3, 1869 July 5, 1870	4, 059
Pavement, &c., Composition blocks for	J. C. Tucker	New York, N. Y	July 2, 1872 Aug. 27, 1872	5, 043
Pavement, Composition for concrete	E. Seeley	Scranton, Pa	Sept. 6, 1864 Dec. 14, 1869	3, 764
Pavement, Concrete	G. Bassett, by T. G. Bassett, assignee.	Syracuse, N. Y	Oct. 29, 1872 Oct. 7, 1873	5, 586
Pavement, Concrete	R. Fisk	New York, N. Y	Oct. 8, 1867 Feb. 9, 1869	3, 296
Pavement, Concrete	J. J. Schillinger	New York, N. Y	July 19, 1870 May 2, 1871	4, 364
Pavement, Sidewalk	J. B. Cornell	New York, N. Y	Apr. 28, 1857 Sept. 7, 1858	596
Pavement, Stone	C. Guidet	New York, N. Y	Jan. 12, 1869 Aug. 23, 1870	4, 106
Pavement, Substrata for	H. P. Russ	New York, N. Y	Mar. 14, 1848 Mar. 28, 1854	261
Pavement, Wooden	W. W. Ballard, by self, T. E. Brown, and E. L. Marsh, assignees.	Elmira, N. Y	July 12, 1870 Mar. 26, 1872	4, 822
Pavement, Wooden	D. McKenzie	Brooklyn, N. Y	July 7, 1868 Nov. 24, 1868	3, 208
Pavement, Wooden	S. Nicolson	Boston, Mass	Aug. 8, 1854 Dec. 1, 1863	1, 583
Pavement, Wooden	S. Nicolson	Boston, Mass	Aug. 8, 1854 Aug. 20, 1867	2, 748
Pavement, Wooden	C. Williams	New York, N. Y	July 21, 1868 July 13, 1869	3, 554
Pawl, Friction	J. Moore	San Francisco, Cal	May 7, 1867 Nov. 17, 1868	3, 200
Peg blank, Shoe	B. F. Sturtevant	Boston, Mass	Aug. 16, 1859 June 12, 1866	2, 286
Peg-cutting machine	S. K. Baldwin	Gilford, N. H	July 16, 1842 Nov. 4, 1856	409
Pegging-jack	W. R. Landfear, by D. Whittemore, assignee.	North Bridgewater, Mass	Nov. 28, 1865 Aug. 7, 1866	2, 331
Pegging-machine	L. Hall, by A. B. Ely, assignee, (mesne.)	Newton, Mass	Mar. 8, 1864 Apr. 9, 1867	2, 550
Pegging-machine	M. Marshall, by S. S. Bucklin, assignee.	Lowell and Brookline, Mass	Nov. 5, 1861 Mar. 25, 1862	1, 296
Pegging-machine	E. M. Stevens, by W. N. Ely, assignee.	Stratford, Conn	May 28, 1867 Jan. 14, 1868	2, 833
Pegging machine, Boot and shoe	A. C. Gallahue, (extended February 18, 1867.)	Riverdale, N. Y	Aug. 16, 1853 July 6, 1869	3, 533

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Pegging machine, Boot and shoe	A. C. Gallahue	Riverdale, N. Y	Mar. 29, 1859 June 22, 1869	3,517
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 July 4, 1854	269
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	698
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	699
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	700
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	701
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	702
Pegging machine, Boot and shoe	J. J. Greenough	New York, N. Y	Jan. 17, 1854 Apr. 26, 1859	703
Pegging machine, Hand	L. Goddu, by R. W. Drew, assignee.	Lowell, Mass	Dec. 5, 1865 Mar. 30, 1869	3,343
Pegging machine, Hand	E. M. Stevens, by W. N. Ely, assignee.	Stratford, Conn	Aug. 6, 1861 Jan. 8, 1867	2,447
Pen and pencil case	T. W. Cox, by L. A. Heely, assignee, (mesne.)	New York, N. Y	June 27, 1865 Mar. 26, 1867	2,525
Pen and pencil case	C. H. Downes	Hudson City, N. J	Sept. 27, 1870 Aug. 5, 1873	5,518
Pen and pencil case	W. S. Hicks	New York, N. Y	Sept. 12, 1865 Feb. 12, 1867	2,477
Pen, Metallic	A. W. Rapp	Philadelphia, Pa	Jan. 6, 1852 July 20, 1856	380
Pencil	J. Reckendorfer	New York, N. Y	Nov. 4, 1862 Mar. 1, 1870	3,863
Pencil-case, (Design)	W. S. Hicks	New York, N. Y	May 14, 1872 Aug. 20, 1872	5,036
Pencil-case	W. S. Hicks	New York, N. Y	Mar. 21, 1871 Apr. 29, 1873	5,384
Pencil-case, Ornamented	E. S. Johnson	Jersey City, N. J	Dec. 5, 1871 Nov. 5, 1872	5,134
Pencil-case, Ornamented	E. S. Johnson	Jersey City, N. J	Dec. 5, 1871 July 1, 1873	5,469
Pencil, Lead, (Design)	J. Rosenthal, by J. Reckendorfer, assignee.	New York, N. Y	Apr. 3, 1860 Apr. 11, 1865	1,933
Pencil-point protector	G. Merritt	New York, N. Y	Mar. 5, 1867 May 7, 1867	2,595
Pencil-sharpeners, Mold for casting	W. K. Foster	Bangor, Me	Apr. 17, 1855 Feb. 23, 1858	528
Pencils, Composition for indelible	E. P. Clark	Holyoke, Mass	May 31, 1859 May 14, 1872	4,899
Pencils, Machine for cutting lead	P. Schrag and P. Hufeland, by E. Faber, assignee.	New York, N. Y	May 17, 1870 Jan. 14, 1873	5,236
Pencils, Machine for cutting lead	A. Warth, by E. Faber, assignee.	Stapleton, N. Y	June 21, 1864 Jan. 7, 1873	5,228
Pencils, Means of attaching rubber to	W. C. Vosburgh and W. A. Ludden, by Rubber-Tip Pencil Company, assignee, (mesne.)	Brooklyn and New York, N. Y.	May 20, 1862 Oct. 19, 1869	3,683
Pencils Rubber head for lead	W. W. Shaw, by L. L. Tower, assignee, (mesne)	Cambridge, Mass	Apr. 5, 1859 June 24, 1862	1,319
Percussion-caps, Machine for varnishing	C. Hicks, by American Flask and Cap Company, assignee.	Haverstraw, N. Y., and New Haven, Conn.	Feb. 17, 1857 Jan. 14, 1862	1,257
Permutation-lock	J. C. Hintz, jr	Cincinnati, Ohio	Oct. 18, 1870 Sept. 5, 1871	4,542
Permutation-lock	A. W. Johnson and G. Thompson, by G. Thompson and H. Mitchell, assignees.	Trenton, N. J	May 21, 1867 Oct. 22, 1867	2,786
Permutation-lock	L. F. Munger, (extended July 14, 1871.)	Rochester, N. Y	July 14, 1857 Oct. 17, 1871	4,596
Permutation-lock	G. Rosner, by H. S. Greenleaf, assignee.	Rochester, N. Y	Sept. 18, 1860 July 25, 1871	4,488
Permutation-lock for doors, vaults, &c	R. Newell	New York, N. Y	Sept. 25, 1838 Dec. 2, 1851	208
Pessary	W. R. Gardner	Leonardsville, N. Y	July 12, 1870 Mar. 7, 1871	4,291
Petroleum and its products, Process of treating	J. A. Tatro	Hartford, Conn	Feb. 8, 1870 June 6, 1871	4,417
Petroleum and other hydrocarbons, Mode of burning.	L. L. Hill, by S. Stevens, assignee.	New York, N. Y	Apr. 7, 1863 Oct. 4, 1864	1,785
Petroleum, Deodorizing	T. Restieaux	Boston, Mass	Apr. 9, 1867 June 7, 1870	4,020
Petroleum, Process of treating	J. A. Tatro	Hartford, Conn	Feb. 8, 1870 Mar. 1, 1870	3,867
Phosphates for the manufacture of fertilizers, Mode of treating mineral.	J. Commins	Charleston, S. C	Feb. 25, 1868 June 30, 1868	3,008
Photograph-mount	A. C. Partridge	Boston, Mass	June 11, 1872 Nov. 12, 1872	5,144
Photographs, Burnisher for	E. R. Weston, by T. McDonald, assignee.	East Corinth, Me	Sept. 10, 1872 Feb. 11, 1873	5,281
Photographs from glass to paper, Removing	E. Howell	Ashtabula, Ohio	May 19, 1857 Sept. 22, 1857	500
Photographs, Instrument for enlarging	D. Shive	Philadelphia, Pa	Mar. 22, 1859 Mar. 13, 1866	2,198
Photographs, Printing	J. Albert	Munich, Bavaria	Nov. 30, 1869 Apr. 11, 1871	4,328
Photographic bath	B. Hufnagel	New York, N. Y	Oct. 5, 1858 Nov. 13, 1860	1,074
Photographic bath	B. Hufnagel	New York, N. Y	Oct. 5, 1858 Mar. 19, 1861	1,152
Photographic impressions, Preparation of oil ground to receive.	J. H. Tatum	Baltimore, Md	Apr. 15, 1856 May 13, 1856	368
Photographic-picture-enameling apparatus	N. Weston	San Francisco, Cal	Dec. 10, 1867 Oct. 1, 1872	5,085

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Invention.	Inventor.	Residence.	Date.	No.
Photographic pictures, Bituminous ground for	V. M. Griswold	Lancaster, Ohio	Oct. 21, 1856 Feb. 24, 1857	430
Photographic pictures, Mode of printing	I. Rehn	Philadelphia, Pa	Apr. 14, 1868 May 26, 1868	2,952
Photographic pictures on glass	J. J. Cutting	Boston, Mass	July 11, 1854 Aug. 12, 1856	384
Photolithography	J. A. Cutting and L. H. Bradford.	Boston, Mass	Mar. 16, 1858 July 31, 1860	1,019
Piano-forte	E. Brown	Boston, Mass	Nov. 20, 1833 Dec. 31, 1839	19
Piano-forte	H. Lindeman	New York, N. Y	Aug. 7, 1860 Sept. 27, 1864	1,773
Piano-forte	G. C. Manner	New York, N. Y	Nov. 13, 1866 June 23, 1868	3,004
Piano-forte action	D. B. Shirley	Boston, Mass	Nov. 28, 1854 Oct. 21, 1856	405
Piano-forte action	H. Steinway, jr	New York, N. Y	June 15, 1858 Feb. 4, 1862	1,271
Piano-fortes, Fitting the hammer-heads of	J. Mackay	Boston, Mass	Aug. 10, 1838 Apr. 23, 1836	8
Piano-frame, Metal	M. Martins	New York, N. Y	Sept. 4, 1866 Oct. 5, 1869	3,660
Piano, Upright	G. C. Manner	New York, N. Y	Dec. 14, 1869 July 1, 1873	5,470
Piano with melodeon and tremolo attachment	L. Louis	Boston, Mass	June 10, 1862 Nov. 10, 1868	3,184
Pianos, Stringing	A. Choplain and P. E. Chollet	New York, N. Y	Dec. 19, 1865 Jan. 30, 1866	2,164
Picture-card frame	R. W. Potter, by G. P. Bergen, assignee.	New York and Brooklyn, N. Y.	Mar. 7, 1865 Sept. 22, 1868	3,125
Picture-cases, Hinge for	A. P. Critchlow, by A. P. Critchlow & Co., assignees.	Florence, Mass	Oct. 14, 1856 Apr. 21, 1857	456
Picture-frames, Machinery for preparing oval	W. Gardner	New York, N. Y	Aug. 17, 1858 Mar. 15, 1859	672
Picture-frames, Machinery for preparing oval	W. Gardner	New York, N. Y	Aug. 17, 1858 Mar. 15, 1859 May 17, 1859	720
Pigment, Opaque	S. Gwynn, by D. L. Bartlett and G. H. Hunt, assignees.	Baltimore, Md	Dec. 19, 1865 May 28, 1867	2,623
Pigments, Manufacture of opaque	S. Gwynn, by D. L. Bartlett and G. H. Hunt, assignees.	Baltimore, Md	Dec. 19, 1865 May 28, 1867	2,624
Pile-sinking apparatus, Pneumatic	F. E. Sickels	Chicago, Ill	Feb. 1, 1870 June 18, 1872	4,953
Piles for wharves, piers, &c., Mode of staying	E. H. Angamar	New Orleans, La	July 12, 1859 Mar. 6, 1860	925
Pin-papering machine	S. Slocum, (extended September 30, 1855.)	Providence, R. I	Sept. 30, 1841 Dec. 4, 1855	332
Pipe-cutter	J. Balmore	Harlem, N. Y	Feb. 19, 1867 May 14, 1867	2,630
Pipe joint, Cement	M. Stephens, by self and N. Stephens, assignees.	Brooklyn, N. Y	Aug. 24, 1869 July 16, 1872	4,980
Pipe joint, Gas	R. C. Robbins, by H. L. Case, administrator, and H. L. Case, J. M. Keen, and J. W. Mason, assignees.	Jersey City, N. J., and Brooklyn, N. Y.	Jan. 13, 1863 Aug. 28, 1866	2,342
Pipe-molding	J. Firth and J. Ingham	Phillipsburgh, N. J	Dec. 20, 1859 Apr. 28, 1863	1,463
Pipe, tube, funnel, faucet, &c	J. K. Mayo, by self and A. and G. B. Cushing, assignees.	New York, N. Y., and Saint John, New Brunswick.	Dec. 26, 1865 Aug. 18, 1868	3,091
Pipes with tin, Mode of lining	W. A. Shaw	New York, N. Y	Mar. 10, 1863 Apr. 3, 1866	2,219
Pistol and other fire-arms	E. Allen	Worcester, Mass	Apr. 16, 1845 Dec. 14, 1858	633
Piston-rod adjuster	D. Bly	Shamburgh, Pa	May 19, 1868 June 7, 1870	4,015
Piston, Steam-engine	H. D. Dunbar	Springfield, Mass	Aug. 14, 1860 July 18, 1865	2,029
Piston, Steam-engine	B. F. Hedden, by O. Kelsey and J. F. Bailey, assignees.	New York, N. Y	Aug. 4, 1863 Feb. 19, 1867	2,488
Pitcher, Ice	E. Kauffman, by H. G. Reed, G. Brabrook, and H. H. Fish, assignees.	Taunton, Mass	Apr. 6, 1858 Nov. 17, 1868	3,194
Pitcher spout and lid	D. Baker, by G. M. Irwin, assignee.	Harwich, Mass	June 19, 1860 Nov. 5, 1872	5,129
Pitcher, &c., Water	K. Goddard, by self and J. P. Adams, assignees.	Richmond, N. Y	Nov. 30, 1869 Apr. 4, 1871	4,318
Pitman	F. R. Glascock	Hillsborough, Ohio	Dec. 3, 1872 Oct. 14, 1873	5,600
Plane, Carpenter's bench	W. H. Faber, by self and T. R. Abbott, assignees.	Lowell, Mass	Feb. 28, 1865 June 5, 1866	2,274
Plane, Multiform molding	T. D. Worrall, by self, assignee, (mesne.)	Lowell, Mass	Aug. 29, 1854 Dec. 24, 1856	418
Planing lumber "out of wind," Machine for	S. S. Gray, by self and S. A. Woods, assignees.	Boston, Mass	Aug. 22, 1854 Apr. 17, 1860	945
Planing-machine	C. Emmons, by W. Emmons, administrator.	New York, N. Y	June 27, 184[illegible] May 21, 1859	170
Planing-machine	J. J. Russ, by R. Ball & Co., assignees.	Worcester, Mass	Mar. 24, 1868 Feb. 6, 1872	4,737
Planing-machine	J. B. Schenck, by H. B., W. T. Y., and A. L. Schenck, assignees, (mesne.)	Matteawan, N. Y.	Feb. 2, 1869 Feb. 6, 1872	4,738
Planing-machine	C. A. Spring and P. Boon	Kensington, Pa	July 30, 1850 Jan. 13, 1852	209
Planing-machine	J. Whitney, by J. A. Woodbury, assignee, (extended April 13, 1866.)	Winchester, and Boston, Mass.	Apr. 13, 1852 July 9, 1867 Sept. 1, 1868	3,110
Planing-machine	A. A. Wilder	Detroit, Mich	Dec. 21, 1852 Nov. 15, 1853	249

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Invention.	Inventor.	Residence.	Date.	No.
Planing-machine	J. A. Woodbury	Winchester, Mass	Feb. 7, 1854 Mar. 31, 1857	444
Planing-machine cutters, Stock for holding	I. Gibbs, (extended July 27, 1872.)	Worcester, Mass	July 27, 1858 Mar. 18, 1873	5,329
Planing, tonguing, and grooving machine	J. Powell, N. Barlow, and E. Holden, by R. G. Eunson, assignee.	Saint Louis, Mo	Feb. 27, 1847 Mar. 9, 1852	210
Planing, tonguing, grooving, and dressing boards, Machine for.	W. Woodworth, by W. W. Woodworth, administrator.	Hyde Park, N. Y	Dec. 27, 1828 July 8, 1845	71
Planing machine, Wood	H. D. Stover	New York, N. Y	Dec. 18, 1860 May 21, 1861	1,190
Planing machine, Wood	J. Whitney, (extended April 13, 1866.)	Winchester, Mass	Apr. 13, 1852 July 9, 1867	2,676
Planter	C. Randall	Palmyra, Ga	Nov. 2, 1852 July 25, 1854	272
Planter, Corn	J. Armstrong, jr	Elmira, Ill	July 22, 1862 Sept. 7, 1869	3,630
Planter, Corn	J. Armstrong, jr	Elmira, Ill	Sept. 20, 1864 Nov. 2, 1869	3,695
Planter, Corn	G. I. Bergen	Galesburgh, Ill	Dec. 1, 1863 Apr. 18, 1865	1,935
Planter, Corn	J. Campbell, by self and W. Campbell, assignees.	Harrison, Ohio	May 8, 1866 Feb. 15, 1870	3,836
Planter, Corn	J. Campbell, by self and W. Campbell, assignees.	Harrison, Ohio	May 8, 1866 Oct. 1, 1872	5,078
Planter, Corn	J. Case	Springfield, Ohio	Jan. 16, 1855 Apr. 17, 1866	2,227
Planter, Corn	J. Case	La Fayette, Ind	Dec. 1, 1857 Apr. 20, 1869	3,388
Planter, Corn	N. Drake, (additional improvement September 28, 1858.)	Newton, N. J	Feb. 2, 1858 Dec. 14, 1858	634
Planter, Corn	J. Gross, by J. H. and D. R. Alexander, assignees, (mesne.)	Decatur, Ill	June 6, 1865 Dec. 26, 1865	2,135
Planter, Corn	S. Malone	Tremont, Ill	June 3, 1854 July 10, 1855	315
Planter, Corn	W. Morrison	Carlisle, Pa	Sept. 13, 1859 Sept. 19, 1871	4,559
Planter, Corn	M. Robbins	Cincinnati, Ohio	Feb. 10, 1857 Feb. 9, 1858	525
Planter, Corn	J. Selby	Peoria, Ill	Aug. 30, 1864 Oct. 6, 1868	3,148
Planter, Corn and cotton-seed	C. C. Garrett	Dayton, Ala	Mar. 12, 1867 July 16, 1867	2,681
Planter gearing, Seed	M. J. Hunt	Rising Sun, Md	June 3, 1851 Mar. 30, 1852	213
Planter, harrow, and cultivator, Combined	D. D. Stelle, by P. P. Runyon, J. Letson, and G. J. Janeway, assignees, (mesne.)	New Brunswick, N. J	July 16, 1867 Oct. 27, 1868	3,173
Planter, Potato	H. J. Kent	Palmyra, N. Y	Jan. 24, 1871 Mar. 5, 1872	4,790
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Nov. 10, 1857	508
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Feb. 16, 1858	526
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Sept. 11, 1860	1,026
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Sept. 11, 1860	1,037
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Sept. 11, 1860	1,038
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Sept. 11, 1860	1,039
Planter, Seed	G. W. Brown	Galesburgh, Ill	Feb. 2, 1853 Sept. 11, 1860	1,040
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Dec. 11, 1860	1,091
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Dec. 11, 1860	1,092
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Dec. 11, 1860	1,093
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Dec. 11, 1860	1,094
Planter, Seed	G. W. Brown	Galesburgh, Ill	May 8, 1855 Dec. 11, 1860	1,095
Planter, Seed	J. Case	Bloomington, Ill	Jan. 16, 1855 Nov. 16, 1858	623
Planter, Seed	J. Case, by self, assignee, and N. Baldwin, administrator.	La Fayette, Ind	Dec. 7, 1858 Oct. 6, 1868	3,144
Planter, Seed	S. T. Holly	Rockford, Ill	June 16, 1857 Sept. 22, 1857	499
Planter, Seed	D. S. Holman	Conneautville, Pa	Jan. 22, 1867 July 14, 1868	3,031
Planter, Seed	B. Kuhns	Dayton, Ohio	Dec. 29, 1868 Aug. 19, 1873	5,542
Planter, Seed	B. Kuhns and M. J. Haines	Dayton, Ohio, and Delaware City, Del.	Sept. 30, 1856 May 11, 1858	533
Planter, Seed	G. W. Lee, by A. R. Reese, assignee.	Philipsburgh, N. J	Nov. 21, 1854 Feb. 11, 1868	2,863
Planter, Seed	L. Moore	Ypsilanti, Mich	July 2, 1850 Aug. 26, 1862	1,336
Planter, Seed	M. and S. Pennock	East Marlborough, Pa	Mar. 12, 1841 Oct. 30, 1849	149
Planter, Seed	M. and S. Pennock	East Marlborough, Pa	Mar. 12, 1841 Dec. 9, 1854	283
Planter, Seed	E. M. Stevens, J. B. Crosby, and J. W. Pearson.	Boston, Mass	May 22, 1855 Jan. 26, 1869	3,278
Planter, Seed	J. H. Thomas and P. P. Mast	Springfield, Ohio	July 27, 1858 Oct. 20, 1868	3,104

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Planter, Seed	J. H. Thomas and P. P. Mast	Springfield, Ohio	July 27, 1858 Nov. 24, 1868	3,210
Planter, Seed	J. D. Willoughby, (extended January 23, 1872.)	Washington, D. C	Jan. 26, 1858 June 18, 1872	4,952
Planter, Seed	E. Young	Fayetteville, Mo	June 26, 1860 Apr. 13, 1869	3,383
Planters, Seeding-apparatus of seed	L. Moore	Bart, Pa	July 2, 1850 Oct. 12, 1852	224
Planting-machine	S. L. Allen	Cinnaminson, N. J	Nov. 24, 1868 Aug. 9, 1870	4,092
Planting-machine	J. G. Clark	Middletown, Ohio	Oct. 2, 1866 Mar. 19, 1867	2,517
Plaster, Wall	B. R. Smith and J. C. Harris	Philadelphia, Pa	Jan. 24, 1871 Apr. 29, 1873	5,389
Plates, Machine for folding tinned	O. W. Stow	Plantsville, Conn	Dec. 24, 1867 Nov. 16, 1869	3,738
Platform-elevator, Hydraulic telescopic	J. Parker and I. Cook	San Francisco, Cal	July 16, 1872 Feb. 25, 1873	5,296
Plow	J. C. Bethea	Blakely, Ga	Feb. 5, 1867 Aug. 25, 1868	3,094
Plow	B. C. Blomsten	Waupaca, Wis	Oct. 11, 1870 Mar. 19, 1872	4,810
Plow	C. R. Brinkerhoff	Batavia, N. Y	Oct. 11, 1853 Jan. 30, 1855	294
Plow	T. E. C. Brinly	Louisville, Ky	July 3, 1866 Aug. 13, 1867	2,726
Plow	J. Deats, by H. Deats, administrator.	Quakertown, N. J	Dec. 28, 1831 May 16, 1845	70
Plow	H. B. Durfee	Decatur, Ill	May 18, 1869 Nov. 30, 1869	3,753
Plow	L. Gibbs, by self, J. R. Bucher, and W. A. Wikidal, assignees.	Canton, Ohio	Aug. 6, 1872 May 20, 1873	5,421
Plow	M. L. Gibbs	Canton, Ohio	Jan. 20, 1871 June 11, 1872	4,943
Plow	M. L. Gibbs	Canton, Ohio	Oct. 25, 1870 July 9, 1872	4,965
Plow	T. J. Hall, by self, H. P. Stockton, and R. P. Lane, assignees, (extended April 3, 1869.)	Bryan, Tex., and Rockford, Ill.	Apr. 3, 1855 Dec. 28, 1869	3,782
Plow	D. Harper	Chicago, Ill	Oct. 21, 1862 Aug. 2, 1864	1,734
Plow	S. Hulbert	Ogdensburgh, N. Y	Sept. 20, 1853 Jan. 1, 1856	337
Plow	D. Mater	Bellmore, Ind	Oct. 6, 1868 June 8, 1869	3,488
Plow	D. Matteson and T. P. Williamson.	Stockton, Cal	Mar. 12, 1867 Nov. 3, 1868	3,179
Plow	S. D., D. A., and J. B. Morrison.	Fort Madison, Iowa	Aug. 8, 1871 Nov. 26, 1872	5,160
Plow	C. O'Bryan and H. Kreps, by Nixon & Co., assignees.	Alliance, Ohio	Aug. 20, 1861 Aug. 11, 1868	3,077
Plow	J. C. Pfeil	Arenzville, Ohio	Apr. 7, 1868 Aug. 29, 1871	4,533
Plow	F. F. Reynolds, by self and J. H. Hines, assignees.	Bethany and Davisborough, Ga.	Jan. 1, 1867 Nov. 2, 1869	3,708
Plow	M. Richards and J. Vandegrift	Princeton, Ill	Feb. 5, 1867 Aug. 25, 1868	3,098
Plow	I. Rulofson, by self and L. Harvey, assignees.	Penn Yan, N. Y	Mar. 1, 1859 Dec. 13, 1859	863
Plow	G. Shelton	Normal, Ill	June 4, 1872 Aug. 12, 1873	5,530
Plow	M. G. Slemmons	Cadiz, Ohio	Oct. 9, 1860 June 22, 1869	3,514
Plow	F. F. Smith, by self and The Collins Company, assignees.	Collinsville, Conn	Nov. 20, 1860 June 21, 1864	1,706
Plow	W. S. Spratt	West Manchester, Pa	Sept. 5, 1865 July 6, 1869	3,539
Plow	G. W. Thompson, by self, N. Hawk, and J. W. Atwood, assignees.	Ripley and Manchester, Ohio.	Jan. 3, 1871 May 28, 1872	4,925
Plow	B. Volkman, by F. Volkman, assignee.	Hoboken, N. J	Nov. 27, 1866 July 30, 1867	2,703
Plow	G. Watt	Richmond, Va	Dec. 9, 1856 Nov. 10, 1857	506
Plow	G. Watt	Richmond, Va	Feb. 9, 1858 Aug. 2, 1859	790
Plow	G. Watt, (additional improvement August 2, 1859.)	Richmond, Va	Feb. 9, 1858 Aug. 4, 1868	3,071
Plow	G. Watt	Richmond, Va	Nov. 26, 1867 Aug. 17, 1869	3,609
Plow	J. Vandegrift	Princeton, Ill	Oct. 15, 1867 Sept. 13, 1870	4,119
Plow and potato-digger combined, Shovel	J. M. Dick, by self and W. H. Albro, assignees.	Buffalo, N. Y	Aug. 2, 1870 Dec. 27, 1870	4,216
Plow-castings, Machine for grinding	J. Gibbs, (extended October 4, 1867.)	Canton, Ohio	Oct. 4, 1853 June 2, 1868	2,963
Plow-colter	W. W. Stillman, by R. Emerson, assignee.	Mount Hawley and Rockford, Ill.	Aug. 7, 1866 Oct. 17, 1871	4,597
Plow, Cotton	Z. B. Sims	Bonham, Tex	Aug. 31, 1869 July 29, 1873	5,513
Plow-coupling	G. Owen	Jacksonville, Ill	Feb. 4, 1862 Jan. 5, 1864	1,598
Plow-coupling	G. Owen	Jacksonville, Ill	Feb. 4, 1862 Nov. 2, 1869	3,705

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Plow, Gang	R. Baxter	French Camp, Cal	Aug. 6, 1867 Dec. 29, 1868	3,244
Plow, Gang	N. F. Burton	Galesburgh, Ill	Oct. 29, 1861 Apr. 10, 1866	2,221
Plow, Gang	H. Cowing	Corpus Christi, Tex	Nov. 26, 1850 Sept. 11, 1860	1,041
Plow, Gang	G. A. Davison	San Leandro, Cal	July 7, 1868 Oct. 12, 1869	3,669
Plow, Gang	T. J. Hall, (extended May 1, 1869.)	Bryan, Tex	May 1, 1855 Nov. 9, 1869	3,716
Plow, Gang	T. J. Hall	Bryan, Tex	Apr. 20, 1869 Nov. 30, 1869	3,750
Plow, Gang	G. W. Hildreth	Lockport, N. Y	Oct. 13, 1857 Dec. 27, 1870	4,222
Plow, Gang	D. Matteson	Stockton, Cal	June 22, 1858 Sept. 8, 1868	3,114
Plow, Gang	W. B. Ready	Sacramento, Cal	Dec. 3, 1861 June 16, 1868	2,991
Plow, Hinged	G. Bartlett	Smithfield, R. I	Feb. 20, 1847 Nov. 7, 1848	125
Plow, Mole	J. H. Elward, by M. A. Howell, jr., assignee.	Ottawa, Ill	Nov. 13, 1860 Feb. 19, 1861	1,138
Plow mold-board, Blank and die for making	W. M. Watson	Tonica, Ill	Mar. 15, 1870 Jan 3, 1871	4,229
Plow-plates, Mode of casting	F. F. Smith, by self and the Collins Company, assignees.	Collinsville, Conn	Nov. 20, 1860 June 21, 1864	1,705
Plow, Prairie	C. M. Clark	Seward, Nebr	Apr. 23, 1872 June 18, 1872	4,948
Plow, Shovel	I. Mosher and W. Eddy	Mosherville and Union Village, N. Y.	Mar. 31, 1863 July 6, 1869	3,545
Plow, Snow	S. Richards	Philadelphia, Pa	Apr. 13, 1858 July 9, 1867	2,671
Plow, Snow	S. Richards	Philadelphia, Pa	May 13, 1856 July 9, 1867	2,672
Plow, Subsoil	C. R. Hartman	Vincennes, Ind	Apr. 14, 1868 Aug. 11, 1868	3,076
Plow, Subsoil	J. W. Murfee	Havana, Ala	June 22, 1869 Aug. 24, 1869	3,616
Plow, Sulky	J. B. Lewis and J. E. Udall	Concord, Ill	Sept. 1, 1868 Mar. 23, 1869	3,336
Plow, Wheel	W. G. Crossley, by Black, Irvine & Co., assignees.	Apple River, Ill	Jan. 7, 1868 June 4, 1872	4,928
Plowing-machine	J. W. Fawkes	Christiana, Pa	Jan. 26, 1858 Nov. 22, 1859	855
Plowshare, (Design)	R. H. Taylor	Lincoln, Va	Dec. 13, 1870 Apr. 9, 1872	4,866
Pocket-book	J. F. Dubber	Brooklyn, N. Y	Jan. 10, 1865 Feb. 12, 1867	2,475
Pocket, Safety	J. Cotton	New York, N. Y	Dec. 3, 1867 Nov. 16, 1869	3,729
Poke, Animal	H. F. Chapin	Rochester, N. Y	Mar. 14, 1871 Dec. 12, 1871	4,667
Polishing-machine	P. F. Randolph	Jerseyville, Ill	Sept. 28, 1869 Sept. 20, 1870	4,127
Polishing sticks and wheels, Composition for the manufacture of flexible.	T. J. Mayall, by J. H. Cheever, assignee.	Roxbury, Mass., and New York, N. Y.	May 17, 1859 Mar. 18, 1862	1,289
Portable bath	E. J. Knowlton	Ann Arbor, Mich	Mar. 1, 1870 June 18, 1872	4,949
Portable bath	J. W. Warren, jr	Boston, Mass	July 31, 1840 Oct. 16, 1847	103
Portable furnace	M. F. Potter	Charlemont, Mass	Jan. 22, 1850 Oct. 22, 1850	181
Portable furnace, boiler, and steamer	D. R. Prindle	East Bethany, N. Y	Sept. 13, 1859 Oct. 8, 1872	5,095
Portfolio	J. C Koch	Brooklyn, N. Y	May 21, 1861 Jan. 7, 1873	5,221
Portfolio	H. T. Sisson	Providence, R. I	Apr. 5, 1859 Mar. 13, 1866	2,190
Potato-digger	L. A. Aspinwall	Albany, N. Y	Nov. 14, 1865 June 12, 1866	2,280
Powder-keg	J. Wilson, C. Green, and W. Wilson, jr., by C. Green, W. Wilson, jr., H., E. I., L., and E. Du Pont, and C. Pratt, assignees.	Wilmington, Del., and New York, N. Y.	July 12, 1859 Dec. 7, 1869	3,757
Powder-kegs, Construction of	J. Wilson, C. Green, and W. Wilson, jr.	Wilmington, Del	July 12, 1859 Jan. 6, 1863	1,383
Powder-proof lock	W. Hall	Boston, Mass	Aug. 1, 1848 Mar. 30, 1852	212
Powders, &c., Putting up	H. Sawyer	Roxbury, Mass	Jan. 5, 1864 Oct. 1, 1867	2,769
Power-press	C. W. Johnson	Waterbury, Conn	Nov. 7, 1865 Jan. 9, 1866	2,144
Preserve-can	W. D. Ludlow, by N. P. Stanton, assignee.	New York, N. Y	June 28, 1859 Apr. 19, 1864	1,656
Preserve-can	J. F. Martin and H. C. Nicholson, by J. C. Lefferts, assignee.	Mount Washington, Ohio, and New York, N. Y.	Feb. 15, 1859 Nov. 4, 1862	1,353
Preserve-can	C. Newman	Birmingham, Pa	Dec. 20, 1859 Dec. 18, 1860	1,105
Preserve-can, Self-sealing	R. Arthur	Philadelphia, Pa	Jan. 2, 1855 June 10, 1856	370
Preserve-cans, Closing	T. Seller, by J. F. Griffin, assignee, (mesne.)	East Birmingham, Pa., and Brooklyn, N. Y.	May 22, 1860 Nov. 24, 1863	1,573
Preserve-cans, Sealing	H. S. Fisher	Newburgh, Pa	Nov. 12, 1861 Nov. 19, 1867	2,801
Preserve-cans, Sealing	R. W. Lewis, by S. B. Rowley, assignee.	Philadelphia, Pa	Feb. 12, 1856 Sept. 8, 1868	3,115

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Preserve-jar	C. F. Spencer, by R. A. Bunnel, assignee.	Rochester, N. Y	Feb. 10, 1863 May 15, 1866	2,242
Preserving and transporting cases for food, &c., Construction of.	D. E. Somes	Washington, D. C	Sept. 15, 1863 Mar. 21, 1865	1,909
Preserving animal and vegetable substances	F. Stabler	Baltimore, Md	Nov. 14, 1865 Jan. 30, 1866	2,102
Preserving eggs	R. S. Rhodes and E. Whyte	Chicago, Ill	Dec. 12, 1865 Jan. 23, 1866	2,157
Preserving fruit	B. M. Nyce	Cleveland, Ohio	Nov. 2, 1858 May 16, 1865	1,900
Preserving fruit	B. M. Nyce	Cleveland, Ohio	Nov. 2, 1858 July 25, 1865	2,037
Preserving fruit	B. M. Nyce	Cleveland, Ohio	Nov. 2, 1858 July 25, 1865	2,038
Preserving fruit, &c	B. M. Nyce	Cleveland, Ohio	Nov. 2, 1858 Mar. 5, 1872	4,784
Preserving fruit, &c., Building for	B. M. Nyce	Cleveland, Ohio	Mar. 19, 1861 Jan. 5, 1869	3,252
Preserving fruit, &c., Building for	B. M. Nyce	Cleveland, Ohio	Mar. 19, 1861 July 25, 1871	4,487
Preserving fruit, House for	B. M. Nyce	Cleveland, Ohio	Nov. 2, 1858 July 25, 1865	2,036
Preserving fruit, meat, &c	N. S. Shaler	Cambridge, Mass	Oct. 11, 1864 Mar. 12, 1867	2,503
Preserving meat, fruit, &c	W. Davis, by self, S. H. and D. W. Davis, assignees.	Detroit, Mich	June 16, 1868 Sept. 15, 1868	3,119
Press	R. Esmond, by the United Power Press Company, assignee.	New York, N. Y	Aug. 26, 1873 Oct. 21, 1873	5,613
Press and strainer	J. H. Littlefield	Cambridge, Mass	June 16, 1868 Nov. 2, 1869	3,702
Pressing and molding pliable materials, Machine for.	G. C. Howard	Philadelphia, Pa	June 19, 1866 Nov. 23, 1869	3,741
Prices-current, bulletins, &c., Producing	W. Smith and H. D. Rogers, by H. D. and L. H. Rogers, assignees, (mesne.)	Cincinnati, Ohio	July 12, 1870 June 27, 1871	4,447
Printer's chase	R. Yeomans	Cincinnati, Ohio	Oct. 24, 1865 Jan. 14, 1868	2,846
Printer's galley	A. T. De Puy, by R. Hoe & Co., assignees.	New York, N. Y	Dec. 4, 1866 Aug. 4, 1868	3,066
Printers' inking-rollers, Composition for making	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	Mar. 8, 1864 Sept. 27, 1864	1,771
Printers' inking-rollers, Composition for making	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	Mar. 8, 1864 Sept. 27, 1864	1,772
Printers' inking-rollers, Composition of matter for	L. Francis, by self and C. H. Loutrel, assignees.	New York, N. Y	Mar. 8, 1864 Mar. 13, 1866	2,195
Printing and embossing cloth, Mode of	L. Murr, by J. and B. Metz, assignees.	Philadelphia, Pa	Mar. 24, 1868 Feb. 13, 1872	4,752
Printing certain textile fabrics and yarns	J. Lightfoot, by American Print Works, assignee.	Fall River, Mass	Oct. 20, 1868 Sept. 28, 1869	3,647
Printing-machine	T. French	Hanover, N. J	Nov. 20, 1817 Sept. 16, 1829	13
Printing on cloth	A. Paraf, by E. S. Renwick, assignee.	New York, N. Y	Sept. 21, 1869 May 2, 1871	4,363
Printing-press	C. B. Cottrell	Westerly, R. I	Oct. 17, 1871 July 16, 1872	4,974
Printing-press	M. Gally	Rochester, N. Y	Nov. 23, 1869 Nov. 28, 1871	4,646
Printing-press	G. P. Gordon	New York, N. Y	Aug. 5, 1851 Apr. 8, 1856	366
Printing-press	G. P. Gordon	New York, N. Y	Aug. 31, 1852 Feb. 23, 1858	529
Printing-press	G. P. Gordon	New York, N. Y	Jan. 1, 1856 Aug. 10, 1858	581
Printing-press	G. P. Gordon	New York, N. Y	June 13, 1854 Nov. 16, 1858	624
Printing-press	G. P. Gordon	New York, N. Y	July 13, 1858 Apr. 12, 1859	638
Printing-press	G. P. Gordon	New York, N. Y	Aug. 5, 1851 July 31, 1860	1,021
Printing-press	G. P. Gordon	New York, N. Y	Aug. 5, 1851 July 31, 1860	1,022
Printing-press	G. P. Gordon	Brooklyn, N. Y	Jan. 1, 1856 Nov. 24, 1863	1,573
Printing-press	G. P. Gordon	Rahway, N. J	Apr. 23, 1861 Oct. 29, 1867	2,792
Printing-press	G. J. Hill, G. F. Hebard, and and S. D. Rockwell, by Sanford, Harroun & Co., assignees, (mesne.)	Buffalo, N. Y	Aug. 1, 1860 Feb. 25, 1862	1,279
Printing-press	R. M. Hoe and S. D. Tucker	New York, N. Y	June 29, 1869 Nov. 16, 1869	3,735
Printing-press	R. M. Hoe and S. D. Tucker	New York, N. Y	Dec. 1, 1868 May 30, 1871	4,400
Printing-press	B. M. Hoe, by R. Hoe & Co., assignees.	New York, N. Y	Aug. 5, 1856 Mar. 22, 1870	3,833
Printing-press	J. M. Jones, by self, H. Johnson, and G. W. Bowman, assignees.	Palmyra, N. Y	Aug. 11, 1868 Dec. 28, 1869	3,783
Printing-press	T. Leavitt, by self and J. and D. Watson, assignees.	Everett, Mass	July 18, 1871 July 9, 1872	4,908
Printing-press	G. W. Prouty	Charlestown, Mass	Oct. 29, 1872 Nov. 18, 1873	5,664
Printing-press	S. P. Ruggles	Boston, Mass	Nov. 10, 1840 Sept. 17, 1850	178
Printing-press	S. P. Ruggles	Boston, Mass	Jan. 1, 1851 Jan. 19, 1858	519

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Invention.	Inventor.	Residence.	Date.	No.
Printing-press	S. D. Tucker, by R. Hoe & Co.	New York, N. Y	June 28, 1864 Aug. 2, 1870	4,084
Printing-press	L. T. Wells, (extended March 20, 1869.)	Saint Louis, Mo	Mar. 20, 1855 June 8, 1869	3,500
Printing-press inking-apparatus	J. K. Lowe, by V. Wood and J. E. Sutterlin, assignees.	Richmond, Ind., and Chicago, Ill.	Apr. 2, 1867 Mar. 22, 1870	3,896
Printing-press piston	C. B. Cottrell	Westerly, R. I	Dec. 12, 1871 Mar. 5, 1872	4,776
Printing-press, Power	I. Adams	Boston, Mass	Mar. 2, 1846 June 30, 1848	116
Printing-press, Power	I. Adams, (extended by Commissioner October 4, 1844, by act of Congress August 16, 1856.)	Boston, Mass	Oct. 4, 1830 Apr. 20, 1858	546
Printing-press, Rotary	C. Montague, by C. C. Child, assignee.	Boston, Mass	Dec. 21, 1869 July 22, 1873	5,501
Printing-presses, Automatic gripper for carrying sheets of paper in.	G. P. Gordon	New York, N. Y	July 13, 1858 Apr. 12, 1859	680
Printing-presses, Feeding paper to	R. M. Hoe, by self, R., and P. S. Hoe, S. D. Tucker, W. L. Colby, and R. Hoe, jr., assignees.	New York, N. Y	Aug. 23, 1859 June 13, 1871	4,429
Printing-presses, Machine for feeding paper to	S. and G. H. Ferguson	Maiden Bridge, N. Y	July 26, 1859 Sept. 25, 1860	1,046
Printing-presses, Machine for wetting and cutting paper for.	M. S. Beach	Brooklyn, N. Y	Aug. 25, 1857 Nov. 15, 1859	852
Projectile	C. T. James	Providence, R. I	Feb. 26, 1856 Dec. 11, 1860	1,098
Projectile	C. T. James	Providence, R. I	Feb. 26, 1856 Feb. 11, 1862	1,275
Projectile	J. D. Richards	Muscatine, Iowa	Sept. 7, 1869 Mar. 22, 1870	3,886
Projectile, Fire-arm	C. Maduell	New Orleans, La	Jan. 9, 1872 Mar. 19, 1872	4,814
Projectile for rifled ordnance	A. Hotchkiss, by A. A. Hotchkiss, administrator.	Sharon, Conn	Oct. 16, 1855 July 2, 1861	1,207
Projectile for rifled ordnance	A. Hotchkiss, by A. A. Hotchkiss, administrator.	Sharon, Conn	Oct. 16, 1855 Dec. 24, 1861	1,247
Projectile for rifled ordnance	W. H. Smith, by self and R. M. Bassett, assignees.	Birmingham, Conn	Dec. 23, 1862 Oct. 4, 1864	1,788
Projectile for rifled ordnance, Banding	E. Lindner	New York, N. Y	July 30, 1861 Feb. 17, 1863	1,410
Projectile for rifled ordnance, Packing	W. H. Smith, by self, R. M. Bassett, and C. D. Gibson, assignees.	Birmingham, Conn., and New York, N. Y.	Jan. 5, 1864 Oct. 4, 1864	1,787
Propeller	F. G. Fowler	Springfield, Ill	May 28, 1867 Sept. 8, 1868	3,113
Propeller, Double-cone marine	J. R. Bayliss	Baltimore, Md	Dec. 10, 1861 July 1, 1862	1,321
Propeller, Screw	J. Montgomery, (extended April 12, 1873.)	Sing Sing, N. Y	Apr. 12, 1859 Apr. 22, 1873	5,364
Propeller, Screw	H. O. Perry, by S. Shephard, assignee.	Buffalo, N. Y	Dec. 7, 1858 Apr. 28, 1863	1,467
Propeller, Vessel	A. J. Marshall	Warrenton, Va	Mar. 7, 1871 Aug. 6, 1872	5,028
Propeller-wheel	T. Tripp, by R. E. Campbell, assignee.	New York, N. Y.	Nov. 22, 1859 Aug. 29, 1865	2,061
Propellers, Operating screw	A. Lee	White Marsh, Pa	Oct. 29, 1872 Apr. 22, 1873	5,371
Propelling ships	J. Ericsson	New York, N. Y	Dec. 31, 1844 Mar. 10, 1849	129
Provisions, Curing	D. E. Somes, by J. S. Anderson, assignee.	Biddeford, Me	Nov. 15, 1860 Dec. 11, 1860	1,097
Provisions, Curing	D. E. Somes, by self, assignee, (mesne.)	Washington, D. C	Nov. 13, 1860 Oct. 24, 1865	2,096
Puddling and boiling furnaces, Lining or fix for	S. Danks, by self, J. C. Butler, and L. Worthington, assignees.	Cincinnati, Ohio	Sept. 10, 1867 Mar. 16, 1869	3,325
Puddling-furnace	P. Keenan and E. O. Connor	West Manchester, Pa	Nov. 14, 1865 Jan. 24, 1866	2,152
Puddling-furnace	P. Keenan and E. O. Connor	Brownstown, Pa	Nov. 14, 1865 July 16, 1867	2,689
Puddling-furnace	H. McDonald	Pittsburgh, Pa	July 16, 1872 July 22, 1873	5,500
Puddling-furnace for manufacturing iron with anthracite coal.	T. Cooper	New York	Aug. 25, 1840 Mar. 18, 1841	30
Puddling-furnaces, Fix for	H. McDonald	Pittsburgh, Pa	Oct. 17, 1865 Jan. 23, 1866	2,153
Puddling-furnaces, Fix for	H. McDonald	Pittsburgh, Pa	Oct. 17, 1865 July 16, 1867	2,690
Puddling-furnaces, &c., in generating steam, Utilizing waste heat of.	J. Watt, by self and H. Childs, assignees.	Charlestown, Mass., and Buffalo, N. Y.	May 12, 1863 June 29, 1869	3,529
Pulling, Fluted	G. E. King	New York, N. Y	Feb. 26, 1867 June 23, 1868	3,001
Pulley-attachment for raising weights	G. W. Gregory	Watertown, N. Y	Aug. 14, 1866 Oct. 22, 1867	2,784
Pulley-attachment for raising weights	G. W. Gregory	Watertown, N. Y	Aug. 14, 1866 May 19, 1868	2,939
Pulley-attachment for raising weights	G. W. Gregory	New York, N. Y	Aug. 14, 1866 May 16, 1871	4,382
Pulley-brake, Self-acting	J. Jochum	Brooklyn, N. Y	Nov. 29, 1864 July 4, 1865	2,020
Pulley, Differential	T. A. Weston	Ridgewood, N. J.	Aug. 6, 1867 July 9, 1872	4,971
Pulley, Expanding	T. H. Savery	Wilmington, Del	June 9, 1868 Dec. 26, 1871	4,685
Pulley, Friction-clutch	A. B. Clemons	Ansonia, Conn	Dec. 8, 1868 Nov. 9, 1869	3,713

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Pulley lubricator, Loose	G. M. Morris and J. McCreary	Cohoes, N. Y	Feb. 4, 1868 May 4, 1869	3,418
Pulleys to shafts, Device for securing	J. H. Beckman, by self and P. W. Reinshagen, assignees.	Cincinnati, Ohio	Dec. 21, 1869 Mar. 7, 1871	4,288
Pulp-machine	G. Sweetland, by H. Kenney, Grant, Warren & Co., and J. Jordan, jr., assignees.	New Haven and Hartford, Conn, and Boston, Mass., and East Hartford, Conn.	Sept. 5, 1848 Jan. 1, 1861	1,108
Pump	W. A. Bemis	Lyndon Centre, Vt	Aug. 9, 1864 Jan. 31, 1865	1,856
Pump	J. Brokenshire	Oswego, N. Y	Aug. 11, 1868 Feb. 2, 1869	3,280
Pump	J. Brokenshire, by self, G. Goble, and J. D. Macfarlane, assignees.	Kingston, Canada, and Oswego, N. Y.	Aug. 11, 1868 Aug. 30, 1870	4,110
Pump	J. Brokenshire, by self, G. Goble, and J. D. Macfarlane, assignees.	Kingston, Canada, and Owego, N. Y.	Aug. 11, 1868 Aug. 30, 1870	4,111
Pump	L. P. and W. F. Dodge	Newburgh, N. Y	June 7, 1853 Sept. 25, 1855	329
Pump	J. N. Forrester and J. H. Luddington, by the Forrester Manufacturing Company, assignee, (mesne.)	Bridgeport, Conn	Jan. 5, 1869 Mar. 22, 1870	3,888
Pump	E. Graser	Union City, Pa	Mar. 12, 1872 May 6, 1873	5,396
Pump	C. and L. Griscom, and J. P. Griscom.	Mahanoy Plane, Pa	Sept. 28, 1869 Dec. 20, 1870	4,204
Pump	W. M. Henderson	Baltimore, Md	Oct. 4, 1859 Nov. 8, 1859	848
Pump	D. P. Henry	Windsor, Ill	May 4, 1869 July 20, 1869	3,560
Pump	B. Holly	Seneca Falls, N. Y	June 5, 1849 May 7, 1850	168
Pump	W. D. Hooker	San Francisco, Cal	Aug. 15, 1865 Aug. 28, 1866	2,343
Pump	R. M. Lafferty, by self and E. P. Smith, assignees.	Three Rivers, Mich	June 21, 1870 Dec. 19, 1871	4,678
Pump, (Division A)	R. M. Lafferty, by self and E. P. Smith, assignees.	Toledo, Ohio	June 21, 1870 June 10, 1873	5,440
Pump, (Division B)	R. M. Lafferty, by self and E. P. Smith, assignees.	Toledo, Ohio	June 21, 1870 June 10, 1873	5,441
Pump	H. Lindsey	Ashville, N. C	Dec. 4, 1855 Aug. 24, 1858	589
Pump	J. M. Lunquest	Griffin, Ga	Mar. 1, 1859 Dec. 13, 1859	865
Pump	E. Perry	Baldwinsville, N. Y	Sept. 20, 1864 July 7, 1868	3,025
Pump	W. Shoup	Saltsburgh, Pa	Dec. 27, 1864 May 26, 1868	2,949
Pump	S. Woodruff and H. B. Beach	Hartford, Conn	Sept. 22, 1868 Apr. 20, 1869	3,399
Pump	M. W. and J. Zimmerman, by H. R. Sensenig and M. W. Martin, assignees, (mesne.)	Earl Township, Pa	May 3, 1864 Dec. 21, 1869	3,774
Pump and steam-engine cylinder and piston	W. Wells, by self and S. B. Wells, assignees.	New York, N. Y	Oct. 12, 1858 Oct. 18, 1859	838
Pump, Breast	M. Mattson	New York, N. Y	Dec. 29, 1868 Feb. 28, 1871	4,282
Pump, Cream	M. A. Richardson	Sherman, N. Y	Sept. 23, 1862 Mar. 17, 1863	1,433
Pump devices for steam and other enginery	C. E. Blake	San Francisco, Cal	Jan. 26, 1869 Sept. 28, 1869	3,648
Pump, Direct-action steam	W. Sewell and A. S. Cameron	New York, N. Y	May 10, 1864 July 19, 1864	1,731
Pump for deep wells	R. Cornelius	Philadelphia, Pa	Mar. 13, 1866 Apr. 9, 1867	2,545
Pump, Oil-well	J. B. Root, by A. S. Hill, H. H. Noyes, and H. M. Haskell, assignees, (mesne.)	New York, N. Y., and Pleasantville, Pa.	Apr. 11, 1865 Aug. 5, 1873	5,525
Pump-piston	N. Stedman, by New England Pump Manufacturing Company, Pacific Pump Manufacturing Company, C. F. Mudge, and Bridgeport Manufacturing Company, assignees, (mesne.)	Boston, Mass., San Francisco, Cal., and Bridgeport, Conn.	Feb. 9, 1864 Mar. 29, 1870	3,890
Pump-piston	D. S. Wood	Delaware, Wis	July 10, 1866 Sept. 10, 1867	2,763
Pump, Pneumatic	W. H. Guild	Williamsburgh, N. Y	Nov. 28, 1865 Feb. 8, 1870	3,828
Pump, Portable	W. T. Vose	Newtonville, Mass	Nov. 15, 1859 Feb. 26, 1861	1,146
Pump-rod attachment	H. H. Locke, by D. Bly, assignee.	Pleasantville, Pa., and Rochester, N. Y.	May 31, 1870 Dec. 26, 1871	4,682
Pump-rod attachment	H. H. Locke, by D. Bly, assignee.	Pleasantville, Pa., and Rochester, N. Y.	May 31, 1870 Aug. 19, 1873	5,543
Pump, Rotary	W. Ball	Chicopee, Mass	Dec. 23, 1851 Sept. 12, 1854	276
Pump, Rotary	J. Broughton	Chicago, Ill	June 10, 1856 Sept. 30, 1856	397
Pump, Rotary	J. O. Joyce	Dayton, Ohio	Mar. 23, 1858 Nov. 10, 1868	3,190
Pump, Rotary	S. W. Kelly, by J. C. Ferriss, administrator, and T. J. Harding, assignee.	Nashville, Tenn	Nov. 14, 1871 Feb. 13, 1872	4,730
Pump, Rotary	A. Sluthour	New Philadelphia, Ohio	Apr. 19, 1870 Mar. 12, 1872	4,809

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Pump, Steam	L. Griscom, by self, C., and J. P. Griscom, assignees.	Port Carbon, Pa	Mar. 19, 1872 Apr. 16, 1872	4,874
Pump, Steam	L. C. Rostier, by self and J. B. Gardiner, assignees.	Springfield, Mass	Aug. 14, 1866 Mar. 26, 1867	2,530
Pump, Steam vacuum	W. Burdon	Brooklyn, N. Y	Jan. 28, 1873 Nov. 4, 1873	5,640
Pump, Steam vacuum	W. Burdon	Brooklyn, N. Y	Aug. 5, 1873 Nov. 4, 1873	5,641
Pump, Steam vacuum	W. E. Prall	Washington, D. C	July 4, 1871 Oct. 29, 1872	5,123
Pump-ventilating attachment	C. N. Lewis, by G. C. King, assignee.	Seneca Falls, N. Y	Nov. 17, 1857 Oct. 26, 1858	614
Pumps, Operating railway	G. M. Cole, by S. Moss, assignee.	San Francisco, Cal	Dec. 16, 1862 Apr. 16, 1867	2,566
Pumping-engine, Steam	R. Allison	Port Carbon, Pa	Sept. 29, 1868 Aug. 3, 1869	3,573
Pumping-engine, Steam	N. W. Wheeler	Morristown, N. J	June 6, 1871 July 18, 1871	4,478
Punch	I. P. Richards	Whitinsville, Mass	June 28, 1870 Jan. 3, 1871	4,228
Punch, Hand	A. L. Eckert, by W. F. Ebbs, assignee.	Newark, N. J	Mar. 20, 1866 June 17, 1873	5,450
Punching-apparatus	N. C. Stiles	West Meriden, Conn	Jan. 26, 1864 Apr. 2, 1867	2,542
Punching articles of irregular forms, Forming and	L. Dodge	Waterford, N. Y	Mar. 12, 1861 Oct. 10, 1865	2,084
Punching-machine	J. Steadman	Pecatonica, Ill	Dec. 19, 1865 Dec. 18, 1866	2,426
Punching machine, Metal	D. and G. Fowler, by C. Parker, assignee, (extended April 14, 1862.)	Meriden, Conn	Apr. 17, 1855 Aug. 24, 1869	3,617
Punching-press	N. C. Stiles	Meriden, Conn	Jan. 26, 1864 Dec. 26, 1865	2,139
Punching-press	M. G. Wilder	West Meriden, Conn	May 28, 1867 June 27, 1871	4,448
Punch, Registering ticket	A. D. Hoffman, by J. H. Small, assignee, (mesne.)	Chicago, Ill	Feb. 22, 1870 Jan. 31, 1871	4,246
Q.				
Quartz-stamper, Making shoe and die for	P. W. Gates	Chicago, Ill	July 31, 1860 Nov. 28, 1865	2,115
Quilting-frame	P. H. Mellon	Saint Louis, Mo	June 16, 1868 Jan. 12, 1869	3,262
R.				
Radiator	W. Steffe, by self and J. Reynolds, assignees.	Philadelphia, Pa	Aug. 11, 1868 May 30, 1871	4,401
Rake-tooth bender	C. Coleman	Allegheny City, Pa	Feb. 20, 1866 July 20, 1869	3,558
Railway alarm-signal	S. Nicolson	Boston, Mass	June 26, 1841 July 3, 1847	97
Railway-carriage	N. F. Bryant	East Boston, Mass	Aug. 18, 1863 Feb. 2, 1864	1,611
Railway-carriage	C. Davenport and A. Bridges	Cambridgeport, Mass	May 4, 1841 Dec. 3, 1850	183
Railway-chair	D. W. Crocker	Deposit, N. Y	Jan. 25, 1859 Mar. 6, 1860	922
Railway-chair	J. A. Rœbling and J. McMurtry, by J. McMurtry, assignee.	Lexington, Ky	Oct. 31, 1865 Oct. 1, 1867	2,767
Railway-chairs, Machine for bending the lips of wrought-iron.	S. A. Cox, by G. P. Cox, administrator and assignee, (mesne.)	Malden, Mass	Aug. 28, 1849 Aug. 12, 1862	1,327
Railway-chairs, Machine for bending the lips of wrought-iron.	S. Cox, by the New York Wrought-Iron Railroad-Chair Company, assignee, (mesne.)	New York, N. Y	Aug. 28, 1849 July 14, 1857	479
Railway-chairs, Machine for making wrought-iron.	W. Van Anden, by A. Frear, J. Rowe, and W. Van Anden, assignees, (mesne.)	Poughkeepsie, N. Y	Apr. 30, 1850 Aug. 12, 1856	386
Railway-chairs, Manufacturing	J. H. Snyder	Troy, N. Y	July 13, 1858 June 3, 1862	1,316
Railway, Elevated	P. Andrew	Cincinnati, Ohio	June 25, 1861 Nov. 19, 1867	2,799
Railway, Elevated	O. Gsantner	East Orange, N. J	Nov. 3, 1868 Mar. 16, 1869	3,329
Railway-frog	E. G. Allen	Boston, Mass	Sept 25, 1866 Dec. 4, 1866	2,405
Railway-frog	J. M. Dick	Buffalo, N. Y	Aug. 3, 1858 Feb. 21, 1860	903
Railway-frog	D. D. Lewis	Philadelphia, Pa	May 17, 1859 Jan. 5, 1864	1,602
Railway-frog	G. Westinghouse, jr	Pittsburgh, Pa	Apr. 7, 1868 Aug. 3, 1869	3,584
Railway-frog	J. Wood, by E. R. Bennett, assignee.	Red Bank, N. J	Dec. 24, 1861 July 21, 1873	5,473
Railway, Portable	J. N. Peteler, by A. Peteler, assignee.	New Brighton, N. Y	Sept. 4, 1866 Feb. 2, 1869	3,286
Railway-rail	T. S. Blair	Pittsburgh, Pa	May 19, 1863 Dec. 1, 1863	1,562
Railway-rail	J. L. Booth	Rochester, N. Y	Aug. 28, 1866 June 1, 1869	3,473
Railway-rail	A. McKenney	Maumee City, Ohio	July 11, 1871 Mar. 4, 1873	5,307
Railway-rail	W. D. O'Brien	Brooklyn, N. Y	July 19, 1864 Feb. 28, 1865	1,891
Railway-rail	E. R. Shepard, by P. Pettebone, J. E. Patterson, and A. W. Brown, assignees.	Scranton, Wyoming, and Wilkesbarre, Pa.	Mar. 3, 1868 Feb. 16, 1869	3,302

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Railway-rail and splice	Z. B. Wakeman	Rockford, Ill	May 26, 1868 Sept. 15, 1868	3,123
Railway-rail joint	E. G. Patterson	Pithole City, Pa	Oct. 6, 1868 Feb. 16, 1869	3,301
Railway-rail joints, Nut-locking device for	A. McKenney	Maumee City, Ohio	July 11, 1871 Mar. 4, 1873	5,308
Railway-rail joints, Securing	L. Fay, by J. M. Rice and D. R. Pratt, assignees.	Worcester, Mass., and New York, N. Y.	June 17, 1862 Jan. 3, 1871	4,224
Railway-rail lap-joints, Method of making	A. Douglass	Paterson, N. J	Aug. 21, 1860 Mar. 31, 1863	1,442
Railway-rails, Fagot for	W. Lewis, J. Price, and F. Naylor.	Danville, Pa	July 19, 1864 July 23, 1867	2,697
Railway-rails, Fagot for	J. Price and W. Lewis	Danville, Pa	Oct. 28, 1862 June 18, 1867	2,651
Railway-rails, Fagot for	T. E. Purchase	Reading, Pa	Feb. 2, 1858 Mar. 24, 1868	2,902
Railway-rails, Forming and using cast or wrought iron.	J. Stimpson	Baltimore, Md	Aug. 23, 1831 Aug. 27, 1840	23
Railway-signals, &c., Double-circuit instrument for	T. S. Hall	West Meriden, Conn	Dec. 7, 1869 Aug. 1, 1871	4,493
Railway-signaling apparatus, Electric	F. L. Pope, by self, S. C. Hendrickson, J. N. Ashley, and J. D. Lincoln, assignees.	Elizabeth, N. J., Brooklyn, N. Y., and Greenville, N. J.	July 16, 1872 Oct. 21, 1873	5,622
Railway-switch	G. R. Smith, by M. Smith, assignee, (mesne.)	Ithaca, N. Y	July 20, 1858 Dec. 17, 1867	2,814
Railway-switch alarm, Electro-magnetic	T. S. Hall, by Hall's Patent Electric Railway-Switch and Draw-Bridge Signal Company, assignee.	New Haven, Conn	Feb. 26, 1867 Mar. 1, 1870	3,859
Railway-tie	A. B. Tripler, by C. E. Tripler, assignee.	Philadelphia, Pa	June 28, 1870 Mar. 26, 1872	4,838
Railway turn-table	W. Sellers, (reissue extended August 16, 1872.)	Philadelphia, Pa	Mar. 23, 1858 Apr. 13, 1873	5,373
Railway water-tank	J. Burnham	Batavia, Ill	July 27, 1869 Mar. 5, 1872	4,774
Railway water-tank	J. Morton, by McGowan Brothers Pump and Machine Company.	Sedalia, Mo., and Cincinnati, Ohio.	Apr. 2, 1867 Sept. 5, 1871	4,543
Railways, Dispensing with switches on	W. Wharton, jr	Philadelphia, Pa	Dec. 13, 1859 Apr. 3, 1860	942
Raisin-seeder	H. Locke	Grand Rapids, Mich	Nov. 28, 1865 May 14, 1867	2,509
Ram, Naval	C. Perley	New York, N. Y	Feb. 24, 1863 Feb. 21, 1865	1,880
Razor-strap	O. B. Howard, by O. P. Shepherd, assignee.	Deering and Portland, Me	July 25, 1871 May 13, 1873	5,402
Range and stove boiler	W. B. Scaife	Pittsburgh, Pa	Sept. 27, 1870 July 11, 1871	4,467
Range, Cooking	M. Pond	Boston, Mass	Oct. 29, 1846 Aug. 21, 1847	102
Range, Cooking	M. Pond	Boston, Mass	Feb. 25, 1851 June 7, 1853	240
Range, Cooking	W. Sanford	Brooklyn, N. Y	June 6, 1871 Aug. 22, 1871	4,526
Range, Cooking	H. H. Stimpson	Boston, Mass	May 7, 1844 Aug. 8, 1846	84
Range, Cooking	H. H. Stimpson	Boston, Mass	Apr. 5, 1859 May 1, 1860	956
Ranges, Water-back for	J. Ingram	New York, N. Y	Feb. 16, 1858 June 21, 1859	738
Reaper and mower	T. I. Stealey, by R. T. Campbell, assignee.	Washington, D. C	Oct. 15, 1857 Oct. 22, 1867	2,783
Reapers, Raking-attachment for	M. G. Hubbard	Penn Yan, N. Y	Sept. 2, 1856 Feb. 3, 1857	426
Reaping and mowing machine	J. G. Dunham, by P. V. Staats, A. R. Reese, C. S. Melick, A. J. Tarrand, G. Sweeney, J. W. Dean, and R. Sheler, assignees, (mesne.)	Raritan, N. J	Sept. 22, 1857 Feb. 5, 1867	2,472
Reaping and mowing machine	L. J., W. L., and C. H. McCormick, by C. H. McCormick, assignee.	Chicago, Ill	May 11, 1858 June 5, 1860	972
Reaping and mowing machine	L. J., W. L., and C. H. McCormick, by C. H. McCormick, assignee.	Chicago, Ill	May 11, 1858 June 5, 1860	973
Reaping and mowing machine	L. J., W. L., and C. H. McCormick, by C. H. McCormick, assignee.	Chicago, Ill	May 11, 1858 June 5, 1860	974
Reaping and mowing machine	L. J., W. L., and C. H. McCormick, by C. H. McCormick, assignee.	Chicago, Ill	May 11, 1858 Jan. 7, 1862	1,255
Reaping and mowing machine	L. J., W. L., and C. H. McCormick, by C. H. McCormick, assignee.	Chicago, Ill	May 11, 1858 Jan. 7, 1862	1,256
Reaping and mowing machine	J. W. Mulley	Amsterdam, N. Y	Feb. 10, 1857 Nov. 29, 1859	859
Reaping and mowing machine	J. W. Mulley	Amsterdam, N. Y	Feb. 10, 1857 Nov. 29, 1859	860
Reaping and mowing machine	J. W. Mulley	Amsterdam, N. Y	Feb. 10, 1857 Nov. 29, 1859	861
Reaping and mowing machine	J. W. Mulley, by D. M. Osborne and W. A. Kirby, assignees, (mesne.)	Auburn, N. Y	Feb. 10, 1857 June 16, 1863	1,499
Reaping and mowing machine	S. Rockafellow	Coatesville, Pa	July 3, 1855 Dec. 11, 1855	334
Reaping and mowing machine	J. T. Whitaker and C. D. Read	Saint Charles, Ill	Aug. 11, 1857 Feb. 7, 1860	896

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Reaping and mowing machine	J. T. Whitaker and C. D. Read	Saint Charles, Ill	Aug. 11, 1857 Feb. 7, 1860	897
Reaping and mowing machine	J. T. Whitaker and C. D. Read	Saint Charles, Ill	Aug. 11, 1857 Feb. 7, 1860	898
Reaping and mowing machine	J. T. Whitaker and C. D. Read	Saint Charles, Ill	Aug. 11, 1857 Feb. 7, 1860	899
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 Apr. 14, 1857	449
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 Apr. 14, 1857	450
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 Apr. 14, 1857	451
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 June 21, 1859	742
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 June 21, 1859	743
Reaping-machine	O. Hussey	Baltimore, Md	Aug. 7, 1847 Feb. 28, 1860	917
Reaping-machine	W. F. Ketchum	Buffalo, N. Y	July 10, 1847 Oct. 21, 1851	206
Reaping-machine	W. F. Ketchum	Buffalo, N. Y	July 10, 1847 Jan. 11, 1853	228
Reaping-machine	C. W. and W. W. Marsh	Clinton, Ill	Aug. 17, 1858 July 5, 1864	1,719
Reaping-machine	C. W. and W. W. Marsh	Clinton, Ill	Aug. 17, 1858 June 27, 1865	2,015
Reaping-machine	C. W. and W. W. Marsh	Clinton, Ill	Aug. 17, 1858 June 27, 1865	2,014
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 May 24, 1853	239
Reaping-machine	C. H. McCormick	Chicago, Ill	Jan. 31, 1845 Aug. 3, 1858	578
Reaping-machine	C. H. McCormick	Chicago, Ill	Jan. 31, 1845 Aug. 3, 1858	579
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Dec. 21, 1858	637
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	816
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	817
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	818
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	819
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	820
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	821
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1850	822
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	823
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	824
Reaping-machine	C. H. McCormick	Chicago, Ill	Oct. 23, 1847 Sept. 20, 1859	825
Reaping-machine	J. Read	Alton, Ill	Mar. 12, 1842 Aug. 19, 1856	387
Reaping-machine	J. Read	Alton, Ill	Mar. 12, 1842 Aug. 19, 1856	388
Reaping-machine	J. Read	Alton, Ill	Mar. 12, 1842 Aug. 19, 1856	389
Reaping-machine	J. Read	Alton, Ill	Mar. 12, 1842 Aug. 19, 1856	390
Reaping-machine	J. Read	Alton, Ill	Mar. 12, 1842 Aug. 19, 1856	391
Reaping-machine	W. H. Seymour, by D. S. Morgan, assignee, (mesne.)	Brockport, N. Y	July 8, 1851 May 31, 1864	1,683
Reaping-machine	W. H. Seymour, by self, D. S. Morgan, A. Palmer, and S. G. Williams, assignees.	Brockport, N. Y., and Janesville, Wis.	July 8, 1851 July 10, 1860	1,003
Reaping-machine	W. H. Seymour, by self, D. S. Morgan, A. Palmer, and S. G. Williams, assignees.	Brockport, N. Y., and Janesville, Wis.	July 8, 1851 July 10, 1860	1,004
Reaping-machine	W. H. Seymour, by self, D. S. Morgan, A. Palmer, and S. G. Williams, assignees.	Brockport, N. Y., and Janesville, Wis.	July 8, 1851 July 10, 1860	1,005
Reaping-machine	W. H. Seymour, by self, D. S. Morgan, A. Palmer, and S. G. Williams, assignees.	Brockport, N. Y., and Janesville, Wis.	July 8, 1851 May 7, 1861	1,177
Reaping-machine	D. Wolf	Lebanon, Pa	Jan. 31, 1865 July 17, 1866	2,318
Reaping-machine rake	T. N. Lupton and A. R. Reese	Phillipsburgh, N. J	Sept. 25, 1855 June 11, 1867	2,641
Reciprocating steam-engine	H. O. Perry and J. L. Lay	Buffalo, N. Y	May 21, 1867 Mar. 30, 1869	3,356
Reclining-chair	A. Eliaers	Boston, Mass	May 11, 1858 Jan. 25, 1859	630
Reclining-chair for railway-cars, &c	S. M. Perry, by I. L. Devoe, assignee, (mesne.)	New York and Staten Island, N. Y.	July 27, 1852 Mar. 2[illegible], 1859	678
Refining hydrocarbon oils and utilizing waste products therefrom.	H. Pemberton	Allegheny City, Pa	Aug. 2, 1859 Jan. 1, 1867	2,431
Refining hydrocarbon oils and utilizing waste products therefrom.	H. Pemberton	Allegheny City, Pa	Aug. 2, 1859 Apr. 2, 1867	2,539
Refining petroleum	F. Huot, by self, assignee, (mesne.)	New York, N. Y	Mar. 19, 1867 Oct. 6, 1868	3,145
Reflector	I. P. Frink	Newark, N. J.	Apr. 17, 1860 Dec. 24, 1861	1,249

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Invention.	Inventor.	Residence.	Date.	No.
Reflector	I. P. Frink	New York, N. Y	Apr. 17, 1860 Feb. 8, 1870	3,826
Reflector	I. P. Frink	New York, N. Y	Apr. 17, 1860 Feb. 8, 1870	3,827
Reflector, Lamp	W. G. Schmidlin and J. W. Driscoll.	New York, N. Y	Dec. 17, 1861 Feb. 1, 1870	3,817
Reflector	W. G. Schmidlin and J. W. Driscoll.	New York, N. Y	July 2, 1861 May 17, 1870	3,981
Reflector, Night-light	J. Wyberd	New York, N. Y	Apr. 10, 1860 June 12, 1860	982
Refrigerator	I. Allegretti, by F. Fontano, assignee, (mesne.)	New York, N. Y	July 26, 1870 Oct. 8, 1872	5,087
Refrigerator	J. H. Fisher	Chicago, Ill	Aug. 1, 1865 Jan. 31, 1871	4,212
Refrigerator	A. Fuller and L. P. Reichert	Buffalo, N. Y	Feb. 25, 1868 Nov. 28, 1871	4,645
Refrigerator	F. W. Hunt	East Orange, N. J	May 24, 1870 Mar. 5, 1872	4,789
Refrigerator	M. C. Longacre	Cleveland, Ohio	Mar. 15, 1864 Oct. 8, 1867	2,773
Refrigerator	B. M. Nyce	Kingston, Ind	Nov. 2, 1858 Oct. 23, 1860	1,068
Refrigerator	D. W. C. Sanford	Saint Louis, Mo	Nov. 13, 1855 Apr. 21, 1857	455
Refrigerator	P. A. Vogt	Buffalo, N. Y	May 22, 1866 Aug. 28, 1866	2,346
Refrigerating and desiccating apparatus	E. D. Brainard	Albany, N. Y	Jan. 14, 1868 June 27, 1871	4,436
Regenerator-furnace for metallurgists and others	C. W. and F. Siemens	Westminster, England	Mar. 1, 1864 Jan. 12, 1869	3,265
Register and ventilator	E. A. Tuttle	Brooklyn, N. Y	June 10, 1856 Nov. 12, 1861	1,234
Rein holder, Carriage	E. C. Patterson	Rochester, N. Y	Mar. 12, 1867 Sept. 27, 1870	4,133
Rein holder, Driving	M. Whipple, by B. B. Hotchkiss, assignee.	New York, N. Y	Sept. 4, 1866 Apr. 2, 1867	2,541
Rendering and refining animal-matter, &c	A. Broadnax	Mont Clair, N. J	Sept. 1, 1868 Dec. 24, 1872	5,195
Rendering fats and deodorizing gases, Apparatus for.	H. S. Firman	New York, N. Y	Mar. 18, 1873 Nov. 4, 1873	5,643
Rendering lard	E. Wilson	Cincinnati, Ohio	Oct. 9, 1844 May 7, 1850	167
Rendering lard and tallow, Apparatus for	C. E. Gray	New York, N. Y	Jan. 31, 1865 Aug. 8, 1865	2,048
Rendering lard, tallow, &c., Apparatus for	C. E. Gray, by R. B. Lockwood and C. J. Everett, assignees.	New York, N. Y	Jan. 31, 1865 Oct. 30, 1866	2,385
Rendering oils and fats, Apparatus for	C. E. Gray	New York, N. Y	Aug. 18, 1863 Aug. 8, 1865	2,049
Retort for distilling oil from coal	J. Nicholson	Allegheny, Pa	Feb. 15, 1859 May 3, 1859	712
Revolving and tilting chair	D. E. Teal, by Heywood Brothers & Co., assignees.	New Lisbon, N. Y	July 19, 1870 Apr. 1, 1873	5,345
Revolving rake	S. E. Ament	Oswego, Ill	Feb. 9, 1864 July 26, 1864	1,732
Ribbon, lace, &c., case	S. Whitaker, by self and A. Ruth, assignees.	Macon and Decatur, Ill	Apr. 18, 1871 Oct. 24, 1871	4,611
Rice, coffee, &c., Machine for cleaning and scouring.	W. Ager, (extended September 15, 1871.)	Washington, D. C	Sept. 15, 1857 Oct. 10, 1871	4,579
Rice-huller	P. McKinlay	Charleston, S. C	Apr. 1, 1851 Aug. 11, 1857	482
Rice-hulling machine	R. Anderson	Brooklyn, N. Y	Feb. 21, 1860 Aug. 13, 1867	2,733
Rings, Die for stamping	V. Draper, by O. M. Draper, assignee.	North Attleborough, Mass	May 24, 1864 Sept. 5, 1865	2,063
Rivet, (Division A)	J. E. Wootten	Reading, Pa	Aug. 6, 1867 Sept. 9, 1873	5,567
Rivets, Making coopers' and other	T. Allen	Eel River, Mass	Feb. 28, 1843 July 18, 1842	43
Riveting-tool	B. F. Cobb, by E. Prescott, assignee.	West Troy, N. Y	June 13, 1871 Feb. 25, 1873	5,297
Rock-channeling machine	E. G. Lamson	Shelburne Falls, Mass	Oct. 2, 1866 Apr. 13, 1869	3,366
Rock-channeling machine	E. G. Lamson, by the Windsor Manufacturing Company, assignee.	Shelburne Falls, Mass., and Windsor, Vt.	Oct. 2, 1866 May 30, 1871	4,407
Rock-channeling machine	W. Plumer, by E. G. Lamson, assignee.	Windsor, Vt	Oct. 6, 1857 Apr. 13, 1869	3,368
Rock-channeling machine	W. Plumer, by E. G. Lamson, assignee.	Windsor, Vt	Oct. 6, 1857 Apr. 13, 1869	3,369
Rock-drill	R. Leschot, by A. J. Severance, assignee, (mesne.)	Middlebury, Vt	July 14, 1863 Feb. 16, 1869	3,304
Rock-drill	R. Leschot, by A. J. Severance, (mesne.)	Middlebury, Vt	July 14, 1863 Oct. 26, 1869	3,690
Rock-drilling machine	S. W. Robinson and D Wood	Champaign, Ill., and Ann Arbor, Mich.	Nov. 26, 1867 Feb. 18, 1873	5,285
Roof, Metallic	S. Hughes	Hudson City, N. J	June 7, 1870 Dec. 13, 1870	4,198
Roofs, Fastening sheet-metal to	A. Johnson, by self and T. S. Sanford, assignee, (extended May 19, 1871.)	New York, N. Y	May 19, 1857 Apr. 16, 1872	4,870
Roofs, Machine for seaming sheet-metal	L. Fay	Cincinnati, Ohio	July 28, 1857 Jan. 24, 1860	889
Roofing	R. K. Kille	Mount Holly, N. J	Sept. 7, 1869 Nov. 2, 1869	3,701
Roofing, belting, &c., Fabric for	J. B. Wands, by the American Water-Proof Fabric Company, assignee, (mesne.)	Memphis, Tenn., and New York, N. Y.	July 31, 1860 Jan. 6, 1863	1,369
Roofing, Cement for slate	C. Wanzer	New York, N. Y	June 24, 1862 Mar. 27, 1866	2,215

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Invention.	Inventor.	Residence.	Date.	No.
Roofing cement, paint, &c	W. Green	Cleveland, Ohio	Mar. 13, 1866 Feb. 9, 1869	3,288
Roofing-composition	D. G. Conger	Chicago, Ill	Feb. 27, 1872 Apr. 2, 1872	4,845
Roofing-composition	J. P. Cowing	Seneca Falls, N. Y	Feb. 19, 1867 Mar. 26, 1867	2,524
Roofing-composition	H. Lester	Cincinnati, Ohio	Jan. 11, 1859 Sept. 18, 1860	1,044
Roofing, &c., composition	W. L. Potter	Newark, N. J	Feb. 21, 1865 July 16, 186[illegible]	2,684
Roofing, &c., composition	R. B. Smith	Mount Pleasant, Ohio	July 31, 1866 Apr. 23, 18[illegible]7	2,575
Roofing-composition	J. H. Smyser	Pittsburgh, Pa	Apr. 11, 1871 Nov. 7, 1871	4,624
Roofing, &c., composition	B. Stephens	Wheeling, W. Va	Sept. 1, 1868 Feb. 23, 1869	3,314
Roofing-composition	J. West	Syracuse, N. Y	Oct. 30, 1855 Sept. 8, 1857	491
Roofing-compound	O. N. Bartholomew, by self and J. S. Thurston, assignees, (mesne.)	Elmira, N. Y	Oct. 7, 1867 May 19, 1868	2,932
Roofing-fabric	A. Robinson, by the Ready-Roofing Company, assignee.	New York, N. Y	Sept. 13, 1864 Apr. 9, 1872	4,862
Roofing fabric, Cement	W. Green	Cleveland, Ohio	May 29, 1866 Feb. 9, 1869	3,287
Roofing-fabrics, Preparation of	A. Robinson	New York, N. Y	June 20, 1865 Aug. 20, 1867	2,741
Roll, Elastic	J. B. Forsyth	Boston, Mass	Apr. 19, 1870 Oct. 1, 1872	5,081
Rolling-mill for irregular shapes	J. S. Hall	Columbus, Ohio	Jan. 30, 1849 Dec. 4, 1849	151
Rolling taper bars of iron	J. A. Bailey, by C. Parker, assignee, (mesne.)	Meriden, Conn	Apr. 13, 1858 Feb. 9, 1869	3,290
Ropes, &c., Machine for tightening	A. Paget	Loughborough, England	July 12, 1870 Apr. 4, 1871	4,324
Rotary steam-engine	J. B. Bennett	Brooklyn, N. Y	Feb. 25, 1868 Mar. 19, 1872	4,808
Rotary steam-engine	A. Millochau, by the Metropolitan Rotary Engine Company, assignee, (mesne.)	New York, N. Y	Nov. 10, 1863 Sept. 22, 1868	3,131
Rotary steam-engine	A. Pease	Lyons, N. Y	Feb. 12, 1844 Sept. 5, 1846	85
Roving and spinning frames, Flyer for	T. Mayor	Providence, R. I	Dec. 20, 1870 Feb. 25, 1873	5,295
Roving-frame	T. Mayor, by G. Chatterton, assignee.	Providence, R. I	Feb. 21, 1865 May 9, 1865	1,950
Roving, Manufacturing variegated	J. Holmes and E. French	Lee, Mass	May 18, 1852 Feb. 28, 1854	258
Rowlock	I. C. and F. W. Flagg	Middletown, Conn	Aug. 15, 1865 Oct. 17, 1865	2,091
Rowlock	J. W. Norcross	Middletown, Conn	Sept. 27, 1864 Jan. 3, 1865	1,846
Rubber and brush	A. Charles	Pittsburgh, Pa	Apr. 4, 1871 Aug. 29, 1871	4,529
Rubber articles, Manufacture of hard	W. H. Halsey, by Halsey's Patent Box and Case Company, assignee.	New York, N. Y	Aug. 18, 1868 May 17, 1870	3,974
Rubber fabric	J. Haskins	Boston, Mass	July 30, 1867 Aug. 25, 1868	3,100
Rubber goods, Manufacture of hard	G. Cuppers	New York, N. Y	July 20, 1858 Aug. 24, 1858	588
Rubber goods, Mode of filling cylindrical mold for	J. W. Cobb, by self and E. A. Hill, assignees.	Melrose and Quincy, Mass	June 18, 1867 Nov. 17, 1868	3,193
Rubber, Hard	A. G. Day, (extended August 10, 1872.)	New York, N. Y	Aug. 10, 1858 Jan. 14, 1873	5,232
Rubber, Manufacture of hard	T. J. Mayall, by J. H. Cheever, assignee, (mesne.)	Roxbury, Mass., and New York, N. Y.	Nov. 30, 1858 Dec. 11, 1860	1,090
Rubber, Manufacture of hard flexible	A. G. Day, (extended August 10, 1872.)	New York, N. Y	Aug. 10, 1858 Jan. 14, 1873	5,231
Rubber, Manufacturing hard	A. G. Day, (extended August 10, 1872.)	New York, N. Y	Aug. 10, 1858 Jan. 14, 1873	5,230
Rubber, Manufacture of white	F. Marquard	Rahway, N. J	Dec. 5, 1865 Feb. 20, 1866	2,179
Rubber, Manufacture of white	F. Marquard	Rahway, N. J	Dec. 5, 1865 Feb. 20, 1866	2,180
Rubber, Perforated sheet	J. Haskins	Boston, Mass	July 30, 1867 Feb. 14, 1871	4,239
Ruffling, Apparatus for making	T. Robjohn, by E. C. Wooster, assignee.	New York, N. Y	July 21, 1863 Oct. 27, 1863	1,556
Rules, Machine for mitering printer's	W. McDonald, by R. Hoe & Co., assignees.	New York, N. Y	July 3, 1855 Mar. 17 1868	2,899
Ruler	S. L. Simpson	New York, N. Y	June 27, 1865 Apr. 3, 1866	2,220
S.				
Saccharine-juice evaporator	L. P. Harris	Mansfield, Ohio	Jan. 18, 1859 Apr. 28, 1863	1,464
Saccharine-juice evaporator	L. P. Harris	Mansfield, Ohio	Jan. 18, 1859 Apr. 28, 1861	1,463
Saccharine-juice evaporator	D. B. Neal and H. C. Emery, by D. B. Neal and G. E. House, assignees.	Mount Gilead, Ohio	Feb. 21, 1860 Mar. 25, 1862	1,294
Saccharine-liquid evaporator	F. D. Drake	Four Corners, Ohio	Jan. 6, 1863 Nov. 10, 1863	1,565
Saccharine liquids, Applying sulphurous-acid gas in defecation of	R. B. Brashear, by N. P. Brashear, executrix.	Pattersonville, La	Dec. 6, 1859 Oct. 22, 1867	2,781
Sad and fluting iron	J. Hewitt	Pittsburgh, Pa	Jan. 21, 1873 Mar. 4, 1873	5,302
Sad and fluting iron	F. Myers	New York, N. Y	Mar. 7, 1871 May 2, 1871	4,309

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Invention.	Inventor.	Residence.	Date.	No.
Sad-iron	M. F. Potts, by self and I. P. Chalfant, assignees.	Ottumwa, Iowa	Apr. 4, 1871 Oct. 15, 1872	5,102
Saddle, Dray	J. O'Mahony	Savannah, Ga.	Apr. 28, 1868 June 22, 1869	3,513
Saddle or sweat cloth	R. Spencer	Newark, N. J	Mar. 15, 1864 Apr. 25, 1871	4,358
Saddle, Riding	G. H. Meeker, by L. Meeker & Co., assignees.	New York, N. Y	May 16, 1865 Nov. 13, 1866	2,394
Saddle, Side	J. T. Gathright and J. C. Freeman, by J. T. Gathright, assignee.	Louisville, Ky	Sept. 14, 1869 June 21, 1870	4,041
Saddle-tree	S. E. Tompkins	Sing Sing, N. Y	Sept. 25, 1860 Jan. 9, 1872	4,730
Saddle-tree	S. E. Tompkins	Sing Sing, N. Y	Sept. 25, 1860 July 15, 1873	5,495
Saddle tree, Side	J. B. Gathright	Louisville, Ky	Feb. 25, 1868 May 24, 1870	3,988
Saddle tree, Side	J. Straus	Saint Louis, Mo	May 17, 1870 Oct. 14, 1873	5,609
Saddles, Back-chain for cart	W. B. McClure, by self, J. G. Graham, and H. O. Claughton, assignees.	Alexandria, Va	Sept. 26, 1871 Dec. 19, 1871	4,679
Safe	R. F. Sanborn	Ripon, Wis	July 17, 1866 Nov. 6, 1866	2,390
Safe	T. J. Sullivan	Albany, N. Y	Dec. 14, 1869 Mar. 22, 1870	3,887
Safe, &c., bolt	G. L. Damon	Cambridge, Mass	May 10, 187 May 23, 1871	4,389
Safe, Burglar-proof	J. R. Floyd	New York, N. Y	Oct. 16, 1860 May 27, 1862	1,311
Safe, Fire and burglar proof	F. C. Goffin	New York, N. Y	Feb. 14, 1854 Apr. 25, 1854	263
Safe, Fire and burglar proof	T. Sharts, by self and J. Ryer, assignee, (extended June 29, 1872.)	New York and Brooklyn, N. Y.	June 29, 1858 Oct. 22, 1872	5,112
Safe, Fire-proof	E. D. Draper and E. W. Glover	Hopedale and Medford, Mass.	Jan. 14, 1868 Feb. 16, 1869	3,298
Safe, Fire-proof	E. and J. L. Hall	Cincinnati, Ohio	Aug. 21, 1849 Dec. 18, 1849	152
Safe, Fire-proof	E. and J. L. Hall	Cincinnati, Ohio	Aug. 21, 1849 Mar. 6, 1860	923
Safe-protector, Electro-magnetic	W. Duncan, by self, C. C. Rowell, and A. H. Cragin, assignees, (mesne.)	Lebanon, N. H	Aug. 1, 1871 Jan. 9, 1872	4,704
Safes and preparing materials for the same, Construction of burglar-proof.	W. and W. H. Terwilliger and J. S. Lockwood.	New York, N. Y	July 24, 1866 Mar. 12, 1867	2,508
Safes, Construction of	L. Lillie, (extended July 15, 1865.)	Troy, N. Y	July 15, 1851 Nov. 21, 1865	2,112
Safes, Construction of	F. H. Williams	Syracuse, N. Y	Jan. 19, 1869 May 31, 1870	4,001
Safes, Fire-proof filling for	R. G. Holmes and W. H. Butler, by W. H. Butler, A. A. Valentine, assignees, and S. A. Holmes, administratrix.	New York, N. Y	Mar. 27, 1855 Nov. 15, 1864	1,822
Salines, Apparatus for obtaining bromine and other products from the mother-water of.	E. Stieren, by A. Stieren, assignee, (mesne.) (extended December 12, 1868.)	Natrona, Pa	Dec. 12, 1854 June 1, 1869	3,480
Salines to obtain useful products, Process of treating the mother-water of.	E. Stieren, by A. Stieren, assignee, (mesne,) (extended December 12, 1868.)	Natrona, Pa	Dec. 12, 1854 June 1, 1869	3,479
Salinometer	B. F. Bee	Harwich, Mass	Jan 9, 1866 Sept. 4, 1866	2,347
Salt and pepper dredge	D. C. Ripley	Pittsburgh, Pa	Sept. 2, 1873 Nov. 18, 1873	5,606
Salt-brine evaporator	S. D. Gilson	Syracuse, N. Y	Oct. 25, 1870 May 30, 1871	4,399
Salt, Manufacture of common	T. Spencer	Syracuse, N. Y	May 29, 1860 Mar. 18, 1862	1,290
Salt, Manufacture of common	T. Spencer	Syracuse, N. Y	Sept. 25, 1860 Mar. 18, 1862	1,291
Sand, Washing	L. M. Speer	Belle Vernon, Pa	Aug. 20, 1861 May 31, 1864	1,687
Sash and door fastening	R. Johnson	Frederick, Md	May 29, 1860 Feb. 23, 1864	1,624
Sash-fastener	J. C. Butterworth	Providence, R. I	Apr. 16, 1861 Mar. 24, 1863	1,440
Sash-fastener	R. J. Falconer	Washington, D. C	Aug. 31, 1858 Aug. 16, 1859	793
Sash-fastener	M. Judd, by the Judd Manufacturing Company, assignee.	New Haven, Conn	June 30, 1863 Apr. 12, 1870	3,915
Sash fastener, Window	H. G. Arnold	Rochester, N. Y	Oct. 15, 1867 Dec. 31, 1867	2,821
Sash fastening, Window	M. B. Stafford	New York, N. Y	Jan. 27, 1863 Apr. 16, 1867	2,568
Sash guide-block	A. Bicknell	Malden, Mass	Nov. 3, 1868 Mar. 19, 1872	4,809
Sash-holder	R. B. Huguniu	New York, N. Y	Apr. 8, 1873 Sept. 2, 1873	5,559
Sash-lock	J. Hughes	New Berne, N. C	Nov. 22, 1870 Feb. 13, 1872	4,758
Sash-lock	G. McGregor and G. Voll, by W. A. Hopkins and F. Z. Dickinson, assignees, (mesne.)	Cincinnati, Ohio	Mar. 30, 1869 Jan. 21, 1873	5,253
Sash-stop	C. Cole, by C. Clapp, assignee	Ithaca, N. Y	May 7, 1867 Dec. 15, 1868	3,229
Sash stopper and lock	W. Van Gaasbeek	Mount Vernon, N. Y	Oct. 4, 1864 Mar. 13, 1866	2,201
Sashes, clocks, &c., Weight for	D. B. Lacy, by self, I. A. Lacy, and T. T. Lacy, assignees, (mesne.)	Mott Haven and Saugerties, N. Y., and Jersey City, N. J.	Sept. 18, 1866 Sept. 6, 1870	4,115

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Sap-spout	C. C. Post	Burlington, Vt	July 23, 1871 Dec. 3, 1872	5,175
Sausage-stuffer	J. J. Weeks, by P. Miles, assignee.	New York, N. Y	Sept. 19, 1854 Aug. 7, 1866	2,329
Saw	A. Boynton, by E. M. Boynton, assignee.	Grand Rapids, Mich	Nov. 27, 1866 July 23, 1867	2,695
Saw	A. Boynton, by E. M. Boynton, assignee.	Grand Rapids, Mich	Nov. 27, 1866 July 27, 1869	3,566
Saw	J. Davis, by self and F. W. Davis, assignees.	Philadelphia, Pa	Jan. 7, 1868 July 12, 1870	4,068
Saw	C. Disston, by H. Disston, assignee.	Philadelphia, Pa	Apr. 2, 1867 July 28, 1868	3,052
Saw	J. H. Tuttle, by E. P. Wheeler, E. M. Madden, and W. Clemson, assignees, (extended June 21, 1867.)	Middletown, N. Y	June 21, 1853 Aug. 9, 1870	4,096
Saw-frame	B. Butler and C. F. Ramsay, by B. Butler and B. M. Tillotson, assignees.	Saint Johnsbury Centre, Vt., and Manchester, N. H.	Oct. 20, 1868 May 11, 1869	3,431
Saw-frame	D. and E. Moore, by the Bissel and Moore Manufacturing Company, assignee.	New York, N. Y	Sept. 7, 1869 Feb. 21, 1871	4,276
Saw-frame	D. and E. Moore, by the Bissel and Moore Manufacturing Company, assignee.	Brooklyn and New York, N. Y.	Sept. 7, 1869 Dec. 2, 1873	5,674
Saw frame, Wood	J. Haynes	Hollis, Me	Aug. 9, 1859 Aug. 25, 1863	1,526
Saw frame, Wood	W. H. Livingston	New York, N. Y	Sept. 18, 1860 Apr. 14, 1863	1,452
Saw grinding and polishing machine	W. J. Lippincott, by J. Lippincott, and T., B. P., and B. Bakewell, jr., assignees.	Pittsburgh, Pa	Oct. 24, 1865 Oct. 6, 1868	3,147
Saw-grinding machine	E. Andrews	Williamsport, Pa	Dec. 16, 1856 June 19, 1866	2,290
Saw-grinding machine	J. G. Baker	Philadelphia, Pa	Feb. 2, 1864 Sept. 29, 1868	3,138
Saw-grinding machine	H. R. Burger	Richmond, Va	Sept. 11, 1860 Oct. 16, 1860	1,061
Saw handles, Attaching cross-cut	I. Pelham, by E. Andrews, assignee.	Elmira, N. Y	Sept. 25, 1869 Mar. 25, 1873	5,339
Saw-hanging, (Division A)	L. Morrison and A. G. Hanna	Allegheny City, Pa	Apr. 5, 1870 Nov. 4, 1873	5,646
Saw-hanging, (Division B)	L. Morrison and A. G. Hanna	Allegheny City, Pa	Apr. 5, 1870 Nov. 4, 1873	5,647
Saw-mill	A. P. Barlow, by self, C. H. Eastman, W. W. King, Z. B. Small, and J. H. Johnson assignees.	Claremont, N. H	Dec. 17, 1867 Mar. 15, 1870	3,878
Saw-mill	W. M. Ferry, jr	Ferrysburgh, Mich	July 21, 1857 Apr. 6, 1858	512
Saw-mill	W. Hawkins and W. C. Clary	Milwaukee, Wis	Mar. 30, 1858 May 11, 1858	552
Saw-mill	L. Hodge, by W. P. Wood and S. De Vaughan, assignees, (mesne.)	New York, N. Y., and Washington, D. C.	May 8, 1849 Mar. 10, 1857	435
Saw-mill	H. Knowles	New York, N. Y	Sept. 28, 1852 Nov. 30, 1858	629
Saw-mill	J. L. Knowlton	Philadelphia, Pa	Oct. 20, 1861 Sept. 12, 1865	2,072
Saw-mill	A. McCreight	Tranquility, Ohio	Oct. 13, 1868 Aug. 16, 1870	4,101
Saw mill, Circular	J. P. Grosvenor	Lowell, Mass	Oct. 26, 1869 Feb. 20, 1872	4,763
Saw mill, Circular	C. I. Hayes and M. Newman, by G. and C. Place, assignees.	New York, N. Y	Aug. 12, 1862 Aug. 25, 1868	3,101
Saw mill, Circular	N. G. Norcross	Lowell, Mass	Jan. 15, 1850 July 10, 1860	1,002
Saw mill, Circular	L. C. Pattee	Lebanon, N. H	Dec. 5, 1871 Mar. 4, 1873	5,303
Saw mill, Circular	S. R. Smith, (extended January 20, 1871.)	Cincinnati, Ohio	Jan. 20, 1857 May 30, 1871	4,409
Saw-mill for resawing boards, &c	P. Crosby		Nov. 3, 1841 Mar. 10, 1849	130
Saw-mill for resawing boards, &c	P. Crosby, (extended October 30, 1855.)	New York, N. Y	Nov. 3, 1841 Apr. 28, 1857	458
Saw-mill head-block	D. Lane	Montpelier, Vt	Sept. 6, 1864 Mar. 6, 1866	2,186
Saw-mill head-block	D. Lane	Montpelier, Vt	July 9, 1861 Feb. 18, 1868	2,879
Saw-mill head-block	D. Lane	Montpelier, Vt	June 30, 1868 Feb. 29, 1872	4,794
Saw-mill head-block	D. Lane	Montpelier, Vt	Sept. 6, 1864 Dec. 31, 1872	5,209
Saw-mill head-block	D. Lane, by self, P. P. Pitkin, and J. W. Brock, assignees.	Montpelier, Vt	July 28, 1868 Sept. 3, 1872	5,048
Saw-mill head-block	J. M. and S. F. Stanton, by S. F. Stanton, assignee.	Manchester, N. H	May 1, 1866 May 5, 1868	2,924
Saw-mill head-block	E. H. Stearns, (extended April 15, 1870.)	Erie, Pa	Apr. 15, 1856 Sept. 12, 1871	4,551
Saw-mill head-block	E. H. Stearns, (extended April 15, 1870.)	Erie, Pa	Apr. 15, 1856 July 16, 1872	4,979
Saw-plates, &c., Machinery for grinding and polishing.	R. M. Hoe, (extended May 26, 1856.)	New York, N. Y	May 30, 1842 May 5, 1857	462
Saw, Scroll	R. J. Camp	Marion, Ohio	Feb. 18, 1868 Sept. 22, 1868	3,126
Saw-teeth, Detachable	J. W. Strange, by H. and H. Disston, assignees, (mesne.)	Philadelphia, Pa	Aug. 13, 1867 Sept. 28, 1869	3,651
Saw-teeth, Dressing	J. Lough	Buckingham Village, Quebec.	Nov. 24, 1868 Nov. 2, 1869	3,703

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Invention.	Inventor.	Residence.	Date.	No.
Saws and saw-plates, Setting teeth in	N. W. Spaulding	San Francisco, Cal	Sept. 10, 1861 Apr. 21, 1863	1,456
Saws, Changing and straining reciprocating	I. N. Forrester	Centreville, Va	Oct. 30, 1855 Sept. 2, 1856	393
Saws, Gate for gang for marble	L. B. Clogston, by C. H. Sheldon, assignee.	West Rutland, Vt	Oct. 17, 1871 Dec. 2, 1873	5,672
Saws, Guide and support for scroll	J. Richards	Columbus, Ohio	May 27, 1862 Aug. 25, 1863	1,527
Saws, Hanging reciprocating	L. Andersen	Painesville, Ohio	Jan. 17, 1860 Aug. 2, 1864	1,733
Saws, Hanging reciprocating	P. Crosby, by T. Bakewell and J. Lippincott, assignees, (mesne.)	Pittsburgh, Pa	Oct. 4, 1859 May 25, 1869	3,454
Saws, Mode of driving reciprocating	I. Brown	Baltimore, Md	July 19, 1853 Feb. 3, 1857	425
Saws, Swage for sharpening	J. E. Emerson	Trenton, N. J	June 5, 1866 Aug. 6, 1867	2,719
Sawing off logs, Machine for	S. Waterman and I. D. Russell, by C. Waterman, administratrix and assignee.	New York, N. Y	May 19, 1843 Mar. 17, 1857	438
Sawing-machine	C. R. Fox	Chicago, Ill	May 9, 1854 July 18, 1854	271
Sawing-machine	C. J. Holman, by S. M. Nickerson, assignee.	Chicago, Ill	Dec. 8, 1863 Jan. 29, 1867	2,471
Sawing-machine	F. W. Robinson	Richmond, Ind	Sept. 5, 1865 Nov. 28, 1865	2,117
Sawing-machine	A. E. and J. V. Warner	Norwalk, Ohio	May 30, 1865 Aug. 1, 1865	2,045
Sawing-machine	W. P. Wood	Washington, D. C	Feb. 26, 1856 Mar. 25, 1856	365
Sawing-machine for edging lumber	E. Tarrant	Muskegon, Mich	Aug. 20, 1867 Aug. 19, 1873	5,536
Sawing machine, Lumber	P. Youngs	Milwaukee, Wis	Jan. 30, 1855 Oct. 2, 1855	330
Sawing-machine, Portable steam	S. R. Wilmot	New York, N. Y	Aug. 14, 1855 Jan. 27, 1857	424
Sawing machine, Portable steam cross-cut	S. B. Wilmot	Watertown, Conn	Aug. 14, 1855 Apr. 7, 1857	447
Sawing machine, Scroll	L. Wright, by self and C. B. Smith, assignees.	Newark, N. J	May 16, 1865 Mar. 13, 1866	2,203
Scabbard-sheaths, &c., of leather, Making	F. Durand and O. Pecqueur	France	Oct. 15, 1846 Aug. 7, 1847	100
Scale-beams, Machine for milling knife-edge of	T. J. Rockwood	Saint Johnsbury, Vt	Aug. 11, 1868 Mar. 1, 1870	3,865
Scale-pivots, Machine for grinding	F. Meyer	Newark, N. J	May 14, 1867 June 2, 1868	2,966
Scale, Spring	S. Ingersoll, by J. Hollely and J. Ryer, assignees, (mesne.)	Brooklyn, N. Y	Oct. 5, 1869 Oct. 1, 1872	5,082
Scales, Platform	T. Fairbanks	Saint Johnsbury, Vt	Jan. 13, 1857 Mar. 31, 1857	445
Scales, Platform	J. F. Keeler	Pittsburgh, Pa	Sept. 26, 1854 July 14, 1868	3,032
School-seat	R. Paton	New York, N. Y	Aug. 20, 1861 Aug. 30, 1864	1,756
Scissors-sharpener	A. W. Gifford, by H. D. Ward and W. A. Richardson, assignees, (mesne.)	Worcester, Mass	Feb. 12, 1867 July 9, 1867	2,674
Scoop, Vegetable	J. F. Unglish, by J. E. Thompson, assignee.	Webster, N. Y	Mar. 15, 1870 Dec. 2, 1873	5,675
Screw	E. S. Pierce, by the National Screw Company, assignee.	Hartford, Conn	Feb. 23, 1869 Apr. 26, 1870	3,941
Screw	F. Washbourne	New York, N. Y	Dec. 1, 1868 Oct. 29, 1872	5,125
Screw-blank-threading machine	E. Croft	Waterbury, Conn	Sept. 9, 1873 Dec. 2, 1873	5,673
Screw-blanks, Machine for arranging and feeding	T. J. Sloan	New York, N. Y	Feb. 25, 1851 Mar. 29, 1853	234
Screw-clamp, Hand	H. Schmidt	New York, N. Y	Aug. 14, 1866 Nov. 23, 1869	3,745
Screw-cutting machine	W. Keane, by T. Sellick, administrator.	Monroe, N. Y	Feb. 13, 1836 Apr. 16, 1838	2
Screw-cutting machine	J. A. Merriman	Chicago, Ill	Aug. 1, 1865 Dec. 18, 1866	2,423
Screw-cutting machinery	T. W. Harvey, by H. A. Harvey, assignee, (mesne.)	New York, N. Y	May 30, 1846 Dec. 28, 1858	641
Screw-heads, Machinery for dressing	T. W. Harvey, by H. A. Harvey, assignee, (mesne.)	New York, N. Y	Aug. 18, 1846 Jan. 4, 1859	645
Screw-heads, Nicking	G. L. Morris	Taunton, Mass	June 12, 1866 Jan. 1, 1867	2,443
Screw-machine feeder	S. Merrick	Springfield, Mass	Mar. 7, 1846 May 7, 1850	169
Screw machine, Wood	C. B. F. Tingley, by W. H. Haskell, assignee.	Pawtucket, R. I	Jan. 30, 1872 July 1, 1873	5,472
Screw-press	T. B. Webster, by self and T. Gannon, assignees.	New York, N. Y	July 25, 1865 Nov. 21, 1865	2,111
Screw-press, Portable revolving	R. M. Brooks, by W. T. Trammell, assignee.	Pike County, Ga	Nov. 6, 1866 July 23, 1872	4,997
Screw-threads, Tool for cutting	E. S. Pierce, by the National Screw Company, assignee.	Hartford, Conn	Feb. 23, 1869 Apr. 26, 1870	3,940
Screw-threads upon metal bolts, Machine for forging or rolling.	J. Cochrane	Wall Township, N. J	Apr. 2, 1867 May 31, 1870	3,998
Screw-threading machine	E. Savage, by self and C. Parker, assignees.	Berlin and Meriden, Conn	Nov. 21, 1854 Sept. 27, 1859	826
Screw-threading machine	E. Savage, by self and C. Parker, assignees.	Berlin and Meriden, Conn	Nov. 21, 1854 Sept. 27, 1859	827
Screw-threading machine	T. J. Sloan	New York	Nov. 24, 1846 Mar. 8, 1848	110

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Screw-threading machine, Wood	C. Whipple	Providence, R. I	Aug. 18, 1842 June 10, 1856	371
Screw-threading machine, Wood	C. Whipple, by the New England Screw Company, assignee.	Providence, R. I	Aug. 18, 1842 Mar. 5, 1850	165
Screw-wrench	A. G. Coes	Worcester, Mass	Aug. 16, 1853 Jan. 3, 1860	874
Screw-wrench	L. Coes	Worcester, Mass	Oct. 16, 1841 June 26, 1849	139
Screw-wrench	S. Merrick	Springfield, Mass	Aug. 10, 1835 May 17, 1842	38
Screw-wrench	S. Merrick, (extended May 14, 1849.)	Springfield, Mass	Aug. 17, 1835 Nov. 25, 1851	207
Screw, Wood	T. J. Sloan	New York	Aug. 20, 1846 Feb. 22, 1848	107
Screw, Wood	T. J. Sloan, by the Eagle Screw Company, assignee.	New York, N. Y., and Providence, R. I.	Aug. 20, 1846 Nov. 23, 1858	626
Screws and rivets, Cutting and heading wire for manufacturing wood.	J. H. Pierson, by H. L. Pierson, assignee.	Ramapo, N. Y	Nov. 26, 1836 Mar. 8, 1848	108
Screws, Capping wood	C. T. Grilley, (extended April 20, 1866.)	New Haven, Conn	Apr. 20, 1852 June 12, 1866	2,284
Screws for picture-frames, Heads of	J. B. Sargent	New Britain, Conn	Aug. 21, 1860 Sept. 26, 1865	2,077
Screws, Machine for cutting notches on the heads of wood.	J. H. Pierson, by H. L. Pierson, assignee.	Ramapo, N. Y	Nov. 28, 1836 Mar. 8, 1848	109
Screws, Machine for shaving and nicking	T. J. Sloan, by American Screw Company, assignee, (extended October 21, 1865.)	Providence, R. I.	Oct. 21, 1851 Mar. 6, 1866	2,182
Screws, Machinery for making wood	C. Whipple, by the New England Screw Company, assignee.	Providence, R. I	Dec. 7, 1852 Apr. 12, 1859	684
Screws, Machinery for making wood	C. Whipple, by the New England Screw Company, assignee.	Providence, R. I	Dec. 7, 1852 Apr. 12, 1859	685
Screws, Machinery for making wood	C. Whipple, by the New England Screw Company, assignee.	Providence, R. I	Dec. 7, 1852 Apr. 12, 1859	686
Screws, Machinery for making wood	C. Whipple, by the New England Screw Company, assignee.	Providence, R. I	Dec. 7, 1852 Apr. 12, 1859	687
Screws, Manufacturing wood	C. O. Read	Milford, Mass	Dec. 13, 1837 Oct. 7, 1846	88
Screws, Method of casting	W. A. Ingalls	Chicago, Ill	May 15, 1866 Feb. 4, 1868	2,849
Scythe-fastening	P. Frost	Springfield, Vt	Jan. 11, 1853 Feb. 9, 1858	524
Scythe-fastening	P. Frost, (extended January 11, 1867.)	Springfield, Vt	Jan. 11, 1853 Jan. 14, 1868	2,834
Scythes, Manufacturing	A. H. Searle, by C. Thurston, administrator.	Worcester, Mass	Dec. 17, 1834 Oct. 12, 1843	56
Scythes to snaths, Fastening	E. S. Clapp	Montague, Mass	Mar. 18, 1851 July 8, 1851	204
Seal-lock, Railway-car	J. H. Lyon	New York, N. Y	July 17, 1860 Feb. 6, 1872	4,734
Sealing cans and bottles, Elastic cap for	R. Davis, by T. R. Hartell and J. Letchworth, assignees, (mesne.)	Philadelphia, Pa	Feb. 24, 1857 Mar. 17, 1863	1,432
Seam for uniting materials, Metallic	J. Keith, by T. K. Reed, assignee; said Reed assignor to A. B. Keith, trustee.	Providence, R. I., and East Bridgeport, and Boston, Mass.	Jan. 10, 1871 Nov. 4, 1873	5,645
Seam-joint for cans, &c	E. A. Thomas	Philadelphia, Pa	Oct. 13, 1868 June 4, 1872	4,936
Seaming machine, Metallic-can	E. T. Covell	Brooklyn, N. Y	Sept. 21, 1869 Mar. 5, 1872	4,777
Seaming machine, Metallic-can	E. T. Covell	Brooklyn, N. Y	Sept. 21, 1869 Mar. 5, 1872	4,778
Seat for public buildings	A. H. Allen	Boston, Mass	Dec. 5, 1854 Jan. 15, 1861	1,126
Sectional boats to each other by a rule-joint, Attaching.	J. Elgar, (extended by Commissioner November 7, 1849.)	Baltimore, Md	Nov. 7, 1835 Dec. 25, 1849	154
Seed-cover for grain-drills	J. S. Gage	Dowagiac, Mich	Aug. 26, 1862 Aug. 1, 1865	2,041
Seed-drill	J. Selby	Lancaster, Ohio	June 19, 1855 Apr. 21, 1857	457
Seed-drill	J. Smith	Tiffin, Ohio	Feb. 14, 1860 Apr. 2, 1861	1,166
Seed-drill	J. Strayer	South Bend, Ind	May 14, 1861 May 10, 1864	1,665
Seed-drill	J. Strayer	South Bend, Ind	May 14, 1861 May 10, 1864	1,666
Seed-drill	M. C. Younglove, by F. H. Manny, assignee.	Rockford, Ill	June 15, 1858 Mar. 21, 1871	4,307
Seed-drill guano-attachment	J. F. Fisher, by self and D. Breed.	Greencastle, Pa., and Washington, D. C.	June 1, 1869 Nov. 30, 1869	3,749
Seed-dropper	F. W. Young	Holden, Mo	Feb. 11, 1873 Aug. 5, 1873	5,529
Seed-separator	W. J. Walker	Dorset, Ill	Jan. 26, 1869 Jan. 7, 1873	5,227
Seeder, Percussion	J. R. Rogers	Sacramento, Wis	Mar. 6, 1860 Oct. 9, 1860	1,057
Seeding-machine	H. Bandel	Dayton, Ohio	Jan. 23, 1866 Dec. 21, 1869	3,769
Seeding-machine	C. W. Cahoon, by J. B. Cahoon, and D. H. Furbish, assignees.	Portland, Me	Sept. 1, 1857 May 11, 1858	554
Seeding-machine	A. Franklin, by F. H. Manny, assignee.	Rockford, Ill	Nov. 10, 1857 Feb. 23, 1869	3,310
Seeding-machine	G. Jessup, by H. L. and C. P. Brown, assignees.	Shortsville, N. Y	June 25, 1861 Oct. 22, 1867	2,782

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Invention.	Inventor.	Residence.	Date.	No.
Seeding-machine	W. M. Jones and S. E. Tyler, by W. M. Jones and D. W. Hall, assignees, (mesne.)	Horicon, Wis	Aug. 12, 1862 Nov. 10, 18.8	3,191
Seeding-machine	W. M. Jones and S. E. Tyler, by W. M. Jones and D. W. Hall, assignees, (mesne.)	Horicon, Wis	Aug. 12, 1862 Nov. 17, 1868	3,197
Seeding-machine	G. W. Lee and A. R. Reese, by A. R. Reese, assignee.	Phillipsburgh, N. J	Jan. 15, 1861 Feb. 11, 1868	2,864
Seeding-machine	W. P. Penn	Belleville, Ill	Dec. 27, 1859 Jan. 29, 1867	2,467
Seeding-machine	S. G. Randall	New Braintree, Mass	Sept. 13, 1859 May 25, 1869	3,464
Seeding-machine	M. A. Van Brunt	Horicon, Wis	Aug. 31, 1869 Feb. 15, 1870	3,846
Seeding-machine	G. W. Van Brunt, by self and D. L. Van Brunt and A. Barber.	Horicon, Wis	July 22, 1862 Mar. 23, 1869	3,339
Seeding-machine	W. Workman, by F. H. Manny.	Rockford, Ill	June 26, 1860 Apr. 12, 1870	3,913
Seine-needles, Machinery for filling	H. M. Glines, by P. Bennet, J. Kendrick, and L. A. Cook, assignees, (mesne.)	Providence, and Cumberland, R. I.	Oct. 2, 1855 July 15, 1856	378
Self-detaching brake	J. Lahaye	Reading, Pa	Apr. 10, 1847 Apr. 13, 1852	216
Self-sealing can	R. Arthur	Philadelphia, Pa	Jan. 2, 1855 Oct. 14, 1856	403
Settee	W. Chase	Buffalo, N. Y	May 18, 1869 Mar. 22, 1870	3,882
Settee-frame	T. J. Close	Philadelphia, Pa	Feb. 9, 1869 Oct. 26, 1869	3,686
Sewing-machine	W. H. Akins and J. D. Felthausen, by R. G. Fairbanks, assignee, (mesne.)	Ithaca and New York, N. Y.	Aug. 5, 1851 Apr. 11, 1865	1,930
Sewing-machine	W. H. Akins and J. D. Felthausen, by J. G. Wilson, assignee.	Ithaca and New York, N. Y.	Aug. 5, 1851 Jan. 20, 1863	1,388
Sewing-machine	J. Bachelder, (extended May 8, 1863.)	Lisbon, Conn	May 8, 1849 Sept. 22, 1863	1,543
Sewing-machine	J. Bachelder, (extended May 8, 1863.)	Norwich, Conn	May 8, 1849 Dec. 12, 1865	2,125
Sewing-machine	J. Bachelder, by I. M. Singer and E. Clark, assignees.	Boston, Mass., and New York, N. Y.	May 8, 1849 Nov. 2, 1858	617
Sewing-machine	J. W. Bartlett	New York, N. Y	Jan. 31, 1865 Mar. 27, 1866	2,210
Sewing-machine	B. W. Bean	New York, N. Y	Mar. 4, 1843 Mar. 10, 1849	131
Sewing-machine	R. M. Berry	New York, N. Y	Dec. 7, 1858 Nov. 13, 1860	1,073
Sewing-machine	S. C. Blodgett and J. A. Serow.	Georgetown and Boston, Mass.	Oct. 2, 1849 Jan. 14, 1851	188
Sewing-machine	S. C. Blodgett, by the Grover and Baker Sewing-Machine Company, assignee, (mesne.)	Georgetown and Boston, Mass.	Dec. 20, 1853 Oct. 12, 1858	613
Sewing-machine	J. H. Bonham, by A. E. Bonham, administrator.	Elizabethtown, Ohio	Oct. 8, 1857 July 10, 1860	1,001
Sewing-machine	J. A. Bradshaw, by J. P. Martin, assignee.	Lowell, Mass., and Philadelphia, Pa.	Nov. 28, 1848 Apr. 14, 1857	452
Sewing-machine	J. A. Bradshaw, by J. P. Martin, assignee.	Lowell, Mass., and Philadelphia, Pa.	Nov. 28, 1848 Apr. 14, 1857	453
Sewing-machine	F. H. Brown, by self and T. H. Walker, assignees.	Chicago, Ill	Apr. 26, 1870 Sept. 3, 1872	5,046
Sewing-machine	W. Butterfield, by E. Townsend, assignee, (mesne.)	Roxbury and Boston, Mass	July 4, 1854 Jan. 5, 1864	1,600
Sewing-machine	P. J. Clever	Goliad, Tex	Nov. 16, 1869 Dec. 28, 1869	3,776
Sewing-machine	J. S. Conant, by self, assignee, (mesne.)	Hackensack, N. J	Jan. 16, 1855 Nov. 24, 1868	3,214
Sewing-machine	C. O. Crosby, by N. A. Baldwin, assignee.	New Haven and Milford, Conn.	Oct. 12, 1858 Mar. 21, 1871	4,305
Sewing-machine	R. W. Drew, by A. B. Ely, assignee.	Newton, Mass	June 30, 1863 Apr. 16, 1867	2,567
Sewing-machine	R. W. Drew, by A. B. Ely, assignee.	Newton, Mass	Nov. 5, 1861 Apr. 30, 1867	2,578
Sewing-machine	R. W. Drew, by A. B. Ely, assignee.	Newton, Mass	Nov. 5, 1861 Apr. 30, 1867	2,579
Sewing-machine	R. W. Drew, by A. B. Ely, assignee.	Newton, Mass	Nov. 5, 1861 Apr. 30, 1867	2,580
Sewing-machine	G. L. Dulaney	Mechanicsburgh, Pa	Feb. 10, 1863 Feb. 8, 1870	3,825
Sewing-machine	C. A. Durgin	New York, N. Y	May 22, 1855 June 15, 1858	567
Sewing-machine	G. Fetter, by S. Pancoast, assignee.	Philadelphia, Pa	Oct. 23, 1860 June 21, 1864	1,704
Sewing-machine	J. E. A. Gibbs	Midway, Va	Aug. 10, 1858 June 18, 1867	2,655
Sewing-machine	J. E. A. Gibbs, by J. A. Ruckman, assignee.	Mill Point, Va	June 2, 1857 July 13, 1858	573
Sewing-machine	E. A. Goodes and E. L. Miller, by C. S. Patterson, E. Pincus, A. Hart, M. Moore, A. Mitchell, and H. H. Reed, assignees.	Philadelphia, Pa	July 26, 1859 Feb. 9, 1864	1,616
Sewing-machine	W. O. Grover and W. E. Baker, by Grover and Baker Sewing-Machine Company, assignee.	Boston, Mass	Feb. 11, 1851 June 15, 1858	568

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Sewing-machine	W. O. Grover and W. E. Baker, by the Grover and Baker Sewing-Machine Company, assignee.	Boston, Mass	June 22, 1852 July 6, 1858	572
Sewing-machine	W. O. Grover and W. E. Baker, by the Grover and Baker Sewing-Machine Company, assignee.	Jamaica Plain and Boston, Mass.	Feb. 11, 1851 Dec. 3, 1861	1,242½
Sewing-machine	W. S. Guinness, by self and A. G. Seaman, assignees.	London, England, and New York, N. Y.	Mar. 15, 1864 Feb. 2, 1869	3,281
Sewing-machine	J. Harrison, jr	New York, N. Y	Apr. 11, 1854 Sept. 14, 1858	600
Sewing-machine	W. C. Hicks	Summit, N. J	Apr. 12, 1859 Mar. 4, 1873	5,305
Sewing-machine	C. Hodgkins	Marlborough, N. H	Aug. 20, 1861 Aug. 20, 1867	2,745
Sewing-machine	C. Hodgkins	Marlborough, N. H	Aug. 20, 1861 Aug. 20, 1867	2,746
Sewing-machine	A. H. Hook, by W. Stanley, assignee, (mesne.)	New York, N. Y	Nov. 30, 1858 Dec. 15, 1863	1,592
Sewing-machine	E. Howe, jr., (extended September 10, 1860.)	Brooklyn, N. Y	Sept. 10, 1846 Mar. 19, 1861	1,154
Sewing-machine	W. H. Johnson	Granville, Mass	Mar. 7, 1854 Feb. 26, 1856	355
Sewing-machine	W. Lyon, by A. W. Goodell and N. R. Scovell, assignees, (mesne.)	Newark, N. J., and Brooklyn and Albany, N. Y.	Dec. 12, 1854 Jan. 4, 1859	646
Sewing-machine	J. W. Marsh	Oxford, Mass	Oct. 27, 1857 Sept. 6, 1859	809
Sewing-machine	N. Meyers, by the Globe Sewing-Machine Company, assignee.	Buffalo, N. Y	Feb. 15, 1870 May 24, 1870	3,994
Sewing-machine	L. Moore	Ypsilanti, Mich	Aug. 31, 1858 June 18, 1861	1,198
Sewing-machine	C. Morey and J. B. Johnson, by I. M. Singer and E. Clark, assignees.	Boston, Mass., and New York, N. Y.	Feb. 6, 1849 June 27, 1854	268
Sewing-machine	C. Morey and J. B. Johnson, by I. M. Singer and E. Clark, assignees.	Boston, Mass., and New York, N. Y.	Feb. 6, 1849 Jan. 12, 1858	517
Sewing-machine	C. Morey and J. B. Johnson, by I. M. Singer and E. Clark, assignees.	Boston, Mass., and New York, N. Y.	Feb. 6, 1849 Jan. 12, 1858	518
Sewing-machine	C. Parham	Philadelphia, Pa	Nov. 21, 1854 Nov. 3, 1863	1,569
Sewing-machine	H. Plummer	Brooklyn, N. Y	July 14, 1868 Apr. 2, 1872	4,840
Sewing-machine	G. Rehfuss, by American Button-Hole, Overseaming, and Sewing Machine Company, assignee.	Philadelphia, Pa	Nov. 21, 1865 Jan. 28, 1873	5,260
Sewing-machine	O. L. Reynolds, by J. W. Bartlett, assignee	Dover, N. H., and New York, N. Y.	May 14, 1850 Sept. 27, 1859	829
Sewing-machine	Q. Rice, by J. C. Headley, assignee, (mesne.)	Washington, D. C	Jan. 22, 1861 Aug. 27, 1872	5,045
Sewing-machine	T. J. W. Robertson	New York, N. Y	Feb. 26, 1856 May 18, 1858	560
Sewing-machine	T. J. W. Robertson	New York, N. Y	May 22, 1855 Sept. 14, 1858	599
Sewing-machine	T. J. W. Robertson, by self and A. E. Beach, assignees.	New York, N. Y	Mar. 20, 1855 Jan. 15, 1856	343
Sewing-machine	J. S. Rowell and M. F. Lowth, by J. S. and I. Rowell, assignees.	Beaver Dam, Wis	Oct. 14, 1862 Apr. 13, 1869	3,373
Sewing-machine	A. B. Shaw, by self and N. H. Shaw, assignees.	Swanton, Vt	Dec. 16, 1862 Feb. 23, 1864	1,625
Sewing-machine	I. M. Singer	New York, N. Y	Aug. 12, 1851 Oct. 3, 1854	278
Sewing-machine	E. H. Smith, (extended November 10, 1871.)	Bergen Heights, N. J	Nov. 10, 1857 Apr. 29, 1873	5,388
Sewing-machine	M. R. Smith	Armonk, N. Y	Mar. 24, 1863 June 22, 1869	3,515
Sewing-machine	G. W. Stedman, by E. M. Stedman, executrix.	Vienna, N. J	Dec. 12, 1854 Apr. 26, 1859	706
Sewing-machine	A. Swingle, by E. Townsend, assignee.	Boston, Mass	July 22, 1856 Nov. 4, 1856	410
Sewing-machine	S. S. Turner, by E. Townsend, assignee.	Westborough and Boston, Mass.	Aug. 22, 1854 Mar. 25, 1855	363
Sewing-machine	S. S. Turner, by E. Townsend, assignee.	Westborough and Boston, Mass.	Aug. 22, 1854 May 16, 1865	1,962
Sewing-machine	K. Vogel, by the Union Button-Hole and Embroidery Machine Company, assignee.	Chelsea and Boston, Mass.	Oct. 4, 1859 Nov. 1, 1864	1,805
Sewing-machine	W. W. Wade	Longmeadow, Mass	Feb. 1, 1859 Jan. 28, 1862	1,264
Sewing-machine	W. Wickersham, (extended April 19, 1867.)	Boston, Mass	Apr. 19, 1853 Mar. 5, 1872	4,785
Sewing-machine	W. Wickersham, (extended April 19, 1867.)	Boston, Mass	Apr. 19, 1853 Mar. 5, 1872	4,786
Sewing-machine	C. H. Willcox, by the Willcox and Gibbs Sewing-Machine Company, assignees, (mesne.)	New York, N. Y	Mar. 22, 1864 Jan. 11, 1870	3,795
Sewing-machine	A. B. Wilson	Pittsfield, Mass	Nov. 12, 1850 Jan. 22, 1856	345
Sewing-machine	A. B. Wilson	Pittsfield, Mass	Nov. 12, 1850 Jan. 22, 1856	346
Sewing-machine	A. B. Wilson	Waterbury, Conn	Nov. 12, 1850 Dec. 9, 1856	414

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine	A. B. Wilson, by Wheeler and Wilson Manufacturing Company, assignee, (mesne.)	Waterbury, Conn., and Connecticut.	Aug. 12, 1851 Feb. 28, 1860	913
Sewing-machine	A. B. Wilson, by Wheeler and Wilson Manufacturing Company, assignee, (mesne.)	Waterbury, Conn., and Connecticut.	Aug. 12, 1851 Feb. 28, 1860	914
Sewing-machine	A. B. Wilson by Wheeler and Wilson Manufacturing Company, assignee, (mesne,) (extended June 15, 1866.)	Bridgeport, Conn	June 15, 1852 May 11, 1869	3,430
Sewing-machine binder	W. N. Martin	Boston, Mass	Nov. 15, 1870 May 9, 1871	4,376
Sewing-machine-bobbin winder	C. H. Palmer, by the Palmer Automatic Bobbin-Winder Company, assignee.	New York, N. Y	July 12, 1870 Oct. 3, 1871	4,576
Sewing machine, Boot and shoe	H. Destony, by C. Goodyear, jr., F. Du Bois, F. Renaud, and H. T. Close, assignees.	New York, N. Y	Feb. 18, 1862 Sept. 7, 1869	3,635
Sewing machine, Boot and shoe	H. Dunham, jr., by F. W. Carruth and E. P. Richardson, assignees, (mesne.)	Boston and Lawrence, Mass.	Sept. 9, 1869 Apr. 20, 1869	3,386
Sewing machine, Button-hole	W. B. Bartram, by the Bartram and Fanton Manufacturing Company, assignees, (mesne.)	Danbury, Conn	Nov. 7, 1865 May 15, 1866	2,245
Sewing machine, Button-hole	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	Flushing and Brooklyn, N. Y., and Boston, Mass.	Oct. 8, 1867 Mar. 4, 1873	5,306
Sewing machine, Button-hole	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	Flushing and Brooklyn, N. Y., and Boston, Mass.	Aug. 31, 1869 Mar. 25, 1873	5,336
Sewing-machine button-hole attachment	S. J. Baird	Waynesborough, Va	Dec. 14, 1869 Mar. 12, 1872	4,794
Sewing-machine, Carpet-lining	J. F. Fales	Walpole, Mass	Feb. 11, 1868 Dec. 29, 1868	3,247
Sewing-machine case	F. A. Ross and W. H. Marshall	New York, N. Y	Aug. 28, 1855 Feb. 26, 1861	1,145
Sewing-machine cloth-guide	G. F. Clemons	Springfield, Mass	June 27, 1865 July 31, 1866	2,323
Sewing-machine corder	H. Horn, by J. O. Fairbairn, assignee.	Fort Howard and Milwaukee, Wis.	Mar. 21, 1871 May 21, 1872	4,909
Sewing-machine covers, Construction of	J. Johnson	Hartford, Conn	Dec. 31, 1867 May 3, 1870	3,961
Sewing-machine extension-table	J. Bennor, by N. D. Stoops and J. B. Myers, assignees, (mesne.)	Philadelphia, Pa	Mar. 18, 1873 Nov. 25, 1873	5,667
Sewing-machine feeding-mechanism	J. L. and D. H. Coles, by selves, S. W. Johnson, S. H. Smith, N. Campbell, A. G. Darwin, and C. Jussen, assignees.	New York, N. Y	Oct. 20, 1868 Dec. 10, 1872	5,177
Sewing-machine folding-guide	B. C. Boyes, by Willcox and Gibbs Sewing-Machine Company, assignee, (mesne,) (extended July 22, 1870.)	New York, N. Y	July 22, 1856 June 27, 1871	4,449
Sewing-machine folding-guide	A. Douglas, by G. H. Wooster, assignee, (mesne,) (extended October 5, 1872.)	New York, N. Y	Oct. 5, 1858 Dec. 10, 1872	5,180
Sewing-machine for straight seams	J. J. Greenough, by I. M. Singer and E. Clark, assignees.	New York, N. Y	Feb. 21, 1842 Feb. 12, 1856	352
Sewing-machine gage	C. C. Roberts	Perrysburgh, Ohio	Feb. 27, 1872 Dec. 16, 1873	5,689
Sewing-machine guide	J. S. Alter	Leavenworth, Kans	May 3, 1870 Sept. 19, 1871	4,556
Sewing-machine guide	D. Barnum	New York, N. Y	Feb. 12, 1861 Sept. 13, 1864	1,760
Sewing-machine guide	D. Barnum	New York, N. Y	Feb. 12, 1861 Jan. 30, 1866	2,163
Sewing-machine hemmer	J. V. D. Eldredge, by C. A. Shaw and H. W. Boardman, assignees.	Detroit, Mich., Biddeford, Me., and Lowell, Mass.	Oct. 4, 1870 Jan. 2, 1872	4,693
Sewing-machine hemmer	E. Howell	Ashtabula, Ohio	Nov. 16, 1869 May 20, 1873	5,414
Sewing-machine hemming-guide	S. E. Blake and T. Johnson, by A. and L. D. Davis, assignees, (mesne.)	Louisville, Ky., and Worcester, Mass.	Oct. 11, 1859 Nov. 10, 1863	1,569
Sewing machine mechanism, Boot and shoe	F. D. Ballou, by W. N. Ely, assignee, (mesne.)	Stratford, Conn	Jan. 22, 1861 Mar. 31, 1868	2,906
Sewing-machine motor	G. W. Manson, by self and T. D. Harrison, assignees, (mesne.)	New York, N. Y	Dec. 5, 1871 Aug. 20, 1872	5,038
Sewing-machine motor	G. W. Manson, by self and T. D. Harrison, assignees, (mesne.)	New York, N. Y	Dec. 5, 1871 Aug. 20, 1872	5,039
Sewing-machine motor, Hydraulic and pneumatic	J. H. and R. Welch	Georgetown, D. C	Nov. 28, 1871 Apr. 23, 1872	4,882
Sewing-machine, &c., motive-power	J. Zuckermann	San Francisco, Cal	Feb. 16, 1869 Sept. 13, 1870	4,123
Sewing-machine needle	M. P. Carpenter	San Francisco, Cal	Jan. 25, 1870 May 31, 1870	4,002
Sewing-machine needle	H. G. Suplee	San Francisco, Cal	Sept. 14, 1869 Feb. 1, 1870	3,818
Sewing-machine needle	H. G. Suplee	San Francisco, Cal	Sept. 14, 1869 Feb. 1, 1870	3,819
Sewing-machine needle	C. H. Willcox, by the Willcox and Gibbs Sewing-Machine Company, assignee, (mesne.)	New York, N. Y	Mar. 19, 1861 Dec. 5, 1871	4,663

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine presser and stitch-divider	A. S. Woodward	Brooklyn, N. Y	Jan. 10, 1871 Aug. 1, 1871	4,500
Sewing-machine ruffler	C. Scharffe, by W. G. Wilson, assignee.	Cleveland, Ohio	Apr. 20, 1869 May 28, 1872	4,923
Sewing-machine ruffling-attachment	D. C. Carey, by W. G. Wilson, assignee.	Chicago, Ill., and Cleveland, Ohio.	Oct. 2, 1866 Apr. 22, 1873	5,368
Sewing-machine ruffling-attachment	A. Johnston	Ottumwa, Iowa	Oct. 18, 1870 Sept. 17, 1872	5,052
Sewing-machine ruffling-attachment	A. Johnston, by the Johnston Ruffler Company, assignee.	Ottumwa, Iowa	Oct. 18, 1870 Sept. 24, 1872	5,070
Sewing-machine ruffling-attachment	A. Johnston, by the Johnston Ruffler Company, assignee.	Ottumwa, Iowa	Jan. 9, 1872 Sept. 24, 1872	5,071
Sewing-machine ruffling-attachment	A. and W. J. Johnston, by the Johnston Ruffler Company, assignee.	Ottumwa, Iowa	Jan. 31, 1871 Sept. 24, 1872	5,072
Sewing-machine shuttle	G. A. Edwards and G. Schieder	Syracuse, N. Y	Feb. 25, 1873 Apr. 1, 1873	5,342
Sewing-machine shuttle	G. A. Edwards and G. Schieder	Syracuse, N. Y	Feb. 25, 1873 June 3, 1873	5,436
Sewing-machine shuttle	J. C. Wade	Boston, Mass	Aug. 17, 1869 Apr. 26, 1870	3,935
Sewing-machine table and cover	J. J. Wheat, by self and A. Lash, assignees.	Wheeling, W. Va., and Bridgeport, Ohio.	Oct. 4, 1870 Aug. 22, 1871	4,527
Sewing-machine treadle	J. A. Brashaw, W. H. Brown, and D. Whithed.	Lowell, Mass	July 20, 1869 Jan. 17, 1871	4,233
Sewing-machine treadle	S. B. Bushfield, by R. D. Morrison, J. H. Warner, and W. L. Stork, assignees, (mesne.)	Baltimore, Md	July 8, 1873 Oct. 14, 1873	5,595
Sewing-machine treadle	B. C. Pole	Washington, D. C	Sept. 27, 1870 Nov. 22, 1870	4,184
Sewing-machine treadle-attachment	W. Glover, by A. B. Shaw, assignee.	Millbury, Mass	Jan. 29, 1861 Dec. 12, 1871	4,669
Sewing-machine tuck-creaser	J. Bolton, by the Singer Manufacturing Company, assignee.	Chicago, Ill	Mar. 21, 1865 Dec. 13, 1870	4,196
Sewing-machine tuck-creasing attachment	I. M. Rose, by H. W. Fuller, assignee, (mesne.)	Brooklyn, N. Y	Sept. 22, 1863 Dec. 1, 1868	3,218
Sewing-machine tuck-creasing attachment	A. Weissenburn	New York, N. Y	May 28, 1867 June 8, 1869	3,491
Sewing-machine tucker	J. H. Bean, by F. W. Brown, assignee.	Cincinnati, Ohio	Oct. 15, 1872 May 27, 1873	5,427
Sewing machine, Wax-thread	E. E. Bean, by the Shoe-Machinery Manufacturing Company, assignee, (mesne.)	Abington and Boston, Mass.	Dec. 5, 1865 May 27, 1873	5,423
Sewing-machines, Device for heating waxed threads in.	A. Holbrook, jr	Lynn, Mass	June 21, 1864 Dec. 6, 1864	1,831
Sewing-machines, &c., Mechanical movement for	E. Cowles, by E. Holmes, assignee, (mesne.)	Cleveland, Ohio, and New York, N. Y.	June 7, 1870 July 8, 1873	5,461
Sewing, &c., machinery, Mechanical movement for	J. Hanley	New York, N. Y	Dec. 15, 1857 Oct. 10, 1871	4,583
Sewing soles to boots and shoes, Machine for	H. Dunham, jr	Abington, Mass	Sept. 9, 1862 Dec. 16, 1862	1,363
Shade-fixture	S. Hartshorn	New York, N. Y	Sept. 3, 1867 Sept. 2, 1873	5,558
Shade-fixture	S. Hartshorn	New York, N. Y	Oct. 11, 1864 Aug. 27, 1867	2,756
Shaft-coupling	S. C. Schofield	Chicago, Ill	Mar. 26, 1867 Feb. 7, 1871	4,256
Shaft shackle, Wagon	J. P. Thorp, by H. D. and G. F. Smith and E. W. Twichell, assignees.	Plantsville, Conn	May 1, 1860 Sept. 18, 1866	2,362
Shank-spring	E. Heaton	New Haven, Conn	Mar. 10, 1868 July 26, 1870	4,081
Shawl, (Design)	M. Landenberger	Philadelphia, Pa	July 19, 1870 Jan. 31, 1871	4,240
Shawl-strap	G. Couch	Westport, Conn	Sept. 29, 1868 Mar. 7, 1871	4,289
Shears	W. B. Barnard, by Barnard, Son & Co., assignees.	Waterbury, Conn	Dec. 27, 1864 Feb. 12, 1867	2,474
Shears	J. A. Braden	La Grange, Ga	Sept. 21, 1858 Dec. 28, 1858	636
Shears	J. Bryant	Brooklyn, N. Y	Sept. 22, 1863 June 20, 1865	1,999
Shears, Die for making	S. H. Woods, by self and R. S. Gladwin, assignees.	Berlin, Conn	Nov. 16, 1869 Oct. 29, 1872	5,127
Shearing-machines, Construction of	F. Schoettle	Philadelphia, Pa	Jan. 2, 1872 July 9, 1872	4,968
Sheep-shears	F. Van Doren	Adrian, Mich	Oct. 1, 1867 Nov. 26, 1872	5,166
Sheep-shears	R. M. Wilder, by self and H. B. Robinson, assignees.	Cold Water, Mich	May 6, 1856 Mar. 22, 1870	3,889
Sheep-shears, Manufacture of	H. Wendt and H. Seymour, by H. Seymour, assignee.	New York, N. Y	Nov. 22, 1864 Aug. 3, 1869	3,583
Sheep-shearing device	A. J. Fullam, by W. Earl, jr., J. G. Blunt, R. T. Smith, and J. K. Priest, assignees.	Springfield, Vt	May 3, 1864 Dec. 23, 1873	5,701
Sheep-shearing machine	J. V. Jenkins, by R. B. Walker and L. Miller, assignees.	Akron, Ohio	Oct. 21, 1856 May 14, 1867	2,613
Sheep-shearing machine	J. V. Jenkins, by R. B. Walker and L. Miller, assignees.	Akron, Ohio	Sept. 8, 1857 May 14, 1867	2,614
Sheep-shearing machine	A. H. Kennedy, by L. Miller and R. B. Walker, assignees, (mesne.)	Akron, Ohio	Jan. 30, 1866 May 14, 1867	2,615
Sheep-shearing machine, (Division B)	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	Brunswick and Akron, Ohio.	Jan. 30, 1866 July 1, 1873	5,477
Sheet-metal-bending machine	O. W. Stow	Plantsville, Conn	Feb. 28, 1860 Aug. 4, 1868	3,069
Sheet-metal can, (Division C)	J. G. Evenden	Chicago, Ill	June 13, 1871 Oct. 14, 1873	5,599

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Invention.	Inventor.	Residence.	Date.	No.
Sheet-metal-cleaning machine	E. A. Harvey	Wilmington, Del	Apr. 4, 1865 Nov. 28, 1865	2,116
Sheet-metal drying and scouring machine	C. E. L. Holmes	New York, N. Y	July 21, 1868 Oct. 19, 1869	3,678
Sheet-metal-grinding machine	H. Todd, by the Bridgeport Brass Company, assignee.	Bridgeport, Conn	Mar. 5, 1867 Apr. 16, 1867	2,564
Sheet-metal plates, Machine for pressing the lock of.	J. J. Laubach, by the S. Stow Manufacturing Company, assignees.	Plantsville, Conn	Jan. 6, 1857 May 25, 1869	3,466
Sheet-metal serrating machine	W. Eaton, by T. Bracher, assignee, (mesne.)	New York, N. Y	May 16, 1854 Mar. 6, 1866	2,185
Sheet-metal ware, Casting bottoms on	L. J. Worden, by self and Hicks, Wolfe & Co., assignees.	Utica and Troy, N. Y	June 2, 1863 Feb. 28, 1865	1,896
Sheet-metal ware, Die for forming	M. Bray	Newton, Mass	Dec. 17, 1872 Jan. 28, 1873	5,257
Shell, Eccentric explosive	W. W. Hubbell	Philadelphia, Pa	Jan. 22, 1856 Jan. 19, 1858	521
Shingle-cutting machine	J. C. Gillett	Bloomfield, Mich	Dec. 20, 1843 Apr. 30, 1844	62
Shingle-machine	W. R. Close, by self, and T. N. Egery, assignees.	Bangor, Me	June 29, 1869 May 9, 1871	4,371
Shingle-machine	J. Crary	Middleport, Ohio	Nov. 24, 1857 Sept. 28, 1858	604
Shingle-machine	J. R. Hall	Brunswick, Me	June 22, 1858 Oct. 6, 1863	1,550
Shingle-machine	H. H. Low, by C. S. Burt, assignee, (mesne.)	Dunleith, Ill	Mar. 16, 1858 Mar. 6, 1866	2,184
Shingle-machine	H. H. Low, by C. S. Burt, assignee, (mesne.)	Dunleith, Ill	Mar. 16, 1858 Apr. 2, 1867	2,535
Shingle-machine	H. H. Low, by C. S. Burt, assignee, (mesne.)	Dunleith, Ill	Apr. 19, 1859 Oct. 8, 1867	2,774
Shingle-machine	E. R. Morrison	Troy, Pa	Nov. 22, 1853 Mar. 7, 1854	260
Shingle-machine	O. Stoddard	Busti, N. Y	Dec. 20, 1859 Apr. 21, 1863	1,457
Shingle-machine	W. P. Valentine	Fond du Lac, Wis	Mar. 22, 1859 Nov. 14, 1865	2,107
Shingle-machine	E. Webber, (additional improvement July 15, 1858.)	Gardiner, Me	July 28, 1857 June 7, 1859	735
Shingle-sawing machines, Gage for	E. Leonard	Canton, Me	Nov. 4, 1837 Oct. 26, 1838	5
Shingle-strap shearing and punching machine	T. E. Harris	Green Bay, Wis	Aug. 6, 1867 Nov. 14, 1871	4,636
Ship-building	R. F. Loper	Philadelphia, Pa	Nov. 13, 1847 May 7, 1861	1,178
Ship, Iron	R. Montgomery, by M. J. Montgomery, assignee, (mesne.)	New York, N. Y	Dec. 6, 1859 May 15, 1866	2,243
Ship, Iron	R. Montgomery, by M. J. Montgomery, assignee, (mesne.)	New York, N. Y	Dec. 6, 1859 May 15, 1866	2,244
Ship's block	S. Waterman and I. D. Russel, C. Waterman, administratrix, and I. D. Russel.	New York, N. Y	Jan. 21, 1844 June 9, 1857	469
Ship's knee	R. Thomas	Buffalo, N. Y	July 19, 1864 May 23, 1865	1,966
Ships, Side-light for	E. Hidden	New York, N. Y	June 21, 1853 Sept. 8, 1863	1,533
Ships, Side-light for	E. Hidden, by E. S. Hidden, assignee.	New York, N. Y	June 21, 1853 Mar. 15, 1864	1,638
Ships, &c., Ventilating	R. Knecht	New York, N. Y	Nov. 11, 1856 July 6, 1858	570
Shirt-bosom	I. Perego, jr	New York, N. Y	Sept. 25, 1860 June 11, 1861	1,197
Shirt-bosom folder	J. Stevens	New York, N. Y	Nov. 9, 1858 Oct. 24, 1865	2,097
Shoe	J. B. Johnson, by C. Buffum, assignee.	Lynn, Mass	Feb. 7, 1865 Aug. 17, 1869	3,602
Shoe	J. B. Johnson, by C. Buffum, assignee.	Lynn, Mass	Feb. 7, 1865 June 21, 1870	4,037
Shoe-shanks, Machine for making metallic	J. Hyslop, jr., by O. M. Holbrook, assignee.	Abington, Mass	July 16, 1872 Dec. 24, 1872	5,197
Shoe-tips, Machine for swaging	G. A. Mitchell, by the American Shoe-Tip Company, assignee.	Turner, Me., New Haven, Conn.	June 26, 1860 June 16, 1863	1,500
Shoe, Water-proof	T. C. Wales	Dorchester, Mass	Jan. 13, 1863 Apr. 26, 1870	3,942
Shoe, Wooden-soled	H. Wight, by W. C. McClallan, assignee.	Cambridge, Mass	Mar. 6, 1860 Aug. 7, 1860	1,023
Shoes, Fabric for manufacture of	E. Waite, by S. M. Weld, assignee.	Franklin, Mass	Sept. 20, 1870 Nov. 1, 1870	4,173
Shoes, Machine for punching and eyeleting	J. Keith, by E. Townsend, assignee, (mesne.)	Boston, Mass	Dec. 16, 1862 Aug. 14, 1866	2,335
Shot-separating apparatus	W. A. Shaw, by self, G. Willard, and L. and J. Colwell, assignees.	New York, N. Y	Jan. 9, 1866 Apr. 7, 1868	2,910
Shoulder-brace and suspenders, Combined	D. W. Canfield	New York, N. Y	Dec. 16, 1862 July 10, 1866	2,290
Show-case, Thread	A. Stewart	Chicago, Ill	June 16, 1868 Aug. 5, 1873	5,526
Shutter and blind fastener	W. H. Mackrell	New York, N. Y	June 13, 1831 Dec. 10, 1839	18
Shutter-fastening	B. D. Washburn	Boston, Mass	Aug. 31, 1869 Oct. 21, 1873	5,625
Shutter-operator	C. R. Edwards	Niagara City, N. Y	July 8, 1856 Mar. 1, 1859	669
Shuttle, Cloth-weaving	J. Baldwin, (extended January 31, 1854.)	Nashua, N. H	Jan. 31, 1840 May 3, 1850	710

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Sifter, Ash	A. Cummings	New York, N. Y	Mar. 8, 1859 Aug. 16, 1859	792
Sifter, Flour	H. Tilden	Boston, Mass	May 16, 1865 Nov. 14, 1865	2,106
Silica, Apparatus for dissolving	B. Hardinge	New York, N. Y	May 8, 1855 Jan. 22, 1856	344
Silicate, Preparation of soluble	G. E. Van Derburgh, by the Liquid Quartz Company, assignee.	Mamaroneck and New York, N. Y.	May 29, 1860 Apr. 1, 1862	1,297
Silicate to a liquid or gelatinous state, Mode of reducing.	G. E. Van Derburgh, by the New York Quartz Company, assignee, (mesne.)	Mamaroneck, N. Y	May 29, 1860 Apr. 1, 1862 May 17, 1864	1,674
Siliceous substances, Apparatus for treating	G. E. Van Derburgh, by the New York Quartz Company, assignee, (mesne.)	Mamaroneck, N. Y	May 29, 1860 May 17, 1864	1,675
Silver, &c., from waste solutions, Apparatus for saving.	J. Shaw	Bridgeport, Conn	July 8, 1862 Apr. 5, 1864	1,651
Silver-ore, Process of treating	C. Stetefeldt	Austin, Nev	Dec. 31, 1867 Jan. 25, 1870	3,808
Skate	O. G. Brady, by P. Smith, assignee.	New York, N. Y	Sept. 23, 1862 Dec. 24, 1867	2,819
Skate	P. J. Clark, by J. L. Calhoon, assignee, (mesne.)	Wolcottville, Conn	Feb. 5, 1861 Aug. 24, 1869	3,614
Skate	S. H. Evans and L. Geutsch, by H. Scott, assignee, (mesne.)	New York, N. Y	Nov. 24, 1857 Jan. 25, 1870	3,806
Skate	J. Forbes	Halifax, Nova Scotia	Oct. 8, 1867 Nov. 18, 1873	5,660
Skate	J. Forbes	Halifax, Nova Scotia	Dec. 1, 1833 Dec. 23, 1873	5,705
Skate	W. L. Gregory, by self and G. Landon, jr., assignees.	Amsterdam, N. Y	Mar. 4, 1862 Apr. 14, 1863	1,454
Skate	J. Lovatt	Newark, N. J	May 29, 1860 Nov. 10, 1868	3,186
Skate	J. L. Plimpton	New York, N. Y	Jan. 6, 1863 Apr. 5, 1870	3,906
Skate	J. L. Plimpton	New York, N. Y	Jan. 6, 1863 Mar. 7, 1871	4,292
Skate	J. L. Plimpton	New York, N. Y	Jan. 6, 1863 Mar. 7, 1871	4,293
Skate	N. C. Sanford	Meriden, Conn	Feb. 20, 1855 Feb. 7, 1860	895
Skate	W. Scarlett	Aurora, Ill	May 29, 1860 Nov. 13, 1860	1,075
Skate-fastener	E. H. Barney and J. Berry	Springfield, Mass	July 23, 1867 June 30, 1868	3,007
Skate-fastening	E. Behr, by N. Ladd, assignee, (mesne.)	Brooklyn, N. Y	Mar. 29, 1859 Aug. 2, 1870	4,088
Skate-fastening	J. H. Coe and W. B. Sniffen, by E. H. Barney and J. Berry, assignees, (mesne.)	Springfield, Mass	May 3, 1859 Mar. 23, 1869	3,333
Skate-fastening	H. Pickford, by H. Scott, assignee.	New York, N. Y	Feb. 17, 1857 Nov. 29, 1870	4,191
Skate, Roller	W. P. Gregg	Boston, Mass	July 25, 1865 Dec. 23, 1873	5,707
Skate, Wheel	R. Shaler, by O. M. and T. J. Vail, assignees.	Madison, Conn., Brooklyn, N. Y., and Hartford, Conn.	May 29, 1860 Mar. 15, 1864	1,639
Skating-rink	I. H. A. Hervey	Cleveland, Ohio	Jan. 28, 1868 Feb. 9, 1869	3,293
Skins, Machine for cleaning and softening sheep	J. M. Brown	Boston, Mass	July 2, 1867 Aug. 13, 1867	2,727
Skirt	W. Heppenstall, by J. E. Lucas, J. P. Arey, and C. G. Howard, assignees, (mesne.)	Springfield, Mass	Oct. 30, 1860 June 4, 1867	2,634
Skirt-hoop	D. Holmes	Westfield, Mass	June 15, 1858 Aug. 17, 1858	585
Skirt-hoop	J. R. Lattin, by E. Wooster & Co. and F. Hull & Co., assignees.	Birmingham, Conn	Apr. 30, 1867 May 26, 1868	2,946
Skirt, Lady's	E. F. Woodward	New York, N. Y	June 16, 1857 Sept. 29, 1857	501
Skirt, Skeleton	E. G. Atwood, by the Shelton and Osborn Skirt Manufacturing Company, assignee.	Derby and Birmingham, Conn.	Oct. 19, 1858 July 26, 1859	784
Skirt, Skeleton	E. G. Atwood, by the Shelton and Osborn Skirt Manufacturing Company, assignee.	Derby and Birmingham, Conn.	Oct. 19, 1858 July 26, 1859	785
Skirt, Skeleton	J. Draper, by S. H. Doughty, assignee, (mesne.)	Clinton Township, N. J	Oct. 4, 1859 Aug. 1, 1865	2,046
Skirt, Skeleton	J. Draper, by self, S. H. Doughty, J. Brown, and W. King, assignees, (mesne.)	New York, N. Y., Hudson City, N. J., and New York, N. Y.	Oct. 4, 1859 Dec. 27, 1859	870
Skirt, Skeleton	M. Fishel, by self, A. Opper, and L. Popper, assignees.	New York, N. Y	Jan. 14, 1862 Nov. 16, 1869	3,730
Skirt, Skeleton	M. Fishel, by self, A. Opper, and L. Popper, assignees.	New York, N. Y	Jan. 14, 1862 Nov. 16, 1869	3,731
Skirt, Skeleton	C. Neumann	New York, N. Y	Aug. 6, 1859 Aug. 30, 1864	1,755
Skirt, Skeleton	S. S. Sherwood, by J. B. Loomis, assignee, (mesne.)	New York, N. Y., and Chelsea, Mass.	June 26, 1860 Apr. 6, 1869	3,360
Skirt-wire, Manufacture of	T. S. Sperry, by the Silver Skirt and Wire Manufacturing Company, assignee.	New York, N. Y	Mar. 7, 1865 June 5, 1866	2,277
Skirt-wire	T. S. Sperry, by the Silver Skirt and Wire Manufacturing Company, assignee.	New York, N. Y	Mar. 7, 1865 Feb. 19, 1867	2,485

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Invention.	Inventor.	Residence.	Date.	No.
Skirts, Machine for clasping hoops to ladies'	B. A. Mann, by J. Wilcox, assignee, (mesne.)	Meriden, Conn	Dec. 24, 1861 Aug. 4, 1863	1,518
Skirts, Tape for spring	T. D. Hoxsey, by L. S. Scofield, assignee.	Boston, Mass	Feb. 12, 1861 Apr. 19, 1864	1,655
Skylight	G. Hayes	New York, N. Y	Mar. 14, 1871 Nov. 11, 1873	5,650
Skylight	G. Hayes	New York, N. Y	Feb. 22, 1870 Dec. 23, 1873	5,693
Slag, Utilizing furnace	W. H. Smith	Philadelphia, Pa	Dec. 7, 1852 Jan. 3, 1854	252
Slate-frames, Machine for dressing the edges of	J. W. Sayre and A. S. Shull, by H. W. Harper, assignee.	Martin's Creek, Pa	Sept. 26, 1865 Mar. 11, 1873	5,322
Slate, Marking	J. W. Hoard, by H. W. Holly, assignee.	Providence, R. I., and Brooklyn, N. Y.	Feb. 24, 1857 Aug. 25, 1868	3,095
Slate-surface blacking, Composition for	I. N. Peirce	Philadelphia, Pa	Feb. 10, 1863 Oct. 24, 1865	2,095
Slaughtering machine, Hog	J. Parker	Louisville, Ky	Feb. 13, 1855 Nov. 3, 1868	3,180
Sleigh-bells to straps, Attaching	W. E. Barton	East Hampton, Conn	Mar. 7, 1865 Nov. 29, 1870	4,185
Sleigh-bells to straps, Attaching	A. G. Bevin	Chatham, Conn	July 22, 1856 Apr. 8, 1862	1,298
Slotting-machines, Tool-holder for	J. S. Ettenborough	Easton, Pa	Dec. 24, 1872 Feb. 11, 1873	5,277
Smelting-furnace	C. C. Alger	Newburgh, N. Y	June 30, 1857 Mar. 29, 1859	677
Smoke-consuming furnace	F. P. Dimpfel	Philadelphia, Pa	May 9, 1839 July 11, 1848	120
Smut-machine	J. Hollingsworth	Zanesville, Ohio	Apr. 22, 1851 Oct. 10, 1854	281
Smelting furnace, Iron	S. M. Fales	Baltimore, Md	Feb. 8, 1859 Oct. 18, 1859	835
Smelting furnace, Iron and other ore	S. W. Harris, by B. Ray, M. Martin, and J. W. Hoysradt, assignees.	Hudson, N. Y	Feb. 20, 1872 May 6, 1873	5,397
Smelting furnace, Iron-ore	I. A. Roth	Philadelphia, Pa	Oct. 31, 1839 Apr. 6, 1852	214
Smoothing and fluting iron, (Division A)	J. Hewitt	Pittsburgh, Pa	Jan. 28, 1873 Apr. 15, 1873	5,357
Smoothing and fluting iron	J. Hewitt	Pittsburgh, Pa	Jan. 28, 1873 June 3, 1873	5,437
Smoothing-iron heater	W. F. Shaw	Boston, Mass	Sept. 1, 1857 Jan. 31, 1865	1,859
Smut-mill and grain-separator	D. Shaw	Chicago, Ill	Apr. 6, 1852 Nov. 3, 1863	1,564
Smut-mill and grain-separator	D. Shaw, (extended April 6, 1866.)	Elkhart, Ind	Apr. 6, 1852 Jan. 11, 1870	3,794
Snap-hook	C. B. Bristol	New Haven, Conn	May 29, 1866 Nov. 4, 1873	5,639
Snow and ice from roadways, Machine for removing.	M. C. Bogia	Philadelphia, Pa	Mar. 17, 1863 Dec. 23, 1873	5,697
Snow-shovel	W. P. Wentworth, by self and M. Miller, assignees.	Seneca Falls, N. Y	Sept. 13, 1870 Mar. 26, 1872	4,835
Snuffers	O. W. Stow and A. Barnes, by the Peck, Stow, and Wilcox Company, assignees, (extended November 24, 1871.)	Southington, Conn	Nov. 24, 1859 Apr. 2, 1872	4,841
Soap, Apparatus for crutching	G. M. Leslie, by self and J. Oakley, assignees.	Northumberland, Pa., and New York, N. Y.	Sept. 6, 1864 Aug. 23, 1870	4,107
Soap, Cooling and mixing	J. D. Sturges	Chicago, Ill	Apr. 25, 1871 Jan. 30, 1872	4,729
Soap, Cooling and mixing	J. D. Sturges	Chicago, Ill	Apr. 25, 1871 Jan. 30, 1872	4,730
Soap-manufacture	W. T. Bush	Union City, Tenn	Aug. 24, 1869 Oct. 12, 1869	3,668
Soap-manufacture	C. J. Eames and C. A. Seely, by C. A. Seely and J. Eames, assignees.	New York, N. Y	May 28, 1867 July 30, 1872	5,007
Soap, &c., mixing machine	C. Elling	Cleveland, Ohio	Sept. 19, 1871 Apr. 9, 1872	4,854
Soap, Silicated	G. E. Vanderburgh, by self, assignee, (mesne.)	New York, N. Y	Mar. 5, 1861 Mar. 10, 1863	1,430
Socket-couplings	E. P. Gleason	Providence, R. I.	Oct. 16, 1860 Aug. 3, 1869	3,577
Soda-fountain	T. A. Long, by E. C. Thompson, assignee.	Rochester, N. Y	Apr. 2, 1867 July 20, 1869	3,563
Soda-fountain	S. R. Sylvester	Washington, D. C	July 21, 1863 July 18, 1865	2,033
Soda-water apparatus	E. Bigelow	Springfield, Mass	Jan. 25, 1859 Aug. 6, 1867	2,711
Soda-water apparatus	T. Daniels	Toledo, Ohio	Jan. 11, 1859 Mar. 30, 1869	3,351
Soda-water, Apparatus for drawing	W. Gee	New York, N. Y	May 19, 1863 Feb. 2, 1864	1,612
Soda-water, Apparatus for drawing	W. Gee	New York, N. Y	May 19, 1863 Feb. 20, 1866	2,177
Soda-water, Apparatus for supplying and measuring sirups in.	E. Bigelow	Springfield, Mass	Apr. 6, 1858 Dec. 4, 1866	2,406
Soda-water, ice, sirups, &c., Apparatus for	G. D. Dows	Boston, Mass	Dec. 10, 1861 Apr. 28, 1863	1,462
Solar camera	W. H. Masters	Princeton, Ill	Nov. 20, 1866 Sept. 27, 1870	4,136
Solar camera	D. A. Woodward	Baltimore, Md	Feb. 24, 1857 July 10, 1866	2,311
Soldering-apparatus	J. Gulden	Key Port, N. J	Aug. 8, 1871 Apr. 22, 1873	5,362
Soldering-apparatus	F. L. Miller	Brooklyn, N. Y	Nov. 14, 1871 June 18, 1872	4,950

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Invention.	Inventor.	Residence.	Date.	No.
Soldering-furnace	L. Cutting, by F. Cutting, assignee.	San Francisco, Cal	Nov. 19, 1867 Sept. 19, 1871	4,565
Soldering-machine	E. T. Covell	Brooklyn, N. Y	Mar. 26, 1867 Nov. 23, 1869	3,740
Soldering sheet-metal cases	H. Miller, by Devoe Manufacturing Company, assignee, (mesne.)	Long Island City, N. Y	Aug. 18, 1863 Aug. 3, 1869	3,575
Soldering-tool	L. McMurray	Baltimore, Md	Jan. 30, 1872 June 4, 1872	4,934
Sole, Boot and shoe, (Design)	M. Thornton	Philadelphia, Pa	June 1, 1869 Sept. 14, 1869	3,641
Sole-edge-trimming machine for boots and shoes	R. C. Lambert, by the Shoe-Machinery Manufacturing Company, assignee, (mesne.)	Quincy, Mass	Aug. 11, 1868 Nov. 18, 1873	5,661
Sole for boots and shoes, Composition	J. M. Wimby, by P. Ware, jr., assignee, (mesne.)	Philadelphia, Pa., and Newton, Mass.	Feb. 5, 1856 Nov. 24, 1863	1,578
Sole for boots and shoes, Composition	J. M. Wimby, by P. Ware, jr., assignee, (mesne.)	Philadelphia, Pa., and Newton, Mass.	Feb. 5, 1856 Nov. 24, 1863	1,579
Sole for boots and shoes, Composition	J. M. Wimby, by P. Ware, jr., assignee, (mesne.)	Philadelphia, Pa., and Newton, Mass.	Feb. 5, 1856 Nov. 24, 1863	1,580
Sole for boots and shoes, Inner	M. A. Johnson, by H. B. Shattuck, assignee.	Lowell, Mass	Feb. 5, 1867 Sept. 12, 1871	4,547
Sole for boots and shoes, Inner	W. Williams	Rochester, N. Y	Apr. 20, 1869 Apr. 26, 1870	3,944
Sole for boots and shoes, India-rubber	C. McBurney	Roxbury, Mass	Apr. 5, 1859 Dec. 8, 1863	1,587
Sole for boots and shoes, India-rubber	C. McBurney	Roxbury, Mass	Apr. 5, 1859 Dec. 8, 1863	1,588
Sole, Galvanic	S. Nowlan, by C. Nettam, assignee.	New York, N. Y	June 18, 1861 Mar. 11, 1862	1,286
Sole trimming and burnishing machine	S. H. Hodges, by J. W. Abbott, assignee, (mesne.)	Lynn, Mass	July 25, 1871 Dec. 10, 1872	5,183
Sole, Water-proof	J. W. Coburn, by the Water-Proof Sole Company, assignee, (mesne.)	New Haven, Conn	June 27, 1865 Apr. 16, 1867	2,565
Soles and uppers of boots and shoes, Machine for uniting.	A. A. Reed, by G. McKay, assignee.	North Bridgewater and Boston, Mass.	Oct. 22, 1872 Nov. 26, 1872	5,163
Soles, Machine for cutting boot and shoe	J. W. Hatch and H. Churchill.	Rochester, N. Y	Jan. 2, 1855 July 24, 1866	2,321
Soles of boots and shoes, Channeling	M. Wesson	Springfield, Mass	May 24, 1859 Dec. 1, 1863	1,586
Soles of boots and shoes, Machine for channeling	M. Wesson, by G. McKay, trustee of the McKay Sewing-Machine Association, assignee, (extended May 24, 1873.)	Springfield, Mass	May 24, 1859 Sept. 2, 1873	5,561
Soles, Machine for cutting out boot and shoe	C. H. Griffen, by D. Knox and W. D. Richards, assignees, (mesne.)	Lyon, Mass	June 12, 1855 Jan. 26, 1864	1,610
Sorghum juice and sirup, Refining	J. F. Shelden	Abingdon, Ill	Sept. 23, 1863 May 10, 1864	1,667
Sower, Broadcast	T. G. and E. A. Floyd	Macomb, Ill	Apr. 2, 1867 Aug. 11, 1868	3,075
Sowing-machine	P. Seymour	East Bloomfield, N. Y	May 7, 1845 July 15, 1856	377
Sowing machine, Fertilizer	W. S. Bartle, by L. Bickford and H. Hoffman, assignees.	Newark and Macedon, N. Y.	Apr. 22, 1856 May 18, 1858	558
Sowing machine, Fertilizer	J. F. Keller	Greencastle, Pa	Jan. 8, 1861 July 5, 1864	1,718
Sowing machine, Fertilizer	J. F. Keller, by A. Miller, W. H. Protzman, A. R. Appleman, and W. Updegraff, assignees.	Hagerstown, Md	Jan. 8, 1861 May 25, 1869	3,461
Sowing plaster, ashes, seeds, &c., Machine for	J. Hatch	Great Bend, Pa	Aug. 17, 1835 Jan. 9, 1838	1
Spade, shovel, or dung-fork handle	G. C. Howard, by A. V., J. D., and F. Blanchard, assignees.	Hardwick and Palmer, Mass.	July 21, 1857 Oct. 22, 1861	1,230
Spark and gas consumer	D. Matthew	Philadelphia, Pa	Feb. 20, 1849 Oct. 4, 1853	248
Spark and gas consumer	D. Matthew	Philadelphia, Pa	Feb. 20, 1849 Feb. 26, 1856	356
Spark-arrester	W. C. Grimes	Philadelphia, Pa	Feb. 12, 1842 Dec. 25, 1855	335
Spark-arrester	D. Matthew	Philadelphia, Pa	Dec. 31, 1840 Mar. 4, 1856	357
Spark-arrester	J. Radley, and J. W. Hunter	New York, N. Y	Jan. 22, 1850 Jan. 16, 1855	293
Spark-arrester	E. Wand, by self and B. F. Dorris, assignees.	Eugene City, Oreg	Feb. 1, 1870 June 20, 1871	4,433
Spark arrester and consumer	G. H. Griggs, by C. F. Pike, assignee.	Whitestone, N. Y	Nov. 7, 1871 Sept. 10, 1872	5,050
Spark arrester and consumer	G. H. Griggs, by C. F. Pike, assignee.	Whitestone, N. Y	Nov. 7, 1871 Sept. 10, 1872	5,051
Spark arrester and consumer	R. Hawkes and H. J. Paine, by selves and J. Kelly, assignees.	Providence, R. I	Mar. 19, 1872 Sept. 17, 1872	5,069
Spark-arrester, Locomotive	F. Kearney and L. F. Tronson	Newark, N. J	Apr. 11, 1871 Dec. 10, 1872	5,184
Spark-arrester, Locomotive-engine	W. M. Thornton and T. A. Buckland.	Saint Louis, Mo	Nov. 5, 1872 Dec. 16, 1873	5,687
Speaking-tube	J. R. Creighton, by O. B. Hall, 2d, assignee.	Boston, Mass	June 29, 1869 Sept. 30, 1873	5,580
Speaking-tube	C. A. Fredericks	Brooklyn, N. Y	Feb. 4, 1873 Oct. 7, 1873	5,588
Spectacle-frame	T. Noel, by A. Lorsch, assignee	Memphis, Tenn	Jan. 11, 1859 Nov. 9, 1869	3,725
Spectacles	L. Black	Detroit, Mich	Nov. 2, 1869 July 12, 1870	4,065

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Invention.	Inventor.	Residence.	Date.	No.
Spelling-block	S. L. Hill, by self, A. Palmer, and A. S. Doane, assignees.	Williamsburgh, N. Y	Oct. 19, 1858 Mar. 26, 1867	2,528
Spice-box	W. A. Miles, by J. H. Steele, assignee.	New Haven, Conn	Oct. 2, 1866 Oct. 26, 1869	3,691
Spice-box	W. A. Miles, by J. H. Steele, assignee.	New Haven, Conn	Oct. 2, 1866 Oct. 26, 1869	3,692
Spike-machine	A. M. George	Nashua, N. H	Dec. 18, 1855 Feb. 19, 1856	351
Spikes and nails, Machine for making wrought-iron.	E. Corning and J. Horner	Albany, N. Y	Mar. 13, 1834 Jan. 17, 1846	78
Spirit-meter	J. G. Allen	Philadelphia, Pa	Apr. 2, 1867 June 25, 1867	2,657
Spittoon	W. H. Topham	Longmeadow, Mass	Aug. 2, 1870 July 29, 1873	5,514
Spinning and twisting roving, Speeder for	T. Mayor, by self and G. Chatterton, assignees, (mesne.)	Providence, R. I	July 20, 1869 May 28, 1872	4,921
Spinning-frames, Lubricating the bearings of	A. H. Gilman, by self, assignee, (mesne.)	Milford, Mass	June 14, 1864 Apr. 9, 1867	2,544
Spinning hemp, flax, &c	M. Day	Roxbury, Mass	June 2, 1836 Oct. 22, 1839	15
Spinning-jack, Self-acting	W. H. Brothers, by B. S. Grant, assignee, (mesne.)	Hartland, Vt., and Boston, Mass.	Aug. 31, 1869 Jan. 2, 1872	4,688
Spinning-jack, Self-acting	P. Keane, by self and S. Bilbrough, assignees.	Cohoes, N. Y	Aug. 8, 1871 Jan. 30, 1872	4,725
Spinning-machine	T. Pye, by W. Earl, jr., assignee.	Nashua, N. H	Feb. 14, 1865 Sept. 4, 1866	2,351
Spinning-machine-lubricating bolster	M. F. Wilmarth, by A. F. and S. A. Jenks, J. R. Fales, and F. J. Rabbeth, assignees.	North Providence, R. I	July 7, 1863 Dec. 19, 1871	4,666
Spinning-machine spindle	B. H. Jenks	Bridesburgh, Pa	Dec. 17, 1872 Aug. 5, 1873	5,521
Spinning machine, Throstle	C. H. Hunt	Madison, N. H	Sept. 28, 1852 May 17, 1864	1,672
Spinning-machine ring	W. T. Carroll, by G. and W. F. Draper, assignees.	Hopedale, Mass	June 2, 1868 Nov. 9, 1869	3,714
Spinning-machines, Drawing-regulator for	N. Wyllys, by E. D. and G. Draper, assignees, (mesne.)	Glastenbury, Conn., and Milford, Mass.	Jan. 28, 1851 July 12, 1864	1,726
Spinning-machines, Ring for ring and traveler	J. W. Wattles	Canton, Mass	Mar. 17, 1868 Oct. 20, 1868	3,165
Spinning-mule, Self-acting	W. Rouse	Taunton, Mass	Nov. 2, 1852 Mar. 15, 1853	233
Spinning-ring	J. Birkenhead	Ilion, N. Y	May 24, 1864 July 20, 1869	3,557
Spinning-ring	W. Jenckes, by G. Draper & Son, assignees.	Manchester, N. H., and Hopedale, Mass.	Aug. 25, 1863 Dec. 23, 1873	5,709
Spinning-spindle	A. H. Gilman	Boston, Mass	June 23, 1857 Aug. 9, 1870	4,094
Splints for fractures	A. Hays	Pittsburgh, Pa	Aug. 13, 1850 Mar. 8, 1853	232
Splints, Machine for cutting	J. C. Brown	Brooklyn, N. Y	June 21, 1864 Sept. 12, 1865	2,071
Splints, Machine for cutting	J. C. Brown	Brooklyn, N. Y	June 21, 1864 Feb. 13, 1866	2,168
Spoke-machine	R. H. Boyton	Oshkosh, Wis	Jan. 23, 1866 Aug. 30, 1870	4,109
Spoke-tenoning and hub-boring machine	J. Deming, by self and A. R. Silver, assignees.	Salem, Ohio	May 17, 1870 Sept. 12, 1871	4,552
Spoon and fork	F. Grosjean	New York, N. Y	Jan. 28, 1862 July 12, 1864	1,727
Spoon and fork	F. Grosjean	New York, N. Y	Jan. 28, 1862 July 16, 1867	2,689
Spoon and fork handles, (Design)	E. C. Moore, by Tiffany & Co., assignees.	Yonkers and New York, N. Y.	Apr. 18, 1871 Sept. 16, 1873	5,573
Spoon, Iron	G. I. Mix	Yalesville, Conn	Oct. 27, 1857 Aug. 8, 1871	4,506
Spoons, &c., Buff for polishing	L. Boardman	East Haddam, Conn	Dec. 15, 1843 Oct. 7, 1856	399
Spoons, Manufacture of	R. B. Perkins, by C. Parker, and R. B. Perkins, assignees.	Meriden, Conn	Apr. 1, 1862 May 29, 1866	2,258
Spoons, Sheet-metal	F. Grosjean	New York, N. Y	Jan. 28, 1862 July 7, 1863	1,509
Spoons, Wire-strengthened	W. Mix, by C. Parker, assignee.	Prospect and Meriden, Conn.	May 1, 1849 Aug. 4, 1857	480
Spring	T. K. John	Moscow, Russia	Jan. 7, 1873 Dec. 16, 1873	5,685
Spring-back chair	R. H. Staples	Lowell, Mass	Nov. 8, 1864 June 6, 1865	1,986
Spring-chair	A. M. Blake	Canton, Ohio	Apr. 28, 1868 Apr. 20, 1869	3,385
Spring-heads, Manufacture of	G. Hopson	Bridgeport, Conn	June 27, 1871 Jan. 7, 1873	5,219
Spring-seat	J. L. Whipple	Detroit, Mich	June 9, 1868 Oct. 5, 1869	3,664
Square and rule graduating machine	N. Millington, by the Eagle Square Company, assignee, (extended August 8, 1868.)	Shaftsbury, Vt	Aug. 8, 1854 Aug. 22, 1871	4,523
Squares, Machine for graduating carpenter's	H. K. Jones, by the Hart, Bliven and Mead Manufacturing Company, assignee.	Kensington, Conn	Aug. 10, 1869 May 13, 1873	5,408
Squares, Manufacture of metallic	S. Darling	Bangor, Me	Oct. 6, 1857 Feb. 18, 1868	2,869
Stair-rod	W. T. Meserean	Newark, N. J	Nov. 20, 1866 Jan. 5, 1869	3,253
Stalk-cutter	T. A. Galt and G. S. Tracy	Sterling, Ill	Nov. 28, 1871 Jan. 14, 1873	5,233
Stalk-cutter	R. B. and J. R. Parks	Neponset, Ill	Jan. 19, 1869 Oct. 19, 1869	3,673

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Stamp, Canceling	J. W. Foster	Washington, D. C	Jan. 3, 1863 Feb. 14, 1865	1,871
Stamp, Canceling hand	M. P. Norton, by the Secombe Manufacturing Company, assignee, (mesne.)	Troy, N. Y	Apr. 14, 1863 Oct. 4, 1870	4,144
Stamp, Hand	D. H. Chamberlain, by N. C. Chamberlain, assignee.	Boston, Mass	July 9, 1877 Aug. 13, 1867	2,734
Stamp, Hand	D. H. Chamberlain, by E. D. Chamberlain and C. H. Brown, assignees.	Westfield, N. J., and New York, N. Y.	Jan. 29, 1867 Jan. 21, 1868	2,847
Stamp, Hand	B. B. Hill	Chicopee, Mass	Nov. 6, 1866 Jan. 14, 1868	2,838
Stamp, Hand	B. B. Hill	Chicopee, Mass	Nov. 6, 1866 Jan. 19, 1869	3,281
Stamp, Hand	H. Holt, by Secombe Manufacturing Company, assignee, (mesne.)	Brooklyn and New York, N. Y.	June 9, 1863 Aug. 26, 1873	5,555
Stamp, Hand	T. J. W. Robertson, (extended September 22, 1871.)	Washington, D. C	Sept. 22, 1857 Dec. 19, 1871	4,675
Stamp-mills and ore-crushers, Apparatus for collecting dust from.	J. Brodie	San Francisco, Cal	May 17, 1864 Oct. 17, 1865	2,090
Stamp, Post marking and canceling hand	M. P. Norton	Troy, N. Y	Apr. 14, 1863 Aug. 3, 1869	3,586
Stamp, Post marking and canceling hand	M. P. Norton, by H. M. Ingalls, assignee.	Troy, N. Y	Apr. 14, 1863 Oct. 4, 1870	4,143
Stamp, Post-office	M. P. Norton, by J. Shavor and A. C. Corse, assignees.	Troy, N. Y	Apr. 14, 1863 Aug. 23, 1864	1,748
Stamps and hammers, Means of operating	C. R. James, by self and N. W. Condict, jr., assignees.	Jersey City, N. J	June 19, 1866 Jan. 15, 1867	2,461
Stamps to letters, Machine for affixing	G. K. Snow, by R. Hoe & Co., assignees, (mesne.)	New York, N. Y	May 18, 1858 Aug. 20, 1867	2,737
Stamping sheet-metal ware, Machine for	W. D. Grimshaw, by self, F. P. Erskine, and J. B. Peabody, assignees.	Ansonia, Conn., Chicago, Ill., and New York, N. Y.	Dec. 1, 1868 Feb. 20, 1872	4,765
Stanchion	W. C. Gifford	Jamestown, N. Y	July 19, 1870 Apr. 25, 1871	4,353
Starching-machine	P. O'Thayne, by self and C. Willard, assignees.	New York, N. Y	Mar. 26, 1872 Aug. 13, 1872	5,031
Station indicator, Railway	C. A. McEvoy	Richmond, Va	Nov. 20, 1855 Aug. 23, 1859	800
Station indicator, Railway	A. C. Rodgers, by self and L. Shaffer, assignees.	Fort Washington, Pa	Sept. 21, 1869 Feb. 15, 1870	3,841
Stationery furniture	C. H. Wright	Baltimore, Md	Dec. 28, 1869 June 14, 1870	4,034
Stave-cutting machine	C. Manning	Acton, Mass	Sept. 14, 1840 Dec. 28, 1840	29
Stave-cutting machine	W. Steele	Wheeling, W. Va	Oct. 19, 1858 Dec. 18, 1866	2,427
Stave crozing and chamfering machine	H. Wilde, by E. and B. Holmes, assignees.	Newark, N. J., and Buffalo, N. Y.	Aug. 19, 1869 Oct. 21, 1873	5,626
Stave-crozing machine	H. Elliott, by self, E. Smith, and S. S. Gray, assignees, (mesne.)	Boston, Mass	Feb. 16, 1869 June 6, 1871	4,411
Stave-dressing machinery	I. Judson	New Haven, Conn	May 1, 1847 Mar. 8, 1859	911
Stave-machine	T. Hanvey	Elma, N. Y	Aug. 25, 1863 July 5, 1864	1,717
Stave-machine	J. E. Warner	Boston, Mass	Nov. 15, 1863 June 28, 1864	1,713
Staves, Machine for chiming and jointing	D. R. Bowker and W. P. Hensel.	New York, N. Y	Feb. 12, 1861 May 19, 1863	1,474
Steam-alarm	S. W. Warren by H. Martin, assignee, (mesne.)	Wallingford, Conn	July 6, 1858 Apr. 27, 1869	3,400
Steam and air brake	J. W. Gardner	Cleveland, Ohio	Jan. 23, 1872 Apr. 23, 1872	4,879
Steam and gas engine	J. A. H. Ellis	Springfield, Vt	Oct. 25, 1870 Mar. 12, 1872	4,806
Steam and hydraulic press	J. F. Taylor	Charleston, S. C	Feb. 28, 1871 Apr. 2, 1872	4,851
Steam and vacuum gage	P. Stillman	New York, N. Y	May 9, 1848 July 29, 1851	203
Steam-boiler	E. N. Dickerson	New York, N. Y	Mar. 1, 1864 June 13, 1865	1,983
Steam-boiler	F. P. Dimpfel	Philadelphia, Pa	Apr. 1, 1856 Aug. 31, 1858	594
Steam-boiler	W. M. and J. B. Ellis	Washington, D. C	Sept. 29, 1857 Apr. 13, 1858	544
Steam-boiler	W. M. and J. B. Ellis	Washington, D. C	Aug. 26, 1862 Mar. 15, 1864	1,636
Steam-boiler	W. M. and J. B. Ellis	Washington, D. C	Aug. 26, 1862 Mar. 15, 1864	1,637
Steam-boiler	L. Lefebare	New Orleans, La	May 3, 1859 Oct. 16, 1860	1,065
Steam-boiler	H. Leslie	Jersey City, N. J	July 5, 1864 Apr. 5, 1870	3,904
Steam-boiler	J. Montgomery	Memphis, Tenn	Dec. 26, 1845 Aug. 15, 1848	192
Steam-boiler	W. Oldman	Buffalo, N. Y	June 7, 1859 Nov. 22, 1859	857
Steam-boiler	T. T. Prosser, by self and M. C. and R. A. Darling, assignees.	Fond du Lac, Wis	Aug. 11, 1863 Dec. 1, 1863	1,585
Steam-boiler	P. Quinn	South New Market, N. H	Dec. 13, 1870 Mar. 14, 1871	4,309
Steam-boiler	R. E. Rogers and J. Black	Philadelphia, Pa	Jan. 19, 1864 Dec. 19, 1865	2,130
Steam-boiler	H. C. Sergeant	Columbus, Ohio	Aug. 22, 1865 Oct. 3, 1865	2,082
Steam boiler and furnace	H. Boardman	Plattsburgh, N. Y	Aug. 14, 1840 Feb. 25, 1851	190

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Invention.	Inventor.	Residence.	Date.	No.
Steam boiler and furnace	G. W. Lascell, by self and H. Robinson, assignees.	Syracuse, N. Y., and Jersey City, N. J.	Nov. 19, 1872 May 6, 1873	5, 398
Steam-boiler furnace	B. Crawford, by English, Bennett, Frisbee & Crawford, assignees.	Allegheny City, Pa	Jan. 29, 1850 Dec. 2, 1862	1, 357
Steam-boiler furnace	J. R. Robinson	Boston, Mass	Mar. 5, 1861 May 14, 1861	1, 184
Steam-boiler furnaces, Means of promoting combustion in.	J. C. Tiffany and G. G. Heermance, by J. C. Tiffany, assignee.	New York and Hudson, N. Y.	Apr. 2, 1861 Apr. 16, 1861	1, 174
Steam-boiler indicator	L. J. Knowles	Warren, Mass	Feb. 10, 1857 Feb. 23, 1858	530
Steam-boiler indicator	L. J. Knowles	Warren, Mass	Feb. 10, 1857 Jan. 11, 1859	647
Steam-boiler safety-apparatus	T. Clark, by the Clark's Patent Steam and Fire Regulator Company, assignee.	Bedford and New York, N. Y.	Aug. 21, 1847 Aug. 28, 1860	1, 031
Steam-boiler, Sectional	W. H. Cornell	Easton, Pa	Apr. 18, 1871 Dec. 19, 1871	4, 677
Steam-boiler sediment-collector	C. W. Deane	Philadelphia, Pa	Apr. 4, 1871 Nov. 14, 1871	4, 635
Steam-boilers, and apparatus to prevent explosion of.	C. Evans	Pittsburgh, Pa	Apr. 15, 1839 Nov. 23, 1852	225
Steam boilers and pipes, Composition for covering.	J. Riley and C. W. Bissell, by the United States and Foreign Salamander Felting Company, assignee, (mesne.)	Troy, N. Y	Oct. 5, 1869 Sept. 27, 1870	4, 134
Steam-boilers, &c., Composition for covering	F. Leroy, by F. Leroy, administrator, and P. A. V. Le Lubez, assignee.	London, England	Dec. 14, 1869 Aug. 9, 1870	4, 095
Steam-boilers, Composition for preventing incrustation of.	H. F. and L. F. Knoderer	Chillicothe, Ohio	Jan. 3, 1860 May 15, 1860	960
Steam-boilers, Preventing explosion of	T. S. Easton, (additional improvement May 17, 1842.)	Mobile, Ala	Feb. 12, 1842 June 11, 1842	41
Steam-boilers, Preventing explosion of	T. S. Easton, (additional improvement May 17, 1842.)	Mobile, Ala	Feb. 12, 1842 June 11, 1842	42
Steam-boilers, Preventing explosion of	T. S. Easton, (additional improvement May 17, 1842.)	Mobile, Ala	Feb. 12, 1842 Oct. 7, 1842	46
Steam-boilers, Prevention of incrustation of	N. B. Webster and R. W. Young	Portsmouth and Richmond, Va.	Oct. 23, 1860 Oct. 2, 1866	2, 371
Steam-boilers with water, Steam-engine for supplying.	H. R. Worthington	New York	July 24, 1844 Sept. 7, 1844	66
Steam-boilers with water to prevent explosion, Supplying.	I. N. Coffin	Washington, D. C	Sept. 30, 1839 Apr. 26, 1845	69
Steam-brake, Railway-car	S. N. Goodale, by the Goodale Steam-Car Brake Manufacturing Company, assignee. (mesne.)	Saint Louis, Mo	May 30, 1865 Mar. 5, 1872	4, 779
Steam-coiled hoop	J. Tomlinson, by self and A. Gage, assignees.	Wellington Square, Canada	May 26, 1863 Oct. 6, 1863	1, 551
Steam-cylinders with steam-chests, Mode of connecting.	F. E. Sickels	New York, N. Y	Sept. 19, 1845 June 1, 1858	565
Steam-engine	H. W. Adams	Philadelphia, Pa	June 6, 1871 Nov. 5, 1872	5, 128
Steam-engine	G. H. Bailey and H. H. Burritt, by selves, C. M. Bolen, T. S. Crane, and F. K. Day, assignees, (mesne.)	Newark, N. J	July 25, 1871 July 30, 1872	5, 005
Steam-engine	E. D. Barrett, by self and H. B. Bigelow, assignees.	New Haven, Conn	Jan. 19, 1858 Aug. 29, 1865	2, 060
Steam-engine	E. Bourson, by J. Strehler, assignee.	New York, N. Y	Nov. 19, 1867 Sept. 21, 1869	3, 645
Steam-engine	T. Carpenter	Providence, R. I	Jan. 29, 1861 Sept. 1, 1863	1, 532
Steam-engine	F. P. Dimpfel	New York, N. Y	July 1, 1851 Feb. 21, 1865	1, 877
Steam-engine	P. Estes	Leavenworth, Kans	Oct. 25, 1870 Feb. 28, 1871	4, 279
Steam-engine	J. Houpt	Springtown, Pa	May 18, 1869 May 9, 1871	4, 374
Steam-engine	W. A. Lighthall	Albany, N. Y	Apr. 4, 1838 July 18, 1840	21
Steam-engine	E. Lynch	Washington, D. C	Apr. 12, 1859 Dec. 3, 1861	1, 239
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	907
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	908
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	909
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	910
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	911
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Feb. 21, 1860	912
Steam-engine	F. E. Sickels	New York, N. Y	Sept. 19, 1859 Jan. 1, 1861	1, 106
Steam-engine	F. E. Sickels	New York, N. Y	Sept. 19, 1845 Jan. 1, 1861	1, 107
Steam-engine	F. E. Sickels, (extended September 19, 1859.)	New York, N. Y	Sept. 19, 1845 Jan. 21, 1862	1, 260
Steam-engine	C. E., J., and S. Wethered	Baltimore, Md	Sept. 27, 1853 Dec. 29, 1863	1, 595
Steam-engine for street-cars	R. H. Long	Philadelphia, Pa	Jan. 24, 1860 Jan. 7, 1862	1, 253
Steam-engine for street-cars	R. H. Long	Philadelphia, Pa	Jan. 24, 1860 Jan. 7, 1862	1, 254

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Invention.	Inventor.	Residence.	Date.	No.
Steam-engine for street-cars	R. H. Long	Philadelphia, Pa	Jan. 24, 1860 Jan. 15, 1861	1,125
Steam-engine lubricator	J. Storer	New York, N. Y	Mar. 13, 1866 Mar. 3, 1868	2,890
Steam-gage	A. J. Allen, by R. Allen, assignee.	Rock Stream, N. Y	Oct. 4, 1859 July 17, 1866	2,313
Steam-gage	T. W. Lane, (extended February 22, 1873.)	Meredith, N. H	Feb. 22, 1859 Mar. 11, 1873	5,320
Steam-gage	E. Quinn	Washington, D. C	Mar. 13, 1866 Mar. 19, 1867	2,516
Steam-gage	T. Stubblefield	Columbus, Ga	July 18, 1854 Mar. 15, 1859	676
Steam-gage, Recording	D. P. Davis, by G. J. Hunter, assignee.	Jersey City, N. J	July 2, 1867 Jan. 21, 1873	5,252
Steam-gage, Registering	E. Clark, by the United States Steam-Gage Company, assignee.	Louisville, Ky	Apr. 5, 1870 Mar. 5, 1872	4,775
Steam-generator	G. H. Babcock and S. Wilcox, by G. H. Babcock and J. P. Manton, assignees.	New York, N. Y	May 28, 1867 Aug. 15, 1871	4,512
Steam-generator	W. Baxter	Newark, N. J	Oct. 27, 1868 Apr. 20, 1869	3,384
Steam-generator	J. F. Boynton, by H. L. Stuart, assignee.	Syracuse and New York, N. Y.	Sept. 10, 1867 Aug. 25, 1868	3,102
Steam-generator	J. F. Boynton, by H. L. Stuart, assignee.	New York, N. Y	Sept. 10, 1867 Aug. 25, 1868 Jan. 25, 1870	3,809
Steam-generator	W. Lowe	Bridgeport, Conn	June 4, 1867 May 31, 1870	4,000
Steam-generator	T. H. Muller, by W. B. Abendroth, J. Griffith, G. W. Wundram, and T. H. Muller, assignees.	New York, N. Y	Oct. 27, 1868 Mar. 1, 1870	3,853
Steam-generator	H. Gerner, by the American Gerner Boiler Company, assignee.	New York, N. Y	Jan. 21, 1868 Nov. 29, 1870	4,186
Steam-generator	C. F. Jauriet, by self and A. I. Ambler, assignees.	Aurora, Ill	Feb. 27, 1866 Dec. 31, 1867	2,824
Steam-generator	C. F. Jauriet, by self and A. I. Ambler, assignees.	Aurora, Ill	Feb. 27, 1866 Dec. 31, 1867	2,825
Steam-generator	A. L. Pennock	Philadelphia, Pa	May 24, 1870 Mar. 14, 1871	4,301
Steam-generator	G. A. Riedel, by J. P. and J. Wood and W. E. and C. J. Wood, assignees.	Philadelphia, Pa., and Baltimore, Md.	Feb. 23, 1869 Aug. 17, 1869	3,611
Steam-generator	R. C. Rogers and J. Black	Philadelphia, Pa	May 28, 1867 Aug. 29, 1871	4,535
Steam-generator	J. B. Root, by self and T. C. M. Paton, assignees.	New York, N. Y	Feb. 4, 1868 July 26, 1870	4,082
Steam-generator	J. B. Root, by self and T. C. M. Paton, assignees.	New York, N. Y	Feb. 4, 1868 July 26, 1870	4,083
Steam-generator	J. B. Root, by self and T. C. M. Paton, assignees, (mesne.)	New York, N. Y	Feb. 4, 1868 Jan. 2, 1872	4,690
Steam-generator	J. B. Root, by T. C. M. Paton, assignee, (mesne.)	New York, N. Y	Feb. 4, 1868 Aug. 5, 1873	5,524
Steam-generator	H. M. and J. F. Rulon, by selves and W. Clark, assignees.	Monmouth, Ill	Aug. 1, 1871 Mar. 26, 1872	4,833
Steam-generator furnace	A. J. Warren and D. W. Wilson, by selves, N. Shaw, and U. M. Stone, assignees.	West Eau Claire and Augusta, Wis.	June 22, 1869 Dec. 14, 1869	3,766
Steam-generator, Sectional	S. L. Wiegand, by self and W. J. Budd, assignees, (mesne.)	Philadelphia, Pa	Aug. 6, 1867 Sept. 24, 1872	5,076
Steam-generator tube	G. E. Van Amringe	New York, N. Y	Dec. 22, 1868 Mar. 30, 1869	3,346
Steam-heater	J. Shackleton	Rahway, N. J	Feb. 23, 1869 Feb. 15, 1870	3,843
Steam-heater	J. Shackleton	Rahway, N. J	Feb. 23, 1869 Feb. 15, 1870	3,844
Steam-heater	J. Shackleton	Rahway, N. J	Feb. 23, 1869 Feb. 15, 1870	3,845
Steam-heater	S. F. Gold and W. A. Foskett, by the Union Steam and Water Heating Company, assignee, (mesne.)	Englewood, N. J., and New Haven, Conn.	July 29, 1862 Nov. 21, 1871	4,643
Steam-heater for buildings	S. F. Gold, by the Union Steam and Water Heating Company, assignee, (mesne.)	Englewood, N. J	June 21, 1859 Feb. 6, 1872	4,744
Steam-power-air-brake device	G. Westinghouse, jr.	Pittsburgh, Pa	Aug. 8, 1871 July 29, 1873	5,505
Steam-power-brake device	G. Westinghouse, jr.	Pittsburgh, Pa	Apr. 13, 1869 July 29, 1873	5,504
Steam-trap	J. Avery, jr., by G. Doyle, assignee.	Barre, Mass	Apr. 10, 1860 Apr. 2, 1872	4,847
Steam-trap	J. H. Blessing, by self and F. Townsend, assignees.	Albany, N. Y	Feb. 13, 1872 Aug. 26, 1873	5,549
Steam-trap	I. E. Giddings	Springfield, Mass	May 30, 1871 June 25, 1872	4,954
Steam-trap	T. Sault	Seymour, Conn	Feb. 28, 1860 Mar. 24, 1863	1,441
Steel, Apparatus for the manufacture of Bessemer	H. Chisholm	Cleveland, Ohio	Apr. 25, 1871 June 27, 1871	4,439
Steel, Converting iron into	J. F. Boynton, by the Barron's Patent Steel Manufacturing Company, assignee.	New York, N. Y	July 16, 1867 Dec. 1, 1868	3,222
Steel direct from the ore, Process of making	G. H. Smith	Rochester, N. Y	July 18, 1854 Aug. 14, 1866	2,339

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Steel direct from the ore, Process of making	G. H. Smith	Rochester, N. Y	July 18, 1854 Aug. 14, 1866	2,334
Steel for tools, cutlery, &c., Manufacture of	T. Brooks, by self, T. Jackson, F. A. Foster, and C. Aultman, assignees, (mesne.)	Minerva, Ohio	Aug. 15, 1871 Jan. 2, 1872	4,692
Steel in crucibles, Manufacture of cast	C. M. Nes	York, Pa	Dec. 12, 1871 Jan. 30, 1872	4,727
Steel, Manufacture of	W. Fields	Wilmington, Del	May 10, 1870 July 12, 1870	4,069
Steel, Manufacture of	S. W. Kirk, by self and H. Thomas, assignees.	Philadelphia, Pa	Mar. 20, 1866 Mar. 28, 1871	4,314
Steel, Manufacture of cast	L. L. Viger, by W. W. Averell, assignee.	Bath, N. Y	Sept. 28, 1869 Feb. 15, 1870	3,835
Steel, Manufacture of cast	L. L. Viger, by W. W. Averell, assignee.	Montreal, Canada, and Bath, N. Y.	Sept. 28, 1869 Oct. 11, 1870	4,153
Steel springs, Tempering	J. H. Deniger	Bridgeport, Conn	Mar. 23, 1869 June 22, 1869	3,511
Steel to articles of iron, Method of applying cast	W. H. Singer	Alleghany City, Pa	Dec. 22, 1868 Feb. 27, 1872	4,772
Steel to render it tougher, stronger, and more elastic, Process of treating.	W. Hasen	Milwaukee, Wis	Sept. 20, 1864 Dec. 13, 1864	1,833
Steering-apparatus	W. Godsoe, by self and I. Ayers, assignees.	Manchester, Mass	June 7, 1859 June 12, 1860	983
Steering-apparatus	J. Reed, by C. M. Hunt, assignee.	Marshfield and Boston, Mass.	Mar. 6, 1855 Dec. 4, 1860	1,089
Steering-apparatus	C. H. Sawyer	Buxton, Me	Mar. 31, 1868 May 26, 1868	2,948
Stench-traps, Casting	J. E. White, by L. A. Cauvet, assignee.	New York, N. Y	Nov. 29, 1870 Feb. 18, 1873	5,291
Stencil-plates	E. L. Tarbox	New York, N. Y	Aug. 11, 1868 May 30, 1871	4,402
Stenciling window-shades, Apparatus for	D. Lloyd, by G. L. Kelty and D. M. Ferguson, assignees.	New York, N. Y	Jan. 29, 1856 Sept. 15, 1857	495
Stereoscopic pictures, Apparatus for exhibiting	A. Beckers	New York, N. Y	Apr. 7, 1857 Jan. 31, 1860	890
Stereotype-plates, Composition for	J. Warren	Harmony Township, Ind	Apr. 25, 1846 July 26, 1853	246
Still, Hydrocarbon	C. Lockhart and J. Gracie	Pittsburgh, Pa	July 28, 1868 Aug. 15, 1871	4,515
Still, Petroleum, &c	C. Lockhart and J. Gracie	Pittsburgh, Pa	Nov. 17, 1863 June 23, 1868	3,002
Still, Petroleum, &c	C. Lockhart and J. Gracie	Pittsburgh, Pa	Nov. 17, 1863 June 23, 1868	3,003
Stippling metallic surfaces, Process and apparatus for.	R. Dimes, by Tiffany & Co., assignees.	New York, N. Y	June 25, 1872 Apr. 29, 1873	5,378
Stirrup	C. W. Saladee	Paducah, Ky	Apr. 27, 1864 Aug. 9, 1864	1,736
Stirrup and cover, Riding	R. N. Eagle	Washington, D. C	Dec. 17, 1861 Sept. 6, 1864	1,759
Stone, Artificial	S. Ravenel	Charleston, S. C	Aug. 12, 1856 Oct. 14, 1856	402
Stone-breakers	E. W. Blake	New Haven, Conn	June 15, 1858 Jan. 9, 1866	2,145
Stone-channeling machine	A. T. Merriman and T. Ross, by T. Ross and R. Barrett, assignees, (mesne.)	Rutland County, Vt	Nov. 20, 1866 Feb. 14, 1871	4,264
Stone-channeling machine	G. W. Bishop, by E. G. Lamson, assignee.	Windsor, Vt	Jan. 27, 1857 Apr. 13, 1869	3,367
Stone-channeling machine	E. G. Lamson	Windsor, Vt	Apr. 20, 1869 Nov. 29, 1870	4,189
Stone-channeling machine	J. Taggart, by T. Ross, J. B. Reynolds, R. Barrett, and A. T. Merriman, assignees, (mesne.)	Middlebury and Rutland, Vt.	Dec. 4, 1855 June 5, 1866	2,278
Stone, Composition for artificial	E. Westermayer	Chicago, Ill	Jan. 5, 1869 Oct. 12, 1869	3,674
Stone, Cutting	C. Wilson	Springfield, Mass	Mar. 13, 1847 Mar. 4, 1851	192
Stone-cutting machine	G. Morgan	Brooklyn, N. Y	Jan. 11, 1859 Feb. 14, 1871	4,263
Stone-cutting machine	G. J. Wardwell, by the Steam Stone-Cutter Company, assignee.	Rutland, Vt., and New York, N. Y.	Nov. 10, 1863 Oct. 10, 1865	2,067
Stone-cutting machine	G. J. Wardwell, by the Steam Stone-Cutter Company, assignee.	Rutland, Vt., and New York, N. Y.	Nov. 10, 1863 Oct. 10, 1865	2,068
Stone, Manufacture of artificial	W. K. Boyle	Bladensburgh, Md	Sept. 15, 1868 Oct. 6, 1868	3,151
Stone, Manufacture of artificial	G. E. Van Derburgh, by the New York Quartz Company, assignee, (mesne.)	Mamaroneck, N. Y	May 29, 1860 May 17, 1864	1,676
Stone, metals, &c., Polishing	A. Broughton	Malone, N. Y	Nov. 7, 1854 Feb. 12, 1856	350
Stone raising and transporting machine	S. E. Bolles	Mattapoisett, Mass	Apr. 10, 1855 Nov. 6, 1860	1,070
Stone, stucco, &c., Manufacture of artificial	G. A. Frear, by C. Holland, G. A. Frear, and J. M. Wilson, assignees.	Chicago, Ill	Feb. 4, 1868 July 4, 1871	4,456
Stove	A. Atwood	Troy, N. Y	May 14, 1850 Sept. 17, 1850	176
Stove	P. N. Burke	Buffalo, N. Y	July 19, 1859 Aug. 21, 1860	1,027
Stove	W. E. Hagan, by Hagan Manufacturing Company and W. E. Hagan, assignees, (mesne.)	Troy and New York, N. Y.	Mar. 8, 1864 June 6, 1865	1,987
Stove	J. C. Henderson	Albany, N. Y	May 18, 1858 Nov. 9, 1858	632

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Stove	J. C. Henderson	Albany, N. Y	May 29, 1860 June 30, 1863	1,506
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Aug. 26, 1862	1,332
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Aug. 26, 1862	1,333
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Aug. 26, 1862	1,334
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Aug. 26, 1862	1,335
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 19, 1861	1,236
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 19, 1861	1,237
Stove	D. G. Littlefield	Albany, N. Y	Mar. 4, 1856 Mar. 3, 1863	1,425
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Mar. 3, 1863	1,426
Stove	D. G. Littlefield	Albany, N. Y	Jan. 4, 1854 Mar. 3, 1863	1,427
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 May 19, 1863	1,478
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 May 19, 1863	1,479
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 8, 1864	1,814
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 8, 1864	1,815
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 8, 1864	1,813
Stove	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Nov. 22, 1864	1,823
Stove	J. Magee and W. J. Towne	Chelsea and Newton, Mass.	Aug. 14, 1860 Nov. 18, 1862	1,356
Stove	J. L. Mott	New York, N. Y	Dec. 30, 1833 Aug. 8, 1846	83
Stove	S. B. Sexton	Baltimore, Md	Apr. 19, 1859 Dec. 3, 1861	1,242
Stove	S. B. Sexton	Baltimore, Md	Apr. 19, 1859 Feb 16, 1864	1,621
Stove	S. B. Sexton	Baltimore, Md	Apr. 19, 1859 Feb. 16, 1864	1,622
Stove	S. B. Sexton	Baltimore, Md	Apr. 19, 1859 Sept. 27, 1864	1,774
Stove	E. Smith	Albany, N. Y	Apr. 13, 1869 Dec. 30, 1873	5,709
Stove	J. G. Treadwell and W. Hailes, by W. Hailes and E. T. Treadwell, assignees.	Albany, N. Y	May 7, 1861 Feb. 3, 1863	1,387
Stove	J. G. Widman, (extended May 10, 1873.)	Yonkers, N. Y	May 10, 1859 Oct. 14, 1873	5,605
Stove, Air-tight	B. Bosworth, by J. M. McKinlay, assignee, (extended April 6, 1856.)	Harmar, Ohio, and Dubuque, Iowa.	Apr. 6, 1842 Jan. 19, 1858	522
Stove, Air-tight	I. Orr	Georgetown, D. C	Jan. 20, 1836 Nov. 12, 1842	48
Stove and range, Cook	J. M. Read	Boston, Mass	Nov. 8, 1859 Sept. 26, 1865	2,076
Stove, Anthracite and other coal	A. D. Spoor	Troy, N. Y	Mar. 15, 1834 Dec. 4, 1838	6
Stove, Base-burning	A. C. Corse	Troy, N. Y	Sept. 20, 1870 June 13, 1871	4,421
Stove, Base-burning	W. C. Durant	West Troy, N. Y	July 23, 1867 May 11, 1869	3,426
Stove, Base-burning	J. Easterly	Albany, N. Y	Feb. 13, 1855 June 30, 1868	3,009
Stove, Base-burning	J. Easterly	Albany, N. Y	Feb. 13, 1855 June 30, 1868	3,010
Stove, Base-burning	J. Easterly, by J. S. Perry, (trustee and executor of M. J. Perry, deceased,) and N. B. Perry, assignees, (extended February 13, 1869.)	Albany, N. Y	Feb. 13, 1855 July 22, 1873	5,498
Stove, Base-burning	J. Gray	Albany, N. Y	Oct. 18, 1864 July 21, 1868	3,044
Stove, Base-burning	J. R. Hawkins, by Backus, Button & Co., assignees.	Syracuse, N. Y	Sept. 20, 1864 Jan. 9, 1872	4,705
Stove, Base-burning	G. G. Hunt	Quincy, Ill	June 9, 1863 May 19, 1870	3,965
Stove, Base-burning	W. J. Keep	Troy, N. Y	Mar. 29, 1870 May 16, 1871	4,386
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 Feb. 28, 1865	1,890
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Jan. 24, 1854 May 30, 1865	1,976
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Dec. 9, 1862 May 14, 1867	2,612
Stove, Base-burning	D. G. Littlefield	Albany, N. Y	Aug. 18, 1863 Feb. 25, 1868	2,881
Stove, Base-burning	B. T. Roney, by A. R. Reese, assignee, (mesne.)	Bristol, Pa., and Phillipsburgh, N. J.	Sept. 24, 1861 Oct. 8, 1872	5,096
Stove, Base-burning	J. Spear	Philadelphia, Pa	Apr. 20, 1869 July 16, 1872	4,985
Stove, Base-burning	J. Spear	Philadelphia, Pa	Apr. 20, 1869 July 16, 1872	4,986
Stove, Base-burning, (Division A)	J. Spear	Philadelphia, Pa	Mar. 1, 1870 June 17, 1873	5,459

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Invention.	Inventor.	Residence.	Date.	No.
Stove, Base-burning, (Division B)	J. Spear	Philadelphia, Pa	Mar. 1, 1870 June 17, 1873	5,460
Stove, Base-burning	A. White, by the Rock Island Stove Company, assignee.	Rock Island, Ill	Apr. 5, 1870 June 13, 1871	4,426
Stove, Base-burning fire-place	D. Stuart and L. Bridge, by D. Stuart and R. Peterson, assignees.	Philadelphia, Pa	June 23, 1868 Aug. 17, 1869	3,608
Stove-board or platform	J. S. Brooks, by Brooks and Wadsworth, assignees, (mesne.)	Rochester, N. Y	June 4, 1872 Oct. 22, 1872	5,106
Stove-bottom	D. Schuyler	Titusville, Pa	Dec. 5, 1871 July 2, 1862	4,961
Stove, Coal	J. C. Henderson	Albany, N. Y	May 29, 1860 June 29, 1869	3,523
Stove, Coal	G. J. Kingsbury	Rochester, N. Y	Apr. 12, 1859 Feb. 17, 1863	1,409
Stove, Coal	G. J. Kingsbury, by H. G. Giles, assignee, (mesne.)	Troy, N. Y	Apr. 12, 1859 Mar. 29, 1870	3,897
Stove, Coal	D. G. Littlefield	Albany, N. Y	Aug. 18, 1863 Dec. 22, 1863	1,594
Stove, Coal	J. J. Savage	Troy, N. Y	Feb. 12, 1867 Mar. 10, 1868	2,895
Stove, Coal	H. Stanley, by C. Eddy and J. Shavor, assignees, (mesne,) (extended January 4, 1845.)	Poultney, Vt., and Troy, N. Y.	Jan. 4, 1845 Apr. 10, 1860	944
Stove, Coal	H. Stanley, by C. Eddy and J. Shavor, assignees, (mesne,) (extended January 4, 1859.)	Poultney, Vt., and Troy, N. Y.	Jan. 4, 1845 May 8, 1860	958
Stove, Coal	H. Stanley, by C. Eddy and J. Shavor, assignees, (mesne,) (extended January 4, 1859.)	Troy, N. Y	Jan. 4, 1845 Nov. 13, 1860	1,078
Stove, Coal	P. P. Stewart	Troy, N. Y	Apr. 28, 1863 July 4, 1865	2,023
Stove, Coal	R. B. Varden	Uniontown, Md	June 8, 1869 July 20, 1869	3,564
Stove, Coal-oil	J. H. Thorp	New York, N. Y	July 16, 1872 May 20, 1873	5,418
Stove, Combined parlor and dumb	A. L. Blanchard	Albany, N. Y	Nov. 12, 1841 Sept. 9, 1843	54
Stove, Cooking	A. Atwood	Troy, N. Y	June 30, 1838 June 5, 1847	95
Stove, Cooking	M. A. Boughton	Norwalk, Conn	Apr. 18, 1871 Sept. 26, 1871	4,568
Stove, Cooking	N. A. Boynton	New York, N. Y	Feb. 2, 1869 Dec. 24, 1872	5,203
Stove, Cooking	A. Bronson	East Port Chester, Conn	Aug. 22, 1848 May 18, 1858	559
Stove, Cooking	D. Buck, by D. Buck, administratrix.	Albany, N. Y	May 20, 1839 Aug. 27, 1850	174
Stove, Cooking	E. Bussey	Troy, N. Y	Dec. 5, 1865 July 24, 1866	2,319
Stove, Cooking	E. Bussey	Troy, N. Y	July 24, 1866 Sept. 28, 1869	3,649
Stove, Cooking	E. Bussey, by self and C. A. McLeod, assignees.	Troy, N. Y	July 24, 1866 Feb. 1, 1870	3,815
Stove, Cooking	S. L. Chase	Woodstock, Vt	Sept. 25, 1840 Aug. 11, 1841	35
Stove, Cooking	E. J. Cridge	Troy, N. Y	May 6, 1862 Oct. 5, 1869	3,659
Stove, Cooking	J. Easterly	Detroit, Mich	Apr. 11, 1871 Oct. 28, 1873	5,627
Stove, Cooking	M. G. Fagan, by self and A. C. Corse, assignees.	Troy, N. Y	Aug. 31, 1869 Dec. 31, 1872	5,208
Stove, Cooking	G. F. Filley	Saint Louis, Mo	June 14, 1853 Dec. 27, 1859	873
Stove, Cooking	C. P. Geissenhainer, by E. Bussey and C. A. McLeod, assignees.	Pittsburgh, Pa., and Troy, N. Y.	July 9, 1861 Feb. 7, 1871	4,254
Stove, Cooking	S. R. Going, by D. S., and D. S. Quimby, jr., assignees.	Brooklyn, N. Y	June 17, 1862 Apr. 6, 1869	3,362
Stove, Cooking	J. Greer and R. J. King	Dayton, Ohio	Mar. 16, 1869 June 1, 1869	3,469
Stove, Cooking	J. G. Hathaway	Buffalo, N. Y	Dec. 7, 1837 Nov. 14, 1846	90
Stove, Cooking	J. C. Henderson	Albany, N. Y	May 29, 1860 Jan. 15, 1867	2,458
Stove, Cooking	L. Hermance	Lansingburgh, N. Y	Feb. 1, 1870 June 20, 1871	4,428
Stove, Cooking	R. M. Hermance, by J. B. Wilkinson, assignee, (mesne.)	Troy, N. Y	Apr. 26, 1870 Aug. 26, 1873	5,554
Stove, Cooking	G. P. Hopkins	Albion, N. Y	June 2, 1863 Feb. 9, 1869	3,289
Stove, Cooking	J. R. Hyde, by D. E. Paris, assignee.	Troy, N. Y	Mar. 24, 1863 July 16, 1867	2,688
Stove, Cooking	J. R. Hyde, by D. E. Paris, assignee, (mesne.)	Troy, N. Y	June 10, 1862 July 30, 1867	2,709
Stove, Cooking	J. R. Hyde, by Eddy, Corse & Co., assignees, (mesne.)	Troy, N. Y	June 10, 1862 Aug. 29, 1871	4,530
Stove, Cooking	E. Johnson and D. B. Cox, by R. D. Granger, assignee.	Troy and Albany, N. Y	July 22, 1845 June 19, 1849	138
Stove, Cooking	S. H. La Rue	Allentown, Pa	May 17, 1870 Oct. 18, 1870	4,157
Stove, Cooking	J. Magee, by the Norton Furnace Company, assignee.	Chelsea and Norton, Mass	Apr. 15, 1862 May 24, 1864	1,678
Stove, Cooking	J. L. Mott	New York N. Y	Aug. 22, 1848 Apr. 30, 1850	166
Stove, Cooking	C. Olhaber	Cincinnati Ohio	Feb. 2, 1869 Sept. 21, 1869	3,642

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Stove, Cooking	G. H. Phillips	Troy, N. Y	Nov. 3, 1868 July 5, 1870	4,063
Stove, Cooking	G. H. Phillips	Troy, N. Y	Nov. 3, 1868 Sept. 30, 1873	5,583
Stove, Cooking	S. Pierce	Troy, N. Y	Dec. 6, 1845 Apr. 24, 1847	91
Stove, Cooking	S. Pierce	Troy, N. Y	Dec. 6, 1845 July 31, 1847	99
Stove, Cooking	S. Pierce, by self, assignee, (mesne,) (extended December 6, 1859.)	Troy, N. Y	Dec. 6, 1845 Dec. 3, 1861	1,240
Stove, Cooking	S. Pierce, by self, assignee, (mesne,) (extended December 6, 1859.)	Troy, N. Y	Dec. 6, 1845 Dec. 3, 1861	1,241
Stove, Cooking	F. Ritchie, by Jewett & Root, assignees, (mesne.)	Buffalo, N. Y	June 29, 1869 July 5, 1870	4,061
Stove, Cooking	J. Root	Cincinnati, Ohio	July 18, 1848 Jan. 22, 1850	160
Stove, Cooking	J. J. Savage	Troy, N. Y	Feb. 12, 1867 Dec. 31, 1867	2,828
Stove, Cooking	R. Scorer	Troy, N. Y	Sept. 14, 1869 Jan. 18, 1870	3,801
Stove, Cooking	J. H. Shear	Albany, N. Y	Sept. 7, 1869 June 4, 1872	4,935
Stove, Cooking	S. B. Spaulding, by E. E. Paris, assignee, (mesne,) (additional improvement May 17, 1859.)	Troy, N. Y	June 22, 1858 June 19, 1866	2,291
Stove, Cooking	S. B. Spaulding, by D. E. Paris, assignee, (mesne,) (additional improvement, May 17, 1859.)	Troy, N. Y	June 22, 1858 Feb. 26, 1867	2,494
Stove, Cooking	J. Spear	Philadelphia, Pa	Feb. 19, 1861 Oct. 9, 1866	2,372
Stove, Cooking	J. Spear	Philadelphia, Pa	Feb. 19, 1861 Oct. 9, 1866	2,373
Stove, Cooking	J. Spear	Philadelphia, Pa	Feb. 19, 1861 Oct. 9, 1866	2,374
Stove, Cooking	P. P. Stewart	Troy, N. Y	Apr. 12, 1859 May 17, 1864	1,673
Stove, Cooking	P. P. Stewart	Troy, N. Y	Jan. 18, 1859 May 31, 1864	1,684
Stove, Cooking	P. P. Stewart	Troy, N. Y	Apr. 12, 1859 Apr. 7, 1868	2,915
Stove, Cooking	P. P. Stewart	Troy, N. Y	Jan. 18, 1859 July 7, 1868	3,027
Stove, Cooking	P. P. Stewart	Troy, N. Y	Jan. 18, 1859 July 14, 1868	3,041
Stove, Cooking	P. P. Stewart, by E. C. Stewart, executrix.	Troy, N. Y	Jan. 18, 1859 May 18, 1869	3,452
Stove, Cooking	P. P. Stewart by. E. C. Stewart, executrix.	Troy, N. Y	Jan. 18, 1859 May 18, 1869	3,453
Stove, Cooking	D. L. Stiles, by A. P. Stiles, assignee, (mesne.)	Rochester, N. Y	Feb. 24, 1863 Dec. 29, 1868	3,248
Stove, Cooking	G. W. Walker	Malden, Mass	Nov. 1, 1870 Aug. 29, 1871	4,540
Stove, Cooking	C. Williams	Manchester, N. H	Apr. 30, 1867 Oct. 29, 1872	5,126
Stove, Cooking	D. Williams	Troy, N. Y	Feb. 3, 1836 Nov. 21, 1840	28
Stove, Cooking	J. Wilson	New York	May 16, 1846 May 8, 1847	93
Stove-cover	D. G. Littlefield	Albany, N. Y	Mar. 13, 1866 May 31, 1870	4,006
Stove-door	D. N. Martin, by self and C. M. Martin, assignees.	Lawrence, Mass	June 27, 1871 May 13, 1873	5,405
Stove, Fire-place heating	H. R. Robbins	Baltimore, Md	Mar. 29, 1859 Nov. 12, 1872	5,145
Stove for burning stumps	H. Willard	Grand Rapids, Mich	Feb. 15, 1870 May 10, 1870	3,968
Stove for heating and cooking, Base-burning	S. Spoor, by self and H. M. and W. M. Spoor, assignees.	Troy, N. Y	Jan. 31, 1871 Sept. 24, 1872	5,074
Stove, Heating	W. A. Barlow	Elkhorn, Wis	June 3, 1862 Jan. 1, 1867	2,435
Stove, Heating	W. A. Barlow	Elkhorn, Wis.	June 3, 1862 Jan. 1, 1867	2,436
Stove, Heating	E. Hawks, by W. E. Marston, assignee.	Troy, N. Y	Dec. 1, 1868 May 11, 1869	3,436
Stove, Heating, &c	J. C. Henderson	Albany, N. Y	May 29, 1860 Jan. 15, 1867	2,459
Stove, Heating	C. Jones	Philadelphia, Pa	July 17, 1860 Aug. 6, 1867	2,714
Stove, Heating	J. W. Lane	Newton, N. J	June 20, 1865 July 24, 1866	2,322
Stove, Heating	S. H. La Rue	Allentown, Pa	July 26, 1870 Nov. 8, 1870	4,175
Stove, Heating	E. Mingay	Boston, Mass	June 11, 1872 Dec. 30, 1873	5,712
Stove, Heating	S. T. Savage	Albany, N. Y	Mar. 30, 1858 Dec. 18, 1866	2,425
Stove, Heating	S. B. Sexton	Baltimore, Md	Apr. 19, 1859 Feb. 12, 1867	2,476
Stove, Heating	J. Spear	Philadelphia, Pa	Apr. 26, 1870 Mar. 4, 1873	5,314
Stove, Heating	D. L. Stiles, by J. M. French, jr., assignee, (mesne.)	Rochester, N. Y	Nov. 17, 1863 May 31, 1870	4,004
Stove, Heating	D. L. Stiles, by J. M. French, jr., assignee, (mesne.)	Rochester, N. Y	Nov. 17, 1863 Oct. 17, 1871	4,595
Stove, Heating	I. M. Thatcher	Jersey City, N. J	Mar. 23, 1852 Sept. 11, 1855	327

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Invention.	Inventor.	Residence.	Date.	No.
Stove lid and damper, Combined	W. Doyle	Albany, N. Y	May 11, 1869 May 2, 1871	4, 359
Stove-pipe elbow	C. Hoeller, by self and H. S. Hoeller, assignees.	Cincinnati, Ohio	Sept. 22, 1868 Apr. 26, 1870	3, 934
Stove-pipe elbow	H. B. Morrison, by self and C. L. Morrison, assignees, (mesne.)	Le Roy, N. Y	Oct. 27, 1868 Nov. 2, 1869	3, 704
Stove-pipe shelf, Adjustable	O. B. Olmsted	Beloit, Wis	Aug. 20, 1867 Sept. 28, 1869	3, 656
Stove-pipe thimble	T. K. Anderson	Hornellsville, N. Y	Feb. 16, 1864 Aug. 16, 1870	4, 098
Stove-pipe thimble	C. A. Buttles	Milwaukee, Wis	Oct. 12, 1869 June 27, 1871	4, 438
Stove, Railway-car	A. A. Wheelock	Washington, D. C	Feb. 9, 1869 Mar. 16, 1869	3, 328
Stove, Railway cooking	I. B. Bucklin	Troy, N. Y	July 9, 1838 Aug. 27, 1840	22
Stove-register	W. Race, by S. H. Ransom & Co., assignees, (extended April 4, 1860.)	Seneca Falls and Albany, N. Y.	Apr. 4, 1846 Feb. 19, 1861	1, 139
Stove, Reservoir	H. F. T. Hale	Bay City, Mich	Sept. 13, 1864 Apr. 22, 1873	5, 369
Stove, Reservoir cooking	E. Bussey, by C. A. McLeod, assignee.	Troy, N. Y	Dec. 5, 1865 June 3, 1873	5, 435
Stove, Reservoir cooking	G. H. Phillips	Troy, N. Y	Feb. 2, 1869 Dec. 27, 1870	4, 219
Stove, Reservoir cooking	J. F. Quimby, by G. W. Swett, J. F. Quimby, and S. W. Perry, assignees.	Troy, N. Y	Oct. 27, 1868 Oct. 29, 1872	5, 124
Stove, Reservoir cooking	G. G. Wolfe	Troy, N. Y	Mar. 31, 1868 June 10, 1873	5, 442
Stove, Steam	J. L. Sutton, by H. Downing, assignee.	Norristown and Philadelphia, Pa.	July 20, 1858 Dec. 28, 1858	640
Stoves, Air-distributor for chambers of	L. Morse and W. T. Lewis, by L. S. R. and C. B. Morse, assignees.	Athol, Mass	May 16, 1840 July 18, 1848	121
Stoves, Ash-pan drawer for	J. A. Lawson	Troy, N. Y	June 16, 1863 July 10, 1866	2, 304
Stoves, Ash sifting pan for	J. Spear	Philadelphia, Pa	Apr. 15, 1862 July 10, 1866	2, 305
Stoves, Fire-plate for	E. Boileau	Saint Louis, Mo	July 6, 1869 Aug. 8, 1871	4, 501
Stoves, Fire-pot for	D. G. Littlefield	Albany, N. Y	June 25, 1861 Aug. 4, 1863	1, 516
Stoves, Form and construction of cooking	E. Andrews and S. Austin, by A. Packard, assignee.	New York	July 1, 1836 June 8, 1842	40
Stoves, heaters, and furnaces, Auxiliary air-chamber for.	E. Hawks	Troy, N. Y	Apr. 23, 1867 Aug. 3, 1869	3, 585
Stoves, Manufacturing railway cooking	P. Williamson	New York	Feb. 16, 1829 Sept. 30, 1840	26
Stoves, Water-reservoir for cooking	C. O. Greene	Troy, N. Y	Mar. 25, 1869 Oct. 25, 1870	4, 161
Strap-machine	A. F. Stowe	Worcester, Mass	Apr. 16, 1872 June 24, 1873	5, 462
Straw-cutter	D. C. Cumings	Fulton, N. Y	Aug. 7, 1855 Nov. 8, 1859	847
Straw-cutter	D. C. Cumings	Fulton, N. Y	Aug. 7, 1855 Mar. 28, 1865	1, 911
Straw-cutter	W. Gale	Chicopee Falls, Mass	Sept. 12, 1854 Apr. 3, 1860	938
Straw-cutter	W. Gale	Chicopee Falls, Mass	Sept. 12, 1854 Oct. 25, 1864	1, 800
Straw-cutter	W. Gale	Chicopee Falls, Mass	Mar. 7, 1854 June 26, 1866	2, 293
Straw-cutter	W. Gale	Chicopee Falls, Mass	Sept. 12, 1854 Nov. 13, 1866	2, 393
Straw-cutter	W. Gale, (extended March 7, 1868.)	Peekskill, N. Y	Mar. 7, 1854 May 4, 1869	3, 416
Straw-cutter	W. Gale, by self and B. B. Belcher, assignees.	Chicopee Falls, Mass	Dec. 18, 1860 May 30, 1865	1, 977
Straw-cutter	W. Gale, by self and B. B. Belcher, assignees.	Chicopee Falls, Mass	Dec. 18, 1860 Dec. 19, 1865	2, 127
Straw-cutter	W. Gale, by self and B. B. Belcher, assignees.	Peekskill, N. Y., and Chicopee Falls, Mass.	Dec. 18, 1860 Apr. 12, 1870	3, 912
Straw-cutter	F. B. Hunt	Richmond, Ind	Jan. 5, 1894 Oct. 2, 1866	2, 368
Straw-cutter	F. B. Hunt	Richmond, Ind	Jan. 5, 1864 Jan. 14, 1868	2, 837
Straw-cutter	F. B. Hunt, by self, assignee, (mesne.)	Richmond, Ind	Dec. 27, 1859 Jan. 14, 1868	2, 838
Straw-cutter	A. S. Macomber, by W. and A. Gale, assignees, (mesne,) (extended November 5, 1864.)	Chicopee Falls, Mass	Nov. 5, 1850 Dec. 5, 1865	2, 119
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Jan. 26, 1858 Sept. 6, 1859	808
Straw-cutter	J. H. Mumma	Harrisburgh, Pa	Nov. 8, 1859 Mar. 21, 1865	1, 909
Straw-cutter	J. H. Mumma, by H. K. Parsons, assignee, (mesne.)	Harrisburgh, Pa	Jan. 26, 1858 Mar. 29, 1864	1, 648
Straw-cutter	J. H. Mumma, by H. K. Parsons, assignee, (mesne.)	Harrisburgh, Pa	Jan. 26, 1858 Mar. 7, 1865	1, 898
Straw-cutter	D. Porter, by self and H. Smith, assignees.	Cleveland, Ohio	July 5, 1864 Feb. 28, 1865	1, 892
Straw-cutter	D. J. Powers, by J. Palmer, assignee, (mesne.)	Brooklyn, N. Y	Feb. 14, 1860 Mar. 29, 1870	3, 898
Street-sprinkler	L. F. Bancroft, by self, and A. B. Yetter, assignees.	Worcester, Mass., and New York, N. Y.	Apr. 3, 1866 Apr. 12, 1870	3, 917

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Street-sprinkler	L. F. Bancroft, by E. E. Quimby, trustee and assignee, (mesne.)	Worcester, Mass	Apr. 3, 1866 Mar. 18, 1873	5,325
Street-sprinkling cart	L. Rodenhausen	Philadelphia, Pa	Aug. 13, 1867 Oct. 10, 1871	4,590
Street-washer	J. Regester	Baltimore, Md	July 23, 1861 June 6, 1865	1,984
Street-washer	J. Regester	Baltimore, Md	July 23, 1861 June 20, 1865	2,004
Stuffing-box	T. W. Allen and C. W. Noyes	Greenbush, N. Y	Nov. 6, 1847 Jan. 10, 1854	254
Stump-extractor	T. Crane	Fort Atkinson, Wis	Oct. 31, 1865 Apr. 17, 1866	2,228
Stump-extractor	I. Hicks	Hartford, Wis	Nov. 3, 1863 Nov. 19, 1867	2,802
Stump-extractor	S. W. Ruggles, by S. M. Longley, E. D. Genet, S. B. Smith, and A. G. Getty, assignees, (mesne.)	Fitchburgh, Mass., and New York and Hudson, N. Y.	Oct. 14, 1862 July 28, 1868	3,054
Stumps, Extracting	W. W. Willis	Orange, Mass	Mar. 6, 1855 June 22, 1858	569
Sugar, Apparatus and process for mixing	M. L. Sonderling	Jersey City, N. J	Jan. 1, 1867 Aug. 29, 1871	4,536
Sugar, &c., Apparatus for drying	G. A. Gasper	Charlestown, Mass	May 25, 1869 Nov. 23, 1869	3,742
Sugar, Apparatus for manufacturing cube	G. Finken	Brooklyn, N. Y	Aug. 20, 1861 Feb. 4, 1862	1,269
Sugar, Apparatus for manufacturing cube	G. Finken	Brooklyn, N. Y	Aug. 20, 1861 Oct. 25, 1864	1,799
Sugar-cane mill	S. L. Denny	Christiana, Pa	Sept. 28, 1858 Sept. 3, 1867	2,759
Sugar, Cleaning	J. Hurd, by F. P. Hurd, assignee, (mesne.)	Stoneham, Mass	Oct. 3, 1844 Sept. 29, 1858	607
Sugar-draining apparatus	G. Finken	New York, N. Y	Nov. 11, 1856 June 23, 1863	1,501
Sugar-evaporator	F. Farquhar and R. E. Doan	Wilmington, Ohio	Sept. 25, 1866 Aug. 13, 1867	2,729
Sugar-juice, Apparatus for defecating and evaporating.	W. Hedges, by P. W. Gates, T. Chalmers, and D. R. Fraser, assignees, (mesne.)	Chicago, Ill	Nov. 29, 1859 Oct. 28, 1862	1,349
Sugar-juice evaporator	W. Hedges, by P. W. Gates, T. Chalmers, and D. R. Fraser, assignees, (mesne.)	Chicago, Ill	Nov. 29, 1859 Oct. 28, 1862	1,348
Sugar juices and solutions by means of steam, Evaporating.	W. Hedges, by P. W. Gates, T. Chalmers, and D. R. Fraser, assignees, (mesne.)	Chicago, Ill	Nov. 29, 1859 Oct. 28, 1862	1,347
Sugar, Machine for cutting loaf	A. and F. Brown	New York, N. Y	Mar. 25, 1856 May 1, 1860	953
Sugar, Machine for granulating and drying	J. Hanford	Lexington, Mass	Sept. 18, 1866 June 8, 1869	3,501
Sugar-manufacture	J. F. Riggs	Fremont, Nebr	Jan. 26, 1864 Nov. 29, 1864	1,830
Sugar, Manufacture of crushed	C. Spreckels	San Francisco, Cal	Mar. 17, 1868 July 6, 1869	3,540
Sugar, Manufacture of starch	N. Pigeon	Brooklyn, N. Y	Apr. 25, 1867 Nov. 17, 1868	3,201
Sugar-mold carriage	C. E. Bertrand	Williamsburgh, N. Y	Mar. 30, 1858 May 29, 1860	967
Sugar-mold carriage	T. A. Havemeyer and H. Schnitzpan, by T. A. Havemeyer, assignee.	New York, N. Y	Mar. 18, 1862 Sept. 22, 1863	1,542
Sugar-mold carriage	T. A. Havemeyer and H. Schnitzpan, by T. A. Havemeyer, assignee.	New York, N. Y	Mar. 18, 1862 Nov. 3, 1863	1,561
Sugar-molds, &c., Manufacture of	C. Kronig, by T. A. Havemeyer, I. L. Elder, and C. F. Loosey, assignees.	New York, N. Y	June 28, 1864 Apr. 14, 1868	2,919
Sugar, Purging and draining	W. H. Guild	Brooklyn, N. Y	Mar. 2, 1869 Jan. 18, 1870	3,797
Sugar-works	N. Rollieux, by self, assignee, (mesne.)	New York, N. Y	Aug. 26, 1843 Mar. 17, 1857	439
Surge-reliever	J. J. Emery, by E. R. Cheney and J. J. Emery, assignees.	Owl's Head, Me., and Boston, Mass.	Sept. 21, 1869 Feb. 15, 1870	3,838
Surgical apparatus	A. G. Hull, by self, assignee, (mesne.)	New York, N. Y	May 7, 1834 Sept. 14, 1839	12
Suspenders	R. H. Eddy, by A. G. Eddy, assignee.	Boston, Mass	June 6, 1871 Dec. 24, 1872	5,196
Suspenders	B. J. Greely	Boston, Mass	Oct. 10, 1865 June 8, 1869	3,492
Suspenders	A. W. Harris	New York, N. Y	June 16, 1868 Aug. 24, 1869	3,615
Suspenders	S. W. Henlon	Selma, Ala	Dec. 1, 1868 Apr. 20, 1869	3,395
Suspenders	T. O. Potter and J. W. Smith, by the Bay State Suspender Company, assignee.	Boston, Mass	June 21, 1871 Oct. 7, 1873	5,593
Suspenders	J. B. Sharp and R. M. Seymour, by J. B. Sharp and W. Seymour, administrator.	New York and Sing Sing, N. Y.	Nov. 6, 1866 Apr. 18, 1871	4,348
Suspension-ring	H. S. Griffiths, by J. Cary and C. Griffiths, assignees, (mesne.)	Brooklyn, N. Y	May 5, 1868 Sept. 24, 1872	5,067
Swimming, Apparatus for teaching	S. Scholfield	Norwich, Conn	May 12, 1863 June 23, 1863	1,503
Swing, Gymnastic	A. P. Payson	San Francisco, Cal	June 25, 1867 Aug. 3, 1869	3,582
Syringe, Enema	C. H. and H. E. Davidson, by H. D. Lockwood, assignee.	Charlestown, Mass	Mar. 31, 1857 Apr. 25, 1865	1,940

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Syringe, Enema	M. Mattson	New York, N. Y	Nov. 19, 1861 Oct. 18, 1864	1, 797
Syringe, Enema	M. Mattson, (extended April 4, 1868.)	New York, N. Y	Apr. 4, 1854 Sept. 1, 1868	3, 106
Syringe, Enema	F. B. Richardson	Boston, Mass	Mar. 5, 1861 June 20, 1865	2, 005
T.				
Table-leaf support	G. L. Gerard	New Haven, Conn	Aug. 16, 1870 Oct. 4, 1870	4, 146
Tablet, platform, or mat, Non-conducting	H. L. Palmer, by C. C. Skilton, assignee.	New York, N. Y	Aug. 12, 1873 Sept. 2, 1873	5, 562
Tablet, Writing	G. Munger	New Haven, Conn	Sept. 27, 1859 May 22, 1866	2, 252
Tacks, Machine for capping	J. C. Rhodes	South Abington, Mass	July 10, 1866 Mar. 19, 1867	2, 521
Tackle-block	I. E. Palmer	Montville, Conn	Nov. 1, 1859 Sept. 8, 1863	1, 534
Tackle-block	I. E. Palmer	Middletown, Conn	Nov. 1, 1859 Apr. 11, 1865	1, 932
Tackle-block	I. E. Palmer	Hackensack, N. J	Nov. 1, 1859 Dec. 8, 1868	3, 226
Tackle-block attachment	G. Focht	Reading, Pa	Sept. 28, 1858 Jan. 17, 1865	1, 853
Tackle-hook	J. W. Norcross	Middletown, Conn	Apr. 18, 1865 Aug. 1, 1865	2, 042
Tailor's shears	R. Heinisch	Newark, N. J	July 13, 1858 Apr. 26, 1859	704
Tailoring	D. Williams	New York, N. Y	May 22, 1833 Aug. 31, 1839	11
Tan-bark and preparing extracts, Apparatus for leaching.	W. H. Allen, by self and O. Warren, assignees.	Fryeburgh, Me	July 29, 1862 Jan. 3, 1865	1, 844
Tan-bark, Extracting	S. W. Pingree	Lawrence, Mass	Mar. 1, 1864 Mar. 28, 1865	1, 922
Tanning	S. A. Hickel, by self, C., J., and B. F. Armstrong, assignees.	Roane County and Jackson Court-House, W. Va.	Nov. 7, 1865 Dec. 11, 1866	2, 418
Tanning	J. M. Muller	Cobleskill, N. Y	Nov. 14, 1865 May 7, 1867	2, 596
Tanning	J. Schultz	Ellenville, N. Y	Apr. 3, 1866 June 12, 1866	2, 285
Tanning and stuffing leather	W. B. Brittingham	La Fayette, Ind	Jan. 18, 1870 Sept. 27, 1870	4, 129
Tanning-apparatus	B. H. McNulty and W. Kern, by selves and S. Bonsall, assignees.	Philadelphia, Pa., Mansfield, Ohio, and Philadelphia, Pa.	May 23, 1865 Mar. 19, 1867	2, 519
Tanning by tannin and acids	H. Hibbard, by W. W. Reid, assignee.	Henrietta, N. Y	Oct. 16, 1849 Feb. 11, 1851	189
Tanning composition	I. Wood	Woodstock, Vt	Aug. 18, 1868 Oct. 6, 1868	3, 157
Tanning, Composition of liquids for	I. Wood	Woodstock, Vt	Sept. 14, 1869 Nov. 30, 1869	3, 752
Tanning, &c., Extracting the strength of bark for	J. Brainard and W. H. Burridge, by W. H. Burridge, assignee.	Cleveland, Ohio	Apr. 8, 1862 Mar. 19, 1867	2, 523
Tanning hides and skins	W. Fields and I. Townsend, by S. H. Kennedy and H. L. Elder, assignees.	Wilmington, Del., and Philadelphia, Pa.	June 7, 1864 Jan. 10, 1865	1, 849
Tanning hides and skins	W. Fields and I. Townsend, by S. H. Kennedy and H. L. Elder, assignees.	Philadelphia, Pa	June 7, 1864 May 9, 1865	1, 955
Tanning, Preparing hides for	A. D. Lufkin	Cleveland, Ohio	July 31, 1860 Apr. 7, 1863	1, 450
Tap for oil-package	A. Warth	Stapleton, N. Y	Dec. 27, 1870 May 30, 1871	4, 403
Tap for oil-package	A. Warth	Stapleton, N. Y	Dec. 27, 1870 May 30, 1871	4, 404
Tap, Oil-vessel	M. Andrew	Melbourne, Australia	Aug. 24, 1869 June 7, 1870	4, 014
Tap, Oil-vessel	M. Andrew, by the Charles Pratt Manufacturing Company, assignee.	Melbourne, Australia	Aug. 24, 1869 Aug. 6, 1872	5, 020
Tape-roll clip-fastening	M. B. Westhead	Manchester, England	July 28, 1868 Oct. 26, 1869	3, 693
Tape trimmings, Manufacture of	C. O. Crosby and H. Kellogg, by the Elm City Company, assignee.	New Haven, Conn	Sept. 16, 1862 Mar. 6, 1866	2, 188
Tassel-clip for window-shades	F. Müller	Boston, Mass	Jan. 19, 1869 Mar. 25, 1873	5, 338
Tea and coffee pot	A. Arnold	Tenafly, N. J	Dec. 10, 1867 May 18, 1869	3, 437
Tea and coffee pot	A. C. Kasson, by self and N. C. Gridley, assignees.	Milwaukee, Wis	Apr. 28, 1868 Dec. 22, 1868	3, 238
Tea and coffee pot	E. B. Manning	Cromwell, Conn	June 3, 1862 June 27, 1865	2, 013
Tea and coffee pot	E. B. Manning	Cromwell, Conn	June 3, 1862 Sept. 26, 1865	2, 075
Tea and coffee pot handle	G. B. Halstead	New York, N. Y	June 6, 1865 Apr. 30, 1867	2, 585
Tea-kettle	E. Ripley	Troy, N. Y	Jan. 1, 1861 Dec. 5, 1865	2, 122
Tea-kettle	E. Ripley	Troy, N. Y	Jan. 1, 1861 Jan. 5, 1869	3, 256
Tea-kettle	E. Ripley	Troy, N. Y	Jan. 1, 1861 Jan. 5, 1869	3, 257
Tea-kettle spout	J. Ash	Sterling, Ill	Jan. 30, 1872 Aug. 19, 1873	5, 537
Teeth, Manufacture of artificial	S. S. White	Philadelphia, Pa	Jan. 21, 1862 Apr. 29, 1862	1, 305

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Teeth, Manufacture of porcelain	J. W. Moffitt	Harrisburgh, Pa	Nov. 20, 1860 Jan. 8, 1861	1,122
Teeth, Plate for artificial	L. R. Streeter, by A. B. Ely, assignee.	Newton, Mass	Dec. 17, 1867 June 9, 1868	2,968
Teeth, Setting mineral	J. Allen	New York, N. Y	Dec. 23, 1851 Mar. 24, 1857	442
Telegraph-apparatus	G. Little	Rutherford Park, N. J	Oct. 18, 1870 Aug. 29, 1871	4,532
Telegraph apparatus, Duplex	J. B. Stearns, by the Western Union Telegraph Company, assignee.	Boston, Mass	May 14, 1872 Apr. 1, 1873	5,344
Telegraph, Automatic signal-box for fire-alarm	M. G. Crane and E. Rogers, by Gamewell & Co., assignees, (mesne.)	Boston, Mass., and New York, N. Y.	July 6, 1869 Aug. 15, 1871	4,513
Telegraph, Bell	T. D. Jackson and A. Judson, by E. Crehore, H. Brooks, and T. D. Jackson, assignees.	Boston, Mass., and New York, N. Y.	Oct. 17, 1846 Dec. 26, 1848	127
Telegraph, Electro-magnetic	S. F. Day	Ballston Spa, N. Y	May 24, 1864 Mar. 23, 1869	3,235
Telegraph, Electro-magnetic	M. G. Farmer	Salem, Mass	Nov. 15, 1859 Dec. 10, 1872	5,181
Telegraph, Electro-magnetic	S. F. B. Morse	Poughkeepsie, N. Y	Apr. 11, 1840 June 13, 1848	118
Telegraph lightning-arrester	G. A. Stearns	Rochester, N. Y	June 21, 1864 Aug. 1, 1865	2,043
Telegraph, Magnetic printing	R. E. House	Binghamton, N. Y	Dec. 28, 1852 Sept. 28, 1858	605
Telegraph, Magnetic printing	R. E. House	Binghamton, N. Y	Apr. 18, 1846 Sept. 20, 1859	813
Telegraph, Printing	H. N. Baker, by Gold and Stock Telegraph Company, assignee, (mesne.)	New York, N. Y	Apr. 29, 1856 Jan. 25, 1870	3,812
Telegraph, Printing	E. A. Calahan, by the Gold and Stock Telegraph Company, assignee.	Brooklyn and New York, N. Y.	Apr. 21, 1868 Jan. 25, 1870	3,810
Telegraph, Printing	T. A. Edison, by the Gold and Stock Telegraph Company, assignee, (mesne.)	New York, N. Y	Nov. 9, 1869 Feb. 1, 1870	3,820
Telegraph, Printing	T. A. Edison, by the Gold and Stock Telegraph Company, assignee, (mesne.)	Newark, N. J	June 22, 1869 Oct. 25, 1870	4,166
Telegraph, Printing	T. A. Edison, by the Gold and Stock Telegraph Company, assignee, (mesne.)	Newark, N. J., and New York, N. Y.	June 22, 1869 Aug. 5, 1873	5,519
Telegraph, Printing	G. Little	Rutherford Park, N. J	Apr. 9, 1872 Feb. 4, 1873	5,267
Telegraph, Printing	G. M. Phelps	Brooklyn, N. Y	May 11, 1869 Oct. 11, 1870	4,152
Telegraph, Printing	F. L. Pope and T. A. Edison, by the Gold and Stock Telegraph Company, assignee, (mesne.)	Elizabeth and Newark, N. J., and New York, N. Y.	June 7, 1870 Aug. 5, 1873	5,523
Telegraph, Submarine-cable for	W. H. Horstmann	Brooklyn, N. Y	Sept. 13, 1859 Sept. 9, 1862	1,342
Telegraph, Submarine cable for	W. H. Horstmann	Brooklyn, N. Y	Sept. 13, 1859 Sept. 9, 1862	1,343
Telegraph-wires, Insulating	A. B. Ely	Newton, Mass	Jan. 9, 1866 Mar. 27, 1866	2,212
Temperature-regulator, Electro-magnetic	G. M. Sternberg	New York, N. Y	Mar. 1, 1870 Apr. 4, 1871	4,326
Tempering-apparatus	H. H. Ray	Arena, Wis	Sept. 26, 1871 Mar. 26, 1872	4,829
Tender frame, Iron	B. W. Healey	Providence, R. I	June 7, 1870 Dec. 5, 1871	4,661
Tents, Ventilating-cap for	T. Boyd	Boston, Mass	Aug. 20, 1861 July 27, 1869	3,565
Testing-apparatus for cans, barrels, &c	W. D. Brooks, by M. C. Brooks, assignee.	Baltimore, Md	Dec. 5, 1871 Mar. 12, 1872	4,796
Textile and other materials, Machine for cutting	A. Warth	Stapleton, N. Y	Aug. 2, 1870 July 23, 1872	5,004
Textile and other materials, Machine for cutting	A. Warth	Stapleton, N. Y	Aug. 2, 1870 Dec. 10, 1872	5,186
Textile fabrics, Machine for hot-pressing	R. R. Wilson, by J. J. Crawford, assignee, (mesne.)	Halifax, England	Mar. 1, 1864 Apr. 9, 1872	4,867
Thill-coupling	D. A. Johnson	Boston, Mass	Apr. 11, 1871 Dec. 26, 1871	4,681
Thimble-skein	C. Paddock	Alton, Ill	Oct. 17, 1871 Mar. 5, 1872	4,791
Thrashers, Rewinnowing-attachment for	J. B. Padon	Troy, Ill	Feb. 25, 1873 June 3, 1873	5,438
Thrashing and cleaning machine, Grain	I. Hart, by C. Aultman, assignee, (mesne.)	Mansfield, Ohio	July 31, 1860 June 1, 1869	3,474
Thrashing and hulling machine, Clover	J. Bradley and J. Nicholas	Gomer, Ohio	May 6, 1873 Oct. 28, 1873	5,634
Thrashing and winnowing machine	A. Ralston	Middletown, Pa	Feb. 21, 1842 Jan. 15, 1856	342
Thrashing, hulling, and cleaning machine, Clover-seed.	M. H. Mansfield	Ashland, Ohio	July 24, 1866 Sept. 19, 1871	4,566
Thrashing-machine	D. C. Baughman	Tiffin, Ohio	June 6, 1871 Jan. 7, 1873	5,217
Thrashing-machine	D. M. Cochran	Richmond, Ind	Sept. 3, 1861 Feb. 16, 1864	1,617
Thrashing-machine	A. B. Crawford, by J. O. Ferrall, and T. L. Daniels, assignees.	Piqua, Ohio	Sept. 4, 1860 May 31, 1870	4,007
Thrashing-machine	H. Hanna	Pittsburgh, Pa	Dec. 1, 1868 Jan. 31, 1871	4,245

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Thrashing-machine	M. Harder, G. W. Douglass, H. Becker, and D. Anthony, by R. and M. Harder, assignees.	Cobleskill, N. Y	June 9, 1863 July 13, 1869	3,550
Thrashing-machine	M. Harder, G. W. Douglass, H. Becker, and D. Anthony, by R. and M. Harder, assignees.	Cobleskill, N. Y	June 9, 1863 July 13, 1869	3,551
Thrashing-machine	P. W. Mills, by N. Palmer, assignee.	Hudson, N. Y	Jan. 19, 1858 Jan. 23, 1866	2,155
Thrashing-machine	S. Moore	Central Bridge, N. Y	Oct. 3, 1854 Dec. 18, 1860	1,099
Thrashing-machine	S. E. Oviatt	Richfield, Ohio	July 10, 1860 Aug. 13, 1861	1,218
Thrashing-machine	N. Palmer	Hudson, N. Y	May 16, 1865 Jan. 23, 1866	2,154
Thrashing-machine	I. S. Spencer, by N. Palmer, assignee.	Hudson, N. Y	Sept. 23, 1856 Jan. 2, 1866	2,141
Thrashing-machine	D. S. Wagener	Penn Yan, N. Y	May 1, 1860 Jan. 29, 1861	1,133
Thrashing-machine	A. S. Whittemore	Willimantic, Conn	Feb. 18, 1868 Apr. 27, 1869	3,403
Thrashing-machine and separator	H. W. Matthews	Chicago, Ill	Aug. 27, 1867 Feb. 4, 1868	2,852
Thrashing-machine dust-conveyor	J. B. Hunsberger	Vincent, Pa	June 11, 1872 Sept. 24, 1872	5,069
Thrashing-machine feed-cutting attachment	G. W. Lee	Sandy, Ohio	May 4, 1869 Dec. 7, 1869	3,756
Thread dressing and finishing machine	E. Burgy and L. Guillemin, by W. Kiefer, assignee.	New York, N. Y	Feb. 7, 1865 July 10, 1866	2,303
Thread dressing and finishing machine	O. Hall and T. Merrick	Willimantic, Conn., and Holyoke, Mass.	Aug. 21, 1860 Nov. 16, 1869	3,734
Thread, Machine for doubling, twisting, and reeling.	F. Cheney	Manchester, Conn	Oct. 9, 1847 Apr. 29, 1851	197
Ticket-register, Railway-car, &c	W. Apperly	New York, N. Y	May 1, 1855 Feb. 19, 1856	353
Tile-dressing machine	G. Barney and V. G. Barney	Swanton, Vt., and Charles City, Iowa.	Sept. 20, 1870 July 1, 1873	5,468
Tile-machine	F. M. Mattice	Detroit, Mich	May 18, 1858 Feb. 22, 1870	3,851
Tile-machine	J. W. Penfield	Cleveland, Ohio	Jan. 4, 1870 Apr. 5, 1870	3,905
Tiles and bricks for roofing, &c	R. O. Lowrey	Tabor, Iowa	Feb. 5, 1867 May 7, 1867	2,591
Till-alarm	C. and W. H. Tucker, by N. Tucker and R. S. Dorsey, assignees, (mesne.)	Indianapolis, Ind	Dec. 13, 1870 Sept. 9, 1873	5,566
Tilting and revolving chair	D. E. Teal, by Heywood Brothers & Co., assignees.	New Lisbon, N. Y	July 19, 1870 Sept. 10, 1872	5,055
Tilting-chair	M. V. Howe, by Heywood Brothers & Co., assignees.	Gardner, Mass	Jan. 28, 1868 May 20, 1873	5,419
Tilting-chair	D. E. Teal, by Heywood Brothers & Co., assignees.	New Lisbon, N. Y	May 5, 1863 Sept. 10, 1872	5,054
Time-detector, Watchman's	J. Bürk, by J. E. Buerk, assignee.	Boston, Mass	Jan. 1, 1861 Aug. 22, 1865	2,054
Time-detector, Watchman's	J. Bürk, by J. E. Buerk, assignee.	Boston, Mass	Jan. 1, 1861 Mar. 8, 1870	3,869
Time-keeper by currents of air, Method of winding.	C. B. Howard	Watertown, N. Y	Apr. 3, 1860 Feb. 19, 1861	1,140
Time-keeper regulator	R. S. Mershon, by self and J. M. Harper, assignees.	Philadelphia, Pa	Apr. 26, 1859 Feb. 7, 1860	892
Time-marking machine, Workman's	B. T. Harris, by M. E. Harris, assignee, (mesne.)	Brooklyn, N. Y	Aug. 11, 1857 July 6, 1858	571
Time-piece regulator	G. P. Reed	Boston, Mass	Feb. 5, 1867 June 8, 1869	3,498
Tin cans, Machine for making	C. Barry	Philadelphia, Pa	Dec. 3, 1867 Oct. 6, 1868	3,143
Tin cans, Machine for making	C. Barry	Philadelphia, Pa	Dec. 3, 1867 Apr. 23, 1872	4,876
Tin cans, Machine for making	E. W. Bliss, by C. Pratt, assignee.	Brooklyn, and New York, N. Y.	Sept. 29, 1868 Dec. 5, 1871	4,659
Tin from sheet-metal, Process of removing	D. B. Sturdevant and B. H. Harmon.	Clifton Springs, N. Y	Mar. 24, 1868 Jan. 5, 1869	3,258
Tin, Method of ornamenting	L. Fitzmaier, by Atwater, Benham & Co., assignees.	New York, N. Y	July 30, 1867 Oct. 25, 1870	4,160
Tinman's machine	C. H. Raymond	Southington, Conn	Aug. 30, 1859 Jan. 19, 1869	3,271
Tire-bending machine	J. Tomlinson	Onslow, Iowa	Feb. 4, 1873 May 13, 1873	5,409
Tire-setter	J. Pailca	Ledyard, N. Y	Jan. 16, 1872 Sept. 9, 1873	5,565
Tire-tightener	P. Daniels, by J. Orr, assignee	Hampden Township, Pa	Apr. 17, 1866 Oct. 12, 1869	3,672
Tire-tightening device, Carriage	J. B. West	Geneseo, N. Y	Mar. 29, 1870 Mar. 26, 1872	4,836
Tire, Wagon	B. F. Morey	Clinton, Ind	Jan. 19, 1869 June 22, 1869	3,518
Tobacco, cotton, and hay press, Portable	A. J. Murray	West River, Md	Jan. 9, 1835 May 17, 1842	37
Tobacco, Cutting	F. W. Ritterhorff and C. A. Colquitt, by selves and W. Mulchahey, assignees.	New York, N. Y	Feb. 23, 1864 Mar. 14, 1865	1,903
Tobacco, Machine for sheeting plug	W. J. Van Horn and W. Alexander.	Louisiana, Mo	Dec. 27, 1859 Aug. 1, 1865	2,044
Tobacco-packing case	S. F. Hess	Rochester, N. Y	Jan. 25, 1870 Mar. 8, 1870	3,871

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Tobacco-pipe	A. J. Bowen, by the Tobacco-Pipe Company, assignee, (mesne.)	Baltimore, Md	June 10, 1862 Apr. 4, 1865	1,929
Tobacco-pipe	H. G. Dayton, by R. H. Collins, assignee.	Maysville, Ky., and Cincinnati, Ohio.	May 12, 1868 Feb. 6, 1872	4,733
Tobacco-pipe	A. Fessenden, by A. B. Ely, assignee.	Boston, Mass	Nov. 29, 1864 Oct. 10, 1865	2,085
Tobacco-pipe	G. W. Frances and W. L. Woods, by W. L. Woods, assignee.	Washington, D. C	Apr. 11, 1865 Mar. 12, 1867	2,506
Tobacco-pipe	G. Lautenschlager and G. L. Gott.	Cincinnati, Ohio, and New York, N. Y.	Jan. 30, 1866 Feb. 11, 1868	2,859
Tobacco-pipe	P. C. Rowe, by C. Houghton, trustee and assignee.	Boston and Roxbury, Mass.	July 12, 1864 Dec. 27, 1864	1,840
Tobacco-pouch	W. S. Sims	Newark, N. J	Feb. 26, 1867 Apr. 16, 1867	2,561
Tobacco, Preparing chewing	H. D. Smith, by C. W. Sweet and J. F. Greene, assignees.	New York, N. Y	Mar. 14, 1865 Jan. 29, 1867	2,468
Tobacco-press	J. A. Bawsel, by A. Harthill, assignee.	Powhatan Court-house, Va., and New York, N. Y.	May 31, 1859 May 8, 1866	2,240
Tobacco-press	W. Cameron	Petersburgh, Va	Nov. 9, 1858 Jan. 15, 1861	1,127
Tobacco-press	W. Cameron	Petersburgh, Va	Nov. 9, 1858 Jan. 15, 1861	1,128
Tobacco-press	W. Cameron and G. Lindsay, by W. Cameron, assignee.	Petersburgh, Va	Sept. 13, 1859 Jan. 15, 1861	1,124
Tobacco-press	J. D. King	Toronto, Canada	July 25, 1865 Aug. 10, 1869	3,593
Tobacco, Treating smoking	W. A. Wright, by L. L. Armistead, assignee	Lynchburgh, Va	Feb. 7, 1871 July 2, 1872	4,962
Tongs, Pipe	H. H. Gilmore, by A. Beach, assignee.	Boston, Mass	Apr. 6, 1858 June 12, 1866	2,283
Tongs, Pipe	H. Herbert	Cincinnati, Ohio	Dec. 20, 1864 May 28, 1872	4,917
Tongue support, Wagon	W. Beers	Milan, Ohio	May 23, 1871 Aug. 1, 1871	4,490
Tonguing and grooving machine	C. W. Brown	Boston, Mass	Aug. 14, 1844 Feb. 5, 1856	349
Tonguing machine	R. Crosby and H. D. Edgcomb, by R. Crosby, jr., assignee.	New York, N. Y	Apr. 13, 1852 July 13, 1852	221
Tool	H. L. Lowman, by the Washoe Tool Company, assignee.	New York, N. Y	June 6, 1865 Feb. 6, 1866	2,167
Tool-holder	W. W. Draper	Greenfield, Mass	Jan. 18, 1859 Apr. 11, 1871	4,333
Tools to handles, Fastening	J. E. Emerson	Trenton, N. J	Mar. 29, 1859 Apr. 29, 1862	1,304
Tooth-pick	B. F. Sturtevant	Boston, Mass	June 2, 1863 Apr. 26, 1864	1,661
Tournure	A. W. Thomas	Philadelphia, Pa	May 9, 1871 May 14, 1872	4,903
Tournure	A. W. Thomas	Philadelphia, Pa	May 9, 1871 Sept. 2, 1873	5,563
Toy	C. Ball, by T. Marriott, assignee	Augusta, Mich	Apr. 29, 1873 July 8, 1873	5,479
Toy, Rocking	J. A. Crandall	New York, N. Y	May 17, 1859 Mar. 11, 1862	1,287
Toy, Teacher's	E. F. Anderson	Mansfield, Conn	July 6, 1869 Mar. 22, 1870	3,891
Toy-top	F. O. and W. W. Tucker, by selves, assignees, (mesne.)	West Meriden, Conn	June 12, 1866 July 9, 1867	2,673
Toy-velocipede	N. S. Warner	Bridgeport, Conn	Sept. 7, 1869 Sept. 13, 1870	4,120
Trace-holder	S. Stout, by O. B. North & Co	New Haven, Conn	May 19, 1868 Apr. 12, 1870	3,914
Track cleaner, Railway	J. Paradis, by self, W. H. Drew, and S. Parker, assignees.	Brooklyn, N. Y	May 28, 1872 Nov. 26, 1872	5,162
Traction-engine	R. C. Parvin	Philadelphia, Pa	Oct. 10, 1871 Feb. 13, 1872	4,733
Trade-mark, (Design)	T. Bakewell	Pittsburgh, Pa	Oct. 1, 1867 Nov. 2, 1869	3,696
Transplanter	J. C. Fuller	Hinmansville, N. Y	Feb. 16, 1869 Mar. 26, 1872	4,832
Traveling-bag	F. Fischbeck	Chicago, Ill	Feb. 9, 1869 July 5, 1870	4,060
Traveling-bag	A. Sonnekalb and J. W. Lieb	Newark, N. J	Feb. 27, 1866 Feb. 25, 1873	5,299
Traveling engines, Supplying steam to	E. Lamm	New Orleans, La	July 30, 1872 Oct. 1, 1872	5,083
Tray or waiter, Table	N. Waterman, by P. A. Doherty, assignee of administrators.	Boston, Mass	May 12, 1863 May 11, 1869	3,432
Treadle	G. B. Kirkham	New York, N. Y	Mar. 11, 1873 Apr. 29, 1873	5,385
Trees, Composition for destroying insects on fruit	B. Best, by J. Ahearn, assignee	Baltimore, Md	June 2, 1868 Nov. 16, 1869	3,728
Treenail	N. L. Tomlinson	Mystic Bridge, Conn	June 2, 1868 Dec. 6, 1870	4,195
Treenails, Machinery for dressing	J. Fitzgerald, by D. A. Fitzgerald, assignee.	New York, N. Y	Aug. 28, 1849 July 17, 1855	319
Trellis for strawberry and other plants	W. W. Wilcox	Middletown, Conn	Aug. 27, 1867 Mar. 10, 1868	2,896
Trellis, Grape and vine	T. G. Yeomans	Walworth, N. Y	Nov. 17, 1868 July 11, 1871	4,469
Tremolo-attachment	R. W. Carpenter, by A. Hitchcock, G. G. Saxe, and J. H. Robertson, assignees.	New York, N. Y	June 27, 1865 May 18, 1869	3,444
Tremolo-attachment	R. W. Carpenter, by A. Hitchcock, G. G. Saxe, and J. H. Robertson, assignees.	New York, N. Y	June 27, 1865 Oct. 5, 1869	3,665

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Trimmings, Machine for producing folded	C. O. Crosby and H. Kellogg, by Elm City Company, assignee.	Milford and New Haven, Conn.	Aug. 5, 1862 June 17, 1873	5,448
Truck, Car	A. Higley, by Higley Car-Journal Company, assignee.	Cleveland, Ohio	Feb. 15, 1870 June 17, 1873	5,452
Truck, Car	C. D. Tisdale, by C. Bockus and S. and H. Shackell, assignees, (mesne.)	Boston, Mass. and Montreal, Canada.	Oct. 11, 1864 May 9, 1871	4,378
Truck, Changeable-gage car	C. D. Tisdale	Boston, Mass	Mar. 10, 1863 Apr. 29, 1873	5,382
Truck, Hand	W. C. Reutgen, by P. H. Humes, assignee.	Keokuk, Iowa, and Watson's Salt Creek, Ill.	Mar. 19, 1861 Nov. 19, 1867	2,804
Truck, Hand	B. W. Tuthill	New York, N. Y	Sept. 7, 1869 Jan. 2, 1872	4,700
Truck, Locomotive	L. Bissell, by the Locomotive-Engine Safety-Truck Company, assignee.	New York, N. Y	Aug. 4, 1857 Oct. 18, 1864	1,794
Truck, Railway-car	W. Pettit	Philadelphia, Pa	June 23, 1863 Jan. 24, 1871	4,238
Truck, Safety	S. Y. Bradstreet	Monticello, Iowa	Apr. 28, 1868 July 7, 1868	3,024
Truck, Street-railway	R. H. Locky	Allegheny, Pa	Apr. 5, 1854 July 11, 1865	2,027
Trunk-lock hasp	L. Hillebrand	Philadelphia, Pa	Sept. 21, 1869 Dec. 20, 1870	4,205
Trunk-lock hasp	C. Liebrich, by S. Croft and J. C. Schuellermann, executors, (extended May 2, 1868.)	Philadelphia, Pa	May 2, 1854 Nov. 1, 1870	4,170
Trunk-lock hasp	C. Liebrich, deceased, by L. Hillebrand and D. Wolf, assignees of S. Croft and J. C. Schuellermann, executors, (extended May 2, 1868.)	Philadelphia, Pa	May 2, 1854 Apr. 15, 1873	5,352
Truss	J. A. Sherman	New York, N. Y	June 19, 1866 Jan. 2, 1872	4,697
Truss-spring	J. W. Riggs, by self and J. J. Diefendorf, assignees.	Brooklyn, N. Y	Jan. 18, 1859 Oct. 10, 1871	4,589
Tub and bucket foot	J. W. Kendall	Philadelphia, Pa	Nov. 26, 1867 July 28, 1868	3,053
Tube-cutter	H. Getty	Brooklyn, N. Y	Aug. 6, 1867 July 13, 1869	3,549
Tubing, Machine for bending, (Division A)	W. T. Farre	Montreal, Canada	Dec. 3, 1872 Sept. 30, 1873	5,581
Tubing, Method of bending, (Division B)	W. T. Farre	Montreal, Canada	Dec. 3, 1872 Sept. 30, 1873	5,582
Tug-holder	T. J. Bottomley, by Pratt & Letchworth, assignees.	Burlington, Wis., and Buffalo, N. Y.	Aug. 6, 1867 Nov. 18, 1873	5,657
Tumbler-washer	A. Hallowell, by G. D. and C. Dows and G. S. Cushing, assignees, (mesne.)	Boston and Lowell, Mass	Feb. 13, 1866 Mar. 8, 1870	3,870
Tumbler-washer	J. Solter	Baltimore, Md	Sept. 4, 1866 Feb. 25, 1868	2,883
Tunnel, Submarine	J. R. Miller, by the American Submarine Tunnel Company, assignee.	New York, N. Y	Aug. 2, 1853 Mar. 12, 1867	2,504
Tunneling and quarrying, Machine for	I. Merrill, by A. Maxwell	Shelburne Falls, Mass	Apr. 22, 1856 Dec. 19, 1865	2,129
Turn-table	J. C. Robie	Binghamton, N. Y	Aug. 15, 1854 May 5, 1857	460
Turn-table, Railway	A. J. Wright and W. L. Meeker	Newark, N. J	June 14, 1870 May 30, 1871	4,410
Turning and sliding table, Railway	W. Sellers	Philadelphia, Pa	Mar. 23, 1858 Aug. 10, 1858	582
Turning irregular forms, Machinery for	T. Clark	New Haven, Conn	Jan. 19, 1847 Nov. 12, 1850	182
Tuyere	J. Bayliss	New York, N. Y	Aug. 7, 1866 Dec. 17, 1867	2,811
Tuyere	S. Williamson	Cincinnati, Ohio	Aug. 9, 1871 Jan. 2, 1872	4,691
Twine-cutter	G. C. Taft, by T. B. Doolittle, assignee.	Bridgeport, Conn	Feb. 1, 1870 May 31, 1870	4,003
Twist drill, Machine for making	A. R. Arnold, by American Standard Tool Company, assignee, (mesne.)	Newark, N. J	Aug. 30, 1864 Aug. 10, 1869	3,588
Type-blocks, Device for forming letters and figures on.	D. A. Draper	Cambridge, Mass	May 7, 1867 May 18, 1869	3,442
Type composing and setting machine	W. S. Loughborough	Rochester, N. Y	Oct. 23, 1855 Jan. 8, 1856	339
Type setting and distributing machine	T. Alden, by the Alden Type Setting and Distributing Machine Company, assignee, (mesne.)	New York, N. Y	Sept. 15, 1857 July 27, 1869	3,572
U.				
Umbrella	W. W. Winter and T. Mueller, by C. Lusby, assignee.	Philadelphia, Pa	Mar. 31, 1868 Dec. 31, 1872	5,215
Umbrella-covers, Hemming and cording	S. C. Blodgett, by N. Wheeler, assignee, (extended July 3, 1867.)	Bridgeport, Conn	Jan. 3, 1854 Apr. 27, 1869	3,402
Umbrella frame, runner, and notch	A. Herzberg, by I. Herzberg, assignee.	Philadelphia, Pa	Oct. 22, 1872 Jan. 14, 1873	5,234
Umbrella-runner	O. M. Smith	Philadelphia, Pa	July 4, 1871 July 1, 1873	5,478
Umbrella safety-attachment	J. A. Lieb and C. W. Crane, by E., J., and J. Wright, J. Noble, and J. F. Filson, assignees.	Philadelphia, Pa., and New York, N. Y.	Feb. 18, 1868 Nov. 9, 1869	3,726

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Umbrella-supporter for vehicles	H. S. Heermance	Lenox, Mass	Apr. 2, 1867 Jan. 11, 1870	3,792
Upholstery springs, Mode of securing	W. Wright, (extended December 16, 1870.)	New York, N. Y	Dec. 16, 1856 Feb. 28, 1871	4,286
Uppers, Apparatus for goring	J. C. Touzet	Paris, France	Dec. 29, 1868 Sept. 24, 1872	5,075
Upsetting machine, Metal-bar	A. Kloman	Pittsburgh, Pa	June 19, 1866 May 21, 1872	4,911
Urinal	S. Males	Cincinnati, Ohio	Jan. 28, 1868 Apr. 26, 1870	3,939
V.				
Vacuum-apparatus for treating diseases	A. F. Jones	Lexington, Ky	Sept. 13, 1864 June 5, 1866	2,276
Vacuum-apparatus, Medical	J. G. Hadfield	Cincinnati, Ohio	Dec. 24, 1867 July 26, 1870	4,080
Vacuum-chamber, Medical	G. Hadfield	Cincinnati, Ohio	Nov. 6, 1866 Sept. 29, 1868	3,139
Vaginal irrigator	M. Mattson	New York, N. Y	Aug. 27, 1867 Jan. 30, 1872	4,726
Valve-arrangement, Steam-engine	J. F. Hamilton	Pittsburgh, Pa	July 24, 1860 Feb. 7, 1865	1,864
Valve, Automatic regulating	B. Holly	Lockport, N. Y	Sept. 14, 1869 May 23, 1871	4,396
Valve, Balance slide	T. M. Herriott and S. Myers	South Pittsburgh, Pa	Dec. 24, 1868 Sept. 13, 1870	4,117
Valve, Balance slide	C. H. Hutchinson	Concord, N. H	Oct. 10, 1871 Oct. 8, 1872	5,090
Valve, Balance slide	W. M. Stevenson	Newcastle, Pa	Oct. 20, 1868 Jan. 18, 1870	3,802
Valve, Butterfly	N. Cope and W. Hodgson	Cincinnati, Ohio	May 10, 1859 July 2, 1861	1,204
Valve device, Steam-engine	W. Baxter	Newark, N. J	Oct. 27, 1868 Apr. 13, 1869	3,364
Valve, Direct-acting-engine	G. F. Blake	Boston, Mass	Nov. 28, 1871 Oct. 1, 1872	5,077
Valve, Dry gas-meter	C. C. Lloyd, by W. Hopper and R. H. Gratz, assignees.	Philadelphia, Pa	June 22, 1858 June 28, 1859	750
Valve, Flexible lip-formed	E. Field	Middlesex County, England	May 21, 1872 June 3, 1873	5,431
Valve, Float	J. H. Guild	Rupert, Vt	May 14, 1867 Nov. 24, 1868	3,212
Valve for petroleum-package, Stop	A. Warth	Stapleton, N. Y	Apr. 19, 1870 Apr. 2, 1872	4,832
Valve for water-pipes	W. Kearney	Belleville, N. J	Sept. 11, 1866 Jan. 7, 1873	5,220
Valve-gear	J. F. Hamilton	Pittsburgh, Pa	July 14, 1863 Feb. 7, 1865	1,863
Valve-gear, Steam-engine	C. H. Brown and C. Burleigh, by Putnam Machine Company, assignee.	Fitchburgh, Mass	Jan. 15, 1856 Aug. 27, 1867	2,754
Valve-gear, Steam-engine	A. S. Cameron	New York, N. Y	Oct. 3, 1865 Dec. 4, 1866	2,407
Valve, Globe steam	E. A. Rock, by the Rock Valve Manufacturing Company, assignee.	Ludlow, Vt	Feb. 4, 1868 June 21, 1870	4,043
Valve, Globe	J. J. French, by self and R. A. McCauley, assignees.	Baltimore, Md	July 2, 1867 Mar. 17, 1868	2,898
Valve, Governor	J. and A. Judson, by J. Judson, assignee.	Rochester, N. Y	Nov. 5, 1850 Jan. 10, 1854	255
Valve, Governor	H. D. Snow	Rochester, N. Y	Oct. 11, 1859 May 13, 1862	1,309
Valve-motion, Steam-engine	H. O. Perry, by J. D. Shepard, assignee.	Buffalo, N. Y	Mar. 25, 1856 June 11, 1867	2,645
Valve, Oscillating	G. Davis	Syracuse, N. Y	Jan. 17, 1865 Oct. 6, 1868	3,152
Valve, Piston steam	R. C. Gray and W. B. Brittingham, by selves and J. Fordyce, assignees.	La Fayette, Ind	Jan. 19, 1869 Apr. 4, 1871	4,319
Valve, Pump	W. H. Pollard, by the Gould's Manufacturing Company, assignee.	Seneca Falls, N. Y	Jan. 7, 1868 Apr. 25, 1871	4,356
Valve, Safety	A. G. Buzby	Philadelphia, Pa	Apr. 21, 1868 July 6, 1869	3,535
Valve, Safety	H. S. Jewell and F. Steele	Brooklyn, N. Y	Jan. 30, 1872 May 7, 1872	4,892
Valve, Safety	H. Waterman	Hudson, N. Y	Nov. 15, 1853 July 9, 1867	2,675
Valve-seat, Non-corrosive	E. H. Ashcroft	Lynn, Mass	Sept. 1, 1858 June 28, 1870	4,045
Valve, Slide	T. Adams and G. J. Parson, by O. Cady and W. W. W. Wood, assignees, (mesne.)	Morristown, Vt., and Brooklyn, N. Y.	Sept. 17, 1867 Aug. 17, 1869	3,603
Valve, Slide	J. Nesbitt, by W. G. Ulery, assignee.	Boston, Mass	Dec. 27, 1870 Mar. 4, 1873	5,309
Valve, Sliding stop	H. G. Ludlow, 2d, by Ludlow Valve Manufacturing Company, assignee.	Troy, N. Y	Sept. 17, 1861 Jan. 31, 1871	4,250
Valve, Steam	G. Rieseck	Pittsburgh, Pa	Aug. 10, 1858 Feb. 8, 1859	655
Valve, Steam-engine	A. Crosby	Fredonia, N. Y	Aug. 30, 1859 Mar. 6, 1860	921
Valve, Steam-engine	S. J. Peet, by the Peet Valve Company, assignee, (mesne.)	Boston, Mass	Jan. 1, 1867 Apr. 2, 1872	4,849
Valve, Steam-engine	H. O. Perry, by J. D. Shepard, assignee.	Buffalo, N. Y	Mar. 25, 1856 June 11, 1867	2,646
Valve, Steam-engine	J. Reichmann	Dubuque, Iowa	Feb. 18, 1868 Jan. 12, 1869	3,263

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Valve, Steam-engine exhaust	T. S. Davis	Jersey City, N. J	Dec. 29, 1868 May 18, 1869	3, 440
Valve, Steam-engine regulator	N. C. Travis, by N. Johnson and R. Emerson, assignees.	Alton, Ill	Oct. 11, 1859 Sept. 25, 1860	1, 051
Valve, Steam-engine slide	R. C. Bristol	Chicago, Ill	June 21, 1859 Feb. 7, 1860	891
Valve, Steam-engine slide	J. Nesbitt, by W. G. Ulery, assignee.	Boston, Mass	Dec. 27, 1870 Mar. 4, 1873	5, 310
Valve, Steam-engine supplemental	R. Colburn and L. W. Hanson	Norwich, Conn	May 20, 1856 Feb. 7, 1865	1, 862
Valve, Steam safety	W. Naylor, by E. H. Ashcroft, assignee.	Boston, Mass	Oct. 16, 1866 Nov. 9, 1869	3, 727
Valve, Stop	J. H. Davis	Allegheny City, Pa	Dec. 29, 1868 Feb. 8, 1870	3, 823
Valve, Tubular elastic	F. Peale	Philadelphia, Pa	June 24, 1856 Apr. 5, 1859	682
Valve, Water-closet	F. H. Bartholomew	New York, N. Y	Jan. 19, 1864 May 15, 1866	2, 241
Valve, Water-closet	J. E. Boyle, by G. Stevenson, assignee.	Brooklyn and New York, N. Y.	Jan. 3, 1860 Jan. 6, 1863	1, 375
Valves in direct-action engines, Operating slide	G. W. Hubbard and W. E. Conant.	Brooklyn, N. Y., and Little Falls, N. J.	Jan. 9, 1855 Sept. 18, 1866	2, 359
Valves in direct-acting engines, Operating slide	G. W. Hubbard and W. E. Conant, by W. H. Guild and W. F. Garrison, assignees, (extended January 9, 1869.)	Brooklyn, N. Y	Jan. 9, 1855 Mar. 22, 1870	3, 885
Valves of steam-engines, Means of operating	W. J. Stevens, by N. W. Condict and D. S. Steele, assignees, (mesne.)	New York, N. Y., and Jersey City, N. J.	July 23, 1861 May 16, 1865	1, 957
Valves of steam-engines, Method of opening	F. E. Sickels, (extended October 19, 1858.)	New York, N. Y	Oct. 19, 1844 Jan. 1, 1861	1, 112
Valves of steam-engines, Method of opening and closing.	F. E. Sickels, (extended October 19, 1858.)	New York, N. Y	Oct. 19, 1844 Jan. 1, 1861	1, 113
Valves of steam-engines, Method of opening and closing.	F. E. Sickels, (extended October 19, 1858.)	New York, N. Y	Oct. 19, 1844 Jan. 28, 1862	1, 263
Valves, Machine for refitting	C. F. Hall, by self and C. S. Hall, assignees.	Brooklyn, N. Y	Dec. 10, 1867 Sept. 28, 1869	3, 654
Valves, Method of operating steam	N. W. Wheeler, by O. T. Earle, assignee, (extended March 1, 1869.)	Norwalk, Conn	July 31, 1855 Oct. 12, 1869	3, 671
Valves, Refitting stop	S. Wing, by C. S. and C. F. Hall, assignees, (mesne.)	Brooklyn, N. Y	Aug. 1, 1865 July 7, 1868	3, 020
Varnish	D. R. Averill	New Centreville, N. Y	Mar. 23, 1858 Feb. 1, 1870	3, 813
Varnish for coating photographic negatives	J. W. Morgeneier	Sheboygan, Wis	Dec. 6, 1870 Oct. 21, 1873	5, 618
Varnish, Manufacture of	D. R. Averill	New Centreville, N. Y	Mar. 23, 1858 Feb. 1, 1870	3, 814
Varnish, Process of making copal	L. Hull, by self, assignee, (mesne.)	Charlestown, Mass	Nov. 22, 1859 Nov. 21, 1865	2, 109
Vault-cover	J. B. Cornell	New York, N. Y	Feb. 19, 1856 Mar. 24, 1857	441
Vault-cover	T. Hyatt	New York, N. Y	Nov. 12, 1845 Apr. 3, 1855	303
Vault-cover	G. R. Jackson	New York, N. Y	Apr. 21, 1857 Jan. 19, 1858	520
Vault-cover, Illuminating	W. Dale, by W. S. O'Brien, assignee.	New York, N. Y	Mar. 7, 1871 Dec. 16, 1873	5, 684
Vault-light	T. Hyatt	New York, N. Y	Sept. 19, 1854 Feb. 1, 1859	653
Vegetable and fruit peeler	E. D. Averill and J. Malan	Brooklyn, N. Y	Mar. 8, 1870 June 14, 1870	4, 025
Vehicle-axle, Lubricating	J. S. Eggleston, by E. H. Kellogg, assignee, (mesne.)	Auburn and New York, N. Y.	Jan. 2, 1872 June 24, 1873	5, 466
Vehicle-dash, Adjustable metallic	G. M. Peters	Columbus, Ohio	Apr. 26, 1870 May 30, 1871	4, 408
Vehicle-dash, Adjustable metallic	G. M. Peters	Columbus, Ohio	Apr. 26, 1870 Apr. 9, 1872	4, 861
Vehicle-seat	J. Burt, by A. F. Hubbell and E. R. Williams, assignees, (mesne.)	Sturgis, Mich	Nov. 5, 1867 June 17, 1873	5, 446
Vehicle-spring	B. Hershey and R. Dudley, by R. Dudley and R. F. Gaggin, assignees, (mesne.)	Erie, Pa	Feb. 21, 1871 Aug. 20, 1872	5, 035
Vehicle-wheel	S. Atha	West Liberty, Ohio	Nov. 9, 1869 June 11, 1872	4, 938
Vehicle-wheel	J. R. Baird	Vincennes, Ind	July 18, 1871 Sept. 26, 1871	4, 567
Vehicle-wheel	A. L. Blackman, by S. K. Schwenk and J. E. Saunders, assignees.	Cross Plains, Tenn	May 28, 1872 Jan. 28, 1873	5, 264
Vehicle-wheel	L. Dorman, by C. W. Fillmore and J. R. Miner, assignees.	Willimantic, Conn	May 21, 1867 July 29, 1873	5, 509
Vehicles, Car-spring for	C. W. Saladee, by L. Dobbins, assignee.	Saint Catharine's, Canada, and Erie, Pa.	Oct. 29, 1872 Apr. 15, 1873	5, 359
Vehicles, Construction of wheeled	O. E. Mills	Aurora, Ill	Feb. 25, 1862 June 30, 1863	1, 508
Velocipede	A. M. Allen	New York, N. Y	Aug. 24, 1869 Nov. 23, 1869	3, 739
Velocipede	B. P. Crandall	New York, N. Y	July 7, 1868 Nov. 24, 1868	3, 207
Velocipede	G., W., A., E., and F. Hanlon, by W. and E. Hanlon, assignees.	New York, N. Y	July 7, 1868 Feb. 9, 1869	3, 207
Velocipede	P. W. Mackenzie, by S. W. Smith, assignee.	New York, N. Y	Aug. 12, 1862 Mar. 2, 1869	3, 319
Veneer	I. Amies, by J. A. Jackson, assignee.	Philadelphia, Pa	Dec. 11, 1855 June 21, 1859	741

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Veneers, Method of producing mosaic	O. Heinigke and M. Laemmel	Bay Ridge, N. Y	May 29, 1860 June 4, 1867	2,633
Veneers, Stay-log for cutting	J. N. Lyman	New York, N. Y	Dec. 1, 1868 Jan. 18, 1870	3,799
Ventilator	S. C. Maine, by Maine's Portable Ventilator Company, assignee, (mesne.)	Boston, Mass	Mar. 1, 1870 Apr. 22, 1873	5,363
Ventilator	M. E. Mead	Darien Depot, Conn	May 18, 1869 Feb. 7, 1871	4,255
Ventilator	E. L. Roberts	New York, N. Y	June 30, 1868 Mar. 2, 1869	3,317
Vessel for boiling	W. Kroeger, by W. Frankfurth, assignee.	Milwaukee, Wis	Mar. 28, 1865 Nov. 29, 1870	4,188
Vessels, Apparatus for discharging water from the holds of.	N. Hodge	North Adams, Mass	Oct. 19, 1852 Feb. 1, 1853	229
Vessels, Construction of steam and sailing	A. Walker	Buffalo, N. Y	Aug. 25, 1863 Jan. 19, 1864	1,608
Vessels, Construction of steam and sailing	A. Walker	Buffalo, N. Y	Aug. 25, 1863 Mar. 8, 1864	1,631
Vessels, Hull of steam	R. and T. Winans	Baltimore, Md	Oct 26, 1858 Jan. 25, 1859	651
Vessels, Lining sheet-iron	J. Kerr, W. Grant, and J. Potter.	Pittsburgh, Pa	May 7, 1842 Oct. 14, 1842	47
Vessels, Mode of raising sunken	C. Krogh and M. G. Hogness	Kroghville, Wis	Oct. 21, 1862 Feb. 3, 1863	1,392
Vinegar-apparatus	A. D. Strong	Ashtabula, Ohio	Dec. 14, 1869 June 28, 1870	4,051
Vise	T. L. Baylies and E. Crawley	Richmond, Ind	Sept. 15, 1868 July 6, 1869	3,530
Vise	E. Crawley and T. L. Baylies	Richmond, Ind	Apr. 27, 1869 Mar. 22, 1870	3,883
Vise	J. S. Hoar	West Acton, Mass	June 19, 1866 May 14, 1867	2,606
Vise	H. K. and T. W. Porter, by C. Parker, assignee, (mesne.)	Boston, Mass., and Meriden, Conn.	Dec. 17, 1867 Nov. 11, 1873	5,653
Vise	J. Simpson	Cleveland, Ohio	Oct. 3, 1871 Nov. 14, 1871	4,637
Vise	G. N. Stearns	Syracuse, N. Y	Oct. 9, 1866 Sept. 16, 1873	5,574
Vise, Carpenter's	O. V. Florey	Yellow Springs, Ohio	Apr. 8, 1856 Dec. 19, 1865	2,126
Vitreous substances, Machine for cutting	O. M. Pike, by W. T. Davis and A. De Wolf, assignees.	Greenfield, Mass	Dec. 29, 1868 May 18, 1869	3,441
Volute spring	D. G. Rollin, by J. Hobart, assignee.	Waltham, Mass	Feb. 23, 1858 Oct. 15, 1867	2,777
Vulcanized rubber, Utilizing waste	C. McBurney	Roxbury, Mass	Aug. 20, 1861 Mar. 20, 1866	2,206
Vulcanizing-flask	A. B. Woodard, by self and T. Ellis, assignees.	Alfred Centre, N. Y	Jan. 16, 1866 May 19, 1868	2,938
Vulcanizing India rubber	J. T. Trotter	New York, N. Y	Dec. 3, 1850 June 19, 1860	988
Vulcanizing rubber, &c., Apparatus for	E. A. L. Roberts and W. J. Demorest, by E. A. L. Robert, assignee.	New York, N. Y	May 10, 1859 Mar. 31, 1863	1,444
Vulcanizing-vessel	G. E. Hayes	Buffalo, N. Y	Mar. 5, 1861 Sept. 29, 1868	3,140
W.				
Wagon	L. M. Ham and J. H. Dodge	Chelsea, Mass	July 28, 1863 May 17, 1870	3,975
Wagon	E. Huson	Ithaca, N. Y	Feb. 17, 1857 Mar. 5, 1867	2,500
Wagon and car unloading apparatus	N. Swickard, by N. E. Phillips and J. W. Cline, assignees, (mesne.)	Galva and Knox County, Ill.	Oct. 13, 1868 Dec. 20, 1870	4,212
Wagon-axle	W. A. Lewis, by the Hollow Axle Manufacturing Company, assignee.	Chicago, Ill	Oct. 25, 1870 Oct. 10, 1871	4,584
Wagon-brake	A. Kessberger	Springfield, Ill	Apr. 6, 1869 Aug. 10, 1869	3,592
Wagon end-gate	J. L. Stropes	Bloomfield, Ind	July 11, 1871 Nov. 7, 1871	4,631
Wagon-skein, Casting	A. Leonard	Kenosha, Wis	Feb. 24, 1857 July 27, 1858	575
Wagon-spring	C. S. Martin	Milwaukee, Wis	Feb. 9, 1864 June 5, 1866	2,272
Wagon-spring	E. P. McCarthy, by self and J. Grant, assignees.	San Francisco, Cal	June 1, 1869 Oct. 21, 1873	5,615
Wagon-springs, Attaching	C. S. Martin	Milwaukee, Wis	Feb. 9, 1864 June 5, 1866	2,271
Wagon, Steam road	C. W. Hermance	Schuylersville, N. Y	Feb. 7, 1871 Mar. 28, 1871	4,311
Wagon-top	A. R. Tully	Harlem, N. Y	Sept. 11, 1866 June 24, 1873	5,467
Wagon-wheel	J. Thrasher	Albion, Mich	Jan. 30, 1866 Aug. 31, 1869	3,628
Wagons, Cast seamless thimble-skein for	A. Leonard, by B. Leonard, administratrix.	Kenosha, Wis	Feb. 24, 1857 Oct. 8, 1861	1,229
Wall-building and stump-extracting apparatus	G. W. Packer, jr	Mystic River, Conn	Aug. 29, 1865 July 7, 1868	3,022
Warp-dressing frame	A. M. Damon	Lowell, Mass	Oct. 9, 1866 Mar. 26, 1867	2,526
Wash-bench, Extension	S. Wiswall, by A. H. Spencer, assignee.	Hyde Park, Vt., and Providence, R. I.	Oct. 9, 1860 Aug. 9, 1870	4,097
Wash-boiler	J. Davis	Florida, Mass	Sept. 10, 1872 Apr. 15, 1873	5,350
Wash-boiler	J. Reist	Philadelphia, Pa	Nov. 29, 1864 Oct. 5, 1869	3,652

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Wash-boiler	M. W. Staples	Catskill, N. Y	Feb. 12, 1867 Dec. 17, 1867	2,816
Wash-boiler	C. N. Tyler	Buffalo, N. Y	Dec. 15, 1868 Sept. 5, 1871	4,544
Washing and wringing machine	J. Young, (extended September 19, 1862.)	West Galway, N. Y	Sept. 19, 1848 Jan. 6, 1863	1,384
Washing and wringing machine	J. Young, (extended September 19, 1862.)	West Galway, N. Y	Sept. 19, 1848 Jan. 6, 1863	1,385
Washing-apparatus	J. T. Grose, by self and W. E. Kinnear, assignees.	Upper Sandusky, Ohio	Jan. 4, 1870 Oct. 4, 1870	4,141
Washing-apparatus	J. T. King	Baltimore, Md	Oct. 21, 1851 Apr. 13, 1852	215
Washing-compound	R. W. Chappell	Chicago, Ill	Sept. 19, 1865 Sept. 25, 1866	2,364
Washing-machine	T. Bailey and V. W. Blanchard	Bridport, Vt	Mar. 9, 1869 Aug. 24, 1869	3,613
Washing-machine	J. M. Clark, by F. L. Clark, assignee.	Lancaster and Clarksville, Pa.	Aug. 1, 1871 Jan. 23, 1872	4,717
Washing, &c., machine	J. M. Clark, by F. L. Clark, assignee.	Lancaster and Clarksville, Pa.	Aug. 1, 1871 Jan. 23, 1872	4,718
Washing-machine	M. C. Cronk and S. W. Palmer, by S. W. Palmer and C. Coventry, assignees.	Auburn, N. Y	Oct. 20, 1863 Aug. 1, 1871	4,497
Washing-machine	W. M. Doty	New York, N. Y	July 12, 1864 Mar. 17, 1868	2,897
Washing-machine	A. and G. H. King	Painesville, Ohio	Aug. 24, 1869 Nov. 16, 1869	3,736
Washing-machine	A. Lamb, by self, M. E. Layman, and W. H. Morse, assignees.	Jeffersonville, N. Y	Feb. 25, 1868 Oct. 20, 1868	3,162
Washing-machine	J. S. Lash	Philadelphia, Pa	Oct. 14, 1862 Aug. 15, 1865	2,051
Washing-machine	J. F. Pond	Cleveland, Ohio	May 22, 1860 Aug. 13, 1861	1,219
Washing-machine	H. E. Smith	Philadelphia, Pa	Oct. 26, 1858 Apr. 19, 1859	694
Washing-machine	W. H. Tambling	Berlin, Wis	Oct. 11, 1859 Jan. 17, 1860	886
Washing-machine	M. Van Auken	Saratoga Springs, N. Y	May 11, 1858 June 28, 1859	748
Washing-machine	B. Wright	Hudson, Mich	Mar. 28, 1865 Oct. 2, 1866	2,370
Washing-machine	J. Young	West Galway, N. Y	Sept. 19, 1848 July 30, 1861	1,216
Washing-machine for cleaning rags	J. Phelps	West Sutton, Mass	Nov. 24, 1843 Mar. 25, 1851	196
Watch	M. Burt	Cleveland, Ohio	Sept. 13, 1864 Mar. 6, 1866	2,189
Watch	S. D. Engle	Hazleton, Pa	Apr. 24, 1866 Mar. 31, 1868	2,907
Watch	G. P. Reed	Waltham, Mass	Apr. 14, 1857 Nov. 24, 1857	510
Watch	O. F. Stedman	Ravenna, Ohio	Jan. 28, 1868 May 26, 1868	2,953
Watch	N. B. Wallace	Fond du Lac, Wis	Sept. 10, 1867 Mar. 3, 1868	2,887
Watch-barrels, &c., Attachment of mainspring to	A. Wadsworth, by self and R. Schell, assignees.	Newark, N. J., and New York, N. Y.	June 15, 1869 Oct. 5, 1869	3,663
Watch-case	E. Bliss	Newark, N. J	Apr. 13, 1858 Nov. 23, 1858	628
Watch-case	J. F. Watson, by W. E. Baldwin and E. Bliss, assignees, (mesne.)	Middlesex County, England, and Newark, N. J.	Apr. 13, 1858 Aug. 17, 1858	586
Watch-case	J. F. Watson, by W. E. Baldwin and L. Bliss, assignees, (mesne.)	Middlesex County, England, and Newark, N. J.	Apr. 13, 1858 Aug. 17, 1858	587
Watch-cases, lockets, &c., from hard rubber, Molding.	W. H. Halsey, by Halsey's Patent Box and Case Company, assignee.	New York, N. Y	Aug. 18, 1868 May 17, 1870	3,973
Watch-cases, Method of making side-band of	G. W. Ladd, by self and J. A. Brown, assignees, (mesne.)	Providence, R. I	June 11, 1867 May 4, 1869	3,417
Watch-chain hook	C. Faas	North Attleborough, Mass	Aug. 25, 1868 Nov. 26, 1872	5,159
Watch-pinions in lathes, Securing	J. M. Bottum	New York, N. Y	July 15, 1851 July 8, 1856	375
Watch, Stem-setting	J. Jürgensen	Locle, Switzerland	Jan. 15, 1867 Apr. 11, 1871	4,334
Water and other pipes under hydrostatic pressure, Machine for boring and tapping.	H. A. Norris	New York	June 22, 1842 Aug. 11, 1842	45
Water-boiler	C. A. Harper	Rahway, N. J	July 2, 1867 Nov. 26, 1867	2,806
Water by steam, Device for raising and forcing	A. Brear	Saugatuck, Conn	Apr. 1, 1862 Oct. 27, 1863	1,553
Water-closet	W. S. Carr	New York, N. Y	Aug. 5, 1856 June 12, 1860	978
Water-closet	H. H. Craigie	New York, N. Y	Apr. 7, 1868 Sept. 24, 1872	5,066
Water-closet	T. Grundy, by W. E. Parmenter, J. Grundy, and J. Grundy, assignees.	Melrose, West Cambridge, Stoneham, and Melrose, Mass.	June 26, 1860 June 14, 1864	1,697
Water-elevator	S. L. Avery	Norwich, N. Y	May 8, 1860 July 1, 1862	1,320
Water-elevator	W. B. Wadsworth	Cleveland, Ohio	Jan. 27, 1863 July 28, 1868	3,056
Water-elevator	W. B. Wadsworth	Cleveland, Ohio	Jan. 27, 1863 July 28, 1868	3,057
Water elevator, Hot	W. E. Prall, by self and A. C. Rand, assignees.	Washington, D. C., and New York, N. Y.	Apr. 21, 1868 Apr. 27, 1869	3,408

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Water-elevator, Steam	W. E. Prall, by self and A. C. Rand, assignees.	Washington, D. C., and New York, N. Y.	July 6, 1869 Sept. 21, 1869	3,643
Water-elevator, Steam	W. E. Prall	Washington, D. C	Dec. 19, 1871 Nov. 5, 1872	5,138
Water-elevator, Steam	W. E. Prall	Washington, D. C	Dec. 19, 1871 Dec. 30, 1873	5,715
Water-indicator for boilers	J. D. Lynde	Philadelphia, Pa	Feb. 11, 1868 June 28, 1870	4,049
Water-meter	G. Sickles, by T. Parsons, assignee.	Brookline, Mass	May 5, 1868 Nov. 9, 1869	3,721
Water-meters, Molding propeller for	H. F. Read, by the National Meter Company, assignee.	New York, N. Y	July 20, 1869 May 23, 1871	4,392
Water-meters, Screw-propeller for	H. F. Read, by the National Meter Company, assignee.	New York, N. Y	July 20, 1869 May 23, 1871	4,391
Water-pipe, Cement	E. Dayton	Meriden, Conn	May 5, 1868 Feb. 8, 1870	3,824
Water-pipe machine	J. W. Stockwell	Portland, Me	Aug. 16, 1870 Dec. 27, 1870	4,220
Water-pipes, Coating	J. Ball	Elmira, N. Y	Dec. 15, 1843 Sept. 15, 1857	496
Water-pipes under hydrostatic pressure, Machine for boring, tapping, and seaming.	H. A. Norris	New York	Sept. 30, 1842 Sept. 9, 1843	53
Water-proof fabric	R. G. Allerton	New York, N. Y	Jan. 23, 1866 May 22, 1866	2,248
Water-proof fabric for carriage-tops, &c	A. M. Whipple	North Adams, Mass	Mar. 19, 1872 July 9, 1872	4,972
Water-proofing and coating fabrics, Composition for	E. L. Simpson, by the Simpson Water-Proof Manufacturing Company, assignee, (mesne.)	Monroe, Conn., and New York, N. Y.	Mar. 24, 1863 July 5, 1864	1,721
Water-raising apparatus	W. T. Barnes	Buffalo, N. Y	Mar. 20, 1849 May 24, 1859	728
Water-supply for cities, System of	B. Holly	Lockport, N. Y	Sept. 14, 1869 May 9, 1871	4,373
Water-supply for cities, System of	B. Holly	Lockport, N. Y	Sept. 14, 1869 Nov. 5, 1872	5,133
Water-supply regulator	G. P. Nutting	Chicago, Ill	Dec. 22, 1868 Mar. 2, 1869	3,316
Water-supply regulator for water-works	B. Holly	Lockport, N. Y	Mar. 2, 1869 Aug. 2, 1870	4,085
Water-supply regulator for water-works	B. Holly	Lockport, N. Y	Mar. 2, 1869 Aug. 2, 1870	4,086
Water-supply regulator for water-works	B. Holly	Lockport, N. Y	Mar. 2, 1869 Aug. 2, 1870	4,087
Water-supply regulator for water-works	B. Holly	Lockport, N. Y	Mar. 2, 1869 Nov. 5, 1872	5,132
Water-supplying apparatus	J. C. Hagan, by J., I. D., and I. N. Walker, assignees.	Nashville, Tenn	June 7, 1870 Oct. 25, 1870	4,167
Water-tank, Railway, (Case A)	J. Morton, by the McGowan Pump Company, assignee, (mesne.)	Cincinnati, Ohio	Apr. 2, 1867 Aug. 19, 1873	5,544
Water-tank, Railway, (Case C)	J. Morton, by the McGowan Pump Company, assignee, (mesne.)	Cincinnati, Ohio	Apr. 2, 1867 Aug. 19, 1873	5,545
Water-wheel	N. F. Burnham	York, Pa	Feb. 22, 1859 Sept. 1, 1863	1,530
Water-wheel	J. T. Case, by National Water-Wheel Company, assignee.	Bristol, Conn	Nov. 1, 1870 Apr. 11, 1871	4,329
Water-wheel	J. T. Case, by National Water-Wheel Company, assignee.	Bristol, Conn	Nov. 1, 1870 Apr. 11, 1871	4,330
Water-wheel	J. P. Collins	Troy, N. Y	Dec. 6, 1859 June 12, 1860	979
Water-wheel	J. P. Collins	Norwich, Conn	Dec. 6, 1859 May 13, 1873	5,407
Water-wheel	R. Dunbar	Buffalo, N. Y	July 30, 1867 Aug. 25, 1868	3,099
Water-wheel	J. Harris, by E. E. Wood, assignee.	New Carlisle, Ind	Jan. 29, 1861 Aug. 20, 1872	5,034
Water-wheel	D. K. Kraatz, by W. Foos, J. W. Bookwalter, M. A. Leffel and L. Foos, assignees, (mesne.)	Springfield, Ohio, and New Haven, Conn.	July 13, 1858 Mar. 8, 1870	3,875
Water-wheel	J. Leffel	Springfield, Ohio	Jan. 14, 1862 Oct. 11, 1864	1,791
Water-wheel	J. Leffel, by J. S. Goode and J. W. Bookwalter, executors.	Springfield, Ohio	Jan. 14, 1862 Oct. 27, 1868	3,168
Water-wheel	J. Leffel, by J. S. Goode and J. W. Bookwalter, executors.	Springfield, Ohio	Jan. 14, 1862 Oct. 27, 1868	3,169
Water-wheel	H. G. Nelson	Mexico, N. Y	Aug. 28, 1860 May 21, 1861	1,187
Water-wheel	J. Raney	Newcastle, Pa	Dec. 24, 1867 July 16, 1872	4,984
Water-wheel	P. H. Roots	Connersville, Ind	Mar. 15, 1859 Feb. 28, 1860	918
Water-wheel	P. H. Roots, by P. H. and F. M. Roots, assignees.	Connersville, Ind	Mar. 15, 1859 Aug. 24, 1869	3,621
Water-wheel	J. E. Stevenson	New York, N. Y	July 11, 1865 Mar. 22, 1873	5,341
Water-wheel	A. M. Swain, by the Swain Turbine Company, assignee, (mesne.)	Lowell, Mass	May 15, 1860 Nov. 19, 1872	5,154
Water-wheel	J. Taney	Bangor, Me	Sept. 23, 1873 Dec. 9, 1873	5,682
Water-wheel	J. Temple, by self, W. M. Mills, and A. L. Stout, assignees.	Middletown, Ohio	Feb. 8, 1859 Feb. 10, 1863	1,405

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Water-wheel	J. Tort	Mexico, Mexico	Oct. 19, 1869 Feb. 20, 1872	4,766
Water-wheel	J. Tyler	West Lebanon, N. H	July 8, 1856 June 30, 1868	3,015
Water-wheel	J. Tyler	West Lebanon, N. H	June 1, 1858 June 30, 1868	3,018
Water-wheel	J. Tyler, (extended July 8, 1870.)	West Lebanon, N. H	July 8, 1856 Aug. 29, 1871	4,539
Water-wheel	L. Wertz	Chambersburgh, Pa	June 20, 1848 Aug. 15, 1848	123
Water-wheel and sewing-machine, Combined	I. Hyde, by O. J. Backus, assignee.	Oakland and San Francisco, Cal.	Sept. 24, 1872 Oct. 7, 1873	5,590
Water-wheel case	J. Leffel	Springfield, Ohio	Jan. 14, 1862 Oct. 11, 1864	1,792
Water-wheel case	J. Leffel, by J. S. Goode and J. W. Bookwalter, executors.	Springfield, Ohio	Jan. 14, 1862 Oct. 27, 1868	3,170
Water-wheel gate	J. Leffel, by J. S. Goode and J. W. Bookwalter, executors.	Springfield, Ohio	Jan. 14, 1862 Oct. 27, 1868	3,171
Water-wheel gate	E. Roberts, by A. L. Stout, W. M. Mills, and J. Temple, assignees, (mesne.)	Dayton, Ohio	Apr. 4, 1854 Aug. 29, 1865	2,062
Water-wheel gate and guide	J. Leffel, by J. S. Goode and J. W. Bookwalter, executors.	Springfield, Ohio	Jan. 14, 1862 Apr. 27, 1869	3,404
Water-wheel, Horizontal	H. Kalbach and A. Andrews, by M. Andrews, administratrix.	Bernville, Pa	Aug. 30, 1859 Jan. 14, 1862	1,259
Water-wheel regulator	H. D. Snow	Bennington, Vt	July 14, 1868 June 29, 1869	3,528
Water-wheel, Turbine	B. Stetson, by self and E. Townsend, assignees.	Uxbridge and Boston, Mass	Aug. 14, 1860 Mar. 1, 1870	3,866
Water-wheel, Turbine	G. C. and J. F. Stevens	Ayer, Mass	May 18, 1869 July 16, 1872	4,987
Water with carbonic acid, Charging	R. Grant	Brooklyn, N. Y	Jan. 28, 1868 June 9, 1868	2,970
Weather-strip	W. L. Gilroy, by E. S. and J. Torrey, assignees.	New York, N. Y	Feb. 4, 1868 Oct. 27, 1868	3,174
Weather-strip	F. C. Gridley	Hudson, Wis	July 10, 1866 Feb. 22, 1870	3,848
Weather-strip	L. M. Lawless	Geneseo, Ill	Sept. 5, 1871 May 7, 1872	4,893
Weather-strip, Door and window	I. F. A. A. Lynch, by B. B. Savary and F. O. Raymond, assignees, (mesne.)	Boston and Haverhill, Mass	Sept. 19, 1865 Nov. 17, 1868	3,202
Weaver's harness, Heddle for	A. Howe and S. S. Grannis	Morrisville, N. Y	Oct. 11, 1841 May 30, 1842	39
Weaver's harness, Machine for making	J. S. Winsor, by L. A. Cook and J. Kendrick, assignees, (mesne,) (extended January 2, 1869.)	Providence, Woonsocket, and Providence, R. I.	Jan. 2, 1855 Feb. 11, 1873	5,282
Weaver's reeds, Machine for making	J. A. Wilkinson	Providence, R. I	July 17, 1835 Apr. 22, 1843	50
Weaving	W. Smith, (extended April 5, 1867.)	New York, N. Y	Apr. 5, 1853 Jan. 14, 1868	2,843
Weaving	W. Smith, (extended April 5, 1867.)	New York, N. Y	Apr. 5, 1853 Jan. 14, 1868	2,844
Weaving corded fabrics	W. Smith, (extended April 5, 1867.)	New York, N. Y	Apr. 5, 1853 June 18, 1867	2,656
Weighing and bagging machine, Grain	J. M. Fish, by H. M. Fish, assignee of L. K. Plimpton and W. Foot, executors.	New York, N. Y	June 5, 1860 Feb. 18, 1868	2,870
Weighing machine, Automatic grain	R. Porter	Washington, D. C	May 5, 1857 Dec. 22, 1857	516
Weighing machine, Grain	F. S. McWharter	Saint George's, Del	Oct. 20, 1868 Mar. 25, 1873	5,337
Welded tubing, Manufacture of	S. P. M. Tasker	Philadelphia, Pa	June 22, 1869 Dec. 17, 1872	5,190
Welding cast iron to malleable iron or steel	M. Fisher and W. Martin, jr	Newport, Me	Oct. 16, 1847 Nov. 30, 1852	227
Welding iron and steel, Composition for	J. B. Rand	Concord, N. H	Mar. 16, 1869 June 15, 1869	3,505
Well-boring apparatus	L. Disbrow	Syracuse, N. Y	Nov. 1, 1830 Oct. 20, 1843	57
Well-boring apparatus, Artesian	J. N. Bolles, by H. Hannen and J. Parker, assignees, (mesne.)	Philadelphia, Pa	Apr. 14, 1857 Dec. 20, 1864	1,837
Well casing or tube cutter, Oil	P. H. Lawrence, by self and J. H. Luther, assignees.	Petroleum Centre, Pa	July 5, 1870 Oct. 8, 1872	5,092
Well-pipe and fixture	J. H. Duck and E. K. Whitcomb, by J. T. Whipple, assignee.	Elgin and Chicago, Ill	Oct. 9, 1866 Feb. 21, 1871	4,267
Well, Tube	S. L. Bignall	Chicago, Ill	July 13, 1869 Oct. 24, 1871	4,604
Well-tube, (Division A)	S. H. Dickerson	Hudson, Mich	Mar. 8, 1870 July 29, 1873	5,507
Well-tube	F. A. Mack	Niles, Mich	Sept. 11, 1866 June 2, 1868	2,965
Well-tubes, Clamp for elevating	D. Fisher	Oil City, Pa	Feb. 23, 1869 Aug. 17, 1869	3,605
Wells, Device for steaming oil	T. B. Carothers	Oil City, Pa	June 10, 1873 Nov. 18, 1873	5,659
Wells, Grab-tool for oil	J. H. Luther	Petroleum Centre, Pa	Aug. 7, 1866 Apr. 29, 1873	5,386
Wells, Method of and means for increasing the capacity of oil.	E. A. L. Roberts	Titusville, Pa	Nov. 20, 1866 June 3, 1873	5,434
Wells, Method of constructing artesian	N. W. Green	Amherst, Mass	Jan. 14, 1868 May 9, 1871	4,372
Wells, Method of elevating and delivering water from.	J. Daykin	Cleveland, Ohio	Aug. 21, 1860 June 28, 1864	1,712
Wells, Method of elevating and delivering water from.	J. W. Wheeler	Cleveland, Ohio	Jan. 17, 1860 Aug. 21, 1860	1,028

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Wells, Mode of constructing	A. Curtis	Bastrop, La	June 17, 1873 Dec. 9, 1873	5,677
Wells, Reservoir for	R. H. Dewey and E. N. Tillotson, by E. N. and W. E. Tillotson, assignees.	Pittsfield, Mass	Apr. 3, 1866 Oct. 25, 1870	4,165
Wells to remove obstructions to the flow of oil, Treating.	B. G. Noble	Brooklyn, N. Y	July 19, 1870 Feb. 27, 1872	4,770
Wheat and other cereals for food, Preparing	G. W. Waitt, by the Nutrio Manufacturing Company, assignee.	Philadelphia, Pa	June 25, 1872 Oct. 15, 1872	5,105
Wheat-drill	J. B. Crowell	Greencastle, Pa	June 23, 1863 June 27, 1865	2,011
Wheat-drill	J. F. Harcourt	Moscow, Ind	Nov. 13, 1866 Aug. 31, 1869	3,626
Whiffletree	G. and W. Gibbs	Canton, Ohio	Mar. 10, 1863 Nov. 28, 1871	4,647
Whiffletree-attachment	J. C. Garner	Ashland, Pa	Dec. 26, 1865 July 10, 1866	2,312
Whiffletree snap-hook	C. W. Saladee	Pittsburgh, Pa	Nov. 21, 1865 May 6, 1873	5,399
Whip-hanger	P. F. Cooley	Pittsfield, Mass	Sept. 1, 1868 Aug. 22, 1871	4,520
Whip-socket	S. W. Beach	Ypsilanti, Mich	July 30, 1872 Feb. 11, 1873	5,272
Whip-socket	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	Lansingburgh and Troy, N. Y.	Aug. 23, 1864 Mar. 5, 1872	4,787
Whip-socket	W. H. Lyman	Newark, N. J	Apr. 15, 1856 June 30, 1863	1,507
Whip-socket	C. B. Morehouse, by E. Chamberlin and J. O. Merriam, assignees, (mesne.)	Newcastle, Ind	Aug. 61, 1864 Jan. 14, 1873	5,235
Whip-socket	C. B. Morehouse, by J. O. Merriam and E. Chamberlin, assignees.	Troy, N. Y	Feb. 6, 1866 July 12, 1870	4,071
Whip-socket	E. W. Scott, by self and A. Searls, assignees.	Wauregan, Conn., and Newark, N. J.	Nov. 5, 1867 May 6, 1873	5,400
Whip-socket fastening	E. Chamberlin	Troy, N. Y	Aug. 23, 1864 Nov. 6, 1866	2,387
Whip-sockets to vehicles, Device for clamping, (Division A.)	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	Lansingburgh and Troy, N. Y.	Aug. 23, 1864 Dec. 23, 1873	5,698
Whip-sockets to vehicles, Device for clamping, (Division B.)	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	Lansingburgh and Troy, N. Y.	Aug. 23, 1864 Dec. 23, 1873	5,699
Whip-sockets to vehicles, Device for clamping, (Division C.)	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	Lansingburgh and Troy, N. Y.	Aug. 23, 1864 Dec. 23, 1873	5,700
Whip-sockets to vehicles, Device for clamping	C. B. Morehouse, by E. Chamberlin and J. O. Merriam, assignees, (mesne.)	Newcastle, Ind	Aug. 16, 1864 Dec. 30, 1873	5,713
Whip-stocks, Manufacture of	D. C. Hull	Westfield, Mass	Nov. 12, 1872 Nov. 11, 1873	5,651
Whip-stocks, Manufacture of	L. Hull	Charlestown, Mass	Jan. 8, 1867 Nov. 30, 1869	3,754
Whips, Covering	G. King, by C. C. Pratt, assignee, (mesne.)	Westfield, Mass	June 18, 1867 May 12, 1868	2,925
Whips, Covering	G. King, by C. C. Pratt, assignee, (mesne.)	Westfield, Mass	June 18, 1867 May 12, 1868	2,926
Whistle, Alarm	N. D. Lamb, by self and A. Clark, assignees.	Norwich, Conn	Oct. 8, 1861 June 2, 1863	1,490
Whistle, Locomotive automatic steam	J. Harrison, jr	New York, N. Y	Apr. 1, 1856 Nov. 9, 1858	621
Willow-peeler	J. M. Wood	Seneca Falls, N. Y	Aug. 7, 1860 Feb. 26, 1861	1,147
Willow-peeling machine	G. J. Colby	Waterbury, Vt	Oct. 12, 1858 June 13, 1865	1,901
Willow-peeling machine	M. Easterbrook and J. M. Wood, by selves, and E. A. Bronson, assignees.	Geneva, N. Y	Jan. 21, 1862 Sept. 2, 1862	1,337
Winch, Direct and counter-motion	C. Perley	New York, N. Y	May 29, 1849 May 21, 1861	1,188
Winch for ship-board, Hoisting	J. Bryant	Brooklyn, N. Y	Apr. 7, 1857 Sept. 21, 1858	601
Winch, Ship's	P. H. Jackson	New York, N. Y	Aug. 7, 1855 Feb. 19, 1861	1,141
Wind-wheel regulator, Automatic	J. Dunkley	Carrollton, Mo	Jan. 13, 1857 Aug. 25, 1857	486
Windlass, Ship's	J. Emerson, by W. H. Gilmore, assignee.	Worcester, Mass	Apr. 17, 1855 July 31, 1860	1,020
Windlass, Method of fitting the heaving-socket and head of.	C. Perley, (extended November 13, 1863.)	New York, N. Y	Nov. 13, 1849 Jan. 12, 1864	1,603
Windlasses, Operating	P. Philip	Ghent, N. Y	July 12, 1859 Mar. 4, 1873	5,304
Windmill	E. A. Atwood and H. H. Bodwell.	San Francisco, Cal	Sept. 16, 1873 Nov. 18, 1873	5,656
Windmill	M. Crossman and P. A. Spicer	Marshall, Mich	Oct. 17, 1871 Dec. 23, 1873	5,692
Windmill	D. Halladay, by the United States Wind Engine and Pump Company, assignee, (extended August 29, 1868.)	Batavia, Ill	Aug. 29, 1854 July 5, 1870	4,064
Windmill	P. C. Perkins	Mishawaka, Ind	Aug. 10, 1869 Oct. 29, 1872	5,128
Windmill	W. I. Tustin	San Francisco, Cal	Nov. 23, 1869 Apr. 15, 1873	5,354

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Windmill, (Division A)	L. H. Wheeler, deceased, by H. W. Wheeler, executrix, and W. H. Wheeler, assignee.	Beloit, Wis	Sept. 10, 1867 Aug. 12, 1873	5,531
Windmill, Self-regulating	A. P. Brown, by the Continental Windmill Company, assignee, (extended July 3, 1869.)	New York, N. Y	July 3, 1855 Oct. 25, 1870	4,169
Window-button	A. D. Judd	New Haven, Conn	Mar. 14, 1871 Apr. 22, 1873	5,370
Window-screen	A. B. Magonn, by the Adjustable Window-Screen Company, assignee, (mesne.)	Philadelphia, Pa	Feb. 20, 1866 Jan. 2, 1872	4,698
Window screen and shutter, (Division A)	B. J. Williams	Philadelphia, Pa	May 10, 1870 Aug. 5, 1873	5,527
Window-shade roller	J. B. Bailey	New York, N. Y	Feb. 16, 1858 Apr. 13, 1858	543
Window-stop	T. Williams, by self and D. Heaton, assignees.	Providence, R. I	Oct. 26, 1858 June 12, 1860	984
Winnowing-machine	S. Canby	Ellicott's Mills, Md	Dec. 28, 1852 Nov. 14, 1854	283
Winnowing-machine	B. D. Sanders	Holliday's Cove, Va	June 19, 1849 Apr. 10, 1855	306
Winnowing-machine	J. Thurston	Bath Township, Ind	Jan. 6, 1848 Oct. 9, 1849	148
Wire, Apparatus for sizing and finishing skirt	S. M. Chesney and J. C. Brown, by I. Washburn and P. L. Moen, assignees, (mesne.)	Worcester, Mass	Oct. 13, 1863 July 4, 1865	2,025
Wire blanks, Machine for making tapered	C. Jillson	Worcester, Mass	Sept. 15, 1857 June 1, 1869	3,475
Wire-cloth painting	C. H. Waters, by the Clinton Wire-Cloth Company, assignee.	Groton, Mass	Dec. 1, 1868 July 4, 1871	4,463
Wire-cloth-painting machine	C. H. Waters, by the Clinton Wire-Cloth Company, assignee.	Groton, Mass	Dec. 1, 1868 July 4, 1871	4,462
Wire grating, Manufacturing	H. Jenkins	Brooklyn, N. Y	Mar. 6, 1847 June 28, 1859	747
Wire heddles, Machinery for making	E. T. Hertle and R. Thompson	New York, N. Y	July 14, 1868 Nov. 9, 1869	3,724
Wire, Machine for pointing	O. L. Hopson and H. P. Brooks	Waterbury, Conn	Aug. 9, 1864 Dec. 12, 1865	2,124
Wire staple	B. Boardman	Norwich, Conn	Mar. 30, 1858 Mar. 6, 1866	2,183
Wire, Tempering	H. Waterman	Brooklyn, N. Y	Aug. 24, 1858 Feb. 14, 1865	1,874
Wires, rods, &c., Method of forming conical points on.	C. Jillson	Worcester, Mass	Sept. 15, 1857 June 1, 1869	3,476
Wood and timber, Process of preserving	D. R. Prindle	East Bethany, N. Y	Mar. 26, 1867 Aug. 24, 1869	3,620
Wood-bundling machine	W. L. Williams, by self and T. J. O'Connor, assignees.	New York, N. Y	Nov. 15, 1859 Oct. 4, 1870	4,142
Wood for railway-ties, &c., Preserving	A. B. Tripler, by C. E. Tripler, assignee.	Philadelphia, Pa	June 28, 1870 Mar. 26, 1872	4,837
Wood-incased can	O. S. Camp	Grand Rapids, Mich	Sept. 12, 1871 Nov. 28, 1871	4,650
Wood-incased can, (Design)	J. G. Evenden, by W. C. Strickler and I. Campbell, assignees.	Chicago, Ill	June 20, 1871 Sept. 3, 1872	5,047
Wood, Machinery for shaping irregular surfaces in	W. Hale and A. Goodman, by selves, L. Hale, and J. W. Goodman, assignees, (extended July 22, 1859.)	North Dana, Mass	July 22, 1845 Feb. 10, 1863	1,400
Wood, Preserving	G. Palmer, by self and J. M. Mason, assignees.	Littlestown, Pa., and Washington, D. C.	Aug. 1, 1865 Aug. 20, 1872	5,040
Wood, Preserving	J. E. Siebel	Chicago, Ill	July 4, 1871 Sept. 12, 1871	4,550
Wood, Preserving and hardening	J. L. Samuels, by self, B. F. and J. S. Josselyn, W. B. Lake, G. G. Burnett, H. S. and G. W. Dent, B. R. Nickerson, F. T. Dent, and H. H. J. Stone, assignees.	San Francisco, Cal., Washington, D. C., and New York, N. Y.	Jan. 1, 1867 Oct. 18, 1870	4,158
Wood, Process of transferring the grain-marks of	J. R. Cross, by self and A. J. Bastine, assignees.	New York, N. Y	July 2, 1872 Apr. 29, 1873	5,377
Wood, railway-ties, &c., Preserving	B. S. Foreman	Morrison, Ill	June 2, 1864 May 9, 1865	1,951
Wood, railway-ties, &c., Preserving	B. S. Foreman	Morrison, Ill	June 21, 1864 May 2, 1871	4,360
Wood-splitting machine	W. L. Williams	New York, N. Y	Apr. 14, 1857 Dec. 19, 1865	2,132
Wood-splitting machine, Fire	W. L. Williams	New York, N. Y	Apr. 19, 1859 Dec. 20, 1859	869
Wood with preservative materials, Process and apparatus for seasoning and impregnating.	M. Voorhees and G. W. N. Custis.	Camden, N. J	Feb. 23, 1869 May 18, 1869	3,451
Wood with rubber, gutta-percha, &c., Coating	K. W. Holmes and A. Albright	Winona, Minn., and Newark, N. J.	May 7, 1867 Apr. 1, 1873	5,343
Wooden ware, Hollow	H. Mellish, by D. Lyman, S. Fairbank, and W. Whitney, assignees.	Walpole, N. H., Middlefield, Conn., and Winchendon, Mass.	May 10, 1864 Feb. 23, 1869	3,309
Wool and cotton for carding, Preparing	G. L. Mason	Williston, Vt	Sept. 4, 1847 Mar. 20, 1849	133
Wool and flax brusher	W. W. Calvert, by G. W. Lyman, assignee.	Boston, Mass	Sept. 18, 1835 Sept. 9, 1843	52
Wool and other fibers, Process for cleaning	O. Macdaniel	New York, N. Y	Nov. 19, 1867 Dec. 22, 1868	3,239
Wool and other fibrous material, Machinery for manufacture of.	J. Goulding, by E. D. Jordan, assignee, (mesne,) (extended August 30, 1862.)	Worcester and Boston, Mass.	Dec. 15, 1826 June 28, 1864	1,714

Index of patents reissued from the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Wool-burring and cotton-ginning machine	M. D. Whipple	Lowell, Mass	Oct. 28, 1840 July 31, 1849	140
Wool-burring machine	F. A. Calvert	Paterson, N. J	June 3, 1843 Dec. 27, 1843	59
Wool, Combing	S. Couillard, by the New England Worsted Company, assignee, (mesne.)	Boston, Mass., and Massachusetts.	July 7, 1835 July 6, 1839	9
Wool-drying machine	J. Petrie, jr., by J. A. Locke, assignee, (mesne.)	Rochdale, England, and Watertown, Mass.	Apr. 1, 1862 Nov. 17, 1863	1,570
Wool, Machine for oiling	W. Clissold, by G. Harwood and G. H. Quincy, assignees.	Dudbridge Works, England, and Boston, Mass.	Feb. 24, 1862 Sept. 13, 1864	1,764
Wool, Machine for oiling	W. Clissold, by G. S. Harwood and G. H. Quincy, assignees.	Boston, Mass	Oct. 7, 1862 Mar. 27, 1866	2,213
Wool-oiling apparatus	B. A. Earl and H. Holcroft, by B. A. Earl, assignee.	Philadelphia, Pa	May 30, 1865 Sept. 7, 1869	3,632
Woolen and cotton goods, Rotary-press for	M. Bayley	Salisbury, Mass	July 5, 1837 Sept. 5, 1840	24
Woolen and other fabrics, Process for cleaning	O. Macdaniel	New York, N. Y	Nov. 19, 1867 Dec. 22, 1868	3,240
Work-holder	J. E. Gilman	Hartford, Conn	May 3, 1870 Mar. 19, 1872	4,811
Wrench	A. G. Coes	Worcester, Mass	Mar. 6, 1866 Mar. 30, 1869	3,350
Wrench	L. Jordan and L. E. Smith, by the Collins Company, assignee.	Collinsville, Conn	Oct. 10, 1865 Feb. 22, 1870	3,852
Wrench	L. Jordan and L. E. Smith, by the Collins Company, assignee.	Collinsville, Conn	Oct. 10, 1865 Feb. 25, 1873	5,294
Wrench	A. C. Richard, by A. G. Coes, assignee, (mesne.)	Worcester, Mass	Feb. 7, 1860 June 27, 1871	4,450
Wrench	G. C. Taft, by L. Coes, assignee, (mesne.)	Worcester, Mass	Nov. 10, 1863 June 1, 1869	3,483
Wrench	G. C. Taft, by L. Coes, assignee	Worcester, Mass	Mar. 28, 1869 Apr. 12, 1870	3,918
Wrench	G. C. Taft, by L. Coes, assignee	Worcester, Mass	Mar. 23, 1869 May 14, 1872	4,902
Wringer-roller	J. F. Pond	Cleveland, Ohio	Apr. 5, 1864 Feb. 13, 1866	2,174
Wringing-machine	J. Allender, by S. A. Bailey and S. S. and B. M. Cook, assignees, (mesne.)	New London, Conn., and Woonsocket, R. I.	Jan. 11, 1859 Apr. 18, 1865	1,934
Wringing-machine	H. Glass, by Bailey Washing and Wringing Machine Company, assignee, (mesne.)	Honeoye Falls, N. Y	July 7, 1863 Feb. 4, 1873	5,265
Wringing-machine	J. S. Lash	Philadelphia, Pa	Oct. 14, 1862 Aug. 15, 1865	2,052
Wringing-machine roller	S. A. Bailey, by the Bailey Washing and Wringing Machine Company, assignee, (mesne.)	Woonsocket, R. I	Apr. 29, 1862 Apr. 9, 1867	2,547
Wringing-machine roller	J. J. Haley	South Dedham, Mass	Jan. 14, 1862 Feb. 4, 1862	1,270
Wringing or squeezing machine	J. Allender, by S. A. Bailey and S. S. and B. M. Cook, assignees, (mesne.)	New London, Conn., and Smithfield, R. I.	Jan. 11, 1859 Nov. 8, 1864	1,807
Wristband	P. T. Gates	Plattsburgh, N. Y	Mar. 13, 1866 July 10, 1866	2,300
Wrought-nails, Machine for making	D. Armstrong	Chicago, Ill	Nov. 21, 1869 May 17, 1870	3,969
Y.				
Yarn, Apparatus for parti-coloring	A. Smith	West Farms, N. Y	June 18, 1850 May 11, 1852	217
Yeast for distillers, Manufacture of	J. Wolff	Cincinnati, Ohio	Feb. 8, 1870 May 3, 1870	3,959
Z.				
Zinc from gold and silver, Separating	E. Balbach, jr	Newark, N. J	May 21, 1867 June 24, 1873	5,461
Zinc, Manufacture of metallic	A. Monnier	Philadelphia, Pa	May 18, 1858 Apr. 14, 1863	1,453

ALPHABETICAL LIST OF DESIGNS.

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Invention.	Inventor.	Residence.	Date.	No.
A.				
Ace of spades	I. Levy	New York, N. Y	May 8, 1866	2,306
Advertising-frame	M. M. Burnham and J. B. Oaks	Syracuse, N. Y	July 8, 1873	6,746
Advertising-frame	C. H. Shackford and M. V. Campbell.	Syracuse, N. Y	Oct. 7, 1873	6,955
Advertising-panel	G. Fay	Newton, Mass	Aug. 11, 1868	3,157
Advertising-print	J. Brooks	Boston, Mass	July 4, 1871	5,068
Agricultural furnace	M. Peckham	Utica, N. Y	Feb. 21, 1865	2,032
Agricultural furnace	R. Wheeler and S. A. Bailey	Utica, N. Y	June 7, 1864	1,951
Alarm-lock plate	J. M. Case	North Lansing, Mich	July 4, 1871	5,069
Alphabet	W. H. Carter	Cincinnati, Ohio	Apr. 3, 1866	2,289
Alphabet	W. H. Page	Norwich, Conn	Feb. 27, 1866	2,267
Alphabet	W. H. Page	Norwich, Conn	Mar. 31, 1868	2,979-2,980
Alphabet, German-type	W. H. Page	Norwich, Conn	Nov. 24, 1863	1,869
Alphabet-puzzle blocks	H. Johnson	Wauregan, Conn	May 11, 1869	3,492
Alto-relief	A. Van Wart	New York, N. Y	June 27, 1871	5,057
Alto-relievo, Composition in	H. Berger	New York, N. Y	Jan. 30, 1866	2,245
Alto-relievo, Composition in	H. P. W. Purdy	Cambridge, Mass	Apr. 11, 1865	2,052
Anchor	F. Dellicker	Trenton, N. J	Oct. 26, 1869	3,726
Andiron	S. Boyd	New York, N. Y	Apr. 3, 1860	1,216-1,217
Andiron	O. F. Fogelstrand	Kensington, Conn	Sept. 17, 1872	6,149
Animal-trap	H. C. Hart	Unionville, Conn	June 6, 1865	2,081
Anklet	J. W. Burt	New York, N. Y	May 6, 1862	1,572
Anklet	J. W. Burt	New York, N. Y	Dec. 9, 1862	1,675
Anklet, Ornamental	J. W. Burt	New York, N. Y	Aug. 12, 1862	1,625
Aprons, Printed material for	W. H. Walton	Brooklyn, N. Y	Apr. 11, 1871	4,801
Aquarium	A. L. Blanchard	Albany, N. Y	June 1, 1858	1,008
Aquarium-frame	G. E. Smith	Chicago, Ill	Sept. 16, 1873	6,887
Aquarium or fish-tank	G. T. Palmer	Brooklyn, N. Y	Sept. 20, 1864	1,988
Arbor, Grape	C. H. Crump	Boston, Mass	Oct. 21, 1873	6,962
Architectural center-flowers	S. Kellett	San Francisco, Cal	Mar. 6, 1866	2,274-2,276
Arm-chair	W. E. Cameron	Taunton, Mass	Aug. 2, 1870	4,269
Arm-chair	W. G. Philips	Newport, Del	May 6, 1862	1,574
Ax	C. B. Drew	Boston, Mass	May 17, 1870	4,029
Ax	E. Hurd	Champaign County, Ohio	May 24, 1870	4,060
Ax "bit," Chopping	H. C. Reynolds	Manchester, N. H	Sept. 14, 1869	3,662
Ax-handle	I. B. Viets	New Britain, Conn	Mar. 19, 1867	2,600
Axle box, Railway-carriage	J. Corrigan	Charlestown, Mass	Dec. 1, 1868	3,266
B.				
Back-comb	A. Gray	Wappinger's Falls, N. Y	Jan. 24, 1860	1,192
Badge	I. Bedichimer	Philadelphia, Pa	Nov. 21, 1871	5,365
Badge	N. P. Chipman and W. T. Collins	Washington, D. C	Dec. 29, 1868	3,298
Badge	G. F. Crook	Cambridge, Mass	June 18, 1872	5,937
Badge	A. Demarest	New York, N. Y	Dec. 28, 1869	3,807
Badge	M. Feely	Providence, R. I	Apr. 16, 1872	5,777
Badge	W. B. Hamm	Philadelphia, Pa	Oct. 8, 1872	6,196
Badge	J. Hartman, jr	Ormsby, Pa	June 11, 1872	5,927
Badge	N. Joseph	San Francisco, Cal	Aug. 29, 1871	5,236-5,237
Badge	E. Moore	Portland, Me	June 30, 1868	3,078
Badge	H. A. Oesterle	Philadelphia, Pa	Apr. 15, 1873	6,589
Badge	W. Riker	Newark, N. J	Sept. 27, 1870	4,372
Badge	J. Seymour	Syracuse, N. Y	Dec. 9, 1873	7,046
Badge	T. W. Sweney	Reading, Pa	Apr. 30, 1872	5,835
Badge, Army	I. T. Hooton and J. H. Cummings.	Boston, Mass	Nov. 7, 1865	2,217
Badge, Campaign	T. H. Denison	Baltimore, Md	Sept. 3, 1872	6,096
Badge, Campaign	E. W. Harrison	Jersey City, N. J	June 11, 1872	5,919
Badge, Campaign	J. P. Perley	Washington, D. C	July 30, 1872	6,015
Badge, Campaign	G. C. Thomas	Brooklyn, N. Y	July 16, 1872	6,001
Badge, Fireman's	J. L. D. Sullivan	Somerville, Mass	May 11, 1869	3,489
Badge, Good Templar	W. H. Wilson	Providence, R. I	Jan. 28, 1868	2,904
Badge-pin, Telegrapher's	O. C. Dow and A. C. Harvey	Saint Johnsbury, Vt	Apr. 4, 1871	4,748
Badge, Union League	S. G. Vredenburgh	Mount Vernon, N. Y	Oct. 31, 1865	2,213
Badges, Set of masonic	V. Price	New York, N. Y	Dec. 10, 1867	2,846
Baggage-rack	R. M. Snodgrass	Pittsburgh, Pa	Mar. 15, 1870	3,910
Balance	C. E. Hoffmann	Philadelphia, Pa	Dec. 18, 1866	2,532
Balance, Post-office	W. W. Reynolds	Brandon, Vt	June 18, 1867	2,678
Ball bat, Base	W. H. and P. Reed	Philadelphia, Pa	July 3, 1866	2,351
Band, Head	W. S. Mingis	New York, N. Y	Oct. 25, 1870	4,436
Band-slide	E. Sealy	Newark, N. J	Nov. 5, 1867	2,828
Banner, Perforated	W. S. Worthington	Newtown, N. Y	Nov. 16, 1869	3,755
Banner-pin	W. Riker	Newark, N. J	July 4, 1871	5,086
Baptismal font	A. E. Van Wert	Binghamton, N. Y	Feb. 25, 1873	6,459
Barber's and dentist's chair	R. W. and G. W. Archer	Rochester, N. Y	May 13, 1873	6,648
Barber's and dentist's chair, Foot-rest for	R. W. and G. W. Archer	Rochester, N. Y	May 13, 1873	6,647
Barber's chair, Foot-stool for	F. J. Coates	Cincinnati, Ohio	June 24, 1873	6,725
Barometer-case	T. R. Timby	Medina, N. Y	Nov. 10, 1857	964
Barrel-bolt	O. F. Fogelstrand	Kensington, Conn	Oct. 1, 1872	6,160
Barrels, Labeling	W. B. Maddux	Cincinnati, Ohio	Feb. 16, 1864	1,897
Bas-relief of Gen. G. B. McClellan	J. F. Drummond	New York, N. Y	Jan. 5, 1864	1,882
Bas-relief of Henry Clay	C. Y. Haynes	Philadelphia, Pa	Nov. 12, 1850	331
"Baschlik"	M. Laudenberger	Philadelphia, Pa	June 21, 1870	4,164
Base or stand	N. Müller	New York, N. Y	Feb. 4, 1868	2,920
Basin-front	F. Boyd	Newburgh, N. Y	June 27, 1871	5,042
Basket	S. I. Russell	Chicago, Ill	Mar. 18, 1873	6,508
Bath-tub	J. L. Mott	New York, N. Y	Aug. 17, 1843	7
Bath-tub	J. L. Mott	New York, N. Y	Aug. 18, 1846	78

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Invention.	Inventor.	Residence.	Date.	No.
Bed-coverlet	H. Berg	Philadelphia, Pa	Dec. 24, 1872	6,325
Bed-quilt	F. W. Eger and H. H. Kunze	Philadelphia, Pa	Feb. 28, 1871	4,688
Bed-quilt	L. Kreuzberger	Philadelphia, Pa	Mar. 28, 1871	4,735
Bed-quilt	J. U. Nef	Housatonic, Mass	May 30, 1871	4,955
Bed-quilt	F. C. Van Horn	Camden, N. J	Jan. 24, 1871	4,610
"Bedouin or Arab"	T. Dolan	Philadelphia, Pa	Mar. 8, 1870	3,881–3,882
"Bedouin or Arab"	T. Dolan	Philadelphia, Pa	June 21, 1870	4,158
Bedstead	J. H. Barth	Indianapolis, Ind	Oct. 4, 1853	598
Bedstead	P. C. Cambridge, jr	Enfield, N. H	Jan. 24, 1860	1,190
Bedstead	P. C. Cambridge, jr	Enfield, N. H	Mar. 13, 1866	2,278–2,279
Bedstead	M. Fitzsimmons	Cincinnati, Ohio	June 25, 1872	5,949–5,954
Bedstead	P. M. Hutton	Troy, N. Y	May 20, 1851	374
Bedstead	H. Neidig	New York, N. Y	July 13, 1858	1,024–1,025
Bedstead, Cast-iron	P. M. Hutton	Troy, N. Y	Sept. 2, 1851	407
Bedstead, Cast-iron	P. Tabb	New York, N. Y	Sept. 14, 1858	1,050
Bedstead-fastening	W. H. McPherson	Nashville, Tenn	Mar. 14, 1871	4,708
Bedstead-fastening	N. C. Whitcomb	Oak Hill, N. Y	May 16, 1871	4,913
Bedstead leg and post	W. Maurer	New York, N. Y	Mar. 31, 1857	879
Bedstead leg and post, Iron	J. P. Koch	New York, N. Y	Mar. 23, 1858	995
Bedstead, Metallic	J. B. Wickersham	New York, N. Y	Dec. 23, 1856	858
Beer-mug	C. Ballinger	Wilkins Township, Pa	Apr. 2, 1872	5,738
Beer-mug	J. H. Hobbs	Wheeling, W. Va	Apr. 2, 1872	5,744
Beer-mug	J. H. Hobbs	Wheeling, W. Va	July 9, 1872	5,977
Bell	F. G. Niedringhaus	Saint Louis, Mo	Oct. 5, 1869	3,704
Bell, Call	C. S and E. A. Barnard	West Meriden, Conn	Sept. 30, 1873	6,895
Bell, Call	H. C. Wilcox	West Meriden, Conn	Aug. 8, 1871	5,195
Bell-crank and escutcheon	P. Cinquini	West Meriden, Conn	Mar. 7, 1871	4,695
Bell-crank and rose	W. Gorman	New Britain, Conn	June 18, 1872	5,939
Bell, Door	W. Allport	New Britain, Conn	July 12, 1870	4,214
Bell, Hand	E. G. Cone	East Hampton Conn	July 22, 1873	6,780
Bell-pull	J. B. Whitney	New York, N. Y	Apr. 1, 1873	6,557
Bell-pull back-plate	J. A. Ruff	Cambridge, Mass	June 7, 1870	4,111–4,112
Bell, Table	H. C. Foote	Wallingford, Conn	Mar. 8, 1859	1,087
Bell, Tea	H. C. Wilcox	West Meriden, Conn	Aug. 8, 1871	5,196
Bell-tower	T. W. H. Moseley	Hyde Park, Mass	July 11, 1871	5,117
Bells, Ornamenting	O. F. Fogelstrand	Kensington, Conn	Mar. 18, 1873	6,493
Bellows	A. F. Jones	New York, N. Y	May 30, 1871	4,949
Belt-fastener	A. O. Baker	Providence, R. I	Nov. 17, 1863	1,849
Belt hook, Military	E. Blakeslee	New Haven, Conn	Feb. 7, 1865	2,028
Belting end	B. A. Lewis	Plainville, Conn	July 9, 1872	5,978
Berry-box	J. W. Leslie	South Pass, Ill	Sept. 20, 1870	4,359
Billiard-marker's stand, Portable	H. W. Collender	New York, N. Y	June 13, 1871	4,985
Billiard-table	O. D. Benjamin	Toledo, Ohio	Nov. 26, 1872	6,269
Billiard-table	H. W. Collender	New York, N. Y	June 6, 1871	4,973
Billiard-table	L. Decker	New York, N. Y	Oct. 31, 1871	5,328
Billiard-table	W. H. Griffith	New York, N. Y	Oct. 24, 1871	5,322
Billiard-table	N. Stoll	Chicago, Ill	Apr. 1, 1873	6,550
Billiard-table	J. Syrcher	Buffalo, N. Y	Nov. 26, 1872	6,278
Bird-cage	O. Lindemann	New York, N. Y	Aug. 29, 1871	5,239
Bird-cage	G. R. Osborn and B. A. Drayton	New York, N. Y	Sept. 5, 1871	5,254–5,255
Bird-cage	G. R. Osborn and B. A. Drayton	New York, N. Y	Mar. 26, 1872	5,731
Bird-cage-bracket base	A. Wunder	New Haven, Conn	Sept. 26, 1871	5,287
Bird-cage hook	O. F. Fogelstrand	Kensington, Conn	July 16, 1872	5,991
Bird-cage hook	J. B. Sargent	New Haven, Conn	Sept. 12, 1871	5,262
Bird-cage hook	A. Wunder	New Haven, Conn	Mar. 5, 1872	5,634
Bird-cages, Feed-cup lid for	O. Lindemann	New York, N. Y	Oct. 4, 1870	4,380
Bird-house	J. Murdock	Jersey City, N. J	Mar. 30, 1869	3,438
Bitter-tube	J. L. Dawes	Pittsburgh, Pa	Apr. 11, 1871	4,789
Blackboard	M. McVicar	Potsdam, N. Y	Jan. 2, 1872	5,455
Blacking-box	D. O'Leary	Hubbard, Ohio	July 11, 1871	5,118
Blacksmith's drill	J. L. Haven	Cincinnati, Ohio	Aug. 13, 1867	2,747
Blind-binding	S. Hasenbühler	Philadelphia, Pa	July 2, 1867	2,691
Blind-binding	H. W. Hensel	Philadelphia, Pa	July 7, 1863	1,796–1,798
Blind-binding	H. W. Hensel	Philadelphia, Pa	Oct. 6, 1863	1,824–1,827
Blind-window	N. Chapin	New York, N. Y	Nov. 30, 1852	530
Blotting-pad	J. S. Bryant	Hartford, Conn	Apr. 12, 1870	3,971
Blower-case	B. F. Sturtevant	Boston, Mass	Mar. 2, 1869	3,399
Blower-holder	F. W. Brocksieper	New Haven, Conn	Sept. 27, 1870	4,361
Blower-stand	W. Bryent	Boston, Mass	Sept. 24, 1850	314
Blower-stand	O. F. Fogelstrand	Kensington, Conn	Oct. 8, 1872	6,194
Boa	G. H. Prindel	Philadelphia, Pa	Aug. 5, 1873	6,793–6,794
Bobbin-score	J. Salisbury	Scituate, R. I	June 27, 1871	5,052
Boiler-lid	J. L. Hadden	Philadelphia, Pa	May 30, 1865	2,072
Bolt-case	J. Ottner	New Britain, Conn	Mar. 19, 1872	5,703
Bolt-threading machines, Frame of	S. W. Putnam, jr	Fitchburgh, Mass	July 8, 1873	6,764
Bonnet	N. D. Terry	Providence, R. I	July 16, 1861	1,454
Bonnets, Imitation braid for	S. A. Blake	Milford, Conn	Mar. 3, 1868	2,941
Bonnets, Imitation braid for	S. A. Blake	Milford, Conn	May 12, 1868	3,019
Bonnets, Imitation braid for	S. A. Blake	Milford, Conn	July 14, 1868	3,097
Book-cover	C. F. Metzger	New York, N. Y	Dec. 17, 1872	6,303
Book-edge	J. H. Crowell	Providence, R. I	Feb. 12, 1867	2,576
Book-mark	W. B. French	Charlestown, Mass	Dec. 14, 1858	1,074
Book-stand, Coral	S. L. Westerfield	New York, N. Y	Nov. 26, 1872	6,280
Boot	A. Strang	Oakland, Cal	Mar. 2, 1869	3,400
Boot and shoe, Metallic armor	A. Hamlin	Schoharie, N. Y	Aug. 7, 1866	2,375
Boot and shoe ornamentation, Rubber	A. O. Bourn	Providence, R. I	July 11, 1871	5,098
Boot and shoe pattern	J. M. Dutton	Rochester, N. Y	July 5, 1870	4,198
Boot-jack	O. F. Fogelstrand	Kensington, Conn	Sept. 30, 1873	6,896
Boot-jack	E. J. Steele	New Haven, Conn	Mar. 25, 1873	6,535
Boot-leg top	J. H. Walker	Worcester, Mass	Aug. 3, 1869	3,601
Boot, Rubber	L. L. Hyatt	New Brunswick, N. J	Oct. 14, 1873	6,957
Boring-machine	C. E. McBeth, F. Bentel, and W. C. Margedant	Hamilton, Ohio	June 27, 1871	5,048
Bottle	T. B. Atterbury	Birmingham, Pa	Apr. 11, 1871	4,773
Bottle	J. B. Brown	Baltimore, Md	Sept. 17, 1872	6,141
Bottle	G. J. Byrne	New York, N. Y	Feb. 15, 1870	3,846–3,848

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Invention.	Inventor.	Residence.	Date.	No.
Bottle	W. A. Candee and W. C. Richards.	Bristol, Conn	Oct. 12, 1869	3, 710
Bottle	J. L. Dawes	Pittsburgh, Pa	Oct. 1, 1872	6, 159
Bottle	W. A. Demuth	New York, N. Y	May 2, 1871	4, 856
Bottle	P. H. Drake	Binghamton, N. Y	Feb. 18, 1862	1, 538
Bottle	E. C. Fougera and B. A. Vanderkieft.	Brooklyn and New York, N. Y.	July 3, 1866	2, 347
Bottle	J. H. Garnhart	Saint Louis, Mo	Mar. 22, 1870	3, 926
Bottle	C. Gautier	Washington, D. C	Apr. 9, 1867	2, 613
Bottle	J. Hart	Lancaster, Pa	July 14, 1868	3, 100
Bottle	M. Jackson	Clarksburgh, W. Va	Mar. 24, 1868	2, 960
Bottle	L. Lacour	San Francisco, Cal	Feb. 4, 1868	2, 915
Bottle	C. Lediard	Brooklyn, N. Y	Oct. 13, 1863	1, 831
Bottle	A. Legrand, sr	Fecamp, Departement de Seine-Inférieure, France.	June 30, 1868	3, 077
Bottle	E. D. Loveridge	Buffalo, N. Y	Nov. 3, 1863	1, 837
Bottle	J. Mackintire	New York, N. Y	July 5, 1870	4, 204
Bottle	M. B. Powell and C. W. Stutenroth.	Naperville, Ill	July 28, 1868	3, 141
Bottle	C. A. Robinson	New York, N. Y	Oct. 21, 1862	1, 665
Bottle	O. H. P. Rose	East Greenwich, R. I	June 21, 1870	4, 170
Bottle	H. Sawyer	Chelsea, Mass	Mar. 4, 1873	6, 489
Bottle	H. Schlichter and H. A. Zug	Philadelphia, Pa	Oct. 22, 1867	2, 816
Bottle	G. Scott	New York, N. Y	Jan. 12, 1864	1, 883
Bottle	N. Sleeper	Burlington, N. J	Dec. 5, 1871	5, 401
Bottle	N. Sleeper	Burlington, N. J	Nov. 4, 1873	6, 985
Bottle	F. Stearns	Detroit, Mich	Feb. 4, 1868	2, 928
Bottle	W. H. Ware	Philadelphia, Pa	Dec. 4, 1866	2, 522
Bottle	S. A. Whitney	Glassborough, N. J	May 14, 1867	2, 652
Bottle	L. J. Wicks	Bridgeton, N. J	Feb. 1, 1870	3, 836
Bottle and cap	R. B. Parkinson	Philadelphia, Pa	May 28, 1867	2, 659
Bottle and cup	J. Mackintire	New York, N. Y	July 5, 1870	4, 205
Bottle, Caster	J. B. Graves	New York, N. Y	Jan. 31, 1871	4, 618
Bottle, Caster	J. Hoare	New York, N. Y	Apr. 4, 1871	4, 752
Bottle, Caster	W. Parkin	Taunton, Mass	Oct. 25, 1870	4, 438
Bottle, Glass	J. B. Bartlett	New York, N. Y	Nov. 3, 1868	3, 213
Bottle, Glass	N. N. Brown	Philadelphia, Pa	Feb. 11, 1868	2, 930
Bottle, Glass	I. N. Peirce	Philadelphia, Pa	Oct. 17, 1865	2, 206
Bottle, Glass	J. W. Philbrook	West Roxbury, Mass	Nov. 4, 1873	6, 983
Bottle, Glass	W. R. Warren	Philadelphia, Pa	Mar. 28, 1871	4, 745
Bottle, Ink	F. Bailey	New York, N. Y	Nov. 15, 1864	1, 998
Bottle, Ink	T. Davids	New York, N. Y	Jan. 11, 1859	1, 078
Bottle, Ink	A. French	Philadelphia, Pa	Mar. 1, 1870	3, 871
Bottle, Ink	B. P. Holmes	Philadelphia, Pa	Aug. 20, 1867	2, 753
Bottle, Ink	G. G. Percival	Brooklyn, N. Y	Nov. 8, 1864	1, 997
Bottle, Nursery	F. Kern	Sandwich, Mass	Sept. 14, 1858	1, 049
Bottle, Nursing	M. S. Burr	Boston, Mass	Nov. 26, 1872	6, 270
Bottle, Perfume	P. Doflein	Philadelphia, Pa	Aug. 13, 1872	6, 021
Bottle, Perfume	H. Whitney	East Cambridge, Mass	June 2, 1868	3, 066
Bottle, Perfumery	F. Storm	Philadelphia, Pa	Nov. 5, 1872	6, 239
Bottle, Perfumery	A. E. Wetherill	Cincinnati, Ohio	Jan. 8, 1856	755
Bottle-stand	G. Gill	Taunton, Mass	Apr. 18, 1871	4, 812
Bottle-stand	C. H. Latham and G. D. Dudley	Lowell, Mass	Jan. 31, 1871	4, 619
Bottle-stand or caster	W. Parkin	Taunton, Mass	Mar. 23, 1869	3, 421–3, 422
Bottle-stand, Revolving	T. P. Spencer	Morrisania, N. Y	Apr. 8, 1873	6, 582
Bottle, Toilet	H. Whitney	East Cambridge, Mass	June 2, 1868	3, 067
Bottles, Ornamenting	L. Q. C. Wishart	Philadelphia, Pa	Oct. 25, 1859	1, 161
Bow	J. G. Wallace	Cincinnati, Ohio	Apr. 2, 1872	5, 751
Bow-instrument	L. P. Wildman	Danbury, Conn	May 2, 1871	4, 866
Bowl, Sugar	J. H. Hobbs	Wheeling, W. Va	Feb. 28, 1871	4, 689
Box	A. H. Mershon	East Saginaw, Mich	Apr. 14, 1871	4, 796
Box	J. J. Philbrick	Zanesville, Ohio	July 27, 1869	3, 589
Box	W. H. Savournin	Philadelphia, Pa	May 5, 1868	3, 016
Bracelet	A. Codding, jr	North Attleborough, Mass.	Feb. 23, 1869	3, 383
Bracelet	D. H. Smith	Attleborough, Mass	May 16, 1871	4, 911
Bracelet	T. I. Smith	Attleborough, Mass	Dec. 13, 1870	4, 516
Bracelet	T. I. Smith	North Attleborough, Mass.	Feb. 7, 1871	4, 643–4, 644
Bracelet	F. Wessel	New Britain, Conn	July 19, 1870	4, 256
Bracket	J. H. Bellamy	Charlestown, Mass	July 24, 1866	2, 264
Bracket	J. H. Bellamy	Charlestown, Mass	June 12, 1866	2, 333
Bracket	J. H. Bellamy	Charlestown, Mass	Oct. 2, 1866	2, 472
Bracket	J. H. Bellamy	Charlestown, Mass	Dec. 11, 1866	2, 524
Bracket	J. H. Bellamy	Charlestown, Mass	Jan. 8, 1867	2, 543
Bracket	J. H. Bellamy	Charlestown, Mass	July 19, 1870	4, 250
Bracket	J. H. Bellamy	Charlestown, Mass	Aug. 2, 1870	4, 268
Bracket	J. H. Bellamy	Charlestown, Mass	Nov. 15, 1870	4, 465–4, 466
Bracket	J. H. Bellamy	Charlestown, Mass	May 2, 1871	4, 853
Bracket	A. Bridges	New York, N. Y	May 15, 1866	2, 312
Bracket	F. W. Brocksieper	New Haven, Conn	May 12, 1868	3, 020–3, 032
Bracket	I. De Zouche	Troy, N. Y	Oct. 31, 1854	675
Bracket	O. F. Fogelstrand	Kensington, Conn	Nov. 4, 1873	6, 973
Bracket	H. Gilson and C. F. Southwick	Nashua, N. H	May 30, 1871	4, 962
Bracket	W. D. Gridley	New Haven, Conn	July 11, 1871	5, 105
Bracket	M. D. Jones	Somerville, Mass	Apr. 5, 1870	3, 953
Bracket	A. D. Judd	New Haven, Conn	Apr. 26, 1870	3, 992
Bracket	A. D. Judd	New Haven, Conn	May 27, 1873	6, 686
Bracket	J. Ottner	New Britain, Conn	Mar. 19, 1872	5, 704
Bracket	B. A. Ward	Lynn, Mass	Nov. 1, 1870	4, 454–4, 455
Bracket and chandelier	T. Village	West Meriden, Conn	July 4, 1871	5, 091
Bracket and lamp	F. T. Fracker	Boston, Mass	July 24, 1866	2, 367
Bracket or chandelier-arm	T. Village	West Meriden, Conn	July 4, 1871	5, 092
Braid and tape, Box for holding and displaying	S. B. Fleisher	Philadelphia, Pa	Oct. 4, 1870	4, 384
Brake-wheel	A. Merriman	New York, N. Y	Apr. 5, 1870	3, 955
Brand	M. Hoffheimer	Cincinnati, Ohio	May 3, 1870	4, 004
Bread-pan	N. Waterman	Boston, Mass	Aug. 31, 1858	1, 046
Breast-pin	A. V. Bock	Chicago, Ill	Apr 16, 1872	5, 769
Breast-pin, &c	G. W. Loomis and A. T. Goodell	New York, N. Y	Oct. 21, 1873	6, 964
Breast-pin	M. F. Ryan	New York, N. Y	Feb. 7, 1865	2, 029

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Invention.	Inventor.	Residence.	Date.	No.
Breast-pin and ear-drop	E. S. Richards	Attleborough, Mass	May 5, 1863	1, 738
Breast-strap slide	J. Henderson	Albion, N. Y	May 10, 1870	4, 015
Brick	G. W. Sholl and C. Stewart	Cincinnati, Ohio	Aug. 25, 1857	9[illegible]
Brick, Molded	J. M. Thompson	Philadelphia, Pa	Feb. 12, 1856	761
Bridle-bit	A. Hegeman, jr	New York, N. Y	Aug. 10, 1869	3, 6[illegible]9
Bridle-bit	J. B. Hoover	New York, N. Y	Nov. 9, 1869	3, 746
Bridle-bits, Ornamenting	L. Rommeiks	Newark, N. J	Nov. 2, 1869	3, 739
Bridle-front, &c	C. Fraser	New York, N. Y	Dec. 1, 1868	3, 269
Broiler	J. T. Page	Rochester, N. Y	May 23, 1871	4, 941
Broiler, Wire	W. J. Johnson and H. A. Hildreth.	Newton and Lowell, Mass	June 21, 1870	4, 163
Brooch	M. A. Snead	Louisville, Ky	May 26, 1863	1, 762
Broom	R. W. English	Buffalo, N. Y	Dec. 13, 1870	4, 506
Broom	G. F. Gale	Philadelphia, Pa	Nov. 26, 1872	6, 273
Broom-handle	J. Dion	Chicago, Ill	Apr. 30, 1872	5, 8[illegible]0
Broom, Whisk	G. Stackpole	Elizabeth, N. J	Mar. 21, 1871	4, 729
Brush	C. L. W. Baker	Hartford, Conn	Nov. 30, 1869	3, 767
Brush, Blackboard	D. Carpenter	San Francisco, Cal	June 1, 1869	3, 512
Brush frame and handle, Hair	H. Rock	Boston, Mass	May 2, 1854	645
Brush handle, Blacking	W. A. Greene	Troy, N. Y	Sept. 25, 1866	2, 433
Brush, Horse	A. H. Smith, W. W. Clark, and G. F. Starbuck.	New York, N. Y	Aug. 20, 1867	2, 766
Brush, Ornamentation of horse	J. A. Bradley and F. N. Smith	New York, N. Y	Apr. 21, 1868	3, 002
Brush, Paint	J. L. Whiting	Boston, Mass	Mar. 14, 1871	4, 718
Bucket	H. Everett	Philadelphia, Pa	June 11, 1872	5, 925
Bucket, Refrigerative	J. Liming	Philadelphia, Pa	May 23, 1871	4, 940
Buckle	A. Bedford	Cold Water, Mich	Oct. 5, 1869	3, 687
Buckle	J. I. Bell	Bell's Bridge, Cal	Nov. 8, 1870	4, 458
Buckle	J. F. Markland	Newark, N. J	Feb. 5, 1867	2, 570
Buckle	L. Schindler	Saint Peter, Minn	June 27, 1871	5, 053
Buckle	J. E. Smith	Waterbury, Conn	Oct. 18, 1870	4, 426
Buckle	J. R. Smith	Waterbury, Conn	Dec. 2, 1873	7, 005
Buckle	A. T. Thayer	New York, N. Y	Dec. 5, 1871	5, 403
Buckle and ring	F. A. Schultz	Mount Pleasant, Iowa	June 27, 1871	5, 054
Buckle, Belt	J. E. Smith	Waterbury, Conn	Sept. 2, 1873	6, 873
Buckle-frame	J. E. Smith	Waterbury, Conn	Mar. 7, 1871	4, 698
Buckle, Harness	D. Schoonmaker	Springfield, Mass	Dec. 7, 1869	3, 7[illegible]3
Buckle-loop	E. N. Crane	Newark, N. J	Mar. 2, 1869	3, 394
Buckle-ornamentation	J. O. West	New York, N. Y	Jan. 16, 1872	5, 478
Buggy	J. Reynolds	Washington, D. C	Dec. 11, 1866	2, 529
Buggy-body	W. M. Armstrong	Middletown, Ohio	Apr. 19, 1870	3, 974
Building-front	J. Fraser, F. Furness, and G. W. Hewitt.	Philadelphia, Pa	June 21, 1870	4, 159
Bulletin-board, Post-office	B. F. Rogers	Cambridge, Mass	Aug. 22, 1871	5, 229
Bureau	M. Fitzsimmons	Cincinnati, Ohio	June 25, 1872	5, 955–5, 956
Bureau-box	C. Kilburn	Philadelphia, Pa	Oct. 18, 1870	4, 421
Bureaus, Box for top of	D. A. Hall and D. Garrison	Philadelphia, Pa	Jan. 24, 1871	4, 602–4, 603
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	June 14, 1870	4, 151
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	July 5, 1870	4, 201
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	Aug. 30, 1870	4, 316
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	Sept. 13, 1870	4, 350–4, 352
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	Sept. 20, 1870	4, 357
Bureaus, Box for top of	C. Kilburn	Philadelphia, Pa	Nov. 8, 1870	4, 460
Bureaus, Box for top of	B. C. Swan	Philadelphia, Pa	Jan. 24, 1871	4, 606–4, 609
Burial-case	M. H. Crane	Cincinnati, Ohio	Oct. 9, 1855	734
Burial-case	M. H. Crane	Cincinnati, Ohio	Jan. 15, 1867	2, 552
Burial-case	M. H. Crane and S. A. Traugh	Cincinnati, Ohio	Dec. 12, 1865	2, 228
Burial-case	J. McMurtry	Fayette County, Ky	May 3, 1859	1, 097
Burial-case	L. Moses	Janesville, Wis	Sept. 25, 1866	2, 445
Burial-case	B. Smith	Cincinnati, Ohio	Aug. 27, 1861	1, 470
Burial-case	B. Smith	Cincinnati, Ohio	June 4, 1867	2, 668–2, 669
Burial-case	S. Stein	Rochester, N. Y	Nov. 14, 1871	5, 363
Burial-case	F. H. Stickney	East Cambridge, Mass	Feb. 14, 1865	2, 031
Burial-case	W. L. Washburn	Springfield, Mass	Sept. 2, 1862	1, 654
Burial-case	J. A. Wilson	Springfield, Mass	Oct. 2, 1866	2, 486
Burial-case	C. Zenner	Cincinnati, Ohio	Mar. 19, 1867	2, 602–2, 605
Burial-case or coffin	E. S. Earley	Philadelphia, Pa	July 9, 1867	2, 6[illegible]8
Burial-case, &c., Metallic plate for	L. Fay	Cincinnati, Ohio	May 12, 1863	1, 759
Burial-casket	W. G. Algeo	Pittsburgh, Pa	Apr. 21, 1868	3, 000
Burial-casket	B. R. Bacon	Philadelphia, Pa	Nov. 5, 1867	2, 818
Burial-casket	E. L. Cooke and J. H. Whitmore.	Hartford, Conn	Apr. 11, 1871	4, 779
Burial-casket	C. Dahlinger	Allegheny, Pa	Mar. 22, 1870	3, 913
Burial-casket	J. M. Hall	Philadelphia, Pa	June 2, 1868	3, 063
Burial-casket	G. Hasecoster	Richmond, Ind	May 7, 1872	5, 838
Burial-casket	B. F. Heinbach	Allentown, Pa	July 15, 1873	6, 771–6, 772
Burial-casket	W. F. Lane	Boston, Mass	Sept. 5, 1871	5, 253
Burial-casket	A. B. Lawrence	Warsaw, N. Y	Sept. 17, 1872	6, 145
Burial-casket	W. L. Lockhart and J. C. Seelye.	East Cambridge, Mass	Nov. 27, 1866	2, 510
Burial-casket	P. J. Marchal	Hartford, Conn	May 3, 1870	4, 006
Burial-casket	W. W. Roberts	Hartford, Conn	July 17, 1866	2, 363
Burial-casket	F. Weseman	Brooklyn, N. Y	May 7, 1872	5, 844
Burial-casket top	S. Avery	Phoenix, N. Y	Aug. 13, 1872	6, 020
Burner, Gas	E. R. Beach	Philadelphia, Pa	Nov. 4, 1873	6, 971
Burner, Gas	H. B. Musgrave	Cincinnati, Ohio	Feb. 15, 1859	1, 082
Burner jacket, Lamp	C. Deavs	New York, N. Y	Mar. 1, 1864	1, 904
Burner, Lamp	J. B. Alexander	Washington, D. C	June 14, 1870	4, 148
Burner, Lamp	H. W. Hayden	Waterbury, Conn	Apr. 18, 1871	4, 829–4, 830
Burner shade, Gas	G. B. Foster	Boston, Mass	Sept. 22, 1857	943
Burner shade, Gas or lamp	P. Lair	Philadelphia, Pa	Apr. 12, 1870	3, 968
Burner shade, Gas or lamp	J. Letchworth	Philadelphia, Pa	Feb. 15, 1870	3, 852–3, 853
Burner shade, Gas or lamp	J. Letchworth	Philadelphia, Pa	Aug. 16, 1870	4, 295
Burner shade, Gas or lamp	F. Rodgers	Philadelphia, Pa	May 10, 1870	4, 018
Burner shade, Gas or lamp	B. Thackara	Philadelphia, Pa	Mar. 1, 1870	3, 878
Burner, Vapor	P. Baumgrass	Washington, D. C	Nov. 10, 1868	3, 229
Burners, Combined top-plate, combustion and air chamber of vapor generators and.	J. Comly	Philadelphia, Pa	Sept. 13, 1870	4, 346

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Invention.	Inventor.	Residence.	Date.	No.
Bust	H. Berger	New York, N. Y	Mar. 29, 1870	3, 941
Bust and clock-case	W. A. Giles	Chicago, Ill	Apr. 3, 1866	2, 292
Bust of Abraham Lincoln	S. F. Ames	Boston, Mass	Jan. 30, 1866	2, 255
Bust of Abraham Lincoln	H. Berger	New York, N. Y	July 18, 1865	2, 134
Bust of Abraham Lincoln	S. J. Haller	Buffalo, N. Y	Aug. 8, 1865	2, 159
Bust of Abraham Lincoln	P. D. Jones	Cincinnati, Ohio	Aug. 8, 1865	2, 161
Bust of Abraham Lincoln	H. Manger	Philadelphia, Pa	Sept. 19, 1865	2, 173
Bust of Abraham Lincoln	F. Mills	Washington, D. C	June 6, 1865	2, 082
Bust of Abraham Lincoln	D. Morgan	Chillicothe, Ohio	Jan. 30, 1866	2, 250
Bust of Abraham Lincoln	W. H. Philip	Brooklyn, N. Y	June 13, 1865	2, 096
Bust of Abraham Lincoln	L. W. Volk	Chicago, Ill	June 12, 1860	1, 250
Bust of Abraham Lincoln, Bas-relief	E. V. Bunting	Philadelphia, Pa	Aug. 1, 1865	2, 149
Bust of Alexander Von Humboldt	H. Berger	New York, N. Y	Sept 28, 1869	3, 667
Bust of Daniel Webster	T. Ball	Boston, Mass	Apr. 19, 1853	548
Bust of Daniel Webster	J. C. King	Boston, Mass	Sept. 17, 1850	313
Bust of Frederick Douglass	D. Morgan	Chillicothe, Ohio	Aug. 4, 1868	3, 151
Bust of General Grant	L. Rebisso	Buffalo, N. Y	Oct. 10, 1865	2, 194
Bust of General Z. Taylor	P. Garbeille	New Orleans, La	Mar. 28, 1848	172
Bust of J. C. Calhoun	C. Mills	Charleston, S. C	Oct. 7, 1845	38
Bust of J. C. Fremont	J. Gott	Albany, N. Y	Oct. 7, 1856	838
Bust of Jerny Lind	T. Ball	Boston, Mass	Apr. 29, 1851	369
Bust of Napoleon Bonaparte	T. Ball	Boston, Mass	June 9, 1857	894
Bust of Robert Burns	J. C. King	Boston, Mass	Jan. 31, 1844	16
Bust of Theodore Frelinghuysen, Medallion	S. Ellis	New York, N. Y	Sept. 27, 1844	23
Bustle	S. H. Brown and C. H. Willets	New York, N. Y	Feb. 9, 1869	3, 362
Bustle	A. W. Thomas	Philadelphia, Pa	Sept. 12, 1871	5, 266
Button	J. R. Farrell	Boston, Mass	July 9, 1872	5, 974
Button	H. Henrich	New York, N. Y	July 30, 1872	6, 013
Button for wearing-apparel	J. E. Wheeler	Westport, Conn	Oct. 7, 1873	6, 947
Button-hole, Cuff, &c	J. R. Wood	Fitchburgh, Mass	July 16, 1867	2, 708
Button, Ornamental	D. A. Booth	New York, N. Y	July 24, 1847	139
Button, Sleeve	W. H. Wilson	Providence, R. I	Jan. 5, 1869	3, 333
Butter vase or cooler	W. Parkin	Taunton, Mass	Jan. 12, 1869	3, 340
C.				
Cake-basket	G. Gill	Taunton, Mass	Feb. 4, 1873	6, 379–6, 380
Cake-basket or fruit-tray	W. Parkin	Taunton, Mass	Mar. 1, 1870	3, 877
Cake-holder	G. Gill	Taunton, Mass	Aug. 12, 1873	6, 799
Cake-pan	G. W. Ketcham	New York, N. Y	June 29, 1871	5, 030
Cake-pan	A. Reid	Buffalo, N. Y	July 18, 1871	5, 132
Calendar	H. C. Heistad	Brooklyn, N. Y	May 10, 1870	4, 014
Calendar, Adjustable counting-house	S. S. Coe	Cleveland, Ohio	Apr. 12, 1870	3, 963
Camera-stand	W. A. Allen	New York, N. Y	Sept. 21, 1852	503
Can	C. Barry	Philadelphia, Pa	Nov. 5, 1867	2, 820
Can	H. G. Shook	New York, N. Y	Sept. 2, 1873	6, 872
Can-cover	J. F. Bodine	Williamstown, N. J	Aug. 3, 1858	1, 030
Candlestick	H Whitney	East Cambridge, Mass	May 10, 1870	4, 022
Candy figure	L. Schulze	Philadelphia, Pa	Sept. 25, 1866	2, 459–2, 466
Cane-head, umbrella-handle, or sword-hilt	J. C. Nobles	Rushford, N. Y	Dec. 23, 1862	1, 702
Cap, Knit skating	M. Landenberger	Philadelphia, Pa	July 12, 1870	4, 221
Cap, Knitted	W. Schwab	New York, N. Y	Oct. 5, 1869	3, 706
Cap, Lady's skating or riding	E. A. Murdock	Boston, Mass	Sept. 20, 1859	1, 146
Cap, Military	J. Schuller	Brooklyn, N. Y	Apr. 30, 1872	5, 834
Cape	M. Landenberger	Philadelphia, Pa	Sept. 2, 1873	6, 869
Cape	M. Landenberger, jr	Philadelphia, Pa	May 6, 1873	6, 629–6, 635
Cape	M. Landenberger, jr	Philadelphia, Pa	May 6, 1873	6, 641–6, 643
Cape	M. Landenberger, jr	Philadelphia, Pa	May 20, 1873	6, 660
Cape	M. Landenberger, jr	Philadelphia, Pa	May 27, 1873	6, 681
Cape	M. Landenberger, jr	Philadelphia, Pa	June 10, 1873	6, 702
Cape and muff fur covering	R. M. Seldis	New York, N. Y	Aug. 27, 1872	6, 095
Car-axle box, Railway	J. Stephenson	New York, N. Y	June 14, 1864	1, 962
Car-basket	W. G. Creamer	Brooklyn, N. Y	Feb. 4, 1868	2, 910
Car basket-rack	M. Tower	Boston, Mass	July 25, 1871	5, 145
Car basket-rack, Railway	W. G. Creamer	Brooklyn, N. Y	Apr. 6, 1869	3, 442
Car-bracket	J. Protin	New York, N. Y	June 1, 1869	3, 522–3, 523
Car clog-hanger, Railway	J. Stephenson	New York, N. Y	June 14, 1864	1, 961
Car lamp-box, Railway	J. Stephenson	New York, N. Y	June 14, 1864	1, 959
Car-lining, &c	C. Husband	Taunton, Mass	Apr. 30, 1872	5, 821
Car-lock	W. Gorman	New Britain, Conn	Nov. 15, 1870	4, 474
Car, Overhead work for passenger-elevator	O. Tufts	Boston, Mass	May 10, 1870	4, 020
Car pedestal, Railway	J. Stephenson	New York, N. Y	June 14, 1864	1, 958
Car-seat end-frame	T. W. Brown	Belmont, Mass	Jan. 9, 1872	5, 463
Car-seat end-frame	G. Buntin	East Boston, Mass	Apr. 2, 1867	2, 609
Car seat, Metallic band for railway	D. F. Randall	Chicopee, Mass	July 2, 1867	2, 693
Car step, Railway	J. Stephenson	New York, N. Y	June 14, 1864	1, 960
Car-ventilator	R. Hitchcock	Springfield, Mass	Dec. 21, 1869	3, 794
Car-ventilator case or shell, Railway	M. T. Hitchcock	Springfield, Mass	Sept. 28, 1869	3, 670
Car-ventilator door and frame	M. T. Hitchcock	Springfield, Mass	Aug. 17, 1869	3, 617
Cars, Side of railway	M. Buell and W. W. Leslie	New Castle, Del	Apr. 25, 1871	4, 838
Card	A. Dougherty	Brooklyn, N. Y	July 23, 1861	1, 455
Card-basket	G. D. Dudley	Lowell, Mass	June 11, 1872	5, 917
Card-basket	G. L. Underwood	Boston, Mass	June 30, 1868	3, 094
Card, Display	S. Houghton	Worcester, Mass	June 20, 1871	5, 027
Card, Garter and armlet	S. Houghton	Worcester, Mass	June 27, 1871	5, 044
Card-holder	J. Brooks	Newton, Mass	May 15, 1866	2, 313
Card, Mourning	E. J. Godfrey	New York, N. Y	Sept. 14, 1869	3, 658
Card-receiver	F. W. Brocksieper	New Haven, Conn	May 12, 1868	3, 033
Card-receiver	G. Gill	Taunton, Mass	Feb. 4, 1873	6, 378
Card-suspension clip	G. W. McGill	New York, N. Y	June 20, 1871	5, 036
Card, Visiting	S. W. Francis	Newport, R. I	June 25, 1867	2, 684
Cards, Back of playing	S. L. Cohen	New York, N. Y	Dec. 27, 1870	4, 536–4, 537
Cards, Pack of	S. Longley	Cincinnati, Ohio	Feb. 16, 1864	1, 896
Carding-machine frame	E. C. Cleveland	Worcester, Mass	Nov. 30, 1869	3, 768
Carpet	J. B. Alden	Worcester, Mass	Nov. 4, 1873	6, 970
Carpet	R. Allan	Camden, N. Y	Feb. 5, 1861	1, 366
Carpet	T. Barclay	Lowell, Mass	Oct. 29, 1872	6, 220–6, 221
Carpet	J. H. Bromley	Philadelphia, Pa	Sept. 12, 1871	5, 256

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Carpet	J. H. Bromley	Philadelphia, Pa	Feb. 11, 1873	6, 186
Carpet	R. R. Campbell	Lowell, Mass	June 20, 1871	5, 008-5, 016
Carpet	R. R. Campbell	Lowell, Mass	Oct. 29, 1872	6, 222-6, 225
Carpet	R. R. Campbell	Lowell, Mass	Dec. 17, 1872	6, 288-6, 290
Carpet	R. R. Campbell	Lowell, Mass	Mar. 4, 1873	6, 469-6, 472
Carpet	R. R. Campbell	Lowell, Mass	Apr. 8, 1873	6, 558-6, 560
Carpet	R. R. Campbell	Lowell, Mass	July 8, 1873	6, 747-6, 752
Carpet	R. R. Campbell	Lowell, Mass	Oct. 7, 1873	6, 900-6, 908
Carpet	R. Charlton	Liversedge, England	Apr. 8, 1873	6, 561
Carpet	J. M. Christie	Brooklyn, N. Y	Oct. 29, 1872	6, 226
Carpet	J. M. Christie	Brooklyn, N. Y	Dec. 17, 1872	6, 291-6, 294
Carpet	J. M. Christie	Brooklyn, N. Y	Mar. 4, 1873	6, 473-6, 479
Carpet	J. M. Christie	Brooklyn, N. Y	Apr. 8, 1873	6, 562-6, 571
Carpet	J. M. Christie	Lowell, Mass	July 8, 1873	6, 753-6, 756
Carpet	A. Cowell	Kidderminster, England	June 20, 1871	5, 013-5, 021
Carpet	A. Cowell	Kidderminster, England	Mar. 25, 1873	6, 512
Carpet	B. Crabtree, jr	Philadelphia, Pa	Sept. 12, 1871	5, 258
Carpet	B. Crabtree, jr	Philadelphia, Pa	Jan. 21, 1873	6, 352-6, 358
Carpet	J. Crabtree	Philadelphia, Pa	Aug. 22, 1871	5, 215-5, 223
Carpet	J. Crabtree	Philadelphia, Pa	Sept. 2, 1873	6, 865-6, 866
Carpet	G. Crompton	Worcester, Mass	Aug. 15, 1871	5, 198-5, 199
Carpet	J. Dornan	Philadelphia, Pa	Jan. 21, 1873	6, 354
Carpet	J. Dornan	Philadelphia, Pa	Aug. 19, 1873	6, 811
Carpet	J. P. Ferguson	Thompsonville, Conn	Oct. 20, 1843	13
Carpet	J. Fisher	Enfield, Conn	Feb. 18, 1873	6, 412-6, 415
Carpet	J. Fisher	Enfield, Conn	Apr. 22, 1873	6, 594
Carpet	J. Fisher	Philadelphia, Pa	June 17, 1873	6, 705-6, 708
Carpet	J. Fisher	Enfield, Conn	Dec. 16, 1873	7, 050
Carpet	W. Gilmour	Kidderminster, England	Jan. 7, 1873	6, 336
Carpet	H. F. Goetze	Boston, Mass	Mar. 4, 1873	6, 480-6, 481
Carpet	H. F. Goetze	Boston, Mass	July 8, 1873	6, 738
Carpet	H. F. Goetze	Boston, Mass	Oct. 7, 1873	6, 950
Carpet	J. Hamer	Lowell, Mass	Oct. 29, 1872	6, 227
Carpet	J. Hamer	Lowell, Mass	Dec. 17, 1872	6, 295-6, 296
Carpet	J. Hamer	Lowell, Mass	Mar. 4, 1873	6, 482-6, 483
Carpet	J. Hamer	Lowell, Mass	Apr. 8, 1873	6, 575-6, 576
Carpet	A. Heald	Philadelphia, Pa	Nov. 19, 1872	6, 249-6, 250
Carpet	A. Heald	Philadelphia, Pa	Jan. 21, 1873	6, 355-6, 356
Carpet	A. Heald	Philadelphia, Pa	Apr. 15, 1873	6, 588
Carpet	A. Heald	Philadelphia, Pa	May 20, 1873	6, 653-6, 654
Carpet	A. Heald	Philadelphia, Pa	June 24, 1873	6, 713-6, 720
Carpet	O. Heinigke	New York, N. Y	Oct. 8, 1872	6, 165-6, 169
Carpet	O. Heinigke	New York, N. Y	Feb. 18, 1873	6, 416-6, 424
Carpet	O. Heinigke	New York, N. Y	Mar. 25, 1873	6, 513-6, 517
Carpet	O. Heinigke	New York, N. Y	May 6, 1873	6, 625
Carpet	O. Heinigke	New York, N. Y	Oct. 7, 1873	6, 909-6, 931
Carpet	O. Heinigke	New York, N. Y	Dec. 16, 1873	7, 051-7, 059
Carpet	W. J. Hogg	Philadelphia, Pa	Jan. 21, 1873	6, 357
Carpet	H. Horan	Newark, N. J	Oct. 8, 1872	6, 170-6, 175
Carpet	H. Horan	Newark, N. J	Nov. 19, 1872	6, 251-6, 258
Carpet	H. Horan	Newark, N. J	Feb. 18, 1873	6, 425-6, 428
Carpet	H. Horan	Newark, N. J	Mar. 25, 1873	6, 518-6, 520
Carpet	H. Horan	Newark, N. J	Apr. 22, 1873	6, 596-6, 602
Carpet	H. Horan	East Orange, N. J	Oct. 7, 1873	6, 932
Carpet	H. Horan	East Orange, N. J	Dec. 9, 1873	7, 025-7, 033
Carpet	H. Horan	East Orange, N. J	Dec. 16, 1873	7, 060-7, 061
Carpet	R. Hoskin	Brooklyn, N. Y	Dec. 31, 1872	6, 329
Carpet	R. Hoskin	New York, N. Y	Mar. 25, 1873	6, 521
Carpet	J. Humphries	Kidderminster, England	Mar. 25, 1873	6, 524
Carpet	H. S. Kerr	Philadelphia, Pa	Dec. 17, 1872	6, 297-6, 298
Carpet	H. S. Kerr	Philadelphia, Pa	Jan. 21, 1873	6, 358
Carpet	H. S. Kerr	Philadelphia, Pa	May 27, 1873	6, 687-6, 688
Carpet	A. M. King	Kidderminster, England	Oct. 8, 1872	6, 176-6, 177
Carpet	A. M. King	Kidderminster, England	Nov. 19, 1872	6, 259
Carpet	H. Knight	Philadelphia, Pa	Dec. 9, 1873	7, 034
Carpet	P. Lawson	Lowell, Mass	Feb. 22, 1848	167-168
Carpet	P. Lawson	Lowell, Mass	Oct. 24, 1848	203
Carpet	P. Lawson	Lowell, Mass	Apr. 3, 1849	212-214
Carpet	C. S. Lilley	Lowell, Mass	Mar. 4, 1873	6, 484-6, 485
Carpet	W. Lockhead	Halifax, England	Aug. 29, 1871	6, 240-5, 242
Carpet	J. Magee	New York, N. Y	June 20, 1871	5, 032-5, 035
Carpet	J. Magee	New York, N. Y	June 27, 1871	5, 047
Carpet	L. G. Malkin	New York, N. Y	Oct. 8, 1872	6, 178-6, 181
Carpet	L. G. Malkin	New York, N. Y	Feb. 18, 1873	6, 429-6, 430
Carpet	L. G. Malkin	New York, N. Y	Mar. 25, 1873	6, 524-6, 525
Carpet	L. G. Malkin	New York, N. Y	Apr. 22, 1873	6, 604-6, 605
Carpet	L. G. Malkin	New York, N. Y	Oct. 7, 1873	6, 934
Carpet	N. Mallinson	Halifax, England	Nov. 19, 1872	6, 260
Carpet	A. Martin	Paris, France	Nov. 19, 1872	6, 261
Carpet	W. McCallum	New York, N. Y	Nov. 19, 1872	6, 262
Carpet	D. McNair	Roxbury, Mass	Apr. 3, 1860	1, 226
Carpet	D. McNair	Lowell, Mass	Oct. 29, 1872	6, 230
Carpet	D. McNair	Lowell, Mass	Dec. 17, 1872	6, 299-6, 301
Carpet	D. McNair	Lowell, Mass	Mar. 4, 1873	6, 486
Carpet	D. McNair	Lowell, Mass	Oct. 7, 1873	6, 936-6, 937
Carpet	C. T. Meyer	Bergen, N. J	May 11, 1869	3, 484-3, 485
Carpet	J. Neil	Clinton, Mass	Aug. 8, 1871	5, 188-5, 189
Carpet	E. J. Ney	Lowell, Mass	Feb. 15, 1859	1, 083-1, 084
Carpet	E. J. Ney	Lowell, Mass	Dec. 20, 1859	1, 175-1, 176
Carpet	E. J. Ney	Lowell, Mass	Oct. 2, 1860	1, 321
Carpet	E. J. Ney	Lowell, Mass	Dec. 18, 1860	1, 353-1, 361
Carpet	E. J. Ney	Lowell, Mass	Feb. 5, 1861	1, 367-1, 368
Carpet	E. J. Ney	Lowell, Mass	Mar. 19, 1861	1, 393-1, 395
Carpet	E. J. Ney	Lowell, Mass	Jan. 21, 1862	1, 519-1, 520
Carpet	E. J. Ney	Lowell, Mass	July 18, 1865	2, 136
Carpet	E. J. Ney	Dracut, Mass	June 20, 1871	5, 037

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Carpet	E. J. Ney	New York, N. Y	Apr. 3, 1872	6, 100–6, 115
Carpet	E. J. Ney	New York, N. Y	Oct. 8, 1872	6, 182–6, 189
Carpet	E. J. Ney	New York, N. Y	Nov. 19, 1872	6, 263
Carpet	E. J. Ney	New York, N. Y	Feb. 18, 1873	6, 437–6, 448
Carpet	E. J. Ney	New York, N. Y	Mar. 25, 1873	6, 529–6, 532
Carpet	E. J. Ney	New York, N. Y	Apr. 22, 1873	6, 606–6, 607
Carpet	E. J. Ney	New York, N. Y	Oct. 7, 1873	6, 938–6, 941
Carpet	E. J. Ney	New York, N. Y	Dec. 9, 1873	7, 038–7, 043
Carpet	H. Nordmann	New York, N. Y	Feb. 18, 1873	6, 449–6, 450
Carpet	H. Nordmann	New York, N. Y	Mar. 25, 1873	6, 533
Carpet	H. Nordmann	New York, N. Y	Apr. 22, 1873	6, 608
Carpet	H. Nordmann	New York, N. Y	Dec. 9, 1873	7, 044–7, 045
Carpet	F. J. Peirce	Lowell, Mass	Apr. 3, 1860	1, 228
Carpet	T. Pennell	Melrose, N. Y	June 20, 1871	5, 038
Carpet	E. Perrin	Kidderminster, England	Oct. 29, 1872	6, 231–6, 233
Carpet	J. Powell	Kidderminster, England	Jan. 7, 1873	6, 337
Carpet	J. Powell	Kidderminster, England	Jan. 21, 1873	6, 360
Carpet	J. Powell	Kidderminster, England	Apr. 15, 1873	6, 590–6, 591
Carpet	J. Powell	Kidderminster, England	July 22, 1873	6, 784
Carpet	C. Righter	Philadelphia, Pa	Dec. 17, 1872	6, 303–6, 304
Carpet	C. Righter	Philadelphia, Pa	Dec. 31, 1872	6, 330–6, 334
Carpet	C. Righter	Philadelphia, Pa	Jan. 21, 1873	6, 361
Carpet	C. A. Righter	Philadelphia, Pa	Apr. 8, 1873	6, 578–6, 579
Carpet	C. A. Righter	Philadelphia, Pa	May 20, 1873	6, 655
Carpet	C. A. Righter	Philadelphia, Pa	Aug. 19, 1873	6, 819–6, 823
Carpet	C. A. Righter	Philadelphia, Pa	Nov. 4, 1873	6, 984
Carpet	H. Smith	Kidderminster, England	July 29, 1873	6, 790
Carpet	H. Smith	Kidderminster, England	Sept. 16, 1873	6, 888
Carpet	J. H. Smith	Enfield, Conn	Oct. 8, 1872	6, 190
Carpet	J. H. Smith	Enfield, Conn	Feb. 18, 1873	6, 452–6, 454
Carpet	J. H. Smith	Enfield, Conn	Mar. 25, 1873	6, 534
Carpet	J. H. Smith	Enfield, Conn	Apr. 22, 1873	6, 610–6, 612
Carpet	J. H. Smith	Enfield, Conn	Oct. 7, 1873	6, 942–6, 945
Carpet	J. H. Smith	Enfield, Conn	Dec. 16, 1873	7, 065–7, 066
Carpet	J. D. Sparkman and M. Kelsey	Williamsburgh and Brooklyn, N. Y.	July 25, 1846	76–77
Carpet	T. J. Stearns	Natick, Mass	Mar. 4, 1873	6, 487
Carpet	F. C. Swann	Lowell, Mass	Oct. 29, 1872	6, 234
Carpet	H. G. Thompson	New York, N. Y	Apr. 4, 1844	19
Carpet	H. G. Thompson	New York, N. Y	Oct. 2, 1860	1, 324–2, 335
Carpet	H. G. Thompson	New York, N. Y	Feb. 12, 1861	1, 370–1, 385
Carpet	H. G. Thompson	New York, N. Y	May 7, 1861	1, 408–1, 418
Carpet	H. G. Thompson	New York, N. Y	Aug. 17, 1869	3, 619–3, 637
Carpet	L. A. Upson	Enfield, Conn	June 20, 1871	5, 040
Carpet	A. Webster, jr	New York, N. Y	Dec. 31, 1872	6, 335
Carpet	A. Webster, jr	New York, N. Y	Jan. 7, 1873	6, 339
Carpet	A. T. Webster	New Brunswick, N. J	Aug. 5, 1873	6, 796–6, 797
Carpet	J. T. Webster	Philadelphia, Pa	Apr. 1, 1873	6, 551–6, 554
Carpet	J. T. Webster	Philadelphia, Pa	July 1, 1873	6, 738–6, 740
Carpet	J. T. Webster	Philadelphia, Pa	Aug. 19, 1873	6, 824
Carpet	G. C. Wright	New York, N. Y	Aug. 29, 1871	5, 245–5, 250
Carpet	G. C. Wright	New York, N. Y	Sept. 10, 1872	6, 137–6, 139
Carpet, Canvas	J. D. Edwards	Elizabethtown, N. J	Mar. 20, 1844	18
Carpet or oil-cloth pattern	C. T. Meyer	Bergen, N. J	Aug. 27, 1867	2, 770
Carpet, Painted	J. Albro, jr	Elizabethtown, N. J	Oct. 6, 1843	10
Carpet-pattern	J. Allinson	Philadelphia, Pa	Aug. 4, 1868	3, 143
Carpet-pattern	J. Allinson	Philadelphia, Pa	Feb. 9, 1869	3, 360
Carpet-pattern	J. Allinson	Philadelphia, Pa	July 26, 1870	4, 258
Carpet-pattern	T. Barclay	Glasgow, Scotland	Oct. 31, 1871	5, 326
Carpet-pattern	T. Barclay	Lowell, Mass	Apr. 16, 1872	5, 767
Carpet-pattern	T. Barclay	Lowell, Mass	June 11, 1872	5, 911
Carpet-pattern	T. Barclay	Lowell, Mass	Aug. 20, 1872	6, 026
Carpet-pattern	J. Barrett	New York, N. Y	May 9, 1871	4, 867
Carpet-pattern	J. Barrett	New York, N. Y	Nov. 28, 1871	5, 379
Carpet-pattern	J. Barrett	New York, N. Y	Apr. 9, 1872	5, 752–5, 756
Carpet-pattern	J. Barrett	New York, N. Y	May 21, 1872	5, 860
Carpet-pattern	J. Barrett	New York, N. Y	July 30, 1872	6, 012
Carpet-pattern	A. Beck	Philadelphia, Pa	Apr. 16, 1867	2, 616–2, 617
Carpet-pattern	A. Beck	Philadelphia, Pa	Nov. 22, 1870	4, 480–4, 482
Carpet-pattern	A. Beck	Philadelphia, Pa	Nov. 28, 1871	5, 380
Carpet-pattern	M. Blatchford	Halifax, England	Mar. 26, 1872	5, 705–5, 706
Carpet-pattern	M. Blatchford	Halifax, England	Apr. 16, 1872	5, 768
Carpet-pattern	M. Blatchford	Halifax, England	June 4, 1872	5, 883
Carpet-pattern	A. J. Bonët	Kidderminster, England	Mar. 12, 1872	5, 639
Carpet-pattern	J. Bonët	Kidderminster, England	Oct. 31, 1871	5, 327
Carpet-pattern	J. H. Bromley	Philadelphia, Pa	Feb. 7, 1871	4, 624
Carpet-pattern	J. H. Bromley	Philadelphia, Pa	Jan. 9, 1872	5, 462
Carpet-pattern	J. H. Bromley	Philadelphia, Pa	Apr. 16, 1872	5, 770
Carpet-pattern	J. H. Bromley	Philadelphia, Pa	May 14, 1872	5, 847–5, 848
Carpet-pattern	R. R. Campbell	Lowell, Mass	Feb. 4, 1868	2, 908–2, 909
Carpet-pattern	R. R. Campbell	Lowell, Mass	July 14, 1868	3, 104
Carpet-pattern	R. R. Campbell	Lowell, Mass	Feb. 16, 1869	3, 368
Carpet-pattern	R. R. Campbell	Lowell, Mass	Dec. 21, 1869	3, 799
Carpet-pattern	R. R. Campbell	Lowell, Mass	Apr. 19, 1870	3, 976
Carpet-pattern	R. R. Campbell	Lowell, Mass	May 31, 1870	4, 081–4, 084
Carpet-pattern	R. R. Campbell	Lowell, Mass	Sept. 6, 1870	4, 324–4, 333
Carpet-pattern	R. R. Campbell	Lowell, Mass	Oct. 11, 1870	4, 394–4, 397
Carpet-pattern	R. R. Campbell	Lowell, Mass	Jan. 3, 1871	4, 547–4, 550
Carpet-pattern	R. R. Campbell	Lowell, Mass	Apr. 11, 1871	4, 775–4, 778
Carpet-pattern	R. R. Campbell	Lowell, Mass	May 9, 1871	4, 868–4, 873
Carpet-pattern	R. R. Campbell	Lowell, Mass	Aug. 8, 1871	5, 164–4, 174
Carpet-pattern	R. R. Campbell	Lowell, Mass	Nov. 28, 1871	5, 381–5, 389
Carpet-pattern	R. R. Campbell	Lowell, Mass	Dec. 19, 1871	5, 434–5, 441
Carpet-pattern	R. R. Campbell	Lowell, Mass	Feb. 13, 1872	5, 519–5, 527
Carpet-pattern	R. R. Campbell	Lowell, Mass	Mar. 19, 1872	5, 653–5, 660
Carpet-pattern	R. R. Campbell	Lowell, Mass	Apr. 16, 1872	5, 771
Carpet-pattern	R. R. Campbell	Lowell, Mass	June 11, 1872	5, 912–5, 916

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Carpet-pattern	R. R. Campbell	Lowell, Mass	July 16, 1872	5,986-5,988
Carpet-pattern	R. R. Campbell	Lowell, Mass	Aug. 20, 1872	6,027-6,030
Carpet-pattern	R. Charlton	Liversedge, England	May 30, 1871	4,943
Carpet-pattern	P. Chorier	Paris, France	Apr. 16, 1872	5,775
Carpet-pattern	H. Christie	Morrisania, N. Y	Sept. 1, 1868	3,187
Carpet-pattern	H. Christie	Morrisania, N. Y	Mar. 8, 1870	3,892
Carpet-pattern	H. Christie	Morrisania, N. Y	June 28, 1870	4,176-4,177
Carpet-pattern	H. Christie	Morrisania, N. Y	July 19, 1870	4,252
Carpet-pattern	J. M. Christie	Kidderminster, England	Sept. 19, 1871	5,272
Carpet-pattern	J. M. Christie	Lowell, Mass	Mar. 19, 1872	5,661-5,664
Carpet-pattern	J. M. Christie	Lowell, Mass	Apr. 16, 1872	5,772-5,774
Carpet-pattern	J. M. Christie	Brooklyn, N. Y	June 25, 1872	5,944-5,948
Carpet-pattern	J. M. Christie	Brooklyn, N. Y	July 16, 1872	5,989
Carpet-pattern	J. M. Christie	Brooklyn, N. Y	Aug. 20, 1872	6,031
Carpet-pattern	J. M. Christie	Brooklyn, N. Y	Aug. 20, 1872	6,072
Carpet-pattern	A. Cowell	Kidderminster, England	Apr. 11, 1871	4,781-4,787
Carpet-pattern	A. Cowell	Kidderminster, England	Aug. 8, 1871	5,175
Carpet-pattern	A. Cowell	Kidderminster, England	Nov. 7, 1871	5,352-5,359
Carpet-pattern	A. Cowell	Kidderminster, England	Mar. 26, 1872	5,707-5,719
Carpet-pattern	A. Cowell	Kidderminster, England	June 4, 1872	5,884-5,890
Carpet-pattern	B. Crabtree, jr	Philadelphia, Pa	Aug. 4, 1868	3,144-3,147
Carpet-pattern	B. Crabtree, jr	Philadelphia, Pa	Dec. 1, 1868	3,267
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Sept. 28, 1869	3,668
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Oct. 19, 1869	3,717-3,718
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Feb. 8, 1870	3,837-3,838
Carpet-pattern	J. Crabtree	Philadelphia, Pa	May 17, 1870	4,026-4,028
Carpet-pattern	J. Crabtree	Philadelphia, Pa	July 19, 1870	4,253
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Aug. 30, 1870	4,305
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Oct. 11, 1870	4,398
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Oct. 18, 1870	4,420
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Nov. 1, 1870	4,448
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Jan. 24, 1871	4,589-4,601
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Feb. 28, 1871	4,679-4,685
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Mar. 21, 1871	4,721
Carpet-pattern	J. Crabtree	Philadelphia, Pa	May 23, 1871	4,917-4,918
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Jan. 16, 1872	5,472
Carpet-pattern	J. Crabtree	Philadelphia, Pa	Mar. 5, 1872	5,563
Carpet-pattern	W. De Hart	Amsterdam, N. Y	May 7, 1872	5,837
Carpet-pattern	E. Demoussay	Paris, France	May 21, 1872	5,862
Carpet-pattern	J. Dornan	Philadelphia, Pa	Aug. 16, 1870	4,294
Carpet-pattern	J. Dornan	Philadelphia, Pa	June 25, 1872	5,960
Carpet-pattern	J. Fisher	Enfield, Conn	May 9, 1871	4,878
Carpet-pattern	J. Fisher	Enfield, Conn	May 23, 1871	4,920
Carpet-pattern	J. Fisher	Enfield, Conn	May 30, 1871	4,944
Carpet-pattern	J. Fisher	Enfield, Conn	June 13, 1871	4,987-4,989
Carpet-pattern	J. Fisher	Enfield, Conn	Mar. 5, 1872	5,564-5,568
Carpet-pattern	J. Fisher	Enfield, Conn	Mar. 19, 1872	5,665-5,669
Carpet-pattern	J. Fisher	Enfield, Conn	Apr. 16, 1872	5,778-5,781
Carpet-pattern	J. Fisher	Enfield, Conn	May 14, 1872	5,849
Carpet-pattern	J. Fisher	Enfield, Conn	Aug. 20, 1872	6,033-6,037
Carpet-pattern	I. Foster	Philadelphia, Pa	Sept. 22, 1868	3,200-3,201
Carpet-pattern	I. Foster	Philadelphia, Pa	Nov. 3, 1868	3,220
Carpet-pattern	I. Foster	Philadelphia, Pa	Nov 17, 1868	3,241-3,242
Carpet-pattern	I. Foster	Philadelphia, Pa	Dec. 1, 1868	3,268
Carpet-pattern	I. Foster	Philadelphia, Pa	Jan. 5, 1869	3,305
Carpet-pattern	I. Foster	Philadelphia, Pa	May 17, 1870	4,032
Carpet-pattern	V. Guéritte	Glasgow, Scotland	Nov. 7, 1871	5,360
Carpet-pattern	A. Heald	Philadelphia, Pa	Aug. 30, 1870	4,311-4,314
Carpet-pattern	A. Heald	Philadelphia, Pa	Nov. 29, 1870	4,490-4,494
Carpet-pattern	A. Heald	Philadelphia, Pa	May 9, 1871	4,879-4,883
Carpet-pattern	A. Heald	Philadelphia, Pa	Nov. 21, 1871	5,375-5,376
Carpet-pattern	A. Heald	Philadelphia, Pa	Nov. 28, 1871	5,390-5,391
Carpet-pattern	A. Heald	Philadelphia, Pa	Jan. 23, 1872	5,481
Carpet-pattern	A. Heald	Philadelphia, Pa	May 28, 1872	5,878-5,880
Carpet-pattern	O. Heinigke	New York, N. Y	July 4, 1871	5,073
Carpet-pattern	O. Heinigke	New York, N. Y	Oct. 31, 1871	5,331-5,333
Carpet-pattern	O. Heinigke	New York, N. Y	Nov. 28, 1871	5,392
Carpet-pattern	O. Heinigke	New York, N. Y	Mar. 5, 1872	5,610-5,618
Carpet-pattern	O. Heinigke	New York, N. Y	Mar. 19, 1872	5,670-5,676
Carpet-pattern	O. Heinigke	New York, N. Y	Apr. 16, 1872	5,782
Carpet-pattern	O. Heinigke	New York, N. Y	May 14, 1872	5,850
Carpet-pattern	O. Heinigke	New York, N. Y	Aug. 20, 1872	6,038-6,051
Carpet-pattern	G. Holdsworth	Halifax, England	Mar. 28, 1871	4,734
Carpet-pattern	H. Horan	Newark, N. J	Feb. 13, 1872	5,529-5,538
Carpet-pattern	H. Horan	Newark, N. J	Mar. 5, 1872	5,619-5,623
Carpet-pattern	H. Horan	Newark, N. J	Mar. 19, 1872	5,677-5,679
Carpet-pattern	H. Horan	Newark, N. J	Apr. 16, 1872	5,784-5,786
Carpet-pattern	H. Horan	Newark, N. J	Aug. 20, 1872	6,052-6,057
Carpet-pattern	R. Hoskins	Brooklyn, N. Y	Sept. 24, 1867	2,785
Carpet-pattern	J. Humphries	Kidderminster, England	June 4, 1872	5,891
Carpet-pattern	J. Humphries	Kidderminster, England	June 4, 1872	5,902-5,904
Carpet-pattern	J. Hutchinson	Newark, N. J	July 4, 1865	2,133
Carpet-pattern	J. C. Johnston	New York, N. Y	June 20, 1871	5,029
Carpet-pattern	J. C. Johnston	Scarborough, N. Y	Dec. 19, 1871	5,427
Carpet-pattern	J. C. Johnston	Scarborough, N. Y	Mar. 26, 1872	5,720
Carpet-pattern	L. Jullien	Passy, France	Apr. 16, 1872	5,787
Carpet-pattern	L. Jullien	Passy, France	May 7, 1872	5,841
Carpet-pattern	L. Jullien	Passy, France	June 11, 1872	5,921
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Dec. 13, 1870	4,507
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Dec. 27, 1870	4,540
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Feb. 7, 1871	4,632-4,633
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Feb. 14, 1871	4,651-4,652
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	May 9, 1871	4,887
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	May 23, 1871	4,925-4,926
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	July 11, 1871	5,108
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Aug. 15, 1871	5,205
Carpet-pattern	H. S. Kerr	Philadelphia, Pa	Mar. 26, 1872	5,721-5,723
Carpet-pattern	W. Kerr	Philadelphia, Pa	May 17, 1870	4,035

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Carpet-pattern	W. Kerr	Philadelphia, Pa	Aug. 30, 1870	4, 315
Carpet-pattern	W. Kerr	Philadelphia, Pa	May 30, 1871	4, 950-4, 952
Carpet-pattern	W. Kerr	Philadelphia, Pa	July 25, 1871	5, 139
Carpet-pattern	W. Kerr	Philadelphia, Pa	Aug. 8, 1871	5, 184
Carpet-pattern	A. M. King	Kidderminster, England	Mar. 12, 1872	5, 640-5, 645
Carpet-pattern	A. M. King	Kidderminster, England	Apr. 30, 1872	5, 823-5, 825
Carpet-pattern	A. M. King	Kidderminster, England	Aug. 27, 1872	6, 091-6, 092
Carpet-pattern	C. J. Koch	Philadelphia, Pa	Feb. 7, 1871	4, 636
Carpet-pattern	C. S. Lilley	Lowell, Mass	Feb. 21, 1871	4, 671-4, 672
Carpet-pattern	C. S. Lilley	Lowell, Mass	Aug. 8, 1871	5, 187
Carpet-pattern	C. S. Lilley	Lowell, Mass	June 11, 1872	5, 922
Carpet-pattern	C. S. Lilley	Lowell, Mass	Aug. 20, 1872	6, 058
Carpet-pattern	J. Magee	New York, N. Y	July 11, 1871	5, 109
Carpet-pattern	J. Magee	New York, N. Y	Oct. 3, 1871	5, 300
Carpet-pattern	L. G. Malkin	New York, N. Y	Jan. 28, 1868	2, 864-2, 865
Carpet-pattern	L. G. Malkin	New York, N. Y	Aug. 25, 1868	3, 165-3, 166
Carpet-pattern	L. G. Malkin	New York, N. Y	Mar. 22, 1870	3, 927-3, 928
Carpet-pattern	L. G. Malkin	New York, N. Y	Apr. 4, 1871	4, 760-4, 767
Carpet-pattern	L. G. Malkin	New York, N. Y	May 9, 1871	4, 889
Carpet-pattern	L. G. Malkin	New York, N. Y	July 4, 1871	5, 076
Carpet-pattern	L. G. Malkin	New York, N. Y	Mar. 5, 1872	5, 624-5, 630
Carpet-pattern	L. G. Malkin	New York, N. Y	Mar. 19, 1872	5, 680-5, 684
Carpet-pattern	L. G. Malkin	New York, N. Y	Apr. 16, 1872	5, 788
Carpet-pattern	W. Mallinson	Halifax, England	Dec. 13, 1870	4, 508-4, 509
Carpet-pattern	W. Mallinson	Halifax, England	Mar. 28, 1871	4, 737
Carpet-pattern	W. Mallinson	Halifax, England	Oct. 31, 1871	5, 334-5, 336
Carpet-pattern	W. Mallinson	Halifax, England	Mar. 5, 1872	5, 631
Carpet-pattern	W. Mallinson	Halifax, England	Apr. 16, 1872	5, 789-5, 791
Carpet-pattern	W. Mallinson	Halifax, England	July 23, 1872	6, 003
Carpet-pattern	A. McCallum	Halifax, England	Mar. 28, 1871	4, 738-4, 740
Carpet-pattern	A. McCallum	Halifax, England	May 16, 1871	4, 905
Carpet-pattern	A. McCallum	Halifax, England	June 6, 1871	4, 9[illegible]0
Carpet-pattern	A. McCallum	Halifax, England	Dec. 12, 1871	5, 417-5, 422
Carpet-pattern	A. McCallum	Halifax, England	Mar. 5, 1872	5, 636
Carpet-pattern	A. McCallum	Halifax, England	Mar. 12, 1872	5, 646-5, 647
Carpet-pattern	A. McCallum	Halifax, England	Apr. 16, 1872	5, 792-5, 793
Carpet-pattern	A. McCallum	Halifax, England	June 4, 1872	5, 905
Carpet-pattern	A. McCallum	Halifax, England	July 23, 1872	6, 004
Carpet-pattern	W. McCallum	Halifax, England	Sept. 26, 1871	5, 278-5, 279
Carpet-pattern	W. McCallum	Yonkers, N. Y	Feb. 20, 1872	5, 549-5, 552
Carpet-pattern	D. McNair	Lowell, Mass	Dec. 19, 1871	5, 444
Carpet-pattern	D. McNair	Lowell, Mass	Apr. 16, 1872	5, 794
Carpet-pattern	D. McNair	Lowell, Mass	June 11, 1872	5, 923
Carpet-pattern	D. McNair	Lowell, Mass	Aug. 20, 1872	6, 059
Carpet-pattern	C. T. Meyer	Bergen, N. J	Sept. 24, 1867	2, 783
Carpet-pattern	C. T. Meyer	Bergen, N. J	Sept. 24, 1867	2, 787-2, 789
Carpet-pattern	C. T. Meyer	Newark, N. J	Feb. 1, 1870	3, 830-3, 832
Carpet-pattern	C. T. Meyer	Newark, N. J	May 9, 1871	4, 890-4, 894
Carpet-pattern	C. T. Meyer	Elizabeth, N. J	Jan. 23, 1872	5, 483-5, 490
Carpet-pattern	C. T. Meyer	Lyon's Farms, N. J	Apr. 30, 1872	5, 828
Carpet-pattern	V. E. Meyer	Harrison, N. J	Mar. 23, 1869	3, 416
Carpet-pattern	E. J. Ney	Lowell, Mass	July 5, 1859	1, 120-1, 123
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 9, 1859	1, 129-1, 130
Carpet-pattern	E. J. Ney	Lowell, Mass	Sept. 6, 1859	1, 144
Carpet-pattern	E. J. Ney	Lowell, Mass	Nov. 22, 1859	1, 169-1, 170
Carpet-pattern	E. J. Ney	Lowell, Mass	Feb. 14, 1860	1, 199
Carpet-pattern	E. J. Ney	Lowell, Mass	Feb. 28, 1860	1, 209-1, 210
Carpet-pattern	E. J. Ney	Lowell, Mass	June 12, 1860	1, 253-1, 254
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 7, 1860	1, 299-1, 301
Carpet-pattern	E. J. Ney	Lowell, Mass	July 16, 1861	1, 443-1, 452
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 13, 1861	1, 459-1, 465
Carpet-pattern	E. J. Ney	Lowell, Mass	Oct. 22, 1861	1, 480-1, 482
Carpet-pattern	E. J. Ney	Lowell, Mass	Feb. 25, 1862	1, 542-1, 546
Carpet-pattern	E. J. Ney	Lowell, Mass	Mar. 18, 1862	1, 550-1, 556
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 12, 1862	1, 630-1, 649
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 19, 1862	1, 650
Carpet-pattern	E. J. Ney	Lowell, Mass	Nov. 11, 1862	1, 666-1, 673
Carpet-pattern	E. J. Ney	Lowell, Mass	Dec. 16, 1862	1, 698, 1, 700
Carpet-pattern	E. J. Ney	Lowell, Mass	Mar. 3, 1863	1, 722-1, 730
Carpet-pattern	E. J. Ney	Lowell, Mass	Apr. 28, 1863	1, 754-1, 756
Carpet-pattern	E. J. Ney	Lowell, Mass	June 16, 1863	1, 764-1, 774
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 11, 1863	1, 806-1, 816
Carpet-pattern	E. J. Ney	Lowell, Mass	Sept. 1, 1863	1, 817-1, 818
Carpet-pattern	E. J. Ney	Lowell, Mass	Nov. 10, 1863	1, 839-1, 847
Carpet-pattern	E. J. Ney	Lowell, Mass	Jan. 19, 1864	1, [illegible]-1, 886
Carpet-pattern	E. J. Ney	Lowell, Mass	Feb. 16, 1864	1, 898-1, 901
Carpet-pattern	E. J. Ney	Lowell, Mass	Mar. 15, 1864	1, 920-1, 925
Carpet-pattern	E. J. Ney	Lowell, Mass	May 10, 1864	1, 941-1, 943
Carpet-pattern	E. J. Ney	Lowell, Mass	June 14, 1864	1, 953-1, 956
Carpet-pattern	E. J. Ney	Lowell, Mass	July 19, 1864	1, 972-1, 978
Carpet pattern	E. J. Ney	Lowell, Mass	Nov. 15, 1864	1, 999-2, 003
Carpet-pattern	E. J. Ney	Lowell, Mass	Dec. 13, 1864	2, 008-2, 012
Carpet-pattern	E. J. Ney	Lowell, Mass	Jan. 17, 1865	2, 019-2, 023
Carpet-pattern	E. J. Ney	Lowell, Mass	Jan. 24, 1865	2, 025-2, 026
Carpet-pattern	E. J. Ney	Lowell, Mass	Apr. 11, 1865	2, 046-2, 051
Carpet-pattern	E. J. Ney	Lowell, Mass	May 30, 1865	2, 073-2, 077
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 1, 1865	2, 152
Carpet-pattern	E. J. Ney	Lowell, Mass	Sept. 19, 1865	2, 174-2, 176
Carpet-pattern	E. J. Ney	Lowell, Mass	Oct. 17, 1865	2, 204
Carpet-pattern	E. J. Ney	Lowell, Mass	Sept. 25, 1866	2, 446-2, 455
Carpet-pattern	E. J. Ney	Lowell, Mass	Feb. 26, 1867	2, 590-2, 593
Carpet-pattern	E. J. Ney	Lowell, Mass	Aug. 20, 1867	2, 754-2, 765
Carper-pattern	E. J. Ney	Lowell, Mass	Feb. 4, 1868	2, 921-2, 926
Carpet-pattern	E. J. Ney	Lowell, Mass	July 21, 1868	3, 119-3, 123
Carpet-pattern	E. J. Ney	Lowell, Mass	Dec. 8, 1868	3, 278-3, 290
Carpet-pattern	E. J. Ney	Lowell, Mass	Jan. 5, 1869	3, 316

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Carpet-pattern	E. J. Ney	Lowell, Mass	Mar. 23, 1869	3,417–3,420
Carpet-pattern	E. J. Ney	Middlesex County, Mass	June 15, 1869	3,540–3,547
Carpet-pattern	E. J. Ney	Dracut, Mass	Oct. 5, 1869	3,698–3,703
Carpet-pattern	E. J. Ney	Dracut, Mass	Dec. 21, 1869	3,798–3,802
Carpet-pattern	E. J. Ney	Dracut, Mass	Apr. 19, 1870	3,977–3,983
Carpet-pattern	E. J. Ney	Dracut, Mass	May 17, 1870	4,039–4,040
Carpet-pattern	E. J. Ney	Dracut, Mass	May 31, 1870	4,090–4,094
Carpet-pattern	E. J. Ney	Dracut, Mass	Sept. 6, 1870	4,339–4,341
Carpet-pattern	E. J. Ney	Dracut, Mass	Oct. 11, 1870	4,411–4,414
Carpet-pattern	E. J. Ney	Dracut, Mass	Apr. 11, 1871	4,798
Carpet-pattern	E. J. Ney	Dracut, Mass	May 9, 1871	4,896–4,898
Carpet-pattern	E. J. Ney	Dracut, Mass	May 23, 1871	4,928–4,929
Carpet-pattern	E. J. Ney	Dracut, Mass	June 13, 1871	4,994–5,003
Carpet-pattern	E. J. Ney	New York, N. Y	July 4, 1871	5,078–5,085
Carpet-pattern	E. J. Ney	New York, N. Y	Mar. 5, 1872	5,577–5,597
Carpet-pattern	E. J. Ney	New York, N. Y	Mar. 19, 1872	5,685–5,693
Carpet-pattern	E. J. Ney	New York, N. Y	Apr. 16, 1872	5,795–5,796
Carpet-pattern	E. J. Ney	New York, N. Y	May 14, 1872	5,852–5,853
Carpet-pattern	E. J. Ney	New York, N. Y	June 4, 1872	5,910
Carpet-pattern	F. Nowell	Milford, N. H	Apr. 2, 1872	5,748
Carpet-pattern	W. R. Parks	Palmer, Mass	Apr. 9, 1872	5,764–5,765
Carpet-pattern	J. J. Patchett	Halifax, England	Oct. 31, 1871	5,337–5,338
Carpet-pattern	J. J. Patchett	Halifax, England	Mar. 5, 1872	5,633
Carpet-pattern	J. J. Patchett	Halifax, England	Apr. 16, 1872	5,797
Carpet-pattern	J. J. Patchett	Halifax, England	July 23, 1872	6,006–6,007
Carpet-pattern	D. Paton	New York, N. Y	Sept. 26, 1871	5,280–5,281
Carpet-pattern	D. Paton	New York, N. Y	Feb. 20, 1872	5,554–5,555
Carpet-pattern	D. Paton	Halifax, England	June 4, 1872	5,893–5,896
Carpet-pattern	D. Paton	Halifax, England	July 23, 1872	6,008–6,009
Carpet-pattern	F. J. Peirce	Roxbury, Mass	Sept. 12, 1865	2,168
Carpet-pattern	F. J. Peirce	Roxbury, Mass	Oct. 10, 1865	2,192
Carpet-pattern	T. Pennel	Morrisania, N. Y	July 11, 1871	5,119
Carpet-pattern	E. Perrin	Kidderminster, England	May 16, 1871	4,908–4,909
Carpet-pattern	E. Perrin	Kidderminster, England	Dec. 19, 1871	5,446
Carpet-pattern	F. J. Pierce	Boston, Mass	June 4, 1872	5,897
Carpet-pattern	E. Poole	Halifax, England	Mar. 12, 1872	5,649–5,650
Carpet-pattern	E. Poole	Halifax, England	Apr. 16, 1872	5,798–5,802
Carpet-pattern	E. Poole	Halifax, England	June 4, 1872	5,898–5,899
Carpet-pattern	E. Poole	Halifax, England	June 4, 1872	5,908–5,909
Carpet-pattern	J. Powell	Kidderminster, England	Aug. 27, 1872	6,094
Carpet-pattern	E. Pyne	Morrisania, N. Y	Jan. 23, 1872	5,482
Carpet-pattern	E. Pyne	Morrisania, N. Y	Feb. 13, 1872	5,518
Carpet-pattern	H. Robinson	Halifax, England	Oct. 31, 1871	5,339–5,341
Carpet-pattern	H. Robinson	Halifax, England	Mar. 12, 1872	5,651–5,652
Carpet-pattern	H. Robinson	Halifax, England	Apr. 16, 1872	5,803
Carpet-pattern	H. Robinson	Halifax, England	May 7, 1872	5,842
Carpet-pattern	W. H. Shelmerdine	Philadelphia, Pa	Jan. 12, 1869	3,341
Carpet-pattern	J. M. Silcox	Kidderminster, England	Nov. 7, 1871	5,361–5,362
Carpet-pattern	J. Smith	Enfield, Conn	Mar. 22, 1870	3,930–3,931
Carpet-pattern	J. H. Smith	Enfield, Conn	Apr. 4, 1871	4,771–4,772
Carpet-pattern	J. H. Smith	Enfield, Conn	May 30, 1871	4,956
Carpet-pattern	J. H. Smith	Enfield, Conn	July 4, 1871	5,088
Carpet-pattern	J. H. Smith	Enfield, Conn	Nov. 21, 1871	5,372
Carpet-pattern	J. H. Smith	Enfield, Conn	Jan. 9, 1872	5,468
Carpet-pattern	J. H. Smith	Enfield, Conn	Mar. 5, 1872	5,600–5,603
Carpet-pattern	J. H. Smith	Enfield, Conn	Apr. 16, 1872	5,804
Carpet-pattern	J. H. Smith	Enfield, Conn	May 14, 1872	5,855
Carpet-pattern	J. H. Smith	Enfield, Conn	Aug. 20, 1872	6,064–6,070
Carpet-pattern	I. Starr, jr	Philadelphia, Pa	Sept. 28, 1869	3,677
Carpet-pattern	J. E. Stone	Kidderminster, England	Dec. 5, 1871	5,402
Carpet-pattern	H. G. Thompson	New York, N. Y	Aug. 30, 1859	1,139–1,142
Carpet-pattern	H. G. Thompson	New York, N. Y	Dec. 20, 1859	1,178–1,182
Carpet-pattern	H. G. Thompson	New York, N. Y	Jan. 24, 1860	1,195–1,196
Carpet-pattern	H. G. Thompson	New York, N. Y	June 19, 1860	1,264–1,275
Carpet-pattern	H. G. Thompson	New York, N. Y	Aug. 7, 1860	1,302–1,309
Carpet-pattern	H. G. Thompson	New York, N. Y	Nov. 19, 1861	1,489–1,503
Carpet-pattern	H. G. Thompson	New York, N. Y	Feb. 11, 1862	1,525–1,537
Carpet-pattern	H. G. Thompson	New York, N. Y	Dec. 9, 1862	1,683–1,694
Carpet-pattern	H. G. Thompson	New York, N. Y	Jan. 27, 1863	1,707–1,718
Carpet-pattern	H. G. Thompson	New York, N. Y	June 16, 1863	1,778–1,788
Carpet-pattern	H. G. Thompson	New York, N. Y	Nov. 24, 1863	1,851–1,868
Carpet-pattern	H. G. Thompson	New York, N. Y	Mar. 8, 1864	1,909–1,919
Carpet-pattern	H. G. Thompson	New York, N. Y	July 4, 1865	2,109–2,132
Carpet-pattern	H. G. Thompson	New York, N. Y	Aug. 14, 1866	2,389–2,426
Carpet-pattern	H. G. Thompson	New York, N. Y	Jan. 28, 1868	2,871–2,903
Carpet-pattern	H. G. Thompson	New York, N. Y	Aug. 25, 1868	3,172–3,183
Carpet-pattern	H. G. Thompson	New York, N. Y	Mar. 22, 1870	3,932–3,940
Carpet-pattern	J. Wade	Palmer, Mass	Dec. 12, 1871	5,409–5,410
Carpet-pattern	J. Wade	Palmer, Mass	Feb. 13, 1872	5,542
Carpet-pattern	J. T. Webster	New York, N. Y	Mar. 1, 1870	3,879–3,880
Carpet-pattern	J. T. Webster	New York, N. Y	Mar. 14, 1871	4,717
Carpet-pattern	G. C. Wright	New York, N. Y	May 16, 1871	4,914
Carpet-pattern	G. C. Wright	New York, N. Y	June 27, 1871	5,061–5,064
Carpet-pattern	G. C. Wright	New York, N. Y	July 11, 1871	5,121–5,126
Carpet-pattern	G. C. Wright	New York, N. Y	Mar. 5, 1872	5,604–5,607
Carpet-pattern	G. C. Wright	New York, N. Y	June 25, 1872	5,959
Carpet-pattern	G. C. Wright	New York, N. Y	July 23, 1872	6,011
Carpet, Printed	E. Demoussy	Paris, France	Oct. 31, 1871	5,329
Carpet, Printed	C. Dresser	London, England	Oct. 31, 1871	5,330
Carriage	A. S. Dodd	New York, N. Y	Aug. 30, 1870	4,306
Carriage	J. C. Ham	New York, N. Y	Apr. 13, 1869	3,448
Carriage, Advertising	O. F. Sage	Boston, Mass	Dec. 12, 1865	2,232
Carriage-bed	H. Killam	New Haven, Conn	Oct. 25, 1870	4,435
Carriage-body	A. S. Clapp	New York, N. Y	Jan. 25, 1870	3,820
Carriage-body	H. Grosh	Litiz, Warwick Township, Pa.	Nov. 15, 1859	1,168
Carriage-body base	R. M. Stiners	New York, N. Y	Aug. 8, 1871	5,193
Carriage-boot	E. Wells	New Haven, Conn	Aug. 30, 1870	4,323
Carriage, Child's	G. H. Mellen	New York, N. Y	Mar. 15, 1870	3,899

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Carriage-door handle	D. W. Thomas	New York, N. Y	Aug. 30, 1870	4, 323
Carriage-door handle	E. Wells	New Haven, Conn	Aug. 1, 1871	5, 163
Carriage, Hat-advertising	S. Jackson, jr	Roxbury, Mass	Nov. 27, 1866	2, 509
Carriage-plate	J. S. Royce	Cuylerville, N. Y	Nov. 19, 1850	335
Carriage-pole trimming	A. Searls	Newark, N. J	Arp. 8, 1873	6, 581
Carriage-spring	G. B. Robinson	Derby, Conn	June 27, 1871	5, 051
Carriage-step	J. W. Curtis, F. A. Briggs, and M. O. Cox.	Cold Water, Mich	June 14, 1870	4, 150
Carriages, Back cross-strap mounting for	A. Searls	Newark, N. J	Apr. 15, 1873	6, 593
Casket	J. Nilsson	Brooklyn, N. Y	Sept. 3, 1872	6, 117
Casket-handle	S. D. Arnold	New Britain, Conn	Aug. 6, 1867	2, 721
Casket-handle	W. M. Smith	West Meriden, Conn	Apr. 16, 1867	2, 615
Casket-handle	H. C. Wilcox	West Meriden, Conn	July 27, 1869	3, 592
Casket-handle socket	C. B Rogers	Meriden, Conn	May 6, 1873	6, 639-6, 640
Casket-handle tip	G. W. Bunnell	West Meriden, Conn	July 22, 1873	6, 779
Cast-iron bracket	W. Bryent	Boston, Mass	Aug. 13, 1850	305
Cast, Plaster	F. S. Batcheller	Providence, R. I	July 1, 1873	6, 741
Caster	G. B. Garrett	Philadelphia, Pa	Feb. 22, 1870	3, 858
Caster	W. H. Green	Meriden, Conn	Apr. 22, 1856	784
Caster	J. L. Haven	Cincinnati, Ohio	Aug. 1, 1871	5, 148
Caster	G. Wilkinson	Providence, R. I	Nov. 30, 1869	3, 774-3, 778
Caster and egg-cup stand, Bottle	R. Gleason, jr	Dorchester, Mass	Feb. 12, 1856	763
Caster case	A. Leonard	Hartford, Conn	Nov. 1, 1859	1, 164
Caster-covering	W. J. Howard	Petersburgh, Ky	July 23, 1867	2, 710
Caster-frame	H. C. Wilcox	West Meriden, Conn	Jan. 1, 1867	2, 541
Caster-frame	H. C. Wilcox	West Meriden, Conn	Jan. 22, 1867	2, 564-2, 565
Caster-handle	A. Leonard	Hartford, Conn	Nov. 1, 1859	1, 165
Caster-handle	H. C. Wilcox	West Meriden, Conn	Jan. 1, 1867	2, 540
Caster handle, Table	H. A. Dirks	New York, N. Y	Apr. 13, 1869	3, 446
Caster handle, Table	H. C. Wilcox	West Meriden, Conn	Dec. 16, 1873	7, 067
Caster, Kitchen spice	G. S. Adams	New York, N. Y	July 16, 1872	5, 980
Caster-ring	E. J. Steele	Wolcottville, Conn	Sept. 19, 1871	5, 275
Caster stand, Table	W. Parkin	Taunton, Mass	Mar. 30, 1869	3, 439
Caster, Table	E. Gleason	Dorchester, Mass	Sept. 11, 1855	727
Caster, Table	C. H. Latham	Lowell, Mass	June 21, 1870	4, 166
Caster, Table	C. H. Latham	Lowell, Mass	July 18, 1871	5, 131
Caster, Table	M. Moore	Brooklyn, N. Y	Dec. 6, 1864	2, 004
Caster, Table	W. Parkin	Taunton, Mass	May 4, 1869	3, 471
Caster, Table	W. Parkin	Taunton, Mass	Oct. 25, 1870	4, 437
Caster, Table	W. Parkin	Taunton, Mass	Mar. 7, 1871	4, 697
Caster, Table	D. Sherwood and G. D. Dudley.	Lowell, Mass	Aug. 16, 1870	4, 297
Caster, Table	D. Sherwood and G. D. Dudley.	Lowell, Mass	Oct. 10, 1871	5, 312
Caster, Three-bottle	G. D. Ludley	Lowell, Mass	Dec. 12, 1871	5, 411
Caster, Trunk-clasp	J. H. Burnett	Williamstown, N. Y	Aug. 3, 1869	3, 596
Caster-wheel-holding block	S. J. Parker	Williamsport, Pa	May 17, 1870	4, 041
Catch-all front	J. H. Bellamy	Charlestown, Mass	May 2, 1871	4, 854
Cauldron	A. C. Barstow	Providence, R. I	Oct. 13, 1863	1, 830
Ceiling center-ornament	G. Protin	New York, N. Y	Mar. 5, 1872	5, 637
Ceiling center-piece	C. Autenrieth	Philadelphia, Pa	July 11, 1871	5, 097
Ceiling center piece	B. Dreyer	Philadelphia, Pa	June 24, 1873	6, 711-6, 712
Ceiling center-piece	J. W. Reeves	Philadelphia, Pa	Dec. 13, 1870	4, 512-4, 513
Ceiling center-piece	J. W. Reeves	Philadelphia, Pa	Feb. 27, 1872	5, 561-5, 562
Ceiling-hook	O. F. Fogelstrand	Kensington, Conn	Mar. 19, 1872	5, 699
Ceiling-light shade	C. Wilhelm and J. Neumann	Philadelphia, Pa	Apr. 16, 1867	2, 623
Cellular fabric	T. Dolan	Philadelphia, Pa	May 30, 1871	4, 957
Cenotaph, Military	J. S. Armstrong	Prairie du Chien, Wis	Mar. 6, 1866	2, 273
Center-piece	H. Berger	New York, N. Y	Oct. 2, 1860	1, 318
Center-piece	H. Berger	New York, N. Y	Sept. 25, 1866	2, 430
Center-piece	H. Berger	New York, N. Y	Apr. 2, 1867	2, 608
Center-piece	H. Berger	New York, N. Y	June 4, 1867	2, 661
Center-piece	H. Berger	New York, N. Y	June 16, 1868	3, 069
Center-piece	H. Berger	New York, N. Y	July 14, 1868	3, 095-3, 096
Center-piece	H. Berger	New York, N. Y	Feb. 16, 1869	3, 367
Center-piece	H. Berger	New York, N. Y	Mar. 30, 1869	3, 432
Center-piece	H. Berger	New York, N. Y	May 18, 1869	3, 496-3, 498
Center-piece	H. Berger	New York, N. Y	Aug. 17, 1869	3, 614
Center-piece	H. Berger	New York, N. Y	Oct. 5, 1869	3, 688
Center-piece	H. Berger	New York, N. Y	Nov. 23, 1869	3, 756-3, 757
Center-piece	H. Berger	New York, N. Y	Apr. 5, 1870	3, 947
Center-piece	H. Berger	New York, N. Y	Dec. 26, 1871	5, 447
Center-piece	S. Kellett	San Francisco, Cal	Sept. 25, 1866	2, 438-2, 439
Center-piece	S. Kellett	San Francisco, Cal	Nov. 15, 1870	4, 478-4, 479
Center-piece	S. Kellett	San Francisco, Cal	May 30, 1871	4, 965-4, 966
Center-piece	S. Kellett	San Francisco, Cal	Dec. 24, 1872	6, 328
Center-piece	S. Kellett	San Francisco, Cal	Feb. 4, 1873	6, 381
Center-piece, Alto-relievo	S. Kellett	San Francisco, Cal	July 16, 1872	5, 999-6, 000
Ceiling center-piece	E. Goutink	Detroit, Mich	May 30, 1871	4, 963
Center-piece, Escutcheon	H. Berger	New York, N. Y	Aug. 22, 1871	5, 213
Center-piece, Oblong	H. Berger	New York, N. Y	Aug. 22, 1871	5, 211
Center-piece, Star	H. Berger	New York, N. Y	Aug. 22, 1871	5, 212
Center-piece, Stucco	J. John	Chicago, Ill	Feb. 21, 1871	4, 669
Chain	J. V. and C. F. Waldron	New York, N. Y	Dec. 27, 1870	4, 543
Chain-bolt	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 500
Chain-hook	G. D. Stevens	New York, N. Y	Jan. 3, 1871	4, 562
Chain-link	V. Draper	Attleborough, Mass	Mar. 21, 1871	4, 723
Chain-link	V. Draper	Attleborough, Mass	Apr. 4, 1871	4, 749
Chain-link	V. Draper	Attleborough, Mass	May 2, 1871	4, 857
Chain-link	V. Draper	North Attleborough, Mass	Feb. 20, 1872	5, 544
Chain-link	E. S. Richards	Attleborough, Mass	May 5, 1863	1, 757
Chain-link, Ornamental	V. Draper	Attleborough, Mass	Mar. 21, 1871	4, 722
Chain-link, Ornamental	V. Draper	North Attleborough, Mass	July 22, 1873	6, 781-6, 783
Chain-link, Ornamental	E. S. Richards	Attleborough, Mass	May 19, 1863	1, 761
Chain, Watch	H. H. Markley and A. Mathiew	San Francisco, Cal	Sept. 16, 1873	6, 884
Chair	G. M. Harwood and R. Wood	West Troy, N. Y	Sept. 9, 1873	6, 875
Chair	S. Hayward	Boston, Mass	Aug. 26, 1873	6, 828
Chair	L. Heywood	Gardner, Mass	Jan. 14, 1868	2, 838
Chair	A. Kimbel	New York, N. Y	Feb. 7, 1871	4, 634-4, 635

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Invention.	Inventor.	Residence.	Date.	No.
Chair	H. Ocorr	Sheboygan, Wis	Mar. 28, 1871	4,741-4,742
Chair	H. I. Seymour	Troy, N. Y	Sept. 23, 1862	1,660
Chair	J. G. Strain	Delaware, Ohio	Oct. 24, 1871	5,325
Chair	J. M. Waters	Cincinnati, Ohio	Sept. 23, 1873	6,894
Chair-back cushion	J. Kuhlmann	Cincinnati, Ohio	Aug. 29, 1871	5,238
Chair frame	B. J. Harrison	New York, N. Y	May 20, 1873	6,658
Chair-frame	E. Seymour and C. E. Shattuck	Clinton, Iowa	Feb. 25, 1873	6,458
Chair-frame	J. H. Travis	Charlestown, Mass	Sept. 2, 1873	6,834
Chair or sofa back	G. Unverzagt	Philadelphia, Pa	Mar. 7, 1871	4,699
Chair-seat bow	H. C. Knowlton	Gardner, Mass	Nov. 24, 1868	3,261
Chair side-frame	J. H. Travis and E. H. Mahoney	Charlestown and Boston, Mass.	Feb. 27, 1872	5,559
Chandelier	E. S. Archer and R. F. Warner	Philadelphia, Pa	Mar. 19, 1850	273
Chandelier	P. Cinquini	West Meriden, Conn	May 31, 1870	4,085
Chandelier	P. Cinquini	West Meriden, Conn	June 13, 1871	4,984
Chandelier	F. T. Fracker	Boston, Mass	July 24, 1866	2,265-2,266
Chandelier	W. H. Green and P. J. Clark	Meriden, Conn	Apr. 29, 1862	1,569
Chandelier	F. R. Seidensticker	West Meriden, Conn	June 13, 1871	5,005
Chandelier	F. R. Seidensticker	West Meriden, Conn	Oct. 31, 1871	5,343-5,344
Chandelier	F. R. Seidensticker	West Meriden, Conn	Mar. 26, 1872	5,732-5,733
Chandelier	J. F. Travis	New York, N. Y	May 29, 1866	2,340
Chandelier	S. B. H. Vance	New York, N. Y	Apr. 8, 1856	777-778
Chandelier-hook	J. B. Sargent	New Haven, Conn	Apr. 23, 1872	5,818
Chart, Drawing	W. N. Bartholomew	Newton Centre, Mass	Feb. 28, 1871	4,676
Chart, Masonic	J. Ames	Indianapolis, Ind	Apr. 19, 1870	3,973
Chess or checker board	W. S. Hill and S. T. Read	New York, N. Y	Sept. 23, 1862	1,658
Chest-handle	O. F. Fogelstrand	Kensington, Conn	Mar. 19, 1872	5,697
Chest-handle	W. E. Sparks	New Haven, Conn	Oct. 31, 1871	5,346
Chimney, Lamp	M. J. Wellman	New York, N. Y	Apr. 23, 1872	5,817
Church, hall, and lawn seat frame	H. M. Sherwood	Chicago, Ill	Sept. 26, 1871	5,282
Churn-body	H. D. Smith	Grafton, Ohio	May 5, 1868	3,018
Churn, egg-beater, &c	J. S. Gallaher, jr	Washington, D. C	May 19, 1857	888
Cigar and tobacco safe	J. H. Knight and J. P. Farrand	Detroit, Mich	Oct. 2, 1866	2,477
Cider and wine press	H. Thomas	Philadelphia, Pa	June 7, 1870	4,147
Cigar-box	F. Becker	Baltimore, Md	Apr. 16, 1867	2,614
Cigar-box	A. Lis	Covington, Ky	Sept. 26, 1871	5,277
Cigar-box	G. Moebs and J. B. Thiesen	Detroit, Mich	June 18, 1872	5,942
Cigar-box	C. Schindlapp	Memphis, Tenn	Aug. 22, 1871	5,230
Cigar-holder	O. F. Balston	Lake Mahopac, N. Y	July 16, 1872	5,998
Circular register	E. A. Tuttle	New York, N. Y	Jan. 9, 1872	5,469
Claw-bar	D. Christie	Chillicothe, Ohio	Apr. 18, 1871	4,811
Claw-bar	J. McMahon	Wooster, Ohio	May 30, 1871	4,967
"Cloak, Persian"	T. Dolan	Philadelphia, Pa	Aug. 23, 1870	4,300-4,301
Clock	F. T. Fracker	Boston, Mass	July 24, 1866	2,368
Clock-ball stand	G. B. Owen	Winsted, Conn	Jan. 12, 1869	3,337
Clock-dial	G. Hills	Plainville, Conn	Dec. 1, 1863	1,870
Clock dial, Calendar	D. G. Gale	Sheboygan Falls, Wis	Feb. 14, 1871	4,649
Clock-case	A. F. Atkins	Bristol, Conn	Aug. 13, 1867	2,742
Clock-case	J. H. Bellamy	Charlestown, Mass	Sept. 10, 1867	2,776-2,778
Clock-case	G. H. Blakesley	Bristol, Conn	Dec. 2, 1873	7,015
Clock-case	E. C. Brewster	Bristol, Conn	Mar. 19, 1861	1,390
Clock-case	P. Cinquini	West Meriden, Conn	July 14, 1857	916
Clock-case	P. Cinquini	West Meriden, Conn	Oct. 6, 1857	946
Clock-case	P. Converse	New Haven, Conn	July 14, 1868	3,098
Clock-case	P. Converse	New Haven, Conn	Nov. 7, 1868	3,238
Clock-case	P. Converse	New Haven, Conn	June 13, 1871	4,986
Clock-case	R. Dunn	Green Point, N. Y	June 28, 1864	1,966
Clock-case	R. Dunn	Brooklyn, N. Y	Aug. 30, 1870	4,307-4,309
Clock-case	R. Dunn	Brooklyn, N. Y	Oct. 18, 1870	4,421
Clock-case	R. Dunn	Brooklyn, N. Y	Dec. 20, 1870	4,524
Clock-case	A. C. Felton	Boston, Mass	Apr. 23, 1867	2,626
Clock-case	A. C. Felton	Boston, Mass	June 18, 1867	2,675
Clock-case	C. T. Foot	Bristol, Conn	Nov. 1, 1859	1,162
Clock-case	C. T. Foot	Bristol, Conn	Sept. 12, 1865	2,164
Clock-case	F. T. Fracker	Boston, Mass	July 17, 1866	2,359-2,360
Clock-case	W. A. Giles	Chicago, Ill	Apr. 3, 1866	2,291
Clock-case	W. A. Giles	Chicago, Ill	Dec. 11, 1866	2,525-2,526
Clock-case	G. R. Holbrook	Ansonia, Conn	Jan. 12, 1869	3,336
Clock-case	H. K. Hotchkiss	Bristol, Conn	Oct. 29, 1861	1,484
Clock-case	E. Ingraham	Bristol, Conn	Apr 14, 1857	882
Clock-case	E. Ingraham	Hartford, Conn	Dec. 3, 1861	1,504
Clock-case	E. Ingraham	Bristol, Conn	Sept. 30, 1862	1,662
Clock-case	E. Ingraham	Bristol, Conn	Sept. 29, 1863	1,820
Clock-case	E. Ingraham	Bristol, Conn	May 10, 1864	1,940
Clock-case	E. Ingraham	Bristol, Conn	Feb. 15, 1870	3,850-3,851
Clock-case	E. Ingraham	Bristol, Conn	June 6, 1871	4,979
Clock-case	S. B. Jerome	Waterbury, Conn	Oct. 20, 1857	959
Clock-case	S. B. Jerome	New Haven, Conn	June 16, 1863	1,763
Clock-case	S. B. Jerome	New Haven, Conn	May 9, 1865	2,057
Clock-case	S. B. Jerome	New Haven, Conn	Sept. 6, 1870	4,338
Clock-case	J. F. and H. Mann	Brooklyn, N. Y	Aug. 12, 1873	6,800
Clock-case	C. Müller	New York, N. Y	Mar. 3, 1868	2,943
Clock-case	C. Müller	New York, N. Y	Nov. 17, 1868	3,249
Clock-case	K. Müller	New York, N. Y	Oct. 20, 1868	3,212
Clock-case	K. Müller	New York, N. Y	Aug. 31, 1869	3,645
Clock-case	N. Müller	New York, N. Y	Aug. 7, 1866	2,377
Clock-case	N. Müller	New York, N. Y	Oct. 30, 1866	2,502
Clock-case	N. Müller	New York, N. Y	Jan. 22, 1867	2,562-2,563
Clock-case	N. Müller	New York, N. Y	July 28, 1868	3,138
Clock-case	N. Müller	New York, N. Y	Dec. 1, 1868	3,274
Clock-case	N. Müller	New York, N. Y	July 19, 1870	4,237
Clock-case	N. Müller	New York, N. Y	Apr. 11, 1871	4,797
Clock-case	N. Müller	New York, N. Y	June 4, 1872	5,892
Clock-case	J. A. Munn	New York, N. Y	July 26, 1859	1,124
Clock-case	G. B. Owen	New York, N. Y	Feb. 18, 1862	1,541
Clock-case	G. B. Owen	New York, N. Y	May 6, 1862	1,573
Clock-case	G. B. Owen	New York, N. Y	Oct. 21, 1862	1,664

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Invention.	Inventor.	Residence.	Date.	No.
Clock-case	G. B. Owen	New York, N. Y	Nov. 11, 1862	1,674
Clock-case	G. B. Owen	New York, N. Y	Mar. 17, 1863	1,738
Clock-case	G. B. Owen	New York, N. Y	Jan. 5, 1864	1,879
Clock-case	G. B. Owen	Winsted, Conn	May 12, 1868	3,042
Clock-case	G. B. Owen	Winsted, Conn	June 2, 1868	3,064
Clock-case	G. B. Owen	Winsted, Conn	Nov. 3, 1868	3,224
Clock-case	G. B. Owen	Winsted, Conn	June 1, 1869	3,520
Clock-case	G. B. Owen	Winsted, Conn	Sept. 28, 1869	3,672
Clock-case	N. Pomeroy	Hartford, Conn	Apr. 21, 1868	3,006
Clock-case	S. C. Spring	Bristol, Conn	Sept. 22, 1868	3,211
Clock-case	S. C. Spring	Bristol, Conn	Nov. 17, 1868	3,253
Clock-case	S. C. Spring	Bristol, Conn	June 8, 1869	3,536
Clock-case	H. Terhune	New York, N. Y	May 6, 1862	1,575
Clock-case	S. B. Terry	Waterbury, Conn	Apr. 27, 1869	3,464
Clock-case	S. B. Terry	Waterbury, Conn	May 4, 1869	3,476
Clock-case	W. L. Tyler	Bristol, Conn	May 16, 1871	4,912
Clock-case	P. B. Wright	New York, N. Y	Mar. 5, 1872	5,638
Clock-case	I. B. Woodruff	Winchester, Conn	Feb. 25, 1862	1,547
Clock-case door	N. Pomeroy	Hartford, Conn	July 17, 1866	2,302
Clock-case front	L. F. and W. W. Carter	Bristol, Conn	Sept. 25, 1866	2,431
Clock-case front	C. Chinnock	New York, N. Y	Apr. 19, 1853	550–552
Clock-case front	C. Chinnock	New York, N. Y	May 16, 1854	648
Clock-case front	C. Chinnock	New York, N. Y	Oct. 17, 1854	670–672
Clock-case front	C. Chinnock	New York, N. Y	Jan. 6, 1857	862
Clock-case front	P. Cinquinni	West Meriden, Conn	Aug. 25, 1857	935
Clock-case front	B. P. Corban	Bristol, Conn	Apr. 27, 1869	3,454
Clock-case front	E. Ingraham	Bristol, Conn	Mar. 19, 1861	1,392
Clock-case front	E. Ingraham	Bristol, Conn	Sept. 3, 1861	1,472
Clock-case front	E. Ingraham	Bristol, Conn	Mar. 31, 1868	2,969
Clock-case front	E. Ingraham	Bristol, Conn	Mar. 30, 1869	3,437
Clock-case front	C. Jerome	New Haven, Conn	Apr. 14, 1857	883
Clock-case front	S. B. Jerome	Waterbury, Conn	May 4, 1858	1,000
Clock-case front	S. B. Jerome	New Haven, Conn	Aug. 9, 1870	4,278
Clock-case front	R. Kimberly	Ansonia, Conn	Oct. 11, 1859	1,154
Clock-case front	F. Kroeber	New York, N. Y	Dec. 7, 1869	3,779
Clock-case front	W. B. Lorton	New York, N. Y	Apr. 25, 1854	641
Clock-case front	C. Muller	New York, N. Y	Mar. 31, 1868	2,976
Clock-case front	N. Müller	New York, N. Y	Aug. 29, 1854	666
Clock-case front	N. Müller	New York, N. Y	Apr. 1, 1856	771
Clock-case front	N. Müller	New York, N. Y	Apr. 29, 1856	786, 787
Clock-case front	N. Müller	New York, N. Y	July 1, 1856	813
Clock-case front	N. Müller	New York, N. Y	July 10, 1866	2,354
Clock-case front	G. B. Owen	Winsted, Conn	Mar. 31, 1868	2,977–2,978
Clock-case front	S. C. Spring	Bristol, Conn	Aug. 9, 1870	4,290
Clock-case front	H. Terry	Plymouth, Conn	Oct. 22, 1861	1,483
Clock-case-front base	N. Müller	New York, N. Y	July 1, 1856	812
Clock-case front, Cast-metal	C. Chinnock	New York, N. Y	May 23, 1854	650–851
Clock-case front, Pendulum	F. Kroeber	New York, N. Y	Dec. 7, 1869	3,780
Clock-frame	N. Batchelor	New York, N. Y	July 24, 1847	137
Clock-frame	N. Batchelor and H. Biggins	New York, N. Y	July 10, 1846	60
Clock-frame	N. A. Batchelor	New York, N. Y	May 13, 1851	372
Clock-frame	J. C. Brown	Bristol, Conn	Dec. 11, 1855	746
Clock-frame	G. B. Owen	Winsted, Conn	Jan. 11, 1870	3,815
Clock-front	J. A. Batchelor	New York, N. Y	May 30, 1871	4,942
Clock-front	J. H. Bellamy	Charlestown, Mass	May 17, 1870	4,023
Clock-front	J. H. Bellamy	Charlestown, Mass	Aug. 23, 1870	4,299
Clock-front	J. H. Bellamy	Charlestown, Mass	Oct. 4, 1870	4,375
Clock-front	J. H. Bellamy	Charlestown, Mass	May 23, 1871	4,939
Clock-front	W. H. Griffiths	Boston, Mass	July 18, 1871	5,129
Clock-front	E. Ingraham	Bristol, Conn	Dec. 22, 1857	970
Clock-front	E. Ingraham	Bristol, Conn	Mar. 31, 1868	2,968
Clock-front	E. Ingraham	Bristol, Conn	May 6, 1873	6,628
Clock-front	W. B. Lorton	New York, N. Y	May 1, 1855	700
Clock-front	G. S. Lovell	Philadelphia, Pa	Apr. 11, 1865	2,044–2,045
Clock-front	G. S. Lovell	Philadelphia, Pa	Oct. 10, 1865	2,190
Clock-front	J. Moore, jr	Brooklyn, N. Y	Apr. 25, 1871	4,846
Clock-front	N. Müller	New York, N. Y	Oct. 13, 1857	950–951
Clock-front	N. Müller	New York, N. Y	May 9, 1865	2,060
Clock-front	N. Müller	New York, N. Y	Mar. 8, 1870	3,888
Clock-front	N. Müller	New York, N. Y	Mar. 15, 1870	3,900
Clock-front	N. Müller	New York, N. Y	Nov. 1, 1870	4,450
Clock-front	N. Müller	New York, N. Y	Nov. 29, 1870	4,496
Clock-front	N. Müller	New York, N. Y	Mar. 26, 1872	5,730
Clock-front	N. Müller	New York, N. Y	Sept. 3, 1872	6,099
Clock-front	J. and R. Shepherd	New York, N. Y	July 29, 1856	818
Clock-front	B. A. Ward	Lynn, Mass	Nov. 1, 1870	4,456
Clock-front	A. Wilder and C. W. Strout	Boston, Mass	Feb. 25, 1868	2,940
Clock-movement frame	L. Hubbell	Bristol, Conn	Oct. 10, 1865	2,189
Clock-pendulum	H. J. Davies	Brooklyn, N. Y	Oct. 21, 1873	6,963
Cloth, Woven	R. C. Taft, W. B. Weeden, and J. W. Taft.	Providence, R. I	May 2, 1871	4,864
Clothes-line holder	D. F. Dunham	Auburn, N. Y	May 18, 1869	3,501
Clothes-line-reel iron	D. Densmore	Red Wing, Minn	Feb. 21, 1871	4,668
Coal-box	R. W. Newbery	New York, N. Y	Dec. 13, 1870	4,510–4,511
Coal-hod	C. Linder	Nauffen, Würtemberg	Jan. 10, 1871	4,564
Coal-hod	J. and J. K. Pitts	McLean, Ill	Nov. 1, 1870	4,451
Coal-hod spout	W. H. Brown	Rochester, N. Y	July 27, 1869	3,585
Coal-scuttle	G. Thülemeyer	New York, N. Y	Oct. 6, 1857	947
Coal-shovel	S. W. Gibbs	Albany, N. Y	Jan. 22, 1867	2,560
Coat and hat hook	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5,499
Coat and hat hook	O. F. Fogelstrand	Kensington, Conn	Oct. 8, 1872	6,163
Coat and hat hook	W. R. Goodrich	Utica, N. Y	Aug. 30, 1870	4,310
Coat and hat hook	J. B. Sargent	New Britain, Conn	Apr. 1, 1862	1,560
Coat and hat hook	A. B. Tanner	New Haven, Conn	May 14, 1872	5,858
Coat or hat hook	J. B. Sargent	New Haven, Conn	May 8, 1866	2,310
Cock, Gas	B. M. Johnson	New York, N. Y	Sept. 27, 1859	1,150
Cock handle, Stop	W. S. Cooper	Philadelphia, Pa	Apr. 11, 1871	4,780
Cock, Stop	H. G. Morris	Philadelphia, Pa	Feb. 23, 1864	1,903

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Invention.	Inventor.	Residence.	Date.	No.
Cockeye	J. Letchworth	Buffalo, N. Y	Sept. 24, 1872	6, 151–6, 152
Coffee and tea pot top	G. Jones	Saugerties, N. Y	Mar. 19, 1867	2, 598
Coffee-mill	J. Sedgebeer	Painesville, Ohio	Apr. 6, 1869	3, 445
Coffee-pot	J. R. Remington	Lownds, Ala	Oct. 6, 1843	11
Coffee-urn	G. Jones	New Haven, Conn	June 30, 1868	3, 076
Coffin	J. P. Albin	Cincinnati, Ohio	Sept. 17, 1872	6, 140
Coffin	W. G. Algeo	Pittsburgh, Pa	Jan. 28, 1868	2, 860
Coffin	W. G. Algeo	Rochester, Pa	June 20, 1871	5, 007
Coffin	J. D. Cunningham	Franklin, Tenn	Aug. 14, 1860	1, 310
Coffin	T. Devins	Cambridgeport, Mass	Feb. 20, 1866	2, 265
Coffin	S. Hillier	Allegheny, Pa	Nov. 23, 1869	3, 762
Coffin	H. Hoffman	Jenner's Cross Roads, Pa	July 30, 1867	2, 713
Coffin	J. C. Karr	Williamson County, Tenn	Apr. 3, 1860	1, 218
Coffin	J. McDuff	Morrisania, N. Y	June 25, 1861	1, 436
Coffin	W. W. Roberts	Hartford, Conn	May 16, 1865	2, 069
Coffin	E. T. Smith and J. S. Winston	New York, N. Y	Oct. 4, 1870	4, 387
Coffin	G. W. and W. P. Woolley	Hartford, Conn	May 16, 1865	2, 070–2, 071
Coffin-end	W. G. Algeo	Rochester, Pa	Aug. 22, 1871	5, 209
Coffin-handle	S. D. Arnold	New Britain, Conn	June 6, 1865	2, 079
Coffin-handle	S. D. Arnold	New Britain, Conn	Aug. 14, 1866	2, 380
Coffin-handle	A. B Bailey	Middle Haddam, Conn	Oct. 31, 1865	2, 210
Coffin-handle	A. B. Bailey	Middle Haddam, Conn	Aug. 14, 1866	2, 387
Coffin-handle	P. Bradford	New Haven, Conn	Mar. 27, 1866	2, 284
Coffin-handle	N. Hayden	Essex, Conn	Apr. 22, 1873	6, 595
Coffin-handle	C. L. Neiberg	New Haven, Conn	May 16, 1865	2, 068
Coffin-handle	C. L. Neiberg	New Haven, Conn	May 8, 1866	2, 308
Coffin-handle	C. L. Neiberg	New Haven, Conn	Oct. 2, 1866	2, 481
Coffin-handle	C. L. Neiberg	New Haven, Conn	Feb. 19, 1867	2, 585–2, 586
Coffin-handle	C. L. Neiberg	New Haven, Conn	May 7, 1867	2, 647–2, 649
Coffin-handle	C. L. Neiberg	New Haven, Conn	May 12, 1868	3, 047
Coffin-handle	J. S. Ray	East Haddam, Conn	June 27, 1865	2, 104
Coffin-handle	J. S. Ray	East Haddam, Conn	Nov. 5, 1867	2, 826
Coffin-handle	C. Strong	Chatham, Conn	May 9, 1865	2, 064
Coffin-handle	J. B. Sargent	New Britain, Conn	Apr. 29, 1862	1, 571
Coffin-handle	W. M. Smith	West Meriden, Conn	Dec. 24, 1872	6, 324
Coffin-handle ear	N. Hayden	Essex, Conn	Oct. 29, 1872	6, 228
Coffin-handle socket	J. S. Ray	East Haddam, Conn	Apr. 8, 1873	6, 584
Coffin-handle socket	J. S. Ray	East Haddam, Conn	Apr. 15, 1873	6, 592
Coffin-handle socket	J. S Ray	East Haddam, Conn	June 24, 1873	6, 734
Coffin, &c., Lifting-handle plate for	S. D. Arnold	New Britain, Conn	Aug. 12, 1862	1, 624
Coffin, Metallic	M. H. Crane	Cincinnati, Ohio	Jan. 23, 1855	688
Coffin, Metallic	W. H. Forbes	New York, N. Y	Dec. 7, 1858	1, 070
Coffin, Metallic	T. I. Gillies	Williamsburgh, N. Y	Oct. 11, 1853	604
Coffin-stud	D. A. Clark	Pawtucket, R. I	June 27, 1865	2, 103
Coffin-top	W. G. Algeo	Rochester, Pa	Oct. 17, 1871	5, 314
Coffin-trimmings	S. D. Arnold	New Britain, Conn	Aug. 14, 1866	2, 381–2, 386
Collar	E. E. Mack	Albany, N. Y	Dec. 7, 1869	3, 781
Collar and cuff	E. J. Frost	Springfield, Mass	July 3, 1866	2, 348
Collar and cuff box	F. Field	Troy, N. Y	Mar. 1, 1870	3, 870
Collar and cuff, Lady's	R. McDonald	New York, N. Y	Nov. 17, 1868	3, 247
Collar-box	A. Aronson	New York, N. Y	Nov. 1, 1870	4, 446
Collar-box	R. W. Betts	New York, N. Y	Aug. 5, 1873	6, 791
Collar-box	A. L. Elliot	Boston, Mass	Oct. 4, 1870	4, 383
Collar-box	S. F. Hilton	Providence, R. I	Aug. 9, 1870	4, 277
Collar-box	S. F. Hilton	Providence, R. I	Sept. 6, 1870	4, 336
Collar-box	J. R. Jerauld and H. L. Holmes	Providence, R. I	Mar. 8, 1870	3, 894
Collar-box	G. K. Snow	Watertown, Mass	June 7, 1870	4, 146
Collar-box cover	P. B. Pickens	New York, N. Y	Jan. 3, 1871	4, 558
Collar, Fur	J. H. Kappelhoff and S. Rauh	New York, N. Y	June 28, 1870	4, 179
Collar, Fur	I. Lewine	New York, N. Y	Aug. 31, 1869	3, 643
Collar, Shirt	C. K. Brown	Troy, N. Y	July 21, 1868	3, 115
Collar, Shirt	R. S. Jennings	New York, N. Y	July 28, 1868	3, 133
Collar, Turn-over	C. H. Welling	New York, N. Y	Nov. 10, 1863	1, 848
Collarette	A. S. Ellison	New York, N. Y	Nov. 11, 1873	6, 988
Comb	E. Brown	Wappinger's Falls, N. Y	June 13, 1865	2, 085–2, 086
Comb	E. F. Coffin	Newburyport, Mass	Apr. 26, 1870	3, 986
Comb-back	G. T. Lincoln	Providence, R. I	June 1, 1869	3, 518
Compass-stand	E. A. Tuttle and T. Barry	New York, N. Y	Feb. 23, 1858	990
Cooking-plate, Stone-ware	H. Mishler	Mogadore, Ohio	July 21, 1863	1, 864
Copying-press	R. Hoe, jr	New York, N. Y	Oct. 10, 1865	2, 184
Copying-press	F. Hovey	New York, N. Y	Mar. 20, 1860	1, 213
Copying-press	J. Naylor	Newark, N. J	Jan. 15, 1867	2, 550
Copying-press stand	C. H. Clayton	New York, N. Y	Mar. 23, 1858	994
Cork or stopper, Bottle	W. R Green	Westminster, England	Dec. 24, 1872	6, 321
Corn-husker	A. T. Morris	Nevada, Ohio	July 26, 1870	4, 262
Corner-piece, Ornamental	A. Soper	Whitestown, N. Y	July 23, 1872	6, 010
Cornice, Curtain	H. Whittemore	Passaic, N. J	Sept. 6, 1870	4, 345
Cornucopia, Confectioner's	C. W. Quanz	New York, N. Y	Feb. 5, 1867	2, 571
Corpse-preserver	J. Good	Philadelphia, Pa	Aug. 17, 1843	6
Corset	L. L. Chapman	Philadelphia, Pa	Sept. 1, 1868	3, 186
Corset	D. H. Fanning	Worcester, Mass	Sept. 27, 1870	4, 366–4, 367
Corset	D. H. Fanning	Worcester, Mass	Jan. 31, 1871	4, 617
Cottage-front	C. Graham	Elizabeth, N. J	Apr. 25, 1871	4, 843
Cotton-knife	G. A. Seaver	New York, N. Y	Nov. 16, 1869	3, 752
Coupé	W. H. Bradley	New Haven, Conn	May 14, 1872	5, 846
Cradle	A. Edmonds	Mount Pulaski, Ill	Feb. 22, 1853	547
Cradle, Cast-iron	P. M. Hutton	Troy, N. Y	Oct. 26, 1852	514
Cravat	J. A. Eshleman	Philadelphia, Pa	Nov. 12, 1861	1, 488
Crib-chair	J. C. Hall	Cincinnati, Ohio	Dec. 10, 1872	6, 283
Croquet ball and mallet, Decorating	C. W. Kirby	New York, N. Y	Dec. 3, 1867	2, 845
Croquet-implements	J. W. Pettengill	Rockford, Ill	Feb. 20, 1872	5, 556
Cross-bar, Chain	V. Draper	North Attleborough, Mass	Feb. 20, 1872	5, 545
Cross, &c., Rustic	A. D. Bloodgood	New York, N. Y	Aug. 20, 1872	6, 073
Crucifix	N. P. Maker	Pawtucket, R. I	Apr. 29, 1862	1, 570
Cuff, Shirt	R. S. Jennings	New York, N. Y	July 28, 1868	3, 134
Cup, Jelley	J. S. and T. B. Atterbury	Pittsburgh, Pa	July 19, 1870	4, 225
Cupboard-bolt	O. F. Fogelstrand	Kensington, Conn	July 16, 1872	5, 993
Cupboard-catch	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 504

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Invention.	Inventor.	Residence.	Date.	No.
Cupboard-catch	O. F. Fogelstrand	Kensington, Conn	Mar. 19, 1872	5, 698
Cupboard-turn	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 498
Curtain-loop	E. Maynard	Brooklyn, N. Y	May 28, 1861	1, 428
Cuspadore	J. P. Connolly	Ravenswood, N. Y	Mar. 3, 1868	2, 942
Cuspadore	S. and J. Roebuck	New York, N. Y	Nov. 17, 1868	3, 252
Cuspadore	S. and J. Roebuck	Brooklyn, N. Y	Aug. 30, 1870	4, 318
Cutlery, Bolster for table	M. Chapman	Greenfield, Mass	Feb. 20, 1872	5, 543
Cutlery, Handle and bolster for table	F. R. Chapman	Greenfield, Mass	July 11, 1871	5, 102
Cutlery handle, Table	J. D. Frary	New Britain, Conn	Dec. 30, 1873	7, 078
Cutlery handle, Table	N. E. Russell	New York, N. Y	Dec. 9, 1862	1, 681
Cutlery, Table	J. D. Frary	New Britain, Conn	July 8, 1873	6, 757
Cylinder and frame, Steam-engine	J. R. Maxwell and E. Cope	Cincinnati, Ohio, and Covington, Ky.	Oct. 24, 1871	5, 324
Cylinder and frame, Steam-engine	G. Sanford	Bergen, N. J	Nov. 1, 1870	4, 452
D.				
Daguerreotype-case	H. A. Eickmeyer	Philadelphia, Pa	Feb. 27, 1855	694
Daguerreotype-case mat	H. W. Hayden	Waterbury, Conn	June 25, 1861	1, 434
Daguerreotype and other mats, Ornamenting	H. W. Hayden	Waterbury, Conn	Oct. 9, 1855	733
Decanter-stopper	W. Pountney	New York, N. Y	June 19, 1860	1, 258
Dentist's grinding-lathe	H. Coy	Philadelphia, Pa	Oct. 2, 1866	2, 476
Dentist's upper-impression tray	E. T. Starr	Philadelphia, Pa	Aug. 8, 1871	5, 194
Desk, Advertising	C. W. Armstrong	Detroit, Mich	Aug. 12, 1873	6, 801
Desk, Advertising	A. Brummel	Indianapolis, Ind	Oct. 11, 1870	4, 391
Desk, Advertising	L. W. Burton	Rochester, N. Y	Aug. 22, 1871	5, 214
Desk and seat-end, School	G. H. Grant	Richmond, Ind	Apr. 25, 1871	4, 845
Desk and seat-frame, School	H. M. Sherwood	Chicago, Ill	May 26, 1868	3, 057
Desk and seat, School	C. F. Palmer	Utica, N. Y	Apr. 25, 1871	4, 847
Desk brace, School	J. K. McCullough and F. W. Smith.	Burlington, Iowa	July 5, 1870	4, 206
Desk frame, School	A. Hutchinson	Philadelphia, Pa	Aug. 10, 1869	3, 610
Desk frame, School	A. E. Roberts	Des Moines, Iowa	Jan. 24, 1871	4, 605
Desk lid, Writing	B. I. Beck	Brooklyn, N. Y	May 4, 1869	3, 469
Desk, School	P. Born	Selin's Grove, Pa	Nov. 23, 1869	3, 758
Desk, School	L. Fairbanks	Philadelphia, Pa	Oct. 17, 1865	2, 201
Desk, School	T. A. Galt and G. S. Tracy	Sterling, Ill	Sept. 12, 1871	5, 259
Desk, School	N. O. Tiffany	Buffalo, N. Y	Nov. 22, 1870	4, 488
Desk, School	W. P. Uhlinger	Philadelphia, Pa	Oct. 8, 1861	1, 478
Desk, School	W. P. Uhlinger	Philadelphia, Pa	Dec. 22, 1868	3, 297
Desk, School	W. P. Uhlinger	Philadelphia, Pa	May 24, 1870	4, 068
Desk side-frame, School	A. F. Old	Philadelphia, Pa	Mar. 21, 1871	4, 725
Desk-standard	J. D. Diffenderfer	East Lewisburgh, Pa	Aug. 6, 1872	6, 019
Desk standard, School	C. W. Sherwood	Chicago, Ill	Nov. 17, 1868	3, 262
Dessert-set	C. Casper	Meriden, Conn	Jan. 31, 1871	4, 613–4, 614
Diagram, Chromatic	S. R. Scofield	Lisle, N. Y	June 16, 1863	1, 775
Dish and nappy, Glass	J. Hobbs	Bellaire, Ohio	Apr. 15, 1873	6, 587
Dish, Butter	J. Hill	West Meriden, Conn	May 7, 1872	5, 839
Dish, Cake	G. Gill	Taunton, Mass	Apr. 26, 1870	3, 989
Dish, Cake	W. Parkin	Taunton, Mass	Aug. 8, 1871	5, 190
Dish, Glass	J. H. Hobbs	Wheeling, W. Va	Aug. 19, 1873	6, 805
Dish or tureen convex lid	T. Young	Philadelphia, Pa	Nov. 9, 1869	3, 748
Dish-ornamentation	E. Bennett	Baltimore, Md	June 28, 1870	4, 175
Dish pedestal, Cake	G. Gill	Taunton, Mass	Mar. 7, 1871	4, 696
Dish, Preserve	W. Parkin	Taunton, Mass	Aug. 31, 1869	3, 647
Dish, Preserve	H. C. Wilcox	West Meriden, Conn	Nov. 12, 1872	6, 248
Door-bolt	F. Fogelstrand	New Haven, Conn	Nov. 15, 1870	4, 472
Door-bolt	A. Wunder	New Haven, Conn	Sept. 26, 1871	5, 295
Door-bolt	A. Wunder	New Haven, Conn	Apr. 23, 1872	5, 813
Door-bolts, Plate of	G. W. White	New York, N. Y	Apr. 29, 1873	6, 624
Door, Book-case	S. Taylor	Worcester, Mass	May 25, 1869	3, 507
Door-butt	J. A. Ruff	Cambridge, Mass	June 7, 1870	4, 120
Door-button	O. F. Fogelstrand	Kensington, Conn	July 16, 1872	5, 992
Door, drawer, &c., pull	H. Herlt	New York, N. Y	Feb. 13, 1872	5, 528
Door-escutcheon	W. Gorman	New Britain, Conn	Aug. 10, 1869	3, 606–3, 608
Door-escutcheon	W. Gorman	New Britain, Conn	Aug. 17, 1869	3, 615
Door-escutcheon	W. Gorman	New Britain, Conn	Mar. 22, 1870	3, 916
Door-escutcheon	J. A. Ruff	Somerville, Mass	Jan. 25, 1870	3, 823–3, 826
Door-handle	G. Munson, and P. and C. H. Bradford.	New Haven, Conn	Dec. 5, 1871	5, 405
Door hanger, Barn	P. P. Child	Saint Louis, Mo	Aug. 15, 1871	5, 197
Door hanger, Barn	J. L. Haven	Cincinnati, Ohio	Mar. 23, 1869	3, 412
Door hanger, Barn	J. Herald	Unadilla, N. Y	Nov. 21, 1871	5, 368
Door hanger or roller, Barn	H. M. Ritter	Cincinnati, Ohio	July 6, 1869	3, 573
Door, Iron	G. Smith and H. Brown	Philadelphia, Pa	July 16, 1861	1, 453
Door-key, Folding	H. H. Elwell	South Norwalk, Conn	Mar. 29, 1870	3, 942
Door-lock	J. H. Barnes	Brooklyn, N. Y	Feb. 13, 1866	2, 263
Door-lock	B. Mallory	New Haven, Conn	Mar. 14, 1865	2, 038
Door-lock face-plate, Sliding	W. Gorman	New Britain, Conn	May 17, 1870	4, 034
Door-lock keeper	H. H. Elwell	South Norwalk, Conn	Oct. 25, 1870	4, 429–4, 432
Door-lock plate	C. B. Erwin	New Britain, Conn	Aug. 10, 1858	1, 034–1, 035
Door-lock plate	H. E. Russell	New Britain, Conn	Aug. 10, 1858	1, 036
Door-pull	F. W. Brocksieper	New Haven, Conn	Sept. 27, 1870	4, 364
Door-spring	I. B. Hartwell	Woodstock, Vt	Apr. 10, 1843	4
Door, Ventilator	M. B. Washburn	Brooklyn, N. Y	Apr. 27, 1869	3, 466
Dovetail	H. H. Evarts	Chicago, Ill	May 17, 1870	4, 031
Dovetail	J. D. Kellogg, jr	Northampton, Mass	Feb. 7, 1871	4, 631
Drawer-pull	P., E. W., and J. A. Blake	New Haven, Conn	Aug. 5, 1856	820
Drawer-pull	F. W. Brocksieper	New Haven, Conn	June 1, 1869	3, 511
Drawer-pull	F. W. Brocksieper	New Haven, Conn	Oct. 5, 1869	3, 689
Drawer-pull	P. Cinquini	Meriden, Conn	Nov. 7, 1865	2, 216
Drawer-pull	P. Cinquini	West Meriden, Conn	Feb. 28, 1871	4, 677
Drawer-pull	P. J. Clark	West Meriden, Conn	Feb. 28, 1871	4, 678
Drawer-pull	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 502
Drawer-pull	O. F. Fogelstrand	Kensington, Conn	July 15, 1873	6, 775
Drawer-pull	W. Gorman	New Britain, Conn	Mar. 22, 1870	3, 915
Drawer-pull	A. D. Judd	New Haven, Conn	Apr. 26, 1870	4, 000
Drawer-pull	A. D. Judd	New Haven, Conn	May 10, 1870	4, 051

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Drawer-pull	A. D. Judd	New Haven, Conn	Jan. 9, 1872	5, 464
Drawer-pull	J. Kintz	West Meriden, Conn	Aug. 8, 1871	5, 185
Drawer-pull	J. M. Maris	Philadelphia, Pa	Apr. 9, 1872	5, 762
Drawer-pull	N. Merriam	West Meriden, Conn	Dec. 6, 1870	4, 502
Drawer-pull	J. E. Merriman	West Meriden, Conn	Feb. 7, 1871	4, 632
Drawer-pull	J. Ottner	New Britain, Conn	Mar. 19, 1872	5, 702
Drawer-pull	J. E. Parker	Meriden, Conn	July 28, 1868	3, 140
Drawer-pull	J. B. Sargent	New Haven, Conn	Aug. 8, 1871	5, 192
Drawer-pull	I. B. Sargent and P. Bradford	New Britain, Conn	Nov. 13, 1860	1, 345
Drawer-pull	A. P. Seymour	Hecla Works, N. Y	July 5, 1870	4, 212
Drawer-pull	A. Shepard	Southington, Conn	Dec. 23, 1873	7, 075
Drawer-pull	E. J. Steele	New Britain, Conn	Nov. 9, 1869	3, 744
Drawer-pull	E. J. Steele	New Britain, Conn	Apr. 18, 1871	4, 822
Drawer-pull	L. Widmayer	New Britain, Conn	June 24, 1873	6, 724
Drawer-pull	A. Wunder	New Haven, Conn	Oct. 1, 1872	6, 161–6, 162
Drawers	H. P. Wetmore	Elizabeth, N. J	May 23, 1871	4, 9[illegible]8
Dress-comb, Lady's	W. O. Capron	New York, N. Y	Dec. 5, 1871	5, 396
Dress-goods	M. Townsend	Canton, Mass	Oct. 4, 1870	4, 388
Dress-waist pattern	E. P. Smith	Chicago, Ill	Apr. 18, 1871	4, 832
Dress-waist pattern or chart	W. and E. Cornwell	Rochester, Minn	Mar. 15, 1870	3, 898
Drilling-machine	F. A. Pratt	Hartford, Conn	Oct. 25, 1870	4, 439
Drinking-glass bottom, Ornamentation of	G. B. Fowle	Cambridge, Mass	May 23, 1871	4, 921
E.				
Eave-trough fastener	W. B. Wadsworth	Cleveland, Ohio	May 18, 1869	3, 504
Egg-beater-agitating plate	E. Bostick	Fort Wayne, Ind	Oct. 3, 1871	5, 296
Egg-cup and salt-stand	G. Wilkinson	Providence, R. I	Jan. 11, 1870	3, 817
Egg-steamer	W. Kirkham	Springfield, Mass	Jan. 3, 1871	4, 554
Elevator-bucket	J. Storms and H. Dorer	Buffalo, N. Y	Nov. 9, 1869	3, 745
Emblem	M. B. Dyott	Philadelphia, Pa	Oct. 22, 1867	2, 805
Emblem, Army and Navy	J. P. Reynolds	Salem, Mass	July 14, 1868	3, 103
Emblem of National Union	H. Harris	Newark, N. J	Oct. 17, 1865	2, 202
Emery-grinder frame	A. Wallace	Stroudsburgh, Pa	Aug. 30, 1870	4, 321
Emery-wheel	T. J. Frazier	Clinton, Iowa	May 24, 1870	4, 059
Envelope	H. C. Berlin and G. H. Jones	Bloomfield, N. J., and New York, N. Y.	Apr. 28, 1863	1, 749
Envelope	E. Morgan	Springfield, Mass	June 25, 1867	2, 688
Envelope	S. Raynor	New York, N. Y	June 26, 1866	2, 340
Envelope	G. H. Reay	New York, N. Y	July 18, 1865	2, 137
Envelope-blank	G. Cade	Long Branch, N. J	Apr. 25, 1871	4, 839
Envelope-scroll	M. S. Chapman	Hartford, Conn	June 30, 1868	3, 082
Eraser	W. W. Hamilton	New York, N. Y	Apr. 13, 1869	3, 449
Eraser, Blackboard	J. H. Atwater	Providence, R. I	Oct. 11, 1870	4, 390
Eraser, Rubber	W. N. Bartholomew	Newton Centre, Mass	Jan. 4, 1870	3, 810
Eraser, Rubber	S. D. Hovey	Brooklyn, N. Y	May 16, 1871	4, 904
Escritoire	J. F. Birchard	Milwaukee, Wis	Oct. 17, 1871	5, 315
Escutcheon	L. Kreuzinger	Cambridge, Mass	June 7, 1870	4, 104–4, 106
Escutcheon	J. A. Ruff	Cambridge, Mass	June 7, 1870	4, 121–4, 122
Eyelet	J. C. Merritt	New York, N. Y	July 16, 1867	2, 706
Eyelet-machine stand	J. A. Safford	Winchester, Mass	Mar. 24, 1863	1, 742
Eyelet, Suspension	G. W. Averell	New York, N. Y	Mar. 5, 1872	5, 608
F.				
Fabric	C. H. Landenberger	Philadelphia, Pa	Sept. 2, 1873	6, 833
Fan	G. Anton	Philadelphia, Pa	Dec. 26, 1865	2, 234
Fan	J. T. Brundage	Niagara Falls, N. Y	July 15, 1873	6, 774
Fan	J. McLoughlin	Morrisania, N. Y	July 23, 1872	6, 005
Fan	W. A. Smith	Niagara Falls, N. Y	Dec. 2, 1873	7, 017
Fan-leaf	O. R. Nitsch	New York, N. Y	May 18, 1869	3, 503
Faucet-holder	C. Tielenius	New York, N. Y	Apr. 25, 1871	4, 852
Felt border	T. J. Webster	New York, N. Y	Sept. 28, 1869	3, 685
Felted goods	M. A. Johnson	Lowell, Mass	July 24, 1866	2, 371
Fence	F. A. Fleming	Curwinsville, Pa	Apr. 2, 1872	5, 743
Fence	J. C. Gearhardt	Jersey Shore, Pa	Aug. 14, 1866	2, 388
Fence	J. I. Healey	Brooklyn, N. Y	Feb. 11, 1873	6, 411
Fence	W. E. Smith	Hartleton, Pa	Aug. 27, 1867	2, 773
Fence and gate, Cemetery	J. Sharkey	Brooklyn, N. Y	July 8, 1873	6, 765
Fence-cap	G. W. Young	Saint Louis, Mo	Jan. 24, 1871	4, 612
Fence, Cast-iron	M. Briggs	Rochester, N. Y	Oct. 5, 1858	1, 053
Fence, Cast-iron	J. T. Davy	Troy, N. Y	Oct. 21, 1851	419
Fence, Cemetery	T. Pitbladdo	Brooklyn, N. Y	July 8, 1873	6, 762
Fence, Iron	E. Gomez	New York, N. Y	Nov. 30, 1858	1, 069
Fence, Iron	C. F. and J. M. Hankey	Danville, Ill	Nov. 26, 1872	6, 274
Fence, Iron	M. Krumm	Columbus, Ohio	Jan. 28, 1873	6, 373
Fence-panel	G. Lovejoy	Deposit, N. Y	Apr. 23, 1867	2, 632
Fence, Rustic	J. Millar	Paterson, N. J	Nov. 8, 1870	4, 461
Fence, Wire	M. Dupuy	New York, N. Y	Oct. 3, 1871	5, 297
Fence, Wire	F. Kilburn	Lancaster, Pa	Sept. 21, 1852	504
Fence, Wire	M. Lachermaier	Philadelphia, Pa	Nov. 21, 1854	679
Figure	C. Müller	New York, N. Y	July 14, 1868	3, 109
Figure	C. Müller	New York, N. Y	Dec. 15, 1868	3, 296
Figure	C. Müller and J. Deacon	New York, N. Y	May 12, 1868	3, 040–3, 041
Figure	J. D. Smith	Washington, D. C	Dec. 30, 1873	7, 079
Figure and base	C. Müller	New York, N. Y	Mar. 3, 1868	2, 944
Figures, Pair of	K. Müller	New York, N. Y	Aug. 31, 1869	3, 646
File, Paper	E. J. Steele	New Haven, Conn	Apr. 8, 1873	6, 583
Filter, Coffee or tea	G. M. Bull	New Baltimore, N. Y	Dec. 21, 1869	3, 792
Finger-ring, &c	F. W. Martin	Springfield, Mass	July 2, 1872	5, 970
Fire-dog	F. W. Brooksieper	New Haven, Conn	Sept. 27, 1870	4, 363
Fire-dog	T. W. Lillagore	Philadelphia, Pa	Jan. 10, 1860	1, 189
Fire-dog	T. W. Lillagore	Philadelphia, Pa	Jan. 24, 1860	1, 194
Fire-dog	T. W. Lillagore	Philadelphia, Pa	Apr. 3, 1860	1, 220–1, 225
Fire-dog	A. Wunder	New Haven, Conn	Nov. 7, 1871	5, 351
Fire-engine, Steam	B. Fitts	Newark, N. J	June 11, 1867	2, 672
Fire-frame	W. W. Stevens	Westbrook, Me	July 5, 1859	1, 119
Fire-iron stand	A. Wunder	New Haven, Conn	Sept. 26, 1871	5, 285–5, 286

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Invention.	Inventor.	Residence.	Date.	No.
Fire-place border-frame	J. R. Rose and E. L. Calely, jr	Philadelphia, Pa	Nov. 23, 1869	3, 764
Fire-place frame	A. Wemyss	Philadelphia, Pa	June 29, 1869	3, 564
Fire-place, Franklin	N. S. Prince	Boston, Mass	Oct. 31, 1854	676
Fire-place, Franklin	N. P. Richardson	Portland, Me	July 31, 1855	716
Fire-place heater	E. S. Heath	Baltimore, Md	Sept. 14, 1869	3, 659
Fire-place heater	P. Rollhaus	Port Chester, N. Y	June 15, 1869	3, 548
Fire-place heater	S. L. Utter	Brooklyn, N. Y	Sept. 28, 1869	3, 679
Fire-place, Ornamental	J. C. Macy	Cincinnati, Ohio	July 8, 1856	814
Fire-place, Portable	W. Ames	Nashua, N. H	Aug. 28, 1855	723
Fire-place screen	J. R. Rose and E. Calely	Philadelphia, Pa	May 24, 1870	4, 063
Fire-pot, Coal-stove	P. D. Beckwith	Dowagiac, Mich	Jan. 2, 1872	5, 454
Fire-set holder	F. W. Brocksieper	New Haven, Conn	Sept. 27, 1870	4, 362
Fire-set holder	E. J. Steele	New Haven, Conn	Nov. 26, 1872	6, 277
Fire-set holder	A. Wunder	New Haven, Conn	Nov. 5, 1872	6, 243
Fire-shovel	L. Morgan	South Norwalk, Conn	June 19, 1860	1, 260–1, 263
Flange and crank	W. W. Eastman	Meadville, Pa	Sept. 11, 1871	4, 791
Flat-iron heater	M. Little	East Saginaw, Mich	Apr. 23, 1872	5, 810
Floor-cloth	J. Albro, jr	Elizabethtown, N. J	July 24, 1847	138
Floor-cloth	J. Barrett	New York, N. Y	May 27, 1873	6, 682–6, 683
Floor-cloth	A. Glominski	Lansingburgh, N. Y	Sept. 16, 1856	831–832
Floor-cloth	A. Glominski	Lansingburgh, N. Y	Dec. 23, 1856	850
Floor-cloth	A. Glominski	Lansingburgh, N. Y	Dec. 3, 1861	1, 505
Floor-cloth	J. Hutchison	Lansingburgh, N. Y	Jan. 27, 1863	1, 706
Floor-cloth	J. Meger	New York, N. Y	Oct. 25, 1859	1, 159
Floor-cloth	J. Meger	New York, N. Y	Apr. 24, 1860	1, 234
Floor-cloth	C. T. Meyer	Boston, Mass	Dec. 4, 1860	1, 351
Floor-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	May 20, 1873	6, 656–6, 657
Floor-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	May 20, 1873	6, 661–6, 663
Floor-cloth	J. Meyer	Lansingburgh, N. Y	May 27, 1873	6, 691
Floor-cloth	J. Neil and A. E. Powers	Clinton, Mass., and Lansingburgh, N. Y.	Mar. 31, 1863	1, 745
Floor-cloth	J. Paterson	Elizabeth, N. J	Apr. 5, 1859	1, 091
Floor-cloth	J. B. Virolet	New York, N. Y	Nov. 29, 1859	1, 171
Floor-cloth	J. T. Webster	New York, N. Y	Apr. 27, 1869	3, 467
Floor-cloth, Painted	J. Hutchison	Troy, N. Y	May 14, 1850	282
Floor-cloth pattern	H. Christie	Morrisania, N. Y	June 2, 1868	3, 061
Floor-cloth pattern	H. Christie	Morrisania, N. Y	Jan. 12, 1869	3, 334
Floor-cloth pattern	H. Christie	Morrisania, N. Y	Mar. 15, 1870	3, 896–3, 897
Floor-cloth pattern	D. Foyer	Dover, N. H	May 13, 1862	1, 577
Floor-cloth pattern	D. Foyer	Dover, N. H	Dec. 9, 1862	1, 677
Floor-cloth pattern	D. Foyer	Dover, N. H	Dec. 16, 1862	1, 695
Floor-cloth pattern	G. Green	Wappinger's Creek, N. Y	Apr. 5, 1864	1, 928
Floor-cloth pattern	A. Heald	Philadelphia, Pa	May 28, 1872	5, 881
Floor-cloth pattern	C. T. Meyer	Bergen, N. J	Mar. 31, 1868	2, 974–2, 975
Floor-cloth pattern	C. T. Meyer	Bergen, N. J	June 30, 1868	3, 089
Floor-cloth pattern	C. T. Meyer	Bergen, N. J	Nov. 17, 1868	3, 248
Floor-cloth pattern	C. T. Meyer	Bergen, N. J	Dec. 15, 1868	3, 293–3, 295
Floor-cloth pattern	C. T. Meyer	Newark, N. J	Mar. 1, 1870	3, 875
Floor-cloth pattern	C. T. Meyer	Newark, N. J	Apr. 5, 1870	3, 956–3, 958
Floor-cloth pattern	C. T. Meyer	Newark, N. J	July 5, 1870	4, 207–4, 210
Floor-cloth pattern	C. T. Meyer	Newark, N. J	Feb. 14, 1871	4, 654
Floor-cloth pattern	V. Meyer	New York, N. Y	Feb. 18, 1862	1, 540
Floor-cloth pattern	V. Meyer	Kearney, N. J	Sept. 22, 1868	3, 209–3, 010
Floor-cloth pattern	V. and C. T. Meyer	New York, N. Y., and Newark, N. J.	July 12, 1870	4, 222
Floor-cloth pattern	J. Neil	Clinton, Mass	Mar. 1, 1864	1, 907
Floor-cloth pattern	J. Paterson	Elizabethtown, N. J	Apr. 5, 1864	1, 931
Floor-cloth pattern	J. Paterson	Elizabeth, N. J	July 2, 1867	2, 692
Floor-cloth pattern	J. Paterson	Elizabeth, N. J	May 3, 1870	4, 007
Floor-cloth pattern	A. E. Powers	Lansingburgh, N. Y	Oct. 15, 1867	2, 801
Floor-cloth pattern	A. E. Powers	Lansingburgh, N. Y	Feb. 18, 1868	2, 939
Floor-cloth pattern	J. Robley	Brooklyn, N. Y	Mar. 1, 1864	1, 908
Floor-cloth pattern	J. T. Webster	New York, N. Y	June 7, 1870	4, 139–4, 140
Floor-cloth, Printing	J. Albro, jr	Elizabethtown, N. J	Dec. 20, 1843	14–15
Flower, Artificial	C. S. Baldwin	New York, N. Y	Mar. 15, 1870	3, 895
Flower-pot	J. Leak	Geddes, N. Y	Aug. 2, 1870	4, 273
Flower-pot	J. Leak	Geddes, N. Y	Nov. 1, 1870	4, 449
Flower-pot	G. P. Palmer	Boston, Mass	Apr. 16, 1872	5, 806
Flower-pot	W. Sutherland and T. I. Lewellen.	Philadelphia, Pa	Mar. 2, 1869	3, 401
Flower-shade and pedestal	E. M. Stigale	Philadelphia, Pa	Oct. 26, 1869	3, 729
Flower-stand	H. H. Kendrick	Fulton, N. Y	Feb. 14, 1871	4, 630
Flower-stand	J. E. Morris	Minneapolis, Minn	July 1, 1873	6, 743
Flower-stand	C. H. Waters	Groton, Mass	Dec. 14, 1869	3, 789
Flowers, Sprig of artificial	L. D. Newell	New York, N. Y	Apr. 5, 1870	3, 960
Fly-trap	D. K. Thompson	Clark, Pa	Oct. 28, 1873	6, 968
Fly-wheel	J. G. Baker	Philadelphia, Pa	Dec. 9, 1873	7, 024
Folding-chair	B. J. Harrison and J. Condie	New York, N. Y	June 25, 1867	2, 685
Font, Baptismal	D. C. Ripley	Birmingham, Pa	Feb. 8, 1870	3, 842
Fork and spoon	R. Taylor and R. D. Laurie	Philadelphia, Pa	Oct. 19, 1852	512
Fork and spoon handle	H. Biggins	Mount Vernon, N. Y	Apr. 3, 1855	698
Fork and spoon handle	T. Evans	New York, N. Y	Mar. 4, 1856	769
Fork and spoon handle	M. H. Mosman	Waterbury, Conn	Apr. 8, 1873	6, 577
Fork and spoon handle	D. C. Wilcox	West Meriden, Conn	Aug. 6, 1867	2, 741
Fork and spoon handle	H. C. Wilcox	West Meriden, Conn	Oct. 22, 1872	6, 219
Fork, knife, and spoon	P. Van Ness and A. Wood	New York, N. Y	Mar. 21, 1848	170
Fork, Knife-edged	A. W. Cox	Malden, Mass	Feb. 5, 1867	2, 567
Fork or spoon handle	J. M. Culver	Wallingford, Conn	Apr. 11, 1871	4, 788
Fork or spoon handle	W. B. Durgin	Concord, N. H	Sept. 25, 1866	2, 470
Fork or spoon handle	H. H. Hayden	New York, N. Y	Jan. 15, 1867	2, 548
Fork or spoon handle	H. H. Hayden	New York, N. Y	Dec. 15, 1868	3, 292
Fork or spoon handle	H. H. Hayden	New York, N. Y	Dec. 29, 1868	3, 300
Fork or spoon handle	W. T. Kennedy	New York, N. Y	June 13, 1871	4, 992
Fork or spoon handle	W. H. Lewis	Glastenbury, Conn	Nov. 1, 1859	1, 166
Fork or spoon handle	E. C. Moore	Yonkers, N. Y	July 27, 1869	3, 588
Fork or spoon handle	J. Polhamus	New York, N. Y	Oct. 31, 1865	2, 212
Fork or spoon handle	J. Polhamus	New York, N. Y	Jan. 1, 1867	2, 539
Fork or spoon handle	J. Polhamus	New York, N. Y	Aug. 27, 1867	2, 772

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Fork or spoon handle	J. Polhamus	New York, N. Y	Mar. 17, 1868	2, 954
Fork or spoon handle	J. Seymour	Syracuse, N. Y	Aug. 6, 1867	2, 720
Fork or spoon handle	G. Sharp	Philadelphia, Pa	Nov. 27, 1866	2, 51[illegible]
Fork or spoon handle	G. Sharp	Philadelphia, Pa	Oct. 26, 1869	3, 728
Fork or spoon handle	G. Sharp	Philadelphia, Pa	Nov. 23, 1869	3, 766
Fork or spoon handle	L. S. White	Waterbury, Conn	Jan. 15, 1867	2, 551
Fork or spoon handle	H. C. Wilcox	Meriden, Conn	Mar. 23, 1869	3, 429
Fork or spoon handle	G. Wilkinson	Providence, R. I	Apr. 7, 1868	2, 993–2, 999
Fork or spoon handle	G. Wilkinson	Providence, R. I	July 14, 1868	3, 110–3, 112
Fork or spoon handle	G. Wilkinson	Providence, R. I	Dec. 1, 1868	3, 276
Fountain	J. W. Fiske	New York, N. Y	June 20, 1871	5, 024–5, 025
Fountain	J. Hegarty	Jersey City, N. J	July 12, 1870	4, 219
Fountain-basin	J. Moore and W. H. Wilkinson	Brooklyn, N. Y	May 6, 1873	6, 644
Fountain-ornament	J. Moore and W. Wilkinson	Brooklyn, N. Y	Apr. 11, 1871	4, 804–4, 808
Fountain-ornament	J. Moore and W. Wilkinson	Brooklyn, N. Y	May 16, 1871	4, 906
Fountain, Ornamental	J. Dutton	Village Green, Pa	Oct. 3, 1846	90
Frame	W. J. Lusk	Fentonville, Mich	Jan. 28, 1868	2, 863
Frame	B. A. Ward	Lynn, Mass	Nov. 1, 1870	4, 453
Frame for machines	J. M. Marston	Boston, Mass	Oct. 7, 1873	6, 935
Fringe	W. B. Cunningham and P. Hill	Philadelphia, Pa	Dec. 19, 1871	5, 424–5, 426
Fringe	H. A. Truitt	Philadelphia, Pa	Feb. 14, 1871	4, 662
Fringe, Tasseled	H. A. Truitt	Philadelphia, Pa	Feb. 14, 1871	4, 663
Fruit-basket	S. D. Payne	Kasota, Minn	May 9, 1871	4, 890
Fruit-box	J. Sherman	Burlington, N. J	Sept. 26, 1871	5, 292
Fruit-can	J. F. Merrill	Cincinnati, Ohio	May 30, 1871	4, 954
Fruit-can cap	J. I. Livingston	Pittsburgh, Pa	Sept. 28, 1869	3, 671
Fruit-gatherer	J. S. and A. M. Barry	Albion, Mich	Dec. 27, 1870	4, 535
Fruit-jar	A. French	Philadelphia, Pa	Nov. 17, 1868	3, 243
Fruit-jar	S. B. Rowley	Philadelphia, Pa	Sept. 16, 1873	6, 886
Fruit-jar clamp	P. J. Biesenbach	Rochester, N. Y	Dec. 20, 1870	4, 522
Fruit-jar cover	H. E. Shaffer	Rochester, N. Y	Dec. 21, 1869	3, 806
Fruit-jar cover, Glass	S. B. Rowley	Philadelphia, Pa	Jan. 19, 1869	3, 349
Fruit-stand	H. Vasseur	Wallingford, Conn	Oct. 25, 1870	4, 440
Frying-pan bottom	H. D. Musselman	Lancaster, Pa	Jan. 15, 1867	2, 549
Fur collar, Lady's	M. Gross and R. B. Zippert	New York, N. Y	Aug. 26, 1873	6, 827
Fur-set box	J. Crane	Bloomfield, N. J	May 11, 1869	3, 491
Furnace	W. S. Bronson	Hartford, Conn	May 26, 1857	890
Furnace-door	A. H. Mershon	Philadelphia, Pa	Mar. 31, 1868	2, 973
Furnace-register	G. Chilson	Boston, Mass	Mar. 4, 1851	352–355
Furniture	D. Denyven	Cambridgeport, Mass	Nov. 5, 1872	6, 236–6, 237
Furniture	T. W. and F. M. Moore	New York, N. Y	June 24, 1873	6, 722
Furniture-leg	G. L. Chapman	Maumee, Ohio	Aug. 3, 1869	3, 597
Furniture-ornament	I. F. Baker	Philadelphia, Pa	Dec. 5, 1848	206
Furniture-ornament	I. F. Baker	Philadelphia, Pa	Apr. 10, 1849	215–216
Furniture, Parlor	D. Shales and N. McCully	Boston, Mass	Sept. 23, 1873	6, 891
Furniture, School	I. S. Wachob	Scranton, Pa	July 2, 1872	5, 973
Furniture, Standard for school	C. W. Sherwood	Chicago, Ill	Jan. 15, 1867	2, 556–2, 557
G.				
Game-board, Combination	W. Hearn	New York, N. Y	July 4, 1871	5, 072
Gang-press	W. Denison	Rome, N. Y	Apr. 4, 1871	4, 747
Garden-chair	W. and R. Mushet	Dalkeith, Scotland	Apr. 30, 1872	5, 830–5, 832
Garden, Flower	W. Webster	Rochester, N. Y	Jan. 15, 1867	2, 559
Garden-tool	R. A. Moore	Kensington, Conn	Mar. 14, 1871	4, 709
Garment-supporting hook	C. A. Griswold	Willimantic, Conn	Aug. 22, 1871	5, 225
Garment, Talma or cloak	E. Flues	Whitemarsh Post-Office, Pa	Apr. 18, 1871	4, 828
Gas-bracket	J. F. Travis	New York, N. Y	Aug. 19, 1873	6, 809
Gas fire-log	T. N. Dixon and C. Friese	Philadelphia, Pa	June 6, 1871	4, 974
Gas-fittings	F. E. Thomas	New York, N. Y	Apr. 25, 1871	4, 851
Gas-heater	T. J. Mayall	Boston, Mass	Apr. 23, 1872	5, 811
Gas-light shade	F. Rodgers	Philadelphia, Pa	Apr. 12, 1870	3, 969
Gasalier	J. F. Travis	New York, N. Y	July 21, 1868	3, 124
Gasalier	J. F. Travis	New York, N. Y	Aug. 19, 1873	6, 808
Gasalier-branch	J. F. Travis	New York, N. Y	Nov. 10, 1868	3, 235
Gasalier-branch	J. F. Travis	New York, N. Y	Nov. 17, 1868	3, 256
Gate	J. F. Travis	Philadelphia, Pa	July 27, 1869	3, 587
Gate	S. Macferran and E. Omensetter.	Philadelphia, Pa	June 28, 1870	4, 184
Gate	L. Passmore	Philadelphia, Pa	Jan. 26, 1869	3, 355
Gate	H. E. Wesche	Philadelphia, Pa	Feb. 5, 1856	759
Gate	H. E. Wesche	Philadelphia, Pa	Feb. 12, 1856	762
Geometrical forms, Arrangement of	C. Baillairge	Quebec, Canada	Dec. 12, 1871	5, 408
Girandole	W. Blake	Boston, Mass	May 17, 1843	3
Girandole	R. E. Dietz	New York, N. Y	Dec. 28, 1852	539
Girandole	W. F. Shaw	Suffolk County, Mass	Dec. 18, 1849	256
Girandole and candelabra	R. E. Dietz	New York, N. Y	Apr. 26, 1853	555
Glass, Church-window	S. West	Boston, Mass	Nov. 22, 1870	4, 492
Glass, &c., Drinking	T. G. Cook	Philadelphia, Pa	Nov. 11, 1873	6, 987
Glass mold, Lager-beer	J. P. Pears	Pittsburgh, Pa	Feb. 7, 1871	4, 640–4, 641
Glass-ware	J. S. and T. B. Atterbury	Birmingham, Pa	June 4, 1872	5, 900
Glass-ware	T. B. Atterbury	Pittsburgh, Pa	Apr. 29, 1873	6, 613
Glass-ware	J. Bryce	East Birmingham, Pa	Nov. 23, 1869	3, 759
Glass-ware	W. O. Davis	Portland, Me	May 11, 1869	3, 494
Glass-ware	W. M. Kirchner	Pittsburgh, Pa	July 26, 1870	4, 261
Glass-ware	J. Oesterling	Wheeling, W. Va	July 26, 1870	4, 263
Glass-ware foot	J. Oesterling	Wheeling, W. Va	Sept. 19, 1871	5, 269
Glass-ware foot and stem	T. Cutter	Birmingham, Pa	Aug. 11, 1868	3, 154
Glass-ware ornamentation	J. S. and T. B. Atterbury	Pittsburgh, Pa	Nov. 8, 1870	4, 457
Glass-ware ornamentation	A. H. Baggs	Wheeling, W. Va	July 23, 1872	6, 002
Glass-ware ornamentation	C. Ballinger	Pittsburgh, Pa	Oct. 18, 1870	4, 419
Glass-ware ornamentation	J. Bryce	Allegheny County, Pa	Apr. 2, 1872	5, 742
Glass-ware ornamentation	M. B. Campbell	Pittsburgh, Pa	Apr. 11, 1871	4, 774
Glass-ware ornamentation	H. C. Fry	Pittsburgh, Pa	Nov. 3, 1868	3, 221
Glass-ware ornamentation	A. W. Henderson	Pittsburgh, Pa	June 1, 1869	3, 515
Glass-ware ornamentation	W. M. Kirchner	Pittsburgh, Pa	Apr. 5, 1870	3, 954
Glass-ware ornamentation	F. Ladner	Philadelphia, Pa	Mar. 14, 1871	4, 707
Glass-ware ornamentation	J. E. Miller	Birmingham, Pa	Sept. 12, 1871	5, 251

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Glass-ware ornamentation	J. Oesterling	Wheeling, W. Va	Oct. 17, 1871	5,318
Glass-ware, Ornamentation of table	W. C. King	Pittsburgh, Pa	Apr. 4, 1871	4,753
Glass-ware, Ornamenting	T. B. Atterbury	Pittsburgh, Pa	Feb. 22, 1870	3,854
Glass-ware, Ornamenting	J. Bryce	East Birmingham, Pa	Oct. 19, 1869	3,716
Glass-ware, Ornamenting	J. Bryce	Pittsburgh, Pa	Feb. 22, 1870	3,855
Glass-ware, Ornamenting	W. T. Gillinder	Philadelphia, Pa	Mar. 22, 1870	3,914
Glass-ware, Ornamenting	S. Hipkins, jr	Bellaire, Ohio	Apr. 12, 1870	3,972
Glass-ware, Ornamenting	J. H. Hobbs	Wheeling, W. Va	Feb. 1, 1870	3,828
Glass-ware, Ornamenting	W. Leighton, jr	Wheeling, W. Va	Feb. 1, 1870	3,829
Glass-ware, Ornamenting table	H. S. McKee	Pittsburgh, Pa	Nov. 5, 1867	2,825
Glass-ware, Stem	D. C. Ripley	Birmingham, Pa	Feb. 1, 1870	3,834
Glass, Window	C. Probst	Hudson City, N. J	Apr. 9, 1861	1,398
Globe-tripod stand	G. Joslin	Boston, Mass	May 7, 1845	30
Glove	W. B. Green	Mayfield, N. Y	May 23, 1871	4,923
Glove palm and back piece	F. E. Hotchkiss	Gloversville, N. Y	May 2, 1871	4,859
Glove-thumb	E. Hulbert, W. F. Steele, and H. C. Day.	Gloversville, N. Y	June 7, 1870	4,143
Gloves, Ornamenting wristbands of	F. Hegle	New York, N. Y	Apr. 23, 1872	5,809
Gloves, Reinforcing thumb-piece of	I. B. Whipple	Gloversville, N. Y	May 2, 1871	4,865
Goblet	C. Ballinger	Pittsburgh, Pa	May 22, 1866	2,323
Goblet, &c	J. Hobbs	Bellaire, Ohio	Nov. 4, 1873	6,975–6,976
Goblet	F. McKee	Pittsburgh, Pa	Apr. 21, 1863	1,748
Goblet	J. S. Palmer	Portland, Me	Aug. 4, 1868	3,152
Goblet, Glass	J. H. Hobbs	Wheeling, W. Va	Aug. 19, 1873	6,804
Governor-base	W. B. Le Van	Philadelphia, Pa	Jan. 28, 1873	6,374
Governor case, Engine	J. A. Lynch	Boston, Mass	Feb. 14, 1871	4,653
Governor case, Steam-engine	J. A. Lynch	Boston, Mass	Apr. 11, 1871	4,794
Grate	J. B. Gayle	Raleigh, N. C	May 17, 1870	4,033
Grate	A. Hampton	New York, N. Y	May 17, 1844	21
Grate-fender	G. Buchanan	Washington, Pa	Oct. 24, 1871	5,321
Grate, Fire-place	H. Biggins	New York, N. Y	June 5, 1847	125
Grate, Fire-place	A. Hampton	New York, N. Y	July 25, 1846	69
Grate, Fire-place	A. Hampton	New York, N. Y	May 15, 1847	122
Grate, Fire-place	J. L. Jackson	New York, N. Y	May 15, 1847	121
Grate-fork	J. Taggart	Boston, Mass	Apr. 27, 1869	3,462
Grate-frame	J. L. Jackson	New York, N. Y	Feb. 3, 1852	442–443
Grate-frame	J. L. Jackson	New York, N. Y	Oct. 12, 1852	509
Grate-frame	J. L. Jackson	New York, N. Y	May 3, 1853	560–562
Grate-frame and fender	J. L. Jackson	New York, N. Y	Oct. 15, 1850	326
Grate-frame and fender	J. L. Jackson	New York, N. Y	Aug. 10, 1852	481–482
Grate-frame and summer-piece	A. Hampton	New York, N. Y	Oct. 5, 1852	507
Grate-frame and summer-piece	J. L. Jackson	New York, N. Y	Feb. 3, 1852	441
Grate-frame and summer-piece	J. L. Jackson	New York, N. Y	Feb. 17, 1852	477
Grate-frame and summer-piece	J. L. Jackson	New York, N. Y	May 3, 1853	563
Grate-frame, summer-piece, and fender	J. L. Jackson	New York, N. Y	Aug. 10, 1852	483
Grate-front	C. Zenner	Cincinnati, Ohio	Sept. 12, 1871	5,265
Grate-hearth	J. G. Ils	San Francisco, Cal	June 20, 1871	5,028
Grate or stove front	J. E. Bendix	New York, N. Y	July 7, 1857	909
Grate, Parlor	W. Ames	Nashua, N. H	Apr. 1, 1851	362
Grate, Parlor	J. Andrews	Philadelphia, Pa	Sept. 11, 1855	728
Grate, Parlor	J. T. Davy	Troy, N. Y	Dec. 23, 1856	855
Grate, Parlor	A. Hampton	New York, N. Y	July 10, 1846	52
Grate, Parlor	W. and N. H. Jackson	New York, N. Y	Jan. 7, 1846	44
Grate, Parlor	J. Pratt	Boston, Mass	Mar. 25, 1851	361
Grate, Parlor	J. Pratt	Boston, Mass	Nov. 16, 1852	527
Grate, Portable	A. Paul	South New Market, N. H	July 22, 1850	304
Grate, Portable	A. Richmond	Providence, R. I	Sept. 11, 1849	231
Grate, Portable	A. Richmond	Providence, R. I	July 13, 1852	473
Grate, Portable	D. Thomson	Boston, Mass	June 8, 1852	461
Grate, Revolving	J. D. Vance	Cincinnati, Ohio	Apr. 11, 1871	4,800
Grate, Spider	N. H. Talbot	North Easton, Mass	July 25, 1871	5,144
Grates, Summer-front for fire-place	J. Bryant	San Francisco, Cal	Apr. 2, 1872	5,734
Grating, Metallic	J. K. Ingalls	Starkey, N. Y	May 7, 1872	5,840
Grave-border	I. Chase, jr	Boston, Mass	Oct. 20, 1857	957
Graves, Stake to mark	G. Arnd	New York, N. Y	May 5, 1868	3,009
Gridiron	E. Peck	New Britain, Conn	July 17, 1860	1,287
Grinding-machine	T. H. Worrall	East Blackstone, Mass	Aug. 3, 1869	3,603
Grinding-mill	W. D. Leavitt and H. Shaw	New Orleans, La., and Cincinnati, Ohio.	Apr. 27, 1869	3,457–3,458
Grinding-mill	J. Sedgebeer	Painesville, Ohio	Feb. 23, 1869	3,390
Grinding-mill	H. Shaw	Cincinnati, Ohio	Apr. 27, 1869	3,461
Grinding-mills, Frame or stand of	J. G. and W. J. Lane	Millbrook, N. Y	Dec. 9, 1873	7,022
Grocer's can	J. J. Bockee, jr	New York, N. Y	Sept. 26, 1871	5,276
Guitar	W. B. Tilton	New York, N. Y	Feb. 21, 1854	632
Gun, Arrow	C. Robinson	Boston, Mass	May 17, 1870	4,050
H.				
Hair-comb	J. Shields	Fishkill, N. Y	Feb. 3, 1852	444
Hair-comb, Lady's	J. Blackman and C. Skidmore	Newtown, Conn	Feb. 17, 1852	446
Hair-comb, Lady's	J. Hills	Newtown, Conn	Apr. 26, 1853	556
Hair-comb, Lady's	W. Redheffer	Spring Garden District, Pa	May 25, 1852	459
Hair-crimper	H. A. Humphrey	Milwaukee, Wis	May 31, 1870	4,088
Hair-pin	W. F. Fluhrer	New York, N. Y	Jan. 3, 1871	4,551
Hair-pin	G. W. Manson	New York, N. Y	Aug. 23, 1870	4,303
Hall, Masonic	J. McArthur, jr	Philadelphia, Pa	Jan. 28, 1868	2,866
Hame-fastening	H. A. Fowler	Afton, N. Y	May 13, 1862	1,576
Hame-loop	J. Letchworth	Buffalo, N. Y	Sept. 12, 1871	5,260
Hame-top	H. Beagle, jr	Philadelphia, Pa	Apr. 29, 1873	6,617
Hame-top	M. F. Boland	Philadelphia, Pa	Mar. 14, 1871	4,701
Hammer, tack-drawer, and wrench, Combined	A. Iske	Lancaster, Pa	June 18, 1867	2,676
Hand-engine	W. R. Bush	Fall River, Mass	Jan. 26, 1864	1,888
Hand-glass frame	J. H. Bellamy	Charlestown, Mass	July 19, 1870	4,249
Harness-bell stand	A. E. Taylor	New Britain, Conn	Nov. 26, 1872	6,279
Harness-bracket	J. L. Jackson	New York, N. Y	Dec. 12, 1871	5,414
Harness breast-collar	W. R. Olmsted	Fayette, N. Y	June 21, 1870	4,169
Harness breast-slide	H. W. Minnemeyer	Allegheny City, Pa	Sept. 13, 1870	4,353

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Invention.	Inventor.	Residence.	Date.	No.
Harness-hook	J. L. Jackson	New York, N. Y	Dec. 5, 1871	5, 399
Harness, Hook to hang	J. L. Jackson	New York, N. Y	Dec. 12, 1871	5, 415–5, 416
Harness-mountings	C. Eisele	Newark, N. J	Apr. 5, 1870	3, 952
Harness-mountings	J. P. Robbins	Philadelphia, Pa	Sept. 28, 1869	3, 674
Harness-saddle bracket	J. L. Jackson	New York, N. Y	Dec. 5, 1871	5, 397
Harness-saddle hook	O. Wiener	Newark, N. Y	Aug. 15, 1871	5, 208
Harness-saddle ornament	L. Rommeiks	Newark, N. Y	Aug. 8, 1871	5, 191
Harness-saddle terret	H. Whitehouse	Newark, N. Y	Mar. 22, 1870	3, 920
Harness trace-carrier	S. Reynolds	Allegheny City, Pa	Sept. 13, 1870	4, 354
Harness-trimming	R. Hoyer	New York, N. Y	Dec. 23, 1873	7, 071
Harness-trimming	C. M. Theberath	Newark, N. J	June 13, 1871	5, 006
Harness-trimming	C. M. and J. H. Theberath	Newark, N. J	Nov. 17, 1868	3, 255
Harness-trimmings, Ornamenting	W. Blüm	Newark, N. J	Aug. 10, 1869	3, 604
Harvesting-machine wheel	A. Rank	Salem, Ohio	May 22, 1866	2, 324
Hasp-hook	S. M. Richardson	New York, N. Y	Dec. 26, 1865	2, 237
Hat	D. K. Albright and L. H. De Lange.	Philadelphia, Pa., and Bordentown, N. J.	Oct. 10, 1865	2, 177–2, 178
Hat	J. S. Fayerweather	Ridgefield, Conn	Oct. 7, 1873	6, 958
Hat	S. R. Hawley	New York, N. Y	May 28, 1861	1, 421
Hat	J. J. Morrisett	New York, N. Y	May 28, 1861	1, 429
Hat	J. J. Morrisett	New York, N. Y	Oct. 29, 1861	1, 486
Hat	P. W. Vail	Newark, N. J	Apr. 16, 1867	2, 622
Hat	I. B. Wentworth	New York, N. Y	Sept. 13, 1870	4, 356
Hat and cane stand	E. Reynolds	Boston, Mass	Nov. 16, 1858	1, 062
Hat and clothes rack	I. H. Kinch	Pleasantville, N. Y	Apr. 30, 1872	5, 822
Hat and coat hook	A. D. Judd	New Haven, Conn	June 3, 1873	6, 694
Hat and dress ornament	M. A. Laurence	New York, N. Y	Feb. 12, 1867	2, 572
Hat and umbrella stand	C. Zenner	Cincinnati, Ohio	July 13, 1852	472
Hat-band pendant	E. Sealy	Newark, N. J	Nov. 5, 1867	2, 829
Hat-box	G. L. Jaeger	New York, N. Y	Feb. 23, 1869	3, 386
Hat, Fireman's	C. D. P. Watters	New York, N. Y	Feb. 27, 1872	5, 560
Hat, Imitation straw-braid	S. A. Blake	Milford, Conn	Apr. 27, 1869	3, 451
Hat, Lady's	W. E. George	Wrentham, Mass	June 21, 1864	1, 964
Hat, Lady's	E. A. Murdock	Boston, Mass	Oct. 2, 1860	1, 319
Hat, Lady's	J. W. Partridge	Roxbury, Mass	May 17, 1864	1, 946
Hat, Military	W. F. Warburton	Philadelphia, Pa	Dec. 16, 1862	1, 701
Hat or cap ornament	J. Sealy, jr	Newark, N. J	Jan. 5, 1869	3, 321
Hat or cap ornament	J. Sealy, jr	Newark, N. J	Jan. 5, 1869	3, 323
Hat-ornament	J. Sealy, jr	Newark, N. J	Jan. 5, 1869	3, 322
Hat ornament, Child's	J. Sealy, jr	Newark, N. J	Aug. 31, 1869	3, 650–3, 652
Hat-rack	H. P. Conant	Boston, Mass	Feb. 18, 1868	2, 935
Hat-rack	E. Reynolds	Boston, Mass	Mar. 29, 1859	1, 090
Hat-rack and mirror	W. Vanscoyve	Oxford, Ohio	Aug. 22, 1871	5, 233
Hat-rack rail	D. Heald	Milford, N. H	July 2, 1872	5, 968
Hat-stand	C. Muller	Tompkinsville, N. Y	Nov. 18, 1851	425
Hay-rack	J. A. Herron	Talley Cavey, Pa	May 9, 1871	4, 884
Head-ornament	S. E. Cook	Philadelphia, Pa	Apr. 24, 1866	2, 294
Hearse	H. Laehr	Boston, Mass	Apr. 27, 1869	3, 459
Hearth-plate	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Dec. 21, 1852	537
Heater-front	E. Tompkins	Brooklyn, N. Y	Oct. 9, 1860	1, 338
Heel plate, Boot	F. Shaw	Braintree, Mass	May 28, 1867	2, 660
Heel plate, Boot and shoe	C. Saunders	Philadelphia, Pa	July 16, 1872	5, 997
Hinge	M. Bradley	Springfield, Mass	Sept. 21, 1869	3, 664–3, 666
Hinge	T. Drake	Cincinnati, Ohio	Apr. 11, 1871	4, 790
Hinge	F. T. Fracker	Boston, Mass	Jan. 26, 1869	3, 353–3, 354
Hinge	W. Gorman	New Britain, Conn	June 8, 1869	3, 533
Hinge	A. C. Kasson	Milwaukee, Wis	Oct. 11, 1870	4, 407
Hinge	E. E. Stow	Plantsville, Conn	Apr. 27, 1869	3, 462
Hinge	C. Suedekum	Newport, Ky	Oct. 3, 1871	5, 304
Hinge	J. B. Whitney	New York, N. Y	Jan. 21, 1873	6, 362
Hinge, Blind	H. N. Baker	Boston, Mass	Nov. 10, 1868	3, 228
Hin, e, Butt	M. Bradley	Springfield, Mass	Oct. 7, 1873	6, 949
Hinge, Butt	F. W. Brocksieper	New Haven, Conn	Nov. 21, 1871	5, 366
Hinge, Butt	W. Gorman	New Britain, Conn	Nov. 2, 1869	3, 733
Hinge, Butt	W. Gorman	New Britain, Conn	Dec. 9, 1873	7, 018
Hinge end, Blind	S. M. Richardson	New York, N. Y	Nov. 21, 1865	2, 221
Hinge face-place	E. Parker	New Britain, Conn	June 8, 1869	3, 534
Hinge, Gate	C. B. Clark	Buffalo, N. Y	May 2, 1871	4, 855
Hinge, Gate	B. Roux	Cincinnati, Ohio	Feb. 8, 1870	3, 844
Hinge-plate	S. M. Richardson	New York, N. Y	Mar. 13, 1866	2, 283
Hinge, School-seat	N. O. Tiffany	Buffalo, N. Y	Nov. 22, 1870	4, 469
Hinge, Strap	E. Woolman	Damascoville, Ohio	Dec. 11, 1855	750
Hitching-post	R. Wood	Philadelphia, Pa	May 21, 1872	5, 874–5, 875
Hitching-post cap	R. S. Austin	Wallingford, Conn	Apr. 4, 1871	4, 746
Hoe	C. Fisher	Canton, Mass	Aug. 15, 1871	5, 201
Hoe	B. T. Stowell	Quincy, Ill	Dec. 13, 1870	4, 517
Hood	C. Rich, H. Crow, and M. Rich	New York, N. Y	Oct. 3, 1871	5, 303
Hood, Lady's	J. Taylor	Philadelphia, Pa	May 8, 1866	2, 311
Hood, Lady's	C. E. White	Baltimore, Md	Oct. 15, 1872	6, 209
Hoop-skirt	C. S. Chaffee and C. H. Vandercook.	Birmingham, Conn	Mar. 10, 1868	2, 947
Horse-spur	T. Lyons	New Britain, Conn	Dec. 24, 1861	1, 507
Horse sun-bonnet	J. Anderson	Brooklyn, N. Y	Aug. 22, 1871	5, 210
Hot-air and ventilating register	E. A. Tuttle	New York, N. Y	Jan. 9, 1872	5, 470–5, 471
Hot-air furnace	H. Bissell	Hartford, Conn	Feb. 15, 1859	1, 081
Hot-air furnace	J. A. Lamson	Troy, N. Y	July 4, 1871	5, 074–5, 075
Hot-air-furnace base	R. Boyd and J. C. Hart	Rochester, N. Y	Dec. 13, 1870	4, 504
Hot-air register	H. M. Phinney	Cambridge, Mass	Aug. 17, 1869	3, 618
Hot-air register	E. A. Tuttle	New York, N. Y	June 11, 1872	5, 934–5, 935
Hot-air register	E. A. Tuttle	Morristown, N. J	Apr. 29, 1873	6, 630–6, 632
Hot-air register	E. A. Tuttle	Morristown, N. J	May 6, 1873	6, 645–6, 646
House front, Country	C. Graham	Elizabeth, N. J	Apr. 25, 1871	4, 844
Housing-plate	J. L. Haven	Cincinnati, Ohio	May 23, 1871	4, 924
Hub-band	B. S. Pardee	Mount Carmel, Conn	July 31, 1860	1, 293
Hub band, Vehicle-wheel	O. S. Stevens	Belvidere, N. J	Nov. 12, 1872	6, 247
Hub, Carriage-wheel	J. R. Locke	Amesbury, Mass	Nov. 18, 1873	6, 997
Hub sand-band, Carriage	J. Ives	Mount Carmel, Conn	Mar. 9, 1858	903

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Invention.	Inventor.	Residence.	Date.	No.
Hubs, Spoke-socket rim for	S. B. Hindman and W. N. Matthews.	Richmond, Ind	Aug. 29, 1871	5, 235
Hydrant	C. Seltman	Washington, D. C	Apr. 2, 1872	5, 737
I.				
Ice, Machinery for making	T. Scheffler	Paterson, N. J	Mar. 22, 1870	3, 929
Inkstand	F. D. Alling	Rochester, N. Y	Apr. 25, 1871	4, 836
Inkstand	B. Brower	New York, N. Y	Sept. 9, 1873	6, 878–6, 879
Inkstand	A. French	Philadelphia, Pa	Jan. 11, 1870	3, 812
Inkstand	H. Harris	Newark, N. J	Apr. 2, 1867	2, 610
Inkstand	T. S. Hudson	East Cambridge, Mass	Jan. 19, 1869	3, 342
Inkstand	T. S. Hudson	East Cambridge, Mass	Mar. 14, 1871	4, 705
Inkstand	J. W. June	Wheeling, W. Va	Mar. 1, 1870	3, 874
Inkstand	G. W. McGill	New York, N. Y	Nov. 25, 1873	7, 003
Inkstand	D. Merritt	Philadelphia, Pa	Oct. 11, 1870	4, 408
Inkstand	J. Moore	Warren, Mass	Oct. 31, 1865	2, 211
Inkstand	W. F. Muller	New York, N. Y	Mar. 25, 1873	6, 528
Inkstand	M. Phineas	New York, N. Y	Aug. 19, 1862	1, 652
Inkstand	L. L. Tower	Somerville, Mass	Aug. 9, 1870	4, 291
Inkstand	L. L. Tower	Somerville, Mass	Apr. 16, 1872	5, 805
Inkstand	H. Whitney	East Cambridge, Mass	Aug. 9, 1870	4, 292
Inkstand	L. L. Woodruff	Cleveland, Ohio	Mar. 14, 1871	4, 720
Inkstand and pen-rack, Combined	H. Whitney	East Cambridge, Mass	Oct. 19, 1869	3, 723
Inkstand, sponge-cup, and pen-rack	T. S. Hudson	East Cambridge, Mass	Feb. 18, 1868	2, 937
Iron bracket	M. D. Jones	Boston, Mass	Mar. 5, 1872	5, 635
Iron post	M. D. Jones	Boston, Mass	Nov. 21, 1871	5, 378
Iron railing	M. H. Fowler and E. Jacobs	Cincinnati, Ohio	Aug. 21, 1855	720
Iron railing	H. Jenkins	Brooklyn, N. Y	July 21, 1857	917
Iron railing	R. Wood	Philadelphia, Pa	Apr. 7, 1857	880
J.				
Jar-body	S. P. Rowley	Philadelphia, Pa	Nov. 26, 1867	2, 840
Jelly-glass	J. S. and T. B. Atterbury	Pittsburgh, Pa	May 16, 1871	4, 915
Jelly-glass	W. Doyle	Birmingham, Pa	July 26, 1870	4, 260
Jelly-glass	T. R. Hartell	Philadelphia, Pa	July 18, 1871	5, 130
Jelly-glass	W. M. Kirchner	Pittsburgh, Pa	Apr. 4, 1871	4, 754–4, 759
Jelly-glass	W. M. Kirchner	Pittsburgh, Pa	Aug. 15, 1871	5, 206
Jelly-glass and cap	J. H. Smith, A. Kwoczalla, and D. C. Ripley.	Birmingham and Lawrenceville, Pa.	June 27, 1871	5, 055
Jewel or silver-ware box	G. Schœnemann	New York, N. Y	Apr. 30, 1872	5, 833
Jewelry-box	E. C. Moore	Yonkers, N. Y	June 24, 1873	6, 721
Jewelry-box	E. C. Moore	Yonkers, N. Y	July 15, 1873	6, 773
Jewelry-box	G. Schœnemann	New York, N. Y	Mar. 5, 1872	5, 599
Jewelry-case	M. Hendberg	Boston, Mass	Apr. 1, 1873	6, 540
Jockey Club, Ornament of American	C. L. Tiffany	New York, N. Y	Jan. 8, 1867	2, 547
Journal-box	P. P. Child	Saint Louis, Mo	Aug. 16, 1870	4, 293
Jug-cover, Metallic	O. Newton	Pittsburgh, Pa	Oct. 9, 1855	732
K.				
Keg, Metal	C. L. Rehn and H. Everett	Philadelphia, Pa	Oct. 13, 1857	952
Kettle-cover handle	R. B. Wardin	Philadelphia, Pa	Jan. 28, 1873	6, 376
Kettle or stove cover	J. L. Hadden	Philadelphia, Pa	Apr. 28, 1863	1, 750
Key	E. Parker	New Britain, Conn	Dec. 28, 1869	3, 808
Key-hole escutcheon	W. Gorman	New Britain, Conn	Dec. 9, 1873	7, 021
Key-hole escutcheon	J. B. Whitney	New York, N. Y	Jan. 21, 1873	6, 365
Key-ring tag	N. Stafford	Brooklyn, N. Y	Oct. 18, 1870	4, 427
Key-socket	L. Hillebrand	Philadelphia, Pa	Mar. 31, 1868	2, 966
Key-tag	A. Stafford	Brooklyn, N. Y	Dec. 31, 1867	2, 856
Key-tag	A. Stafford	Brooklyn, N. Y	Dec. 29, 1868	3, 303
Kitchen-boiler	W. B. Scaife	Pittsburgh, Pa	July 12, 1870	4, 224
Kite	S. M. Simonds	Philadelphia, Pa	Oct. 14, 1873	6, 961
Knife, fork, and spoon handle	W. Rogers	Hartford, Conn	Apr. 8, 1873	6, 585
Knife-handle	M. Chapman	Greenfield, Mass	Mar. 5, 1872	5, 609
Knife-handle	R. H. Fisher	Beaver Falls, Pa	July 14, 1868	3, 108
Knife-handle	J. D. Frary	New Britain, Conn	Nov. 25, 1873	7, 002
Knife-handle	H. H. Hayden	New York, N. Y	Dec. 18, 1866	2, 530
Knife-handle	S. Oppenheimer	Peru, Ind	May 15, 1866	2, 317
Knife or fork bolster	C. H. Crump	Boston, Mass	May 13, 1873	6, 649
Knife or fork handle	J. Hill	Newark, N. J	Aug. 4, 1868	3, 148
Knife or fork handle	E. W. Sperry	Wolcottville, Conn	Apr. 30, 1867	2, 641–2, 643
Knit fabric, Border for	T. Langham	Philadelphia, Pa	Jan. 16, 1872	5, 474
Knitted fabric	F. Bleckle	Philadelphia, Pa	July 2, 1867	2, 690
Knitted fabric	J. P. Delahenty	Cohoes, N. Y	June 2, 1868	3, 062
Knitted fabric	T. Dolan	Philadelphia, Pa	July 28, 1868	3, 132
Knitted fabric	T. Dolan	Philadelphia, Pa	Apr. 12, 1870	3, 964
Knitted fabric	T. Dolan	Philadelphia, Pa	Sept. 6, 1870	4, 334
Knitted fabric	E. Greasly	Philadelphia, Pa	Oct. 4, 1870	4, 386
Knitted fabric	M. Landenberger	Philadelphia, Pa	July 19, 1870	4, 230
Knitted fabric	M. Landenberger	Philadelphia, Pa	Aug. 2, 1870	4, 270–4, 271
Knitted fabric	T. Langham	Philadelphia, Pa	Sept. 16, 1873	6, 889
Knitted fabric pattern	J. D. McKee	Philadelphia, Pa	Sept. 1, 1868	3, 191–3, 192
Knitted goods	M. Landenberger	Philadelphia, Pa	July 19, 1870	4, 231–4, 232
Knitted nubia fabric	J. Taylor	Philadelphia, Pa	Sept. 26, 1871	5, 283
Knitted trimming	M. Landenberger	Philadelphia, Pa	May 2, 1871	4, 860
Knob and plate	G. E. Bringman	Philadelphia, Pa	Apr. 29, 1873	6, 614
Knob and rose, Door	W. Gorman	New Britain, Conn	Nov. 2, 1869	3, 732
Knob, Bell-pull	J. A. Ruff	Cambridge, Mass	June 7, 1870	4, 109–4, 110
Knob, Bell-pull	J. J. C. Smith	Somerville, Mass	June 7, 1870	4, 129–4, 130
Knob, Cattle-horn	H. J. Frantz	Metamora, Ill	July 25, 1871	5, 136
Knob, Door	S. Eich	East Toledo, Ohio	Oct. 5, 1869	3, 696
Knob, Door	J. Enteneuer	Peoria, Ill	Nov. 26, 1867	2, 838
Knob, Door	W. Gorman	New Britain, Conn	Dec. 9, 1873	7, 020
Knob, Door	J. O. Hollis	Boston, Mass	Oct. 14, 1873	6, 956
Knob, Door	L. Kreuzinger	Cambridge, Mass	June 7, 1870	4, 097–4, 100
Knob, Door	C. Kunze	Cambridge, Mass	June 7, 1870	4, 107

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Knob, Door	J. L. Leger	Somerville, Mass	June 7, 1870	4,108
Knob, Door	J. A. Ruff	Cambridge, Mass	June 7, 1870	4,113–4,118
Knob, Door	J. J. C. Smith	Somerville, Mass	June 7, 1870	4,131–4,138
Knob, Door	G. W. White	New York, N. Y	Apr. 29, 1873	6,623
Knob, Door	J. B. Whitney	New York, N. Y	Jan. 21, 1873	6,363–6,364
Knob-rose and escutcheon	W. Gorman	New Britain, Conn	Dec. 23, 1873	7,068
Knob rose, Door	W. Gorman	New Britain, Conn	Dec. 9, 1873	7,019
Knob rose, Door	L. Kreuzinger	Cambridge, Mass	June 7, 1870	4,101–4,103
Knob rose, Door	J. A. Ruff	Cambridge, Mass	June 7, 1870	4,119
Knob, Shutter	J. A. Ruff	Cambridge, Mass	June 7, 1870	4,124–4,126
Knobs, Glass head for door	A. E. Young	Boston, Mass	June 25, 1872	5,963–5,966
L.				
Label	C. H. Collins	Cincinnati, Ohio	Jan. 30, 1872	5,497
Label	S. Crump	New York, N. Y	June 30, 1868	3,073
Label	S. Crump	New York, N. Y	Dec. 24, 1872	6,326–6,327
Label	J. S. Dunham	Saint Louis, Mo	May 17, 1870	4,030
Label	J. Fahnestock	New York, N. Y	Aug. 6, 1867	2,715
Label	G. F. Gantz	New York, N. Y	Mar. 23, 1869	3,410
Label	G. F. Gantz	New York, N. Y	May 31, 1870	4,075
Label	M. J. Hays	Allegheny City, Pa	Feb. 4, 1868	2,914
Label	T. F. Leslie	Brooklyn, N. Y	Nov. 30, 1869	3,771
Label	T. K. Leslie	New York, N. Y	Apr. 2, 1872	5,745
Label	A. Miles	Winona, Minn	Sept. 25, 1866	2,471
Label	A. M. Thomson and J. E. Taylor	Chicago, Ill	Dec. 30, 1873	7,082
Label	C. H. Wells	Philadelphia, Pa	July 28, 1863	1,805
Label, Ax	J. H. Mann	Lewistown, Pa	Mar. 10, 1868	2,948
Label-border	A. D. Thurber	New York, N. Y	Oct. 22, 1867	2,811
Label, Bottle	C. Gautier	Washington, D. C	July 9, 1867	2,699
Label, Bottle and jar	W. A. Rogers	Decatur, Ala	Aug. 7, 1855	717
Label, Mustard-box	S. Crump, jr	New York, N. Y	Dec. 13, 1864	2,007
Label or trade-mark	I. D. Brewer	Cambridge, Mass	May 28, 1861	1,422
Label, Trade-mark	J. M. Taft	North Providence, R. I	Jan. 28, 1868	2,870
Lady's comb	A. Cook	Newtown, Conn	Aug. 19, 1851	405
Lamp	E. S. Archer and R. F. Warner	Philadelphia, Pa	July 9, 1850	299
Lamp	D. Ashworth	Kenton County, Ky	Feb. 11, 1873	6,385
Lamp	J. S. and T. B. Atterbury	Pittsburgh, Pa	July 26, 1870	4,259
Lamp	W. W. Bacon	Middletown, Conn	Oct. 18, 1843	12
Lamp	R. S. Merrill	Hyde Park, Mass	May 31, 1870	4,089
Lamp	P. F. Slane	East Cambridge, Mass	Mar. 26, 1845	28
Lamp air-jacket	G. B. Halsted	New York, N. Y	Jan. 13, 1863	1,704
Lamp-base, Figure for	D. Mosman	West Meriden, Conn	Jan. 16, 1872	5,475–5,476
Lamp-bowl	J. S. and T. B. Atterbury	Pittsburgh, Pa	Sept. 16, 1873	6,882
Lamp-bracket	P. Cinquini	West Meriden, Conn	May 31, 1870	4,086
Lamp-bracket	F. R. Seidensticker	West Meriden, Conn	Apr. 4, 1871	4,770
Lamp, Campaign	T. Adams	Hudson City, N. J	Sept. 10, 1872	6,119
Lamp, Carriage	M. De Voursney	Newark, N. J	May 21, 1867	2,656
Lamp-chimney	E. Dithridge	Pittsburgh, Pa	Aug. 6, 1867	2,726
Lamp-chimney	E. Foster	Boston, Mass	Feb. 22, 1870	3,857
Lamp-chimney	G. W. Fry	Pittsburgh, Pa	Feb. 16, 1869	3,380
Lamp-chimney	R. Hemingray	Cincinnati, Ohio	Mar. 30, 1869	3,436
Lamp-chimney	T. Houghton	Philadelphia, Pa	Feb. 16, 1869	3,372
Lamp-chimney	J. Letchworth	Philadelphia, Pa	June 13, 1865	2,094
Lamp-chimney	G. W. Moyers	Gordonsville, Va	May 17, 1870	4,038
Lamp-chimney	J. W. Schreiber	New York, N. Y	Dec. 9, 1862	1,682
Lamp-chimney	W. W. Skaats	Brooklyn, N. Y	Feb. 17, 1863	1,720
Lamp-chimney	M. Sweeney	Martinsville, Ohio	June 6, 1871	4,983
Lamp-chimney	M. J. Wellman	New York, N. Y	Apr. 1, 1873	6,555–6,556
Lamp-chimney cleaner	E. T. Annis	Mount Morris, N. Y	Dec. 6, 1870	4,501
Lamp-chimney cleaner	C. Oblinger	Camden, N. J	Apr. 26, 1870	4,101
Lamp-chimney, Mica	C. and C. H. Colt	Jonesborough, Tenn	May 31, 1870	4,087
Lamp, Coach	E. Blakeslee	New Haven, Conn	Nov. 20, 1866	2,506
Lamp, Coach	T. Boudren	Jersey City, N. J	Feb. 5, 1867	2,566
Lamp, Coach	R. P. Cowles	New Haven, Conn	Jan. 1, 1867	2,534
Lamp, Coach	A. P. De Voursney	New York, N. Y	Oct. 30, 1866	2,499–2,500
Lamp, Coach	J. H. Downs	New Haven, Conn	Nov. 27, 1866	2,508
Lamp, Coach	J. H. Downs	New Haven, Conn	Nov. 17, 1868	3,240
Lamp, Coach	C. B. Wood	New York, N. Y	Oct. 10, 1865	2,200
Lamp-flue	T. Moore and J. S. Haldeman	Bloomington, Ill	Oct. 2, 1866	2,479
Lamp-foot	T. B. and J. S. Atterbury	Pittsburgh, Pa	Oct. 7, 1873	6,948
Lamp-foot	N. L. Bradley	West Meriden, Conn	Sept 30, 1873	6,899
Lamp-foot	H. Whitney	East Cambridge, Mass	June 2, 1868	3,168
Lamp-fount	H. Whitney	East Cambridge, Mass	May 10, 1870	4,021
Lamp glass, Coach	J. H. Downs	New Haven, Conn	Nov. 17, 1868	3,239
Lamp-pedestal	N. L. Bradley	West Meriden, Conn	Dec. 16, 1873	7,049
Lamp-pedestal	S. Spoor	Phelps, N. Y	May 11, 1869	3,488
Lamp-post	P. H. Jackson	New York, N. Y	Jan. 21, 1873	6,348
Lamp-post	H. B. Scholes	New York, N. Y	June 1, 1869	3,529
Lamp post, Street	R. H. Smith	Pittsburgh, Pa	June 2, 1868	3,065
Lamp, Pulley hall	F. T. Fracker	Boston, Mass	Sept. 25, 1866	2,432
Lamp-shade	C. Binzer	New York, N. Y	Mar. 17, 1868	2,951
Lamp-shade	C. Binzer	New York, N. Y	Oct. 24, 1871	5,320
Lamp-shade	W. L. Libbey	Boston, Mass	Dec. 9, 1873	7,023
Lamp-shade	W. Maevers	New York, N. Y	Sept. 30, 1873	6,897
Lamp-shade	J. B. Russell	Wheeling, W. Va	May 23, 1871	4,934
Lamp-shade	G. L. Smith and G. W. Kissam	Bridgeport, Conn	May 17, 1870	4,051
Lamp-shade, Glass	C. Dorflinger	Texas, Pa	July 12, 1870	4,217
Lamp-stand	J. S. and T. B. Atterbury	Pittsburgh, Pa	Aug. 23, 1870	4,298
Lamp-stand	D. Mosman	West Meriden, Conn	Mar. 11, 1873	6,490
Lamp-stand	M. H. Mosman	Chicopee, Mass	Apr. 29, 1873	6,616
Lamp-stand	W. H. Perkins	Meriden, Conn	Sept. 9, 1873	6,876
Lamp, Street	T. D. Stetson	New York, N. Y	May 23, 1871	4,936
Lamps, Glass column for coach	T. Boudren	Bridgeport, Conn	May 3, 1870	4,002
Land-mark	J. H. Parrish	Greensborough, Ala	Jan. 3, 1871	4,557
Lantern	J. Alexander	Brooklyn, N. Y	Feb. 4, 1868	2,905
Lantern	I. S. Clough and V. Fountain, jr.	Brooklyn and Castleton, N. Y.	July 19, 1864	1,971
Lantern	G. H. Deuell	Brooklyn, N. Y	June 15, 1869	3,538
Lantern	J. J. Marcy	Meriden, Conn	Mar. 18, 1862	1,549

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Invention.	Inventor.	Residence.	Date.	No.
Lantern	W. D. Titus	Brooklyn, N. Y	Jan. 5, 1855	687
Last	G. D. Melotte	Utica, N. Y	Sept. 24, 1872	6, 153
Latch	W. L. Humason	New Britain, Conn	Feb. 16, 1869	3, 373
Latch and handle, Door	A. Wunder	New Haven, Conn	Mar. 25, 1873	6, 537
Latch cradle-plate, Gate	J. Johnson	Brooklyn, N. Y	Sept. 27, 1870	4, 371
Latch, Cupboard	S. D. Arnold	New Britain, Conn	May 26, 1868	3, 049
Latch, Cupboard	W. Gorman	New Britain, Conn	Sept. 6, 1870	4, 335
Latch, Cupboard	J. Ottner	New Britain, Conn	May 23, 1871	4, 930
Latch, Cupboard	W. E. Sparks	New Haven, Conn	Oct. 31, 1871	5, 345
Latch, Door	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 503
Latch, Door	J. A. Ruff	Cambridge, Mass	June 7, 1870	4, 123
Latch, Door	A. Wunder	New Haven, Conn	Apr. 9, 1872	5, 766
Latch face-plate	E. Parker	New Britain, Conn	Sept. 28, 1869	3, 673
Latch, Gate	J. W. Still	San Francisco, Cal	May 24, 1870	4, 067
Latch-handle	F. W. Brocksieper	New Haven, Conn	Oct. 5, 1869	3, 690–3, 691
Latch, Outside door	W. Gorman	New Britain, Conn	Mar. 1, 1870	3, 873
Latch, Thumb	F. Fogelstrand	New Haven, Conn	Nov. 15, 1870	4, 473
Lath-machine bed	W. F. Burton	Chippewa Falls, Wis	June 17, 1873	6, 703
Lathe-dog	B. L. Lathrop	New Haven, Conn	Oct. 7, 1873	6, 933
Lathe, Foot	J. W. Baldwin	Laconia, N. H	Oct. 12, 1869	3, 708
Lead-block, Black	W. C. James	Plymouth, England	June 27, 1871	5, 045
Leech-jar	W. Neidlinger	New York, N. Y	Feb. 6, 1872	5, 508
Legal-blank	J. B. Shaw	Brooklyn, N. Y	July 2, 1872	5, 972
Lemon-press	I. Townsend	Philadelphia, Pa	May 30, 1865	2, 078
Letter-box	G. F. Topliff	Boston, Mass	Sept. 12, 1871	5, 264
Letter-box cover	C. W. Zaremba	Chicago, Ill	Nov. 9, 1869	3, 749
Letter-box plate	W. Gorman	New Britain, Conn	June 25, 1872	5, 961
Letter-clip	A. Wunder	New Haven, Conn	Oct. 8, 1872	6, 200
Letter, Ornamental	W. H. Clendinen	Baltimore, Md	Apr. 5, 1870	3, 948
Letter, Ornate	W. H. Page	Norwich, Conn	Apr. 19, 1864	1, 933
Letter-press arch	F. Hovey	New York, N. Y	Dec. 12, 1865	2, 231
Level, Spirit	L. L. Davis	Springfield, Mass	Sept. 22, 1868	3, 195
Lift or handle	S. D. Arnold	New Britain, Conn	Jan. 21, 1862	1, 517
Lifting-handle socket	W. M. Smith	West Meriden, Conn	Oct. 17, 1871	5, 319
Liquor-holder	J. A. and F. Dunworth	New York, N. Y	Feb. 7, 1871	4, 625
Lock-case	W. H. Andrews	New Haven, Conn	Nov. 18, 1873	6, 996
Lock-case	L. Widmayer	New Britain, Conn	Dec. 23, 1873	7, 076
Lock case and nosing	S. M. Richardson	New York, N. Y	Nov. 21, 1865	2, 222
Lock case, Satchel, &c	B. Steinmetz	Paris France	Nov. 21, 1871	5, 373
Lock escutcheon-plate	W. Gorman	New Britain, Conn	Sept. 2, 1873	6, 867
Lock face-plate	H. H. Elwell	South Norwalk, Conn	Oct. 25, 1870	4, 430–4, 431
Lock face-plate	W. Gorman	New Britain, Conn	July 13, 1869	3, 578
Lock face-plate	E. Parker	New Britain, Conn	Feb. 23, 1869	3, 387
Lock-front	F. W. Brocksieper	New Haven, Conn	Nov. 15, 1870	4, 467
Lock-front	E. J. Steele	New Haven, Conn	June 24, 1873	6, 723
Lock-front and strike-plate	G. W. White	New York, N. Y	Apr. 30, 1872	5, 836
Lock-key	W. T. Munger	New Britain, Conn	Mar. 22, 1870	3, 918
Lock striker-plate	E. Parker	New Britain, Conn	Dec. 28, 1869	3 809
Locket	G. Hartie and L. S. Jacquin	New York, N. Y	Mar. 23, 1869	3, 411
Locket	A. C. Randall	Providence, R. I	Oct. 19, 1858	1, 057
Long comb	C. E. Moore	New York, N. Y	June 13, 1871	4, 993
Long comb, Child's	L. Picot	Hoboken, N. J	Sept. 25, 1866	2, 457
Long comb, Child's	L. Picot	Hoboken, N. J	Oct. 2, 1866	2, 482–2, 483
Long comb, Child's	L. Picot	Hoboken, N. J	Oct. 9, 1866	2, 493
Long comb, Child's	L. Picot	Hoboken, N. J	Oct. 23, 1866	2, 496
Looms, Guide and friction-brake for shuttle	W. Atkinson	Philadelphia, Pa	Apr. 6, 1869	3, 441
Looms, Top-rail of weaver's	G. Crompton	Worcester, Mass	Apr. 8, 1862	1, 562
Lounge	J. B. Rohrer	Philadelphia, Pa	Mar. 11, 1873	6, 492
Lounge	J. B. Rohrer	Philadelphia, Pa	Mar. 18, 1873	6, 507
Lounge-back	G. Hartzell	Philadelphia, Pa	Apr. 4, 1871	4, 751
Lubricating-cup	F. Limkenheimer and J. Meehan.	Cincinnati, Ohio, and Covington, Ky.	Apr. 1, 1873	6, 545
M.				
Machine frame or housing	F. D. Pastorius	Philadelphia, Pa	Dec. 29, 1868	3, 301
Mallet, Croquet	A. C. Bullock	North Providence, R. I.	June 29, 1869	3, 556
Manger	J. L. Jackson	New York, N. Y	Nov. 21, 1871	5, 369–5, 370
Manger	J. L. Jackson	New York, N. Y	Dec. 5, 1871	5, 398
Manger top-plate	S. S. Bent	Port Chester, N. Y	Aug. 9, 1870	4, 275
Mantel, grate-frame, and summer-piece	J. L. Jackson	New York, N. Y	Feb. 3, 1852	440
Mantel, Iron	C. B. Evans, J. Carlisle, and G. H. Burrows.	Cincinnati, Ohio	May 30, 1871	4, 958–4, 961
Mat	J. Magee	New York, N. Y	July 11, 1871	5, 110–5, 111
Mat, Ornamental	L. Moeslein	New York, N. Y	Nov. 25, 1873	7, 004
Match-box	E. Burke	Philadelphia, Pa	Dec. 20, 1864	2, 016
Match-box	P. J. Clark	West Meriden, Conn	June 28, 1859	1, 111
Match-box	J. Kintz	West Meriden, Conn	Dec. 19, 1871	5, 428
Match-box	R. L. Smith	Wolcottville, Conn	Aug. 25, 1868	3, 171
Match-box	H. Sommer, jr	Newark, N. J	May 14, 1872	5, 856
Match-box	T. Village	Cromwell, Conn	Sept. 17, 1872	6, 147–6, 148
Match-box	E. Waters	Troy, N. Y	Nov. 17, 1857	965
Match-receiver	W. F. Müller	New York, N. Y	Oct. 8, 1872	6, 198
Match-safe	F. W. Brocksieper	New Haven, Conn	May 12, 1868	3, 034
Match-safe	F. W. Brocksieper	New Haven, Conn	Oct. 5, 1869	3, 692
Match-safe	F. W. Brocksieper	New Haven, Conn	Oct. 25, 1870	4, 428
Match-safe	R. Frisbie	Cromwell, Conn	Jan. 15, 1867	2, 553
Match-safe	W. A. Haynes.	Everett, Mass	Nov. 4, 1873	6, 974
Match-safe	G. R. Hubbard	New York, N. Y	Apr. 18, 1871	4, 814
Match-safe	A. D. Judd	New Haven, Conn	Feb. 7, 1871	4, 630
Match-safe	L. Macneir	Philadelphia, Pa	Dec. 5, 1865	2, 224–2, 225
Match-safe	A. P. Seymour	Hecla Works, N. Y	July 19, 1870	4, 238
Match-safe and paper-weight combined	G. W. Brown	Louisville, Ky	Sept. 12, 1871	5, 257
Match-safe, paper-weight, and pin-cushion, Combined.	M. B. Dyott	Philadelphia, Pa	May 27, 1856	796
Match-stand	C H. Latham	Lowell, Mass	Sept. 17, 1872	6, 144
Match-stand	C. H. Leggett	Elizabeth, N. J	Dec. 10, 1872	6. 285
Measure, Garment	E. F. Harmon	Conneaut Ohio	July 25, 1871	5, 138
Medal	S. L. Denney	Christiana, Pa	May 23, 1871	4, 919

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Invention.	Inventor.	Residence.	Date.	No.
Medal	D. K. Hitchcock	Newton, Mass	Jan. 8, 1867	2,544–2,545
Medal	T. R. Timby	Tarrytown, N. Y	Nov. 29, 1870	4,499
Medal	S. Van Campen	New York, N. Y	Aug. 20, 1872	6,071
Medal, Campaign	W. B. Gregory	La Fayette, Ind	July 16, 1872	5,994
Medal of Elias Howe, jr	E. Howe, jr	New York, N. Y	Feb. 1, 1870	3,835
Medallion	G. Erkson	Brooklyn, N. Y	May 12, 1868	3,035
Medallion	O. Frazee	New York, N. Y	Jan. 1, 1867	2,536
Medallion	W. Miller	Philadelphia, Pa	June 29, 1869	3,560
Medallion head of Abraham Lincoln	J. Powell	Cincinnati, Ohio	June 13, 1865	2,097
Medallion head of General Grant	W. M. Marshall	Philadelphia, Pa	May 5, 1868	3,012
Medallion head of Jackson	J. H. Miller	Philadelphia, Pa	Dec. 19, 1871	5,433
Medallion head of Washington	J. H. Miller	Philadelphia, Pa	Aug. 1, 1871	5,150
Medallion of Abraham Lincoln	A. Leconte	New York, N. Y	July 4, 1865	2,108
Medallion of Abraham Lincoln	F. Simmons	Washington, D. C	July 18, 1865	2,139
Medallion of Chief-Justice Chase	F. Simmons	Washington, D. C	July 18, 1865	2,147
Medallion of Daniel Webster	P. Stephenson	Boston, Mass	July 27, 1852	476
Medallion of Franklin Pierce	P. Stephenson	Boston, Mass	Sept. 7, 1852	496
Medallion of Franklin to mark pens and pen-holders.	W. Ball	New York, N. Y	July 21, 1857	918
Medallion of General Grant	F. Simmons	Washington, D. C	July 18, 1865	2,140
Medallion of General Grant	J. Powell	Cincinnati, Ohio	Jan. 30, 1866	2,258
Medallion of General Scott	P. Stephenson	Boston, Mass	Sept. 7, 1852	495
Medallion of Major-General Hancock	F. Simmons	Washington, D. C	July 18, 1865	2,142
Medallion of Major-General Hooker	F. Simmons	Washington, D. C	July 18, 1865	2,145
Medallion of Major-General Parke	F. Simmons	Washington, D. C	July 18, 1865	2,144
Medallion of Major-General Wright	F. Simmons	Washington, D. C	July 18, 1865	2,143
Medallion of President Lincoln	S. Ellis	Mantorville, Minn	Aug. 26, 1862	1,653
Medallion of Theodore Parker	T. A. Carew	Cambridge, Mass	Nov. 13, 1860	1,340
Medallion of Vice-Admiral Farragut	F. Simmons	Washington, D. C	July 18, 1865	2,141
Medallion of Washington Irving	M. L. Livingston	New York, N. Y	Sept. 4, 1860	1,311
Medallion of W. H. Seward	F. Simmons	Washington, D. C	July 18, 1865	2,146
Medallion or cameo	L. Salomons	London, England	Oct. 4, 1870	4,381
Medicine-dropper	H. A. Tweed	New York, N. Y	Dec. 20, 1870	4,533
Melodeon-case	J. R. Lomas	New Haven, Conn	Nov. 5, 1867	2,822
Memorial, Soldier's	J. S. Harrison	Canton, Ohio	Sept. 24, 1867	2,782
Metal can	H. Everett	Philadelphia, Pa	Feb. 8, 1870	3,839
Metal, Impression upon	W. L. Ormsby	New York, N. Y	Feb. 24, 1843	2
Metallic bracket	A. D. Judd	New Haven, Conn	May 31, 1870	4,077
Metallic gate	E. Weeman	Charlestown, Mass	Sept. 16, 1851	413
Military shoulder-knot	D. C. Hall	Boston, Mass	July 2, 1872	5,967
Milk-heater	G. S. Abbe	Hopkinton, Mass	Feb. 7, 1871	4,623
Milk-stool frame	P. A. Palmer	Leroy, N. Y	Aug. 30, 1853	593
Mill stand or frame, Grinding	J. G. Baker	Philadelphia, Pa	June 7, 1870	4,141
Mirror-frame	W. G. Cross	Philadelphia, Pa	Jan. 2, 1872	5,457
Mirror frame	R. Frisbie	Cromwell, Conn	July 23, 1867	2,709
Miter-mold	W. Sage	Indianapolis, Ind	Nov. 30, 1869	3,773
Mittens, Back of	W. S. Tooker	Kingsborough, N. Y	Mar. 14, 1871	4,716
Model of the ancient city of Jerusalem	J. G. Evans	Albany, N. Y	Oct. 22, 1867	2,814
Mold-board	J. T. Wilson	Rochester, N. Y	June 28, 1870	4,197
Molding	W. Baker	New York, N. Y	Feb. 4, 1868	2,906
Molding	J. H. Ferreira	Newark, N. J	Aug. 8, 1871	5,176
Molding	S. Kellett	San Francisco, Cal	Jan. 15, 1867	2,554
Molding	E. Martin	Burlington, Vt	Nov. 5, 1867	2,823
Molding, Picture-frame	S. Garrison	Baltimore, Md	July 1, 1873	6,742
Mole-trap	H. Fry	Cincinnati, Ohio	Sept. 12, 1854	668
Monogram	J. H. Cummings	Boston, Mass	Feb. 19, 1867	2,583
Monument	W. T. Cross	Kewanee, Ill	Jan. 28, 1873	6,368
Monument	J. B. Earnshaw	Cincinnati, Ohio	Jan. 21, 1862	1,518
Monument	J. M. Martin	Cleveland, Ohio	July 2, 1872	5,971
Monument	J. W. McLaughlin	Cincinnati, Ohio	June 13, 1865	2,095
Monument	M. V. Mitchell	Zanesville, Ohio	Sept. 9, 1873	6,881
Monument	J. Sharkey	Brooklyn, N. Y	May 27, 1873	6,693
Monument, Abraham Lincoln	W. H. Machem	Toledo, Ohio	Nov. 7, 1865	2,218
Monument, Cast-iron	I. H. Wilson	Chesterfield, Ill	Sept. 18, 1855	731
Monument, Cemetery	R. Miller	Lincoln, Ill	Nov. 27, 1866	2,511
Monument, Military	J. S. Armstrong	Prairie du Chien, Wis	Oct. 30, 1866	2,497
Monument, Military	J. S. Armstrong	Prairie du Chien, Wis	Mar. 12, 1867	2,595
Monument, Sepulchral	R. Barry	Boston, Mass	May 24, 1859	1,104
Monument, Soldiers'	D. Morgan	Chillicothe, Ohio	June 18, 1867	2,677
Monument, Soldiers'	L. A. Tifft	Springfield, Mass	Jan. 10, 1871	4,565
Mortising-machine base	D. L. Gibbs	Worcester, Mass	Sept. 1, 1868	3,189
Mowing-machine frame	W. G. Kenyon	Wakefield, R. I	July 12, 1870	4,220
Mucilage-bottle	H. S. Adams and B. Fay	Cleveland, Ohio	Sept. 3, 1872	6,116
Mucilage-bottle	H. S. Adams and B. Fay	Cleveland, Ohio	Oct. 1, 1872	6,158
Mucilage-bottle	L. Dovell	Newark, N. J	Aug. 29, 1871	5,234
Muff	F. Booss	New York, N. Y	Feb. 4, 1868	2,907
Muff	W. Ettinger	New York, N. Y	July 11, 1871	5,104
Muff	M. Gross and B. B. Zippert	New York, N. Y	Aug. 26, 1873	6,826
Muff	S. Herzig	New York, N. Y	Mar. 14, 1871	4,702
Muff	J. H. Kappelhoff	New York, N. Y	Oct. 5, 1869	3,697
Muff	J. H. Kappelhoff and S. Rauh	New York, N. Y	July 19, 1870	4,254
Muff	R. M. Seldis	New York, N. Y	Nov. 26, 1867	2,841
Muff	R. M. Seldis	New York, N. Y	Mar. 29, 1870	3,946
Muff	J. Simonet	Flatbush, N. Y	May 10, 1870	4,019
Muff and collar box	R. M. Seldis	New York, N. Y	May 2, 1871	4,863
Muff and collar box	R. M. Seldis	New York, N. Y	July 4, 1871	5,087
Muff, Skating	R. M. Seldis	New York, N. Y	June 18, 1872	5,943
Mug, Beer	J. E. Miller	Pittsburgh, Pa	Mar. 18, 1873	6,506
Mug, Beer	J. Oesterling	Wheeling, W. Va	Feb. 4, 1873	6,383
Music-rack	C. Zeuner	Cincinnati, Ohio	May 11, 1869	3,490
Music-stand	W. P. Bigelow	Natick, Mass	Apr. 1, 1873	6,538
Music-stand	M. H. Elmore	Buffalo, N. Y	June 13, 1865	2,088
Muzzle, Dog	J. and H. Braentigam	Chicago, Ill	May 24, 1870	4,055
Muzzle, Dog	F. J. Meyers	Covington, Ky	June 21, 1870	4,168
N.				
Nail head, Picture	H. L. Judd	Brooklyn, N. Y	Sept. 5, 1871	5,259
Nail or tack	T. R. Bearse	Taunton, Mass	Aug. 17, 1869	3,613

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Name-plate	S. S. Bent	Port Chester, N. Y	Oct. 29, 1867	2,817
Name-plate	S. S. Bent	Port Chester, N. Y	June 1, 1869	3,508
Napkin-ring	F. A. Clamer	Philadelphia, Pa	June 11, 1867	2,671
Napkin-ring	C. W. Goodhue	Lowell, Mass	June 6, 1871	4,977
Needle-case	J. Semelé	New York, N. Y	May 24, 1870	4,064-4,065
Net-fabric	R. H. Jefford	New York, N. Y	July 19, 1870	4,228
Net-fabric	R. H. Jefford	New York, N. Y	Sept. 6, 1870	4,337
Net-fabric	A. G. Jennings	New York, N. Y	July 19, 1870	4,229
Net-fabric	J. Slack	Brooklyn, N. Y	Sept. 19, 1871	5,270
Net, Hair	T. Officer	Brooklyn, N. Y	Sept. 3, 1872	6,118
Net, Hair	G. Osborne	Brooklyn, N. Y	Sept. 24, 1872	6,154
Netted fabric	W. Dexter	Brooklyn, N. Y	July 16, 1872	5,981
Netting, Mosquito	T. Carmichal	Newark, N. J	Apr. 25, 1871	4,840
Newel-post	R. Lowry	Nashville, Tenn	Dec. 3, 1872	6,281
Nubia	H. Boot	Philadelphia, Pa	July 22, 1873	6,776-6,778
Nubia	H. Boot	Philadelphia, Pa	Aug. 5, 1873	6,792
Nubia	J. Phipps	Philadelphia, Pa	June 3, 1873	6,696
Nubia	J. Phipps	Philadelphia, Pa	June 17, 1873	6,710
Nut-cracker	E. F. Blake	New Haven, Conn	Mar. 15, 1864	1,920
Nut-cracker	S. J. Smith	New York, N. Y	June 12, 1860	1,249
O.				
Oil-cabinet	M. H. Wiley	Boston, Mass	Sept. 19, 1871	5,271
Oil-can	H. Everett	Philadelphia, Pa	Apr. 5, 1864	1,927
Oil-can	C. J. Hauck	Williamsburgh, N. Y	Nov. 13, 1866	2,504
Oil-can	C. J. Hauck	Brooklyn, N. Y	Jan. 28, 1868	2,862
Oil-can	C. Pratt	New York, N. Y	July 23, 1867	2,712
Oil-can	S. R. Wilmot	Bridgeport, Conn	Feb. 26, 1867	2,594
Oil-can top	T. W. Burger	New York, N. Y	July 6, 1869	3,569
Oil-cloth	J. Barrett	New York, N. Y	Aug. 19, 1873	6,810
Oil-cloth	J. Hutchison	Newark, N. J	Mar. 5, 1872	5,569-5,673
Oil-cloth	J. Hutchison	Newark, N. J	Sept. 10, 1872	6,120-6,126
Oil-cloth	J. Hutchison	Newark, N. J	Jan. 21, 1873	6,343-6,347
Oil-cloth	J. Hutchison	Newark, N. J	Aug. 19, 1873	6,812-6,818
Oil-cloth	H. Kagy	Philadelphia, Pa	Aug. 8, 1871	5,179-5,182
Oil-cloth	H. Kagy	Philadelphia, Pa	Aug. 13, 1872	6,022-6,023
Oil-cloth	H. Kagy	Philadelphia, Pa	Sept. 10, 1872	6,127-6,128
Oil-cloth	H. Kagy	Philadelphia, Pa	Nov. 12, 1872	6,245
Oil-cloth	H. Kagy	Philadelphia, Pa	Jan. 21, 1873	6,349-6,350
Oil-cloth	H. Kagy	Philadelphia, Pa	Nov. 11, 1873	6,991-6,994
Oil-cloth	C. T. Meyer	Newark, N. J	Sept. 14, 1869	3,660-3,661
Oil-cloth	C. T. Meyer	Elizabeth, N. J	Mar. 5, 1872	5,575
Oil-cloth	C. T. and V. E. Meyer	Elizabeth, N. J	Mar. 5, 1872	5,576
Oil-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	Oct. 22, 1872	6,211-6,213
Oil-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	Nov. 12, 1872	6,246
Oil-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	Feb. 18, 1873	6,431-6,436
Oil-cloth	C. T. and V. E. Meyer	Lyon's Farms, N. J	July 29, 1873	6,786-6,789
Oil-cloth	C. T. and V. E. Meyer	Bergen, N. J	Sept. 2, 1873	6,871
Oil-cloth	C. T. and V. E. Meyer	Bergen, N. J	Sept. 16, 1873	6,885
Oil-cloth	C. T. and V. E. Meyer	Bergen, N. J	Nov. 18, 1873	6,998-7,001
Oil-cloth	J. Meyer	Lansingburgh, N. Y	Sept. 10, 1872	6,129-6,133
Oil-cloth	A. E. Powers	Lansingburgh, N. Y	Sept. 12, 1865	2,167
Oil-cloth	W. H. Townsend	New York, N. Y	Nov. 5, 1867	2,830
Oil-cloth	J. T. Webster	Yonkers, N. Y	Aug. 29, 1871	5,243
Oil-cloth and carpet, Floor	C. T. and V. E. Meyer	Bergen, N. J	Dec. 9, 1873	7,035-7,037
Oil-cloth and carpet, Floor	J. Meyer	New York, N. Y	Dec. 20, 1859	1,174
Oil-cloth and carpet pattern, Floor	C. T. Meyer	Bergen, N. J	Aug. 6, 1867	2,730-2,731
Oil-cloth, Floor	J. Bogle	West Newton, Mass	July 5, 1859	1,116-1,117
Oil-cloth, Floor	J. Bogle	West Newton, Mass	Aug. 23, 1859	1,134-1,135
Oil-cloth, Floor	J. Bogle	West Newton, Mass	Jan. 31, 1860	1,197-1,198
Oil-cloth, Floor	H. Christie	Morrisania, N. Y	Feb. 12, 1867	2,575
Oil-cloth, Floor	H. Christie	Morrisania, N. Y	May 11, 1869	3,479-3,480
Oil-cloth, Floor	H. Christie	Morrisania, N. Y	Aug. 31, 1869	3,639-3,642
Oil cloth, Floor	G. Green	Wappinger's Falls, N. Y	Mar. 17, 1863	1,737
Oil-cloth, Floor	R. Hoskin	Brooklyn, N. Y	Dec. 4, 1866	2,515
Oil-cloth, Floor	J. Hutchinson	Troy, N. Y	May 13, 1851	371
Oil-cloth, Floor	J. Hutchinson	Troy, N. Y	Sept. 2, 1851	411
Oil-cloth, Floor	J. Hutchison	Lansingburgh, N. Y	Mar. 10, 1857	875
Oil-cloth, Floor	C. T. Meyer	Bergen, N. J	Mar. 27, 1866	2,285
Oil-cloth, Floor	C. T. Meyer	Bergen, N. J	Jan. 8, 1867	2,546
Oil-cloth, Floor	C. T. Meyer	Bergen, N. J	Feb. 12, 1867	2,579-2,581
Oil-cloth, Floor	C. T. Meyer	Bergen, N. J	Aug. 25, 1868	3,161-3,163
Oil-cloth, Floor	C. T. and V. E. Meyer	Lyon's Farms, N. J	Mar. 18, 1873	6,494-6,505
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	Lyon's Farms, N. J	Mar. 25, 1873	6,526-6,527
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	Lyon's Farms, N. J	Apr. 1, 1873	6,546-6,547
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	Bergen, N. J	Oct. 7, 1873	6,951
Oil-cloth, Floor	C. T. and V. E. Meyer	Bergen, N. J	Nov. 4, 1873	6,980-6,981
Oil cloth, Floor	J. Meyer	Lansingburgh, N. Y	Oct. 22, 1872	6,214-6,215
Oil-cloth, Floor	V. E. Meyer	Elizabeth, N. J	June 11, 1872	5,932
Oil-cloth, Floor	J. Paterson	Elizabethtown, N. J	Jan. 13, 1852	438
Oil-cloth, Floor	J. Paterson	Elizabeth, N. J	Mar. 17, 1863	1,739
Oil-cloth, Floor	J. Paterson	Elizabeth, N. J	Dec. 26, 1865	2,236
Oil-cloth, Floor	A. E. Powers	Lansingburgh, N. Y	Aug. 16, 1864	1,985
Oil-cloth, Floor	A. E. Powers	Lansingburgh, N. Y	Oct. 10, 1865	2,193
Oil-cloth, Floor	A. E. Powers	Lansingburgh, N. Y	May 4, 1869	3,472
Oil-cloth, Floor	C. W. Strout	Hallowell, Me	Nov. 16, 1869	3,753
Oil-cloth, Floor	J. B. Virolet	New York, N. Y	Aug. 30, 1859	1,138
Oil-cloth, Floor	J. B. Virolet	New York, N. Y	Apr. 24, 1860	1,236
Oil-cloth, Floor	J. T. Webster	New York, N. Y	Oct. 18, 1864	1,993
Oil-cloth, Floor	J. T. Webster	New York, N. Y	May 9, 1865	2,065
Oil-cloth, Floor	J. T. Webster	New York, N. Y	July 16, 1867	2,705
Oil-cloth, Floor	J. T. Webster	New York, N. Y	May 4, 1869	3,477
Oil-cloth, Floor	J. T. Webster	New York, N. Y	Sept. 28, 1869	3,682-3,684
Oil-cloth, Floor	J. T. Webster	Yonkers, N. Y	June 27, 1871	5,058-5,059
Oil-cloth, Floor	J. T. Webster and A. E. Powers	New York and Lansingburgh, N. Y.	Sept. 6, 1870	4,344
Oil-cloth or carpet pattern, Floor	R. Hoskin	Brooklyn, N. Y	Apr. 30, 1867	2,633-2,634

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Invention.	Inventor.	Residence.	Date.	No.
Oil-cloth or carpet pattern, Floor	C. T. Meyer	Bergen, N. J	Apr. 30, 1867	2, 635–2, 640
Oil-cloth or carpet pattern, Floor	C. T. Meyer	Bergen, N. J	May 14, 1867	2, 653
Oil-cloth or carpet pattern, Floor	C. T. Meyer	Newark, N. J	Mar. 1, 1870	3, 876
Oil-cloth pattern	L. F. Dandre	Paris, France	Oct. 11, 1870	4, 399
Oil-cloth pattern	J. Hutchison	Lansingburgh, N. Y	June 25, 1861	1, 435
Oil-cloth pattern	J. Hutchison	Newark, N. J	Oct. 11, 1870	4, 403
Oil-cloth pattern	J. Hutchison	Newark, N. J	Feb. 20, 1872	5, 546
Oil-cloth pattern	H. Kagy	Philadelphia, Pa	Oct. 11, 1870	4, 404–4, 406
Oil-cloth pattern	H. Kagy	Philadelphia, Pa	Dec. 27, 1870	4, 538–4, 539
Oil-cloth pattern	H. Kagy	Philadelphia, Pa	Feb. 28, 1871	4, 691
Oil-cloth pattern	H. Kagy	Philadelphia, Pa	Feb. 13, 1872	5, 511–5, 513
Oil-cloth pattern	H. Kagy	Philadelphia, Pa	Apr. 9, 1872	5, 760–5, 761
Oil-cloth pattern	C. T. Meyer	Lyon's Farms, N. J	July 11, 1871	5, 112–5, 116
Oil-cloth pattern	C. T. Meyer	Elizabeth, N. J	Feb. 13, 1872	5, 515–5, 517
Oil-cloth pattern	C. T. and V. E. Meyer	Lyon's Farms, N. J	May 21, 1872	5, 864
Oil-cloth pattern	C. T. and V. E. Meyer	Lyon's Farms, N. J	Aug. 20, 1872	6, 060–6, 063
Oil-cloth pattern	J. Meyer	Lansingburgh, N. Y	Mar. 26, 1872	5, 724
Oil-cloth pattern	J. H. Park and B. Hart	Burlington, N. J., and Philadelphia, Pa.	Mar. 26, 1872	5, 725–5, 727
Oil-cloth pattern	J. Paterson	Elizabeth City, N. J	Dec. 17, 1867	2, 850
Oil-cloth pattern	J. Paterson	Elizabeth, N. J	Feb. 7, 1871	4, 639
Oil-cloth pattern	J. Paterson	Elizabeth, N. J	Feb. 21, 1871	4, 674
Oil-cloth pattern	J. Paterson	Elizabeth, N. J	Nov. 28, 1871	5, 393
Oil-cloth pattern	J. Robley	Brooklyn, N. Y	Jan. 26, 1864	1, 890
Oil-cloth pattern	W. H. Townsend	New York, N. Y	Apr. 12, 1870	3, 970
Oil-cloth pattern	W. H. Townsend	New York, N. Y	Apr. 26, 1870	3, 998
Oil-cloth pattern	J. T. Webster	New York, N. Y	Dec. 27, 1870	4, 544–4, 545
Oil-cloth pattern, Floor	H. Christie	New York, N. Y	Nov. 3, 1868	3, 215
Oil-cloth pattern, Floor	H. Christie	Morrisania, N. Y	Nov. 3, 1868	3, 216
Oil-cloth pattern, Floor	H. Christie	Morrisania, N. Y	Feb. 16, 1869	3, 378–3, 379
Oil-cloth pattern, Floor	H. Christie	Morrisania, N. Y	June 1, 1869	3, 513–3, 514
Oil-cloth pattern, Floor	R. Hoskin	Brooklyn, N. Y	July 14, 1868	3, 101
Oil-cloth pattern, Floor	R. Hoskin	Brooklyn, N. Y	July 13, 1869	3, 580
Oil-cloth pattern, Floor	J. Hutchison	Newark, N. J	Jan. 19, 1869	3, 343
Oil-cloth pattern, Floor	J. Hutchison	Newark, N. J	Apr. 26, 1870	3, 990–3, 991
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	Sept. 25, 1866	2, 441–2, 444
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	Oct. 23, 1866	2, 495
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	Feb. 4, 1868	2, 916–2, 918
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	May 12, 1868	3, 036–3, 039
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	June 30, 1868	3, 088, 3, 093
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	Jan. 19, 1869	3, 344–3, 345
Oil-cloth pattern, Floor	C. T. Meyer	Bergen, N. J	Mar. 23, 1869	3, 414–3, 415
Oil-cloth pattern, Floor	C. T. Meyer	Newark, N. J	Oct. 11, 1870	4, 409–4, 410
Oil-cloth pattern, Floor	C. T. Meyer	Newark, N. J	Nov. 22, 1870	4, 484–4, 486
Oil-cloth pattern, Floor	C. T. Meyer	Newark, N. J	Feb. 14, 1871	4, 655–4, 661
Oil-cloth pattern, Floor	C. T. Meyer	Lyon's Farms, N. J	Oct. 10, 1871	5, 309–5, 311
Oil-cloth pattern, Floor	C. T. Meyer	Elizabeth, N. J	Jan. 23, 1872	5, 491–5, 492
Oil-cloth pattern, Floor	C. T. and V. E. Meyer	Lyon's Farms, N. J	May 21, 1872	5, 865–5, 872
Oil-cloth pattern, Floor	C. T. and V. E. Meyer	Lyon's Farms, N. J	June 4, 1872	5, 906–5, 907
Oil-cloth pattern, Floor	J. Meyer	Kearney, N. J	Oct. 25, 1870	4, 444
Oil-cloth pattern, Floor	J. Meyer	Newark, N. J	Aug. 1, 1871	5, 149
Oil-cloth pattern, Floor	J. Meyer	Lansingburgh, N. Y	Apr. 2, 1872	5, 746
Oil-cloth pattern, Floor	J. Meyer	Lansingburgh, N. Y	Apr. 30, 1872	5, 829
Oil-cloth pattern, Floor	J. Meyer	Lansingburgh, N. Y	June 25, 1872	5, 958
Oil-cloth pattern, Floor	V. E. Meyer	Lansingburgh, N. Y	May 23, 1871	4, 927
Oil-cloth pattern, Floor	V. E. Meyer	Lansingburgh, N. Y	May 30, 1871	4, 968
Oil-cloth pattern, Floor	V. E. Meyer	Elizabeth, N. J	Apr. 2, 1872	5, 747
Oil-cloth pattern, Floor	J. Paterson	Elizabeth, N. J	Oct. 31, 1865	2, 214
Oil-cloth pattern, Floor	J. Paterson	Elizabeth, N. J	Feb. 16, 1869	3, 382
Oil-cloth pattern, Floor	J. Paterson	Elizabeth, N. J	Dec. 7, 1869	3, 782
Oil-cloth pattern, Floor	J. Paterson	Elizabeth, N. J	Oct. 11, 1870	4, 415–4, 416
Oil-cloth pattern, Floor	C. L. Pierpont	Salem, N. J	May 23, 1871	4, 931–4, 932
Oil-cloth pattern, Floor	C. L. Pierpont	Salem, N. J	Aug. 1, 1871	4, 152–4, 154
Oil-cloth pattern, Floor	A. E. Powers	Lansingburgh, N. Y	Feb. 18, 1868	2, 938
Oil-cloth pattern, Floor	J. Robley	Brooklyn, N. Y	Oct. 22, 1867	2, 806
Oil-cloth pattern, Floor	J. Robley	Brooklyn, N. Y	Mar. 17, 1868	2, 955–2, 957
Oil-cloth pattern, Floor	J. Robley	Brooklyn, N. Y	June 1, 1869	3, 524
Oil-cloth pattern, Floor	J. Robley	Brooklyn, N. Y	Mar. 14, 1871	4, 711–4, 713
Oil-cloth pattern, Floor	J. Robley	Brooklyn, N. Y	Jan. 9, 1872	5, 467
Oil-cloth pattern, Floor	J. T. Webster	New York, N. Y	Sept. 25, 1866	2, 469
Oil-cloth pattern, Floor	J. T. Webster	New York, N. Y	Jan. 14, 1868	2, 859
Oil-cloth pattern, Floor	J. T. Webster	New York, N. Y	Mar. 2, 1869	3, 403
Oil-cloth pattern, Floor	J. T. Webster	New York, N. Y	July 13, 1869	3, 584
Oil-cloth, Stair	E. Dwight	New York, N. Y	Nov. 3, 1868	3, 217
Oil-cup, Journal-box	I. Dreyfus	New York, N. Y	Mar. 30, 1869	3, 434
Organ	E. Hamlin	Winchester, Mass	June 21, 1870	4, 161
Organ-case	E. C. Bacon	Buffalo, N. Y	Mar. 14, 1871	4, 700
Organ-case	L. K. Fuller	Brattleborough, Vt	Sept. 26, 1871	5, 289–5, 290
Organ-case	L. K. Fuller	Brattleborough, Vt	May 27, 1873	6, 677
Organ-case	S. Hayward	Boston, Mass	Mar. 18, 1873	6, 509–6, 511
Organ-case	S. Hayward	Boston, Mass	May 27, 1873	6, 679
Organ-case	J. R. Lomas	New Haven, Conn	Oct. 22, 1867	2, 807
Organ-case	J. R. Lomas	New Haven, Conn	Oct. 17, 1871	5, 317
Organ case, Cabinet	F. Doerschuck	New Haven, Conn	Dec. 15, 1868	3, 291
Organ-case end	L. K. Fuller	Brattleborough, Vt	May 27, 1873	6, 678
Organ-case end	S. Hayward	Boston, Mass	May 27, 1873	6, 686
Organ case, Parlor	L. K. Fuller	Brattleborough, Vt	Oct. 3, 1871	5, 299
Organ case, Parlor	G. Woods	Cambridge, Mass	Dec. 27, 1870	4, 546
Organ case, Reed	J. R. Lomas	New Haven, Conn	Apr. 22, 1873	6, 603
Organ case, Reed	J. Schatz	New Haven, Conn	Mar. 10, 1868	2, 949
Organ case, Reed	J. L. Treat	New Haven, Conn	Oct. 10, 1865	2, 197
Organ or melodeon case	G. Cook	New Haven, Conn	Jan. 18, 1870	3, 818
Organ pipe, Reed	C. E. Snell	Chatham, Canada	Aug. 15, 1871	5, 207
Ornament, Masonic	D. Keefer	Attica, Ind	Dec. 14, 1869	3, 787
Ornamental bracket	R. Wood and W. Hamilton	Philadelphia, Pa	June 20, 1848	187
Ornamental star	J. Dundas	New York, N. Y	Aug. 6, 1867	2, 728
Ornamentation	G. R. Fagan	Philadelphia, Pa	Mar. 4, 1873	6, 488
Ottoman	C. J. Conradt	Baltimore, Md	Aug. 27, 1872	6, 090

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Ottoman	J. D. Ladd	New York, N. Y	Feb. 18, 1873	6, 455
Ottoman	J. D. Ladd	New York, N. Y	Feb. 25, 1873	6, 457
Ottoman	W. H. Reed	New York, N. Y	Mar. 23, 1869	3, 423
Oven	J. H. Keyser	New York, N. Y	Apr. 18, 1871	4, 817
Oven-door	J. F. Allen and J. Stewart	Philadelphia, Pa	May 23, 1854	655
Oven-frame	C. W. Warnich and F. Leibrandt	Philadelphia, Pa	May 8, 1847	120
Oven, Gas	E. J. Delany	Philadelphia, Pa	Apr. 15, 1856	782
Oven or summer-range door, Gas	S. W. Gibbs	Albany, N. Y	May 9, 1854	647
Oven, Parlor	R. Wheeler and S. A. Bailey	Utica, N. Y	July 8, 1856	815
Oven-shovel	T. Lyons	Hartford, Conn	May 30, 1871	4, 953
Overshoe	G. Watkinson	New Haven, Conn	Nov. 4, 1873	6, 986
Overshoe, Rubber	A. O. Bourn	Providence, R. I	July 4, 1871	5, 065–5, 067
Overshoe, Rubber	I. F. Williams	Bristol, R. I	July 4, 1871	5, 094–5, 095
Oxygen-generator	A. H. Carpenter	Newark, N. J	May 24, 1870	4, 956
P.				
Package	D. Dick	New York, N. Y	May 9, 1871	4, 875
Package	G. Pustkuchen	New York, N. Y	May 17, 1870	4, 042
Pail, Ash	J. Merry	New York, N. Y	Aug. 23, 1870	4, 304
Pail, Chamber	J. S. Jennings	Brooklyn, N. Y	Mar. 23, 1869	3, 413
Pail, Lard	J. J. Bockee, jr	New York, N. Y	Apr. 25, 1871	4, 837
Pail or can, Metal	G. C. Napheys	Philadelphia, Pa	Mar. 12, 1872	5, 648
Pail, Tin	G. D. Napheys	Philadelphia, Pa	Apr. 23, 1872	5, 812
Paint-can	C. F. Brand	Philadelphia, Pa	Nov. 8, 1864	1, 995
Paint-can	W. L. Gilroy	Philadelphia, Pa	Apr. 24, 1860	1, 237–1, 240
Paper bag	S. W. Valentine	Bristol, Conn	Aug. 20, 1867	2, 767
Paper bag	S. W. Valentine	Bristol, Conn	May 23, 1871	4, 937
Paper-bag-machine frame	C. F. Annan	Boston, Mass	Dec. 13, 1870	4, 503
Paper box	J. C. Bauer	New York, N. Y	June 28, 1870	4, 174
Paper box	E. C. Moore	Yonkers, N. Y	Nov. 4, 1873	6, 982
Paper box	G. K. Snow	Watertown, Mass	Mar. 22, 1870	3, 919
Paper-box cover	J. W. Carter	South Orange, N. J	July 25, 1871	5, 134
Paper-clip	T. Orton	Chicago, Ill	Aug. 26, 1873	6, 830
Paper-clip	J. Ottner	New Britain, Conn	Mar. 19, 1872	5, 694
Paper collar	W. S. Bell, jr	Boston, Mass	Jan. 30, 1866	2, 256
Paper collar	B. G. Briggs	Providence, R. I	July 3, 1866	2, 342–2, 344
Paper collar	B. G. Briggs	Providence, R. I	July 17, 1866	2, 358
Paper collar	C. A. Brown	Troy, N. Y	June 29, 1869	3, 557
Paper collar	J. A. Charnley	Providence, R. I	Oct. 30, 1866	2, 498
Paper collar	C. D. Elliot	Cambridge, Mass	July 3, 1866	2, 346
Paper collar	F. Field	Troy, N. Y	June 29, 1869	3, 559
Paper collar	W. F. Moseley	Brooklyn, N. Y	Dec. 17, 1867	2, 849
Paper collar	W. F. Moseley	Brooklyn, N. Y	Dec. 14, 1869	3, 788
Paper collar	A. Peck	New York, N. Y	Oct. 17, 1865	2, 205
Paper collar and cuff	W. Boggs	New York, N. Y	July 18, 1865	2, 135
Paper-collar box	F. Field	Troy, N. Y	Mar. 1, 1870	3, 869
Paper-collar box	W. H. Richardson	West Roxbury, Mass	July 12, 1870	4, 223
Paper collar, Lady's tucked	J. M. Flagg	Providence, R. I	June 12, 1866	2, 334
Paper collars and cuffs, Ornamenting	B. W. Burnet	Madison, N. J	Oct. 24, 1865	2, 209
Paper collars, Ornamenting edges of	F. Field	Troy, N. Y	May 11, 1869	3, 495
Paper cuff	B. G. Briggs	Providence, R. I	July 17, 1866	2, 356–2, 357
Paper cuff and collar	W. S. Bell, jr	Boston, Mass	Apr. 3, 1866	2, 288
Paper-cuff box	G. Faul	Boston, Mass	Nov. 15, 1870	4, 471
Paper, &c., Embossed	E. F. Price and E. A. Murphy	New Haven, Conn	July 28, 1868	3, 142
Paper-hanging	C. Husband	Taunton, Mass	Oct. 16, 1866	2, 494
Paper, Shelf	S. Simon	New York, N. Y	July 8, 1873	6, 766–6, 768
Paper-weight	G. B. Garrett	Philadelphia, Pa	Aug. 15, 1871	5, 202
Park-seat	E. O. Schwagerl	Saint Louis, Mo	Feb. 21, 1871	4, 675
Pedestal and column	T. Law	New York, N. Y	Nov. 9, 1852	521
Pedestal and column	W. L. and W. H. Lewis	New York, N. Y	Mar. 25, 1851	360
Pedestal, Balance	T. Fairbanks	Saint Johnsbury, Vt	Aug. 30, 1848	197
Pedestal, Iron	M. D. Jones	Boston, Mass	Feb. 13, 1872	5, 539–5, 540
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Pen, Medallion	A. Granger	New York, N. Y	Apr. 21, 1863	1, 747
Pen, Metallic	A. Granger	New York, N. Y	Apr. 15, 1856	780
Pen or pencil case	E. S. Johnson	New York, N. Y	Nov. 21, 1871	5, 377
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Pencil and receptacle, Combined	H. J. Wickham	Manchester, Conn	Jan. 10, 1871	4, 566
Pencil-case	W. S. Hicks	New York, N. Y	May 14, 1872	5, 851
Pencil-case	E. S. Johnson	Jersey City, N. J	Oct. 29, 1872	6, 229
Pencil-case	G. W. Simons	Philadelphia, Pa	Nov. 18, 1844	24
Pencil-case	E. Todd	Brooklyn, N. Y	Dec. 2, 1873	7, 006
Pencil case, Ever-pointed	J. H. Knapp	New York, N. Y	Jan. 6, 1857	861
Pencil, Lead	J. Reckendorfer and T. H. Müller.	New York, N. Y	Feb. 7, 1871	4, 642
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Pencil sharpener, Slate	C. Kennedy	Philadelphia, Pa	Aug. 8, 1871	5, 183
Pencils, Stamping on lead	J. Rosenthal	New York, N. Y	Apr. 3, 1860	1, 230
Pendant, Hall	S. B. H. Vance	New York, N. Y	Jan. 1, 1856	753
Pendant-light	F. T. Fracker	Boston, Mass	July 24, 1866	2, 369
Pendant or chandelier, Hall	S. B. H. Vance	New York, N. Y	Jan. 1, 1856	754
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Perambulator-body	C. Lyne	Philadelphia, Pa	Aug. 11, 1868	3, 159
Phaeton-body	G. Delker and C. L. Blondin	Henderson, Ky	July 8, 1873	6, 770
Photograph	J. G. Stewart	Carlinville, Ill	May 14, 1872	5, 857
Photograph-preserver	J. Dean and S. P. Emerson	Worcester, Mass	Feb. 4, 1862	1, 521
Photographic-album leaf	M. Carty	New York, N. Y	Oct. 18, 1864	1, 992
Photographic card	A. E. Alden	Providence, R. I	June 13, 1865	2, 083
Photographic-card frame	M. J. Rice	Boston, Mass	June 27, 1871	5, 050
Photographic head-rest	J. J. Hays	Green Point, N. Y	Oct. 8, 1872	6, 197
Photographic-portrait holder	H. Bach	Paterson, N. J	July 6, 1869	3, 567
Piano	O. Bull	New York N. Y	Nov. 15, 1870	4, 468
Piano-case	G. H. Davis	Boston, Mass	Feb. 22, 1870	3, 856
Piano-forte leg	A. Bosworth	Westfield, Mass	May 27, 1856	798
Piano-forte leg	I. Engel	Boston, Mass	May 13, 1856	78c

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Invention.	Inventor.	Residence.	Date.	No.
Piano-forte leg, Cast-iron	F. Starr	Rochester, N. Y	Feb. 28, 1854	633
Piano-fortes, Cast-iron pedal-lyre for	F. Starr	Rochester, N. Y	Feb. 28, 1854	634
Piano-front ornamentation	W. Leigh	Bridgeport, Conn	May 9, 1871	4, 888
Piano-stool	H. T. Merrill and J. H. Breman	Chicago, Ill	May 9, 1865	2, 059
Piano-stool	H. M. Ritter	Cincinnati, Ohio	May 21, 1867	2, 658
Piano-stool	C. Zenner	Cincinnati, Ohio	Feb. 13, 1866	2, 264
Pianos, Iron frame for upright	J. Whitney	Boston, Mass	Sept. 26, 1871	5, 203
Pickle-jar	J. Jepson	West Meriden, Conn	Nov. 21, 1871	5, 371
Pickle-jar	H. C. Wilcox	West Meriden, Conn	Nov. 21, 1871	5, 374
Pickle-jar body	S. A. Whitney	Glassborough, N. J	Mar. 23, 1869	3, 428
Pickle jar or caster	J. Hill	West Meriden, Conn	Sept. 19, 1871	5, 273
Pickle-stand and bottle	G. Gill	Taunton, Mass	June 11, 1872	5, 926
Picture	E. Metcalf	Norristown, Pa	June 18, 1872	5, 941
Picture-case, Revolving	R. R. Marsh	Detroit, Mich	Apr. 30, 1872	5, 827
Picture, Emblematic	J. F. Bodtker	Madison, Wis	Oct. 24, 1865	2, 208
Picture for animal studies, Ornamental	C. A. Foster	North Providence, R. I	Dec. 4, 1866	2, 514
Picture-frame	J. H. Bellamy	Charlestown, Mass	May 1, 1866	2, 296
Picture-frame	J. H. Bellamy	Charlestown, Mass	Sept. 25, 1866	2, 428–2, 429
Picture-frame	J. H. Bellamy	Charlestown, Mass	Dec. 11, 1866	2, 523
Picture-frame	J. H. Bellamy	Charlestown, Mass	Jan. 8, 1867	2, 542
Picture-frame	J. H. Bellamy	Charlestown, Mass	Feb. 26, 1867	2, 588
Picture-frame	J. H. Bellamy	Charlestown, Mass	July 19, 1870	4, 248
Picture-frame	J. H. Bellamy	Charlestown, Mass	Mar. 7, 1871	4, 694
Picture-frame	A. P. C. Bonte	Cincinnati, Ohio	May 26, 1857	889
Picture-frame	E. D. Bradley	New Haven, Conn	Aug. 10, 1869	3, 605
Picture-frame	L. L. Dennick	Chicago, Ill	July 11, 1871	5, 103
Picture-frame	F. Giraud	New York, N. Y	Oct. 22, 1861	1, 479
Picture-frame	J. J. Gray	Boston, Mass	May 28, 1872	5, 877
Picture-frame	E. W. Haven	Brandon, Vt	July 5, 1870	4, 199
Picture-frame, &c	J. Nonnenbacher	New York, N. Y	Oct. 14, 1873	6, 959
Picture-frame, &c	J. Nonnenbacher	New York, N. Y	Nov. 11, 1873	6, 995
Picture-frame	C. Pfeffer	Buffalo, N. Y	Feb. 23, 1869	3, 388
Picture-frame	W. H. Sadler	Baltimore, Md	Mar. 2, 1869	3, 396
Picture-frame	S. Sailor	Philadelphia, Pa	Mar. 24, 1863	1, 743
Picture-frame	J. H. Saunders	Johnston, R. I	Nov. 8, 1870	4, 462
Picture-frame	H. Slusser and L. Pearson	South Bend, Ind	Apr. 22, 1873	6, 609
Picture-frame	L. Steinhilper and L. Welker	Williamsport, Pa	Mar. 25, 1873	6, 536
Picture-frame	G. L. Underwood	Boston, Mass	July 21, 1868	3, 125–3, 127
Picture-frame	H. Vanderbeck and E. H. Hadden.	New York, N. Y	July 18, 1865	2, 148
Picture-frame molding	J. H. Brown	Geneseo, N. Y	Dec. 31, 1867	2, 852
Picture-suspending brace	G. W. McGill	New York, N. Y	Dec. 24, 1872	6, 323
Pier or center table	R. Wood and W. Hamilton	Philadelphia, Pa	June 20, 1848	186
Pilaster and center-piece of heaters, &c	C. J. Shepard	Brooklyn, N. Y	Oct. 15, 1867	2, 802
Pillar	W. S. Rockwell	Savannah, Ga	Aug. 6, 1867	2, 733
Pin-cushion	A. Merriam and C. L. Little	West Meriden, Conn	Dec. 30, 1873	7, 081
Pipe elbow, Sheet-metal	F. Bohsert	New York, N. Y	Dec. 5, 1865	2, 223
Pipe-wrench	T. K. Cook	New York, N. Y	June 20, 1871	5, 017
Pistol-barrel	E. Goddard	Brooklyn, N. Y	Feb. 4, 1868	2, 912
Pistol-barrel	J. Murphy	New York, N. Y	Dec. 31, 1867	2, 855
Pistol-handle	D. Moore	Brooklyn, N. Y	Feb. 24, 1863	1, 721
Pistol handle, Revolving	G. A. Hickcox	Brooklyn, N. Y	Jan. 31, 1865	2, 027
Pistol handle, Revolving	D. Moore	Brooklyn, N. Y	Apr. 5, 1864	1, 930
Piston, Steam-pump	J. H. McGowan	Cincinnati, Ohio	June 27, 1871	5, 049
Pitcher	A. and W. Dunworth	Dobb's Ferry, N. Y	Mar. 19, 1867	2, 601
Pitcher	J. Fleming and J. Hamilton	Pittsburgh, Pa	Nov. 23, 1869	3, 760
Pitcher	E. Kaufmann	Philadelphia, Pa	May 29, 1866	2, 327
Pitcher	G. W. Smith	Hartford, Conn	July 20, 1858	1, 028
Pitcher	H. C. Wilcox	West Meriden, Conn	Mar. 3, 1868	2, 946
Pitcher body, Ice	G. Wilkinson	Providence, R. I	Sept. 26, 1871	5, 284
Pitcher, Ice	E. Kaufmann	Philadelphia, Pa	Apr. 28, 1863	1, 751
Pitcher, Ice	N. Lawrence	Taunton, Mass	Feb. 16, 1869	3, 375
Pitcher, Ice	N. Lawrence	Taunton, Mass	May 11, 1869	3, 481
Pitcher, Ice	G. W. Smith	Hartford, Conn	Apr. 3, 1860	1, 219
Pitcher, Ice	H. Vasseur	Wallingford, Conn	Mar. 8, 1870	3, 891
Pitcher-stand plate	H. O. Fritsch	New York, N. Y	Oct. 4, 1870	4, 385
Plant-stand	J. R. Robertson	Syracuse, N. Y	Apr. 8, 1873	6, 580
Plate, Bread	H. S. McKee	Pittsburgh, Pa	May 6, 1873	6, 636
Plow	C. Smith	Warsaw, Ind	June 1, 1869	3, 528
Plow-clevis	J. M. Cook	Marion, Ind	Jan. 31, 1871	4, 615
Plow-clevis	G. P. Darron	Cincinnati, Ohio	June 18, 1867	2, 674
Plow-clevis	G. P. Darron	Cincinnati, Ohio	Dec. 14, 1869	3, 785
Plowshare	R. H. Taylor	Lincoln, Va	Dec. 13, 1870	4, 521
Plow-springs, &c., Trade-mark on	J. D. Willoughby	Pleasant Hall, Pa	Dec. 22, 1857	971
Pocket-book	S. and I. Schener	New York, N. Y	Aug. 6, 1867	2, 719
Pocket-book tip	J. C. Arms	Northampton, Mass	Feb. 21, 1871	4, 664
Pocket comb and brush	A. H. Forstner	Newport, Ky	Oct. 8, 1872	6, 195
Portable furnace	J. G. Abbott and A. Lawrence	Philadelphia, Pa	Apr. 27, 1852	454
Portable furnace	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Mar. 13, 1866	2, 282
Portable furnace	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Jan. 22, 1856	757
Portable furnace	C. W. Warnick	Philadelphia, Pa	May 9, 1848	179
Portable furnace	C. W. Warnick, F. Leibrandt, J. G. Abbott, and A. Lawrence.	Philadelphia, Pa	Mar. 26, 1850	276
Post and fence	C. Coots	Rochester, N. Y	Aug. 6, 1867	2, 724
Postage-stamp case	J. Gault	Boston, Mass	Aug. 12, 1862	1, 627
Poultry-fountain	B. Van Gaasbeek	Mount Vernon, N. Y	Dec. 27, 1870	4, 542
Preserved-fish jar	J. R. Thomson	New York, N. Y	Oct. 15, 1872	6, 208
Press and mantel-piece frame	E. L. Freeman	Belleville, N. Y	Dec. 23, 1851	430
Pressure-gage case	E. A. Wood	Utica, N. Y	Feb. 22, 1870	3, 868
Printed fabric	F. Christie	Philadelphia, Pa	Feb. 6, 1872	5, 505
Printed fabric	T. Hardcastle	Bradshaw Works, near Bolton, England.	Apr. 11, 1871	4, 792
Printer's border	W. H. Page	Norwich, Conn	Feb. 11, 1868	2, 932
Printer's border	W. H. Page	Norwich, Conn	Mar. 31, 1868	2, 981–2, 982
Printer's flourishes	C. Reuter	Cincinnati, Ohio	Nov. 17, 1868	3, 250

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Printing on woolen	G. W. Wight	New York, N. Y	Sept. 11, 1847	152
Printing-press frame	J. Henry	Millburn, N. J	June 21, 1870	4, 162
Pruning-shears	C. Condon	Rochester, N. Y	Apr. 5, 1870	3, 950
Pruning-shears	E. L. Nichols and F. A. Edler	Folsom, Cal	Apr. 26, 1870	3, 995
Pulley-block, Metal	N. C. Whitcomb	Oak Hill, N. Y	Feb. 2, 1864	1, 895
Pulley face-plate, Sash	E. Parker	New Britain, Conn	Jan. 12, 1869	3, 338
Pulley, Rack	C. F. Hager	Buffalo, N. Y	Nov. 2, 1869	3, 734
Pump	H. H. Babcock	Watertown, N. Y	Feb. 16, 1869	3, 377
Pump	M. C. Bignall	Seneca Falls, N. Y	Jan. 6, 1863	1, 703
Pump	W. Burlingham	New York, N. Y	Mar. 19, 1872	5, 695
Pump	G. Cowing	Seneca Falls, N. Y	Sept. 20, 1864	1, 987
Pump	B. C. Cromwell	Skowhegan, Me	Mar. 10, 1863	1, 732
Pump	L. Egleston	Seneca Falls, N. Y	Jan. 17, 1871	4, 585
Pump	M. Greenwood	Cincinnati, Ohio	May 28, 1861	1, 425
Pump	B. Holly	Lockport, N. Y	June 19, 1860	1, 256
Pump	B. S. Nichols	Seneca Falls, N. Y	Apr. 3, 1866	2, 293
Pump, Ale	S. Lane, jr	Englewood, N. J	June 10, 1873	6, 699–6, 700
Pump-barrel	J. W. Douglas	Middletown, Conn	Aug. 20, 1872	6, 032
Pump, Chain	H. L. Fry	Cincinnati, Ohio	May 23, 1871	4, 922
Pump, Chain	H. L. Fry	Cincinnati, Ohio	May 30, 1871	4, 945
Pump, Cistern	B. Holly	Lockport, N. Y	Jan. 24, 1860	1, 193
Pump-curb	J. W. Wheeler and O. B. Latham.	Seneca Falls, N. Y	Nov. 2, 1852	517
Pump, Steam	W. W. Hanscom	San Francisco, Cal	June 20, 1871	5, 026
Pump, Steam-boiler	L. Egleston	Seneca Falls, N. Y	Nov. 17, 1868	3, 259
Pump-stock, Cistern or well	L. Egleston	Seneca Falls, N. Y	Oct. 10, 1865	2, 183
Pump-top	B. C. Cromwell	Skowhegan, Me	Mar. 10, 1863	1, 733
Punch-drawer	A. H. Rowe	Newburyport, Mass	Sept. 27, 1870	4, 373
Puzzle-block	S. Loyd	New York, N. Y	Apr. 11, 1871	4, 793
R.				
Radiator, Steam	W. Burdon	Brooklyn, N. Y	May 17, 1870	4, 024
Radiator, Steam	S. E. Chubbuck	Roxbury, Mass	Apr. 30, 1861	1, 402
Radiator, Steam-heater	L. S. Daniels	Foxborough, Mass	Apr. 2, 1872	5, 735
Railing	J. McArthur, jr	Philadelphia, Pa	May 1, 1866	2, 303
Railing	E. Omensetter	Philadelphia, Pa	June 28, 1870	4, 196
Railing, Cemetery-lot	A. L. Murphy	Philadelphia, Pa	Jan. 3, 1871	4, 556
Railing for horse-stalls, Iron	J. L. Jackson	New York, N. Y	Oct. 4, 1870	4, 377–4, 379
Railing, Iron	W. Ballard	New York, N. Y	Oct. 29, 1850	330
Railing, Iron	I. De Zouche	Saint Louis, Mo	Feb. 21, 1860	1, 205
Railing, Iron	F. Fitzgerald	New York, N. Y	Nov. 18, 1851	423
Railing, Iron	N. T. Horton	Cincinnati, Ohio	Dec. 14, 1852	533
Railing, Iron	E. Omensetter	Philadelphia, Pa	June 28, 1870	4, 189–4, 195
Railway-station	J. W. Hoyt	Springfield, Mass	July 8, 1873	6, 760
Railway-station indicator	F. F. Bibber	South Boston, Mass	Feb. 21, 1871	4, 666
Range	W. H. Burrows	New York, N. Y	June 6, 1871	4, 970
Range	S. W. Gibbs	Albany, N. Y	Oct. 1, 1867	2, 796
Range	A. J. Gilbert	New York, N. Y	Dec. 17, 1872	6, 318
Range	N. S. Vedder and F. Ritchie	Troy, N. Y	Dec. 17, 1872	6, 312
Range	C. J. Wood	Baltimore, Md	Apr. 18, 1871	4, 835
Range, Cook	G. Chilson	Boston, Mass	June 12, 1860	1, 248
Range, Cook	J. I. Hess	Philadelphia, Pa	Aug. 3, 1869	3, 598
Range, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	May 1, 1866	2, 302
Range, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	May 11, 1869	3, 482
Range, Cook	J. C. Shoch	Philadelphia, Pa	Aug. 3, 1869	3, 600
Range, Cook	G. Smith and H. Brown	Philadelphia, Pa	Dec. 14, 1858	1, 073
Range, Cooking	A. C. Barstow	Providence, R. I	June 12, 1860	1, 247
Range, Cooking	R. H. N. Bates	Providence, R. I	July 26, 1853	587
Range, Cooking	J. Beesley	Philadelphia, Pa	Apr. 30, 1872	5, 819
Range, Cooking	L. W. Harwood	Troy, N. Y	Dec. 26, 1871	5, 448
Range, Cooking	D. Hathaway	Green Island, N. Y	July 9, 1872	5, 976
Range, Cooking	J. Martino and J. Horton	Philadelphia, Pa	Apr. 10, 1860	1, 231
Range, Cooking	J. A. Price	Scranton, Pa	June 30, 1868	3, 079
Range, Cooking	S. P. Robinson	Plainfield, Conn	Dec. 26, 1871	5, 451
Range, Cooking	A. K. Sanders and N. S. Vedder	New York and Troy, N. Y.	July 31, 1860	1, 295
Range, Cooking	C. J. Shepard	Brooklyn, N. Y	Feb. 10, 1857	869
Range, Cooking	I. A. Sheppard	Philadelphia, Pa	June 13, 1865	2, 099
Range, Cooking	S. S. Utter	Brooklyn, N. Y	July 1, 1873	6, 745
Range, Cooking	B. Wardwell and E. R. Barstow	Fall River, Mass., and Providence, R. I.	Oct. 19, 1852	513
Range, Elevated-oven	A. T. Barry	New York, N. Y	Oct. 12, 1869	3, 709
Range, Elevated-oven	P. Rollhaus	Port Chester, N. Y	Aug. 31, 1869	3, 649
Range-front	A. C. Barstow	Providence, R. I	July 6, 1858	1, 023
Range-front	J. L. Mott	Mott Haven, N. Y	Oct. 19, 1869	3, 720
Range or stove	N. S. Vedder and T. S. Heister.	Troy and Lansingburgh, N. Y.	Nov. 8, 1870	4, 464
Range or stove, Cooking	A. and S. G. Richmond	Brooklyn, N. Y., and Norwich, Conn.	July 25, 1871	5, 141
Range plate, Cook	R. Moss	Philadelphia, Pa	Oct. 2, 1866	2, 480
Range plate, Cooking	C. J. Shepard	Brooklyn, N. Y	June 14, 1864	1, 957
Range plate, Portable	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Sept. 1, 1868	3, 190
Range, Portable	J. F. Allen and J. Stewart	Philadelphia, Pa	May 23, 1854	654
Range, Portable	J. Horton and J. Currie	Philadelphia, Pa	May 27, 1856	797
Range, Portable	J. Martino and J. Currie	Philadelphia, Pa	June 13, 1865	2, 094
Range, Portable	G. Smith and H. Brown	Philadelphia, Pa	Apr. 26, 1853	557
Range, Portable	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Jan. 22, 1856	758
Range, Portable	J. C. Smith	Philadelphia, Pa	Apr. 26, 1853	559
Range, Portable	D. Stuart and L. Bridge	Philadelphia, Pa	Aug. 30, 1870	4, 320
Range, Portable cooking	S. W. Gibbs	Albany, N. Y	Jan. 30, 1866	2, 246
Range, Portable cooking	J. Magee	Chelsea, Mass	May 21, 1872	5, 863
Range, Portable cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	May 23, 1854	649
Range, Portable cooking	W. A. Spicer	Providence, R. I	Sept. 24, 1872	6, 155

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Range, Summer	D. M. Scypes and S. Smith	Springville, Pa	July 23, 1861	1,457
Reel	C. Lambert	New York, N. Y	Oct. 2, 1866	2,478
Reel	E. C. Wooster	New York, N. Y	Oct. 20, 1863	1,834
Reflector	E. Dithridge	Pittsburgh, Pa	Aug. 6, 1867	2,727
Reflector	E. Himes	New Albany, Ind	Nov. 5, 1867	2,821
Reflector	A. Wilhelm	Philadelphia, Pa	Dec. 31, 1867	2,857
Reflector	A. Wilhelm	Philadelphia, Pa	Sept. 28, 1869	3,686
Reflector	A. Wilhelm	Philadelphia, Pa	Feb. 28, 1871	4,693
Reflector, Lantern	C. Wilhelm and J. Neumann	Philadelphia, Pa	Apr. 16, 1867	2,624
Refrigerator and water-cooler	C. C. Savery	Philadelphia, Pa	Aug. 2, 1870	4,274
Register	J. A. Read	Philadelphia, Pa	Oct. 25, 1853	606
Register and ventilator plate	C. F. Tuttle and J. S. Bailey	Williamsburgh, N. Y	Sept. 24, 1850	315-320
Register-face	J. Cowles	Rochester, N. Y	June 28, 1853	577
Return-bend	G. F. Stone	Baltimore, Md	Oct. 12, 1869	3,712
Ribbon, lace, and velvet case	J. Gross and A. Ruth	Decatur, Ill	July 9, 1872	5,975
Rim-lock	E. M. Mix	Westfield, N. Y	July 9, 1867	2,701-2,702
Ring and buckle	J. E. Strode	Hillsborough, Ill	June 21, 1870	4,173
Robe-rack	M. Nuhn	New York, N. Y	Dec. 12, 1871	5,423
Roll-pan	N. Waterman	Boston, Mass	Aug. 17, 1858	1,043
Rolling-pin	J. Holt	Gardiner, Me	Dec. 10, 1861	1,506
Roof-ridge, Ornamental	J. L. Jones	Slatington, Pa	June 12, 1860	1,252
Roofing-slate	D. Rickerby	Boston, Mass	Aug. 13, 1861	1,467
Room corner-piece	C. A. Durgin	East Andover, N. H	Aug. 15, 1871	5,200
Round comb	W. S. Mingis	New York, N. Y	Jan. 1, 1867	2,537-2,538
Round comb	W. S. Mingis	New York, N. Y	Jan. 15, 1867	2,555
Rubber mat	L. L. Hyatt	New Brunswick, N. J	July 16, 1872	5,983
Ruche-holder	D. Kisch	New York, N. Y	Sept. 9, 1873	6,880
Ruffle	S. Trischet	New York, N. Y	Sept. 20, 1864	1,990
Ruffle, Box-plaited	E. W. Taylor, jr	Brooklyn, N. Y	Oct. 8, 1872	6,191
Ruffle-stand	L. Sutro	New York, N. Y	May 13, 1873	6,650
Ruffling	S. E. Barney	New Haven, Conn	Dec. 30, 1873	7,077
S.				
Sad-iron	W. M. Griscom	Reading, Pa	Nov. 15, 1870	4,475
Sad-iron	T. Loring	Blackwoodtown, N. J	Sept. 25, 1860	1,313
Sad-iron	I. H. Moss	Cincinnati, Ohio	Sept. 17, 1872	6,146
Sad-iron	A. Niffeler	Chicago, Ill	Apr. 21, 1868	3,005
Sad-iron handle	A. Barrows	Philadelphia, Pa	Dec. 31, 1867	2,851
Sad-iron handle	J. Hargrave	Cincinnati, Ohio	Sept. 9, 1873	6,874
Saddle and bridle bracket	J. L. Jackson	New York, N. Y	Dec. 5, 1871	5,400
Saddle-tree	J. T. Million	Fayette, Mo	Nov. 29, 1870	4,495
Safe	W. K. Marvin	New York, N. Y	Nov. 30, 1869	3,772
Safe	W. McFarland	Williamsburgh, N. Y	Jan. 11, 1870	3,814
Safe, Flour	G. Davis	Cincinnati, Ohio	Aug. 22, 1871	5,224
Salt-cellar	J. B. Larner	Washington, D. C	Mar. 28, 1871	4,736
Sample case, Thread and sewing-silk	J. N. Leonard	Rockville, Conn	Dec. 19, 1871	5,443
Sash clock-case	E. Ingraham	Bristol, Conn	May 30, 1871	4,948
Sash clock-case	S. B. Jerome	New Haven, Conn	Oct. 18, 1870	4,422
Sash clock-case	E. N. Welch	Forestville, Conn	Mar. 17, 1868	2,959
Sash-fastener	P. Bradford	New Haven, Conn	Sept. 26, 1871	5,288
Sash-fastener	O. F. Fogelstrand	Kensington, Conn	Mar. 19, 1872	5,696
Sash-fastener	W. Gorman	New Britain, Conn	June 21, 1870	4,160
Sash-holder	E. C. and G. O. Heister	Reading, Pa	May 16, 1871	4,903
Sash-holder	A. W. Lawrence	Raleigh, N. C	Oct. 10, 1871	5,308
Sash-holder	J. H. Martin	Salem, N. Y	June 28, 1870	4,185
Sash holder, Window	C. M. Drury	Granby, N. Y	Feb. 28, 1871	4,687
Sash-lift	F. W. Brocksieper	New Haven, Conn	Oct. 5, 1869	3,694-3,695
Sash-lift	O. F. Fogelstrand	Kensington, Conn	July 16, 1872	5,990
Sash-lift	J. A. Ruff	Cambridge, Mass	June 7, 1870	4,128
Sash-lift	A. Wunder	New Haven, Conn	Oct. 31, 1871	5,347
Sash-lock face-plate	C. H. Eccleston	Oxford, N. Y	Nov. 15, 1870	4,470
Sash lock, Railway-car	W. H. Paige	Springfield, Mass	Dec. 27, 1870	4,541
Sash or shutter lift	E. Parker	New Britain, Conn	Feb. 1, 1870	3,833
Sash-weight	J. Benedict	Brooklyn, N. Y	July 6, 1869	3,574
Sash-weight	W. H. Short	Brooklyn, N. Y	Apr. 25, 1871	4,850
Satchel	J. H. Hitchings	San Francisco, Cal	July 30, 1872	6,014
Satchel	R. M. Seldis	New York, N. Y	Nov. 19, 1867	2,835
Satchel-fastening	G. Sieben	Newark, N. J	Feb. 8, 1870	3,845
Satchel-handle cap	G. Havell	Newark, N. J	May 2, 1871	4,858
Satchel-handle cap	J. M. Riley	Newark, N. J	Mar. 15, 1870	3,908
Satchel, Lady's	A. Senne	Newark, N. J	Aug. 22, 1871	5,232
Satchel-lock	D. Neumann	New York, N. Y	Feb. 16, 1869	3,381
Sausage-filler	A. Shepard	Southington, Conn	Aug. 9, 1870	4,288
Saw	W. Kidd	Duncan's Mills, Cal	Mar. 14, 1871	4,706
Saw	H. S. Miller	Philadelphia, Pa	Aug. 22, 1871	5,226
Saw	E. Rhodes	Philadelphia, Pa	July 19, 1870	4,255
Saw	E. Rhodes	Philadelphia, Pa	Nov. 29, 1870	4,497
Saw, Cross-cut	W. G. Tuttle	Chelsea, Mich	May 3, 1870	4,009
Saw-frame	T. S. and H. Disston, 2d	Philadelphia, Pa	Aug. 26, 1873	6,825
Saw frame, Band	L. M. Collins	Lebanon, N. H	Aug. 19, 1873	6,803
Saw frame, Band	W. H. Doane	Cincinnati, Ohio	Sept. 19, 1871	5,268
Saw frame, Band	J. Richards	Philadelphia, Pa	June 7, 1870	4,145
Saw-teeth, Shape of the slots between	E. Moore	Brooklyn, N. Y	Apr. 26, 1870	3,994
Scabbard	V. Price	New York, N. Y	Jan. 25, 1870	3,822
Scale-dish	J. W. Kissam	New York, N. Y	Nov. 17, 1868	3,246
Scales	F. M. Strong and T. Ross	Brandon, Vt	Aug. 23, 1859	1,137
Scales, Counter	W. W. Reynolds	Brandon, Vt	June 18, 1867	2,679
Scales, Counter weighing	P. Cinquini	Meriden, Conn	May 9, 1871	4,874
Scales, Standard of bullion	L. J. Howe and J. V. Bouvier	New York, N. Y	Mar. 28, 1865	2,040
Scarf	C. Button	Philadelphia, Pa	May 27, 1873	6,673-6,676
Scarf, Gentleman's	C. Roder	Philadelphia, Pa	June 1, 1869	3,525-3,526
Scarf-pattern	C. Button	Philadelphia, Pa	July 6, 1869	3,575
Scarf-pattern	F. W. Henson	Philadelphia, Pa	July 13, 1869	3,579
Scarf-pin	C. A. Flesche and J. Perpente	New Haven, Conn	Jan. 28, 1868	2,861
Scarf-ring	R. S. Jennings	New York, N. Y	Aug. 4, 1868	3,149-3,150
Scarf-ring, Medallion	R. S. Jennings	New York, N. Y	June 30, 1868	3,086-3,087

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Invention.	Inventor.	Residence.	Date.	No.
School-seat	W. H. Joeckel	New York, N. Y	Feb. 28, 1871	4,690
School seat and desk	C. G. Harington	Northville, Mich	May 31, 1870	4,076
Scissors	S. W. Valentine	Bristol, Conn	Jan. 15, 1867	2,558
Scraper, Road	J. C. Evans	Delaware, Ohio	Sept. 7, 1869	3,655
Screen	C. L. Hubbard	New Haven, Conn	June 30, 1868	3,075
Screen	J. L. Jackson	New York, N. Y	Aug. 31, 1858	1,045
Screen	J. L. Jackson	New York, N. Y	Apr. 5, 1864	1,929
Sculpture, Group of	J. Rogers	New York, N. Y	Sept. 7, 1869	3,657
Scythe	C. P. Crossman	West Warren, Mass	Dec. 13, 1870	4,505
Seal or banner	F. W. Bacon	New Haven, Conn	June 7, 1870	4,095
Seal or embossing press stock	B. B. Hill	Chicopee, Mass	Oct. 17, 1865	2,203
Seal-press	C. A. Mathiesen and J. C. Schrader.	New York, N. Y	Aug. 19, 1873	6,806
Settee	J. W. Fiske	New York, N. Y	Aug. 1, 1871	5,147
Settee arm-end	J. Beesley	Philadelphia, Pa	Aug. 3, 1869	3,594
Settee, Cast-iron	D. W. Downs and F. P. Rand	North Providence, R. I	July 6, 1869	3,570
Settee, Reclining	M. D. Jones	Roston, Mass	June 18, 1872	5,940
Settee, Rustic	W. P. Uhlinger	Philadelphia, Pa	Sept. 14, 1869	3,663
Sewing and embroidering machine frame	J. W. Bartlett	New York, N. Y	May 1, 1866	2,295
Sewing-bird	A. Gerould and J. H. Ward	Middletown, Conn	Aug. 2, 1853	589
Sewing-bird	J. E. Merriman	Meriden, Conn	July 26, 1853	582
Sewing-bird	J. North	Middletown, Conn	May 29, 1855	710
Sewing-bird	C. Waterman	Meriden, Conn	Feb. 15, 1853	546
Sewing-butterfly	J. Lane	New Haven, Conn	Nov. 8, 1853	610
Sewing-machine	J. Bond, jr	Newark, N. J	Oct. 2, 1866	2,473
Sewing-machine	C. Cadwell	Waukegan, Ill	Apr. 11, 1865	2,042
Sewing-machine	S. B. Ellithorp	New York, N. Y	June 7, 1859	1,105
Sewing-machine	J. E. A. Gibbs	Mill Point, Pa	Feb. 21, 1860	1,206
Sewing-machine	T. C. Page	Chicopee, Mass	Oct. 1, 1867	2,798
Sewing-machine	G. Rehfuss	Philadelphia, Pa	Jan. 28, 1873	6,375
Sewing-machine	C. A. Shaw and J. R. Clark	Biddeford, Me	Aug. 13, 1861	1,469
Sewing-machine	C. A. Shaw and J. R. Clark	Biddeford, Me	Feb. 16, 1864	1,902
Sewing-machine	C. A. Shaw and J. R. Clark	Biddeford, Me	July 18, 1865	2,138
Sewing-machine	W. G. Wilson	Cleveland, Ohio	Nov. 19, 1867	2,836
Sewing-machine arm	J. G. Folsom	Winchendon, Mass	May 17, 1864	1,945
Sewing-machine arm	J. S. McCurdy	Brooklyn, N. Y	June 14, 1859	1,110
Sewing-machine arm	J. S. McCurdy	Brooklyn, N. Y	Oct. 4, 1859	1,152
Sewing-machine bed	W. G. Beckwith	Newark, N. J	May 21, 1872	5,861
Sewing-machine cover	G. L. Du Laney	Brooklyn, N. Y	Oct. 22, 1872	6,210
Sewing-machine cover	J. Wilson	Boston, Mass	Oct. 10, 1871	5,313
Sewing-machine frame	J. W. Bartlett	New York, N. Y	Oct. 10, 1865	2,180
Sewing-machine frame	W. B. Bartram	Danbury, Conn	Feb. 19, 1867	2,584
Sewing-machine frame	W. B. Bartram	Danbury, Conn	May 11, 1869	3,478
Sewing-machine frame	J. Bond, jr	Newark, N. J	Oct. 2, 1866	2,474
Sewing-machine frame	S. B. Ellithorp	New York, N. Y	Sept. 27, 1859	1,149
Sewing-machine frame	H. J. Hancock	New York, N. Y	Aug. 11, 1868	3,158
Sewing-machine frame	J. O'Neil	New York, N. Y	Feb. 18, 1873	6,451
Sewing-machine frame	L. Porter	Rochester, N. Y	May 11, 1869	3,486
Sewing-machine frame	J. B. Secor	Chicago, Ill	Dec. 5, 1871	5,407
Sewing-machine leg	J. B. Secor	Chicago, Ill	Aug. 1, 1871	5,155
Sewing-machine leg and treadle	C. Grieff	New York, N. Y	Nov. 9, 1869	3,742
Sewing-machine-oil-can bracket	H. R. Frisbie	Chicopee Falls, Mass	Dec. 24, 1872	6,320
Sewing-machine-sample trunk	F. S. Fahnestock	Chicago, Ill	Jan. 31, 1871	4,616
Sewing-machine spool-holder	J. G. Folsom	Winchendon, Mass	Mar. 1, 1864	1,905
Sewing-machine stand	H. Loth	Philadelphia, Pa	Jan. 24, 1871	4,604
Sewing-machine stand	J. Willcox	Philadelphia, Pa	June 1, 1858	1,012
Sewing-machine standard and treadle	J. W. Bartlett	New York, N. Y	Nov. 7, 1865	2,215
Sewing-machine table	S. F. Pratt	Roxbury, Mass	Feb. 16, 1858	989
Sewing-machine treadle	J. B. Secor	Chicago, Ill	Aug. 22, 1871	5,231
Sewing-machines, Ornament for Wilcox and Gibbs's.	S. P. Crins	Providence, R. I	Sept. 7, 1869	3,654
Sewing-machines, Ornamenting	W. N. Brown	New York, N. Y	Oct. 25, 1859	1,156
Shaft-frame	A. H. Rau	Philadelphia, Pa	May 21, 1867	2,657
Shafting-hanger	C. C. Klein	Philadelphia, Pa	Dec. 11, 1866	2,528
Shawl	H. Erbs	Philadelphia, Pa	Feb. 6, 1872	5,506
Shawl	H. Erbs and J. Barth	Philadelphia, Pa	Dec. 12, 1871	5,412
Shawl	J. Hodgson	Philadelphia, Pa	Apr. 2, 1872	5,736
Shawl	C. H. Landenberger	Philadelphia, Pa	Jan. 3, 1871	4,555
Shawl	M. Landenberger	Philadelphia, Pa	July 19, 1870	4,233–4,235
Shawl	M. Landenberger	Philadelphia, Pa	Feb. 21, 1871	4,670
Shawl	F. Wink	Philadelphia, Pa	Feb. 11, 1873	6,387–6,409
Shawl-border	M. M. Peyser	Boston, Mass	Oct. 9, 1866	2,491–2,492
Shawl-border	M. Townsend	Chelsea, Mass	Oct. 14, 1862	1,663
Shawl-fabric	S. Byrom	Philadelphia, Pa	Nov. 21, 1871	5,367
Shawl-fabric	J. Hodgson	Philadelphia, Pa	July 11, 1871	5,106–5,107
Shawl-fabric	J. Hodgson	Philadelphia, Pa	Oct. 24, 1871	5,323
Shawl-fabric	J. Hodgson	Philadelphia, Pa	Apr. 16, 1872	5,783
Shawl-fabric	M. Landenberger	Philadelphia, Pa	Aug. 2, 1870	4,272
Shawl-fabric	M. Landenberger	Philadelphia, Pa	Sept. 20, 1870	4,358
Shawl-fabric, Woven	J. Hodgson	Philadelphia, Pa	Dec. 20, 1870	4,526–4,528
Shawl-mantle	E. Flues	Fort Washington, Pa	Apr. 26, 1870	3,987–3,988
Shawl-mantle	A. E. Taylor	Philadelphia, Pa	Apr. 26, 1870	3,996–3,997
Shawl-pattern	H. Boot	Philadelphia, Pa	Jan. 23, 1872	5,479
Shawl-pattern	H. Boot	Philadelphia, Pa	Jan. 30, 1872	5,496
Shawl-pattern	A. M. King	Kidderminster, England	Aug. 27, 1872	6,093
Shawl-pattern	C. H. Landenberger	Philadelphia, Pa	July 16, 1872	5,996
Shawl-pattern	F. Wink	Philadelphia, Pa	Aug. 20, 1872	6,076–6,088
Shawl-pattern	F. Wink	Philadelphia, Pa	Sept. 24, 1872	6,157
Shawl-pattern	F. Wink	Philadelphia, Pa	Sept. 2, 1873	6,835–6,864
Sheet-metal can	H. Everett	Philadelphia, Pa	Apr. 23, 1872	5,803
Sheet-metal can	C. Pratt	New York, N. Y	Feb. 16, 1869	3,376
Sheet-metal-can corner	C. Seimel	Green Point, N. Y	Feb. 9, 1869	3,365
Sheet-metal-can top or bottom	C. Pratt	New York, N. Y	Feb. 9, 1869	3,357–3,359
Shelf-bracket	I. Chase, jr	Boston, Mass	Oct. 13, 1857	948–949
Shelf-bracket	I. Chase, jr	Boston, Mass	Oct. 20, 1857	958
Shelf-bracket	W. Gorman	New Haven, Conn	Jan. 5, 1869	3,307–3,314
Shelf-bracket	J. E. Parker	West Meriden, Conn	Jan. 5, 1869	3,318
Shield, Transparent	I. C. Mayo	Gloucester, Mass	June 14, 1870	4,153

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Invention.	Inventor.	Residence.	Date.	No.
Shirred goods	A. Hecht	New York, N. Y	Dec. 20, 1870	4, 525
Shirt, Campaign	A. Blumann	New York, N. Y	Aug. 20, 1872	6, 089
Shoe	D. P. Brown	Reading, Mass	Nov. 19, 1872	6, 264
Shoe	A. A. Gould	Melrose, Mass	May 9, 1865	2, 056
Shoe	A. H. Herring	Haverhill, Mass	July 16, 1872	5, 995
Shoe	G. E. Leathe	Reading, Mass	Feb. 13, 1872	5, 541
Shoe	G. H. Maynard	Berlin, Mass	Oct. 18, 1870	4, 424
Shoe-clasp	G. Oldham	Youngstown, Ohio	Aug. 1, 1871	5, 151
Shoe, Infant's	W. M. Carpenter	Rowley, Mass	Feb. 14, 1871	4, 646
Shoe, Quarter of a balmoral	T. R. Evans	Philadelphia, Pa	Jan. 2, 1866	2, 239
Shoe, Rubber	C. Meyer	New York, N. Y	May 2, 1871	4, 861–4, 862
Shoes, Ornamentation of rubber	C. Meyer	New York, N. Y	Apr. 4, 1871	4, 769
Shot-pouch	J. T. Capewell	Woodbury, Conn	June 6, 1871	4, 972
Shovel	P. W. Groom	Philadelphia, Pa	June 27, 1871	5, 043
Shovel and tongs stand	O. F. Fogelstrand	Kensington, Conn	Oct. 8, 1872	6, 193
Shovel and tongs stand	J. Meyer	Cincinnati, Ohio	Sept. 29, 1857	944–945
Shovel and tongs stand	C. Zeuner	Cincinnati, Ohio	Jan. 24, 1854	621–622
Shovel and tongs stand	C. Zeuner	Cincinnati, Ohio	Oct. 18, 1864	1, 994
Shovel and tongs stand	C. Zeuner	Cincinnati, Ohio	Nov. 3, 1868	3, 226
Shovel, Cast-iron fire	W. Bennett	New York, N. Y	Oct. 12, 1858	1, 056
Shovel-stand	C. Zeuner	Cincinnati, Ohio	Sept. 9, 1851	412
Show-card	C. S. Hall	Rochester, N. Y	Feb. 7, 1871	4, 629
Show-card for head-nets	T. Hall	Jersey City, N. J	Jan. 14, 1873	6, 341
Show-card, Hair-net	T. Hall	Jersey City, N. J	Dec. 12, 1871	5, 413
Show-case	W. H. Core	New York, N. Y	Apr. 22, 1862	1, 567
Show-case	W. H. Core	New York, N. Y	July 18, 1871	5, 128
Show-case	J. H. Fraser	New York, N. Y	Dec. 29, 1868	3, 299
Show-case	J. R. Gallegos	Havana, Cuba	Jan. 17, 1871	4, 586
Show-case	W. H. Grove	Philadelphia, Pa	Nov. 15, 1870	4, 477
Show-case	W. H. Grove	Philadelphia, Pa	Mar. 21, 1871	4, 724
Show-case	W. H. Grove	Philadelphia, Pa	May 30, 1871	4, 946
Show-case	W. H. Grove	Philadelphia, Pa	June 6, 1871	4, 978
Show-case	W. S. Grove	Philadelphia, Pa	Feb. 7, 1871	4, 628
Show-case	J. Irons	Philadelphia, Pa	Dec. 16, 1873	7, 062
Show-case	G. Q. Pragnell	New York, N. Y	Apr. 4, 1865	2, 041
Show-case	W. H. Reiff	Philadelphia, Pa	Oct. 11, 1870	4, 417
Show-case	W. H. Reiff	Philadelphia, Pa	Jan. 2, 1872	5, 461
Show-case	R. J. Roberts	New York, N. Y	Dec. 13, 1870	4, 514
Show-case	M. Terhune	Chicago, Ill	May 4, 1869	3, 475
Show-case	J. D. Vredenburg	Chicago, Ill	Apr. 18, 1871	4, 824
Show-case	L. Wiegel and J. Lehnbeuter	Cincinnati, Ohio	Sept. 10, 1872	6, 136
Show-case	G. Winter	New York, N. Y	June 29, 1869	3, 566
Show-case	G. Winter	New York, N. Y	Aug. 3, 1869	3, 602
Show-case	T. E. Wood	Chicago, Ill	Aug. 29, 1871	5, 244
Show-case and drawer	G. P. Farmer	Brooklyn, N. Y	Apr. 25, 1871	4, 841
Show-case base	C. Hesdra	Brooklyn, N. Y	Aug. 12, 1862	1, 628
Show-case frame	B. Hill	Malden, Mass	Mar. 14, 1871	4, 703
Show-case frame	F. A. Howell	New York, N. Y	June 30, 1868	3, 074
Show-case molding	C. Fersch	New York, N. Y	Dec. 31, 1867	2, 853
Show-case molding	P. Sum	New York, N. Y	Mar. 31, 1868	2, 987
Show-case, Needle-package	G. P. Farmer	Brooklyn, N. Y	Apr. 25, 1871	4, 842
Show-cases, Corner of glass	T. Vaughan	Boston, Mass	Dec. 9, 1873	7, 047
Shutter and tassel hook plate	E. J. Steele	Walcottville, Conn	Sept. 19, 1871	5, 274
Shutter-bar	L. Crooke	New York, N. Y	July 4, 1871	5, 070
Shutter-bar	W. Gorman	New Britain, Conn	June 18, 1872	5, 938
Shutter-bar	J. A. Ruff	Cambridge, Mass	June 7, 1870	4, 127
Shutter-bar	J. Tiebout	New York, N. Y	Mar. 15, 1870	3, 912
Shutter-fastener	W. E. Sparks	New Haven, Conn	Jan. 23, 1872	5, 495
Shutter-hook	F. W. Brocksieper	New Haven, Conn	Oct. 5, 1869	3, 693
Shutter hook or bar	E. Parker	New Britain, Conn	Oct. 19, 1869	3, 722
Shutter, Iron	E. H. Brown	New York, N. Y	Dec. 18, 1860	1, 352
Sideboard	M. Fitzsimmons	Cincinnati, Ohio	June 25, 1872	5, 957
Sieve	R. J. Mann	Dallas City, Ill	Feb. 7, 1871	4, 637
Sifter, Flour	H. L. Meservey	Boston, Mass	Jan. 30, 1866	2, 257
Sign	E. Berg	New York, N. Y	Aug. 15, 1865	2, 163
Sign	J. B. Moore and J. B. Robitzer	Pittsburgh, Pa	Aug. 22, 1871	5, 227
Sign	E. Ney	New York, N. Y	Nov. 16, 1869	3, 750
Sign	H. B. Titus	Brooklyn, N. Y	Aug. 5, 1873	6, 795
Signal-flags, Set of	H. J. Rogers	Baltimore, Md	Mar. 19, 1867	2, 599
Skate	F. Douglas	Norwich, Conn	Mar. 17, 1863	1, 736
Skate	E. T. Starr	New York, N. Y	May 12, 1863	1, 760
Skate	R. S. Stenton	West Farms, N. Y	Sept. 20, 1864	1, 989
Skate, Metallic	R. S. Stenton	New York, N. Y	Mar. 3, 1863	1, 731
Skate-runner	A. C. Tallman	Philadelphia, Pa	Feb. 11, 1868	2, 933
Skate-runner	H. P. Tilden	Philadelphia, Pa	Nov. 26, 1867	2, 843
Skewer-cushion	J. C. Wilson	New York, N. Y	Apr. 26, 1870	3, 999
Skirt, Balmoral	C. W. Cooke	Waterloo, N. Y	May 28, 1861	1, 424
Skirt-border	R. M. Bailey	Boston, Mass	June 13, 1865	2, 087
Skirt, Lower portion of gored	T. Dolan	Philadelphia, Pa	Sept. 22, 1868	3, 196
Skirts, Material for gored	J. Anderson	New York, N. Y	Aug. 26, 1873	6, 829
Skirts, Printed material for gored	W. H. Walton	Brooklyn, N. Y	Apr. 11, 1871	4, 802
Slate-frame	J. M. Coffin	Lehigh Township, Pa	July 12, 1870	4, 215
Slate-frame	J. M. Coffin	Danielsville, Pa	May 27, 1873	6, 684
Sled-runner	T. L. Varns	Kokomo, Ind	Jan. 26, 1869	3, 356
Sleigh	J. Nelson and H. G. Ellsworth	Lockport, N. Y	Aug. 24, 1869	3, 638
Sleigh-bell	E. G. Cone	East Hampton, Conn	Aug. 18, 1868	3, 160
Sleigh-body	J. C. Goold	Albany, N. Y	Nov. 19, 1872	6, 268
Sleigh-bodies, Exterior of	C. P. Kimball	Portland, Me	Mar. 17, 1868	2, 952
Sleigh, Landau	J. C. Goold	Albany, N. Y	Feb. 11, 1873	6, 410
Slipper-pattern	E. K. Butler	Boston, Mass	May 10, 1864	1, 939
Smoking-pipe	W. Masters	New York, N. Y	Nov. 5, 1867	2, 824
Smoking-pipe cap	W. H. Blake	Waterbury, Conn	Aug. 6, 1872	6, 017
Snap-hook	J. Protz	Easton, Pa	Sept. 25, 1866	2, 458
Snuff-box	F. C. Heiser	Brooklyn, E. D., N. Y	Dec. 8, 1868	3, 277
Soap, Block of	A. Van Haagen	Philadelphia, Pa	Dec. 20, 1870	4, 534
Soda-fountain	E. Bigelow	Springfield, Mass	June 1, 1869	3, 509–3, 510
Soda-fountain	G. F. Meacham	Newton, Mass	Jan. 31, 1871	4, 620
Soda-fountain	G. F. Meacham	Newton, Mass	Feb. 6, 1872	5, 509

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Soda-fountain	G. F. Meacham	Newton, Mass	Feb. 20, 1872	5, 553
Soda-fountain	G. F. Meacham	Newton, Mass	Mar. 5, 1872	5, 632
Soda-fountain	G. F. Meacham	Newton, Mass	Mar. 19, 1872	5, 700–5, 701
Soda-fountain	G. F. Meacham	Newton, Mass	Apr. 4, 1871	4, 768
Soda-water apparatus	J. Bernhard	Philadelphia, Pa	Mar. 24, 1857	876
Soda-water apparatus	C. Lippincott	Philadelphia, Pa	Apr. 30, 1872	5, 826
Soda-water apparatus	C. Lippincott and J. Patterson	Philadelphia, Pa	Apr. 1, 1873	6, 541–6, 543
Soda-water apparatus, Casing for	G. F. Meacham	Newton, Mass	July 16, 1872	5, 985
Soda-water apparatus, Casing for	G. F. Meacham	Newton, Mass	Nov. 26, 1872	6, 275
Soda-water apparatus, Casing for	G. F. Meacham	Newton, Mass	Jan. 21, 1873	6, 366–6, 367
Soda-water apparatus, Casing for	G. F. Meacham	Newton, Mass	May 27, 1873	6, 690
Soda-water apparatus, Casing for	G. F. Meacham	Newton, Mass	Dec. 16, 1873	7, 063
Soda-water apparatus, Casing for	J. W. Tufts	Medford, Mass	Apr. 27, 1869	3, 465
Soda-water apparatus, Casing for	J. W. Tufts	Medford, Mass	Jan. 11, 1870	3, 816
Soda-water draft-stand	C. Müller	New York, N. Y	Apr. 28, 1863	1, 753
Soda-water fountain	C. W. Anderson	Cincinnati, Ohio	June 30, 1868	3, 072
Soda-water fountain	A. J. Morse	Boston, Mass	Apr. 5, 1870	3, 959
Soldier's memorial	J. C. Andrews	Woodstock, Me	July 4, 1865	2, 107
Sole, Boot or shoe	M. Thornton	Philadelphia, Pa	June 1, 1869	3, 530
Solitaire-board	J. A. Bazin	Canton, Mass	Mar. 17, 1863	1, 734
Spice mill	W. Haslam	Philadelphia, Pa	Mar. 8, 1870	3, 893
Spade	H. Parkman	Philadelphia, Pa	May 30, 1871	4, 969
Spinning-flyer	O. Pearl	Lawrence, Mass	Apr. 28, 1863	1, 752
Spittoon	H. Biggins	New York, N. Y	Mar. 14, 1846	46
Spittoon	W. L. and S. W. Pearsall	New York, N. Y	Dec. 21, 1852	538
Spoon	E. DeBusson	Yonkers, N. Y	Feb. 21, 1871	4, 667
Spoon	J. Gorham	Providence, R. I	Apr. 10, 1855	699
Spoon	J. Gorham, G. Thurber, and L. Dexter, jr.	Providence, R. I	Sept. 3, 1861	1, 471
Spoon	A. Hebbard	New York, N. Y	Oct. 2, 1860	1, 320
Spoon	H. Hebbard and J. Polhamus	New York, N. Y	Jan. 6, 1852	434
Spoon	H. Hebbard and J. Polhamus	New York, N. Y	July 3, 1855	715
Spoon	B. Jerald	Meriden, Conn	June 7, 1870	4, 096
Spoon	C. E. Marchand	Delaware City, Del	Aug. 27, 1867	2, 768
Spoon	J. C. Moore	New York, N. Y	May 29, 1847	124
Spoon	F. Whitehouse	Brooklyn, N. Y	Feb. 23, 1869	3, 391
Spool-stand	R. G. Clemons	Nashua, N. H	June 14, 1870	4, 149
Spool-stand	R. Gordon	Peoria, N. Y	Aug. 9, 1870	4, 276
Spool, Thread	H. Conant	Pawtucket, R. I	Apr. 5, 1870	3, 949
Spool, Thread	L. C. Ives	Hartford, Conn	Mar. 29, 1864	1, 926
Spoon and fork	M. Gibney	New York, N. Y	June 19, 1847	128
Spoon and fork	M. Gibney	New York, N. Y	June 13, 1848	184
Spoon and fork	G. Wilkinson	Providence, R. I	Mar. 22, 1870	3, 922–3, 924
Spoon and fork	G. Wilkinson	Providence, R. I	Oct. 28, 1873	6, 969
Spoon and fork handle	B. D. Beiderhase	New York, N. Y	Oct. 4, 1870	4, 382
Spoon and fork handle	M. Gibney	New York, N. Y	May 15, 1860	1, 241
Spoon and fork handle	F. H. Gibney	New York, N. Y	Sept. 23, 1862	1, 657
Spoon and fork handle	P. B. Gilbert	New York, N. Y	Sept. 6, 1859	1, 143
Spoon and fork handle	J. Gorham, G. Thurber, and L. Dexter, jr.	Providence, R. I	July 16, 1861	1, 440
Spoon and fork handle	C. D. Hall	Bristol, Conn	Sept. 13, 1870	4, 348
Spoon and fork handle	H. Hebbard	New York, N. Y	July 5, 1859	1, 114
Spoon and fork handle	H. Hebbard	New York, N. Y	Sept. 13, 1859	1, 145
Spoon and fork handle	W. H. Lewis	Glastenbury, Conn	May 3, 1859	1, 098
Spoon and fork handle	E. C. Moore	Yonkers, N. Y	Nov. 15, 1870	4, 476
Spoon and fork handle	E. C. Moore	Yonkers, N. Y	Oct. 15, 1872	6, 205
Spoon and fork handle	J. Polhamus	New York, N. Y	Nov. 13, 1860	1, 342
Spoon and fork handle	J. Polhamus	New York, N. Y	May 9, 1865	2, 061
Spoon and fork handle	J. Polhamus	New York, N. Y	Aug. 30, 1870	4, 317
Spoon and fork handle	J. L. D. Sullivan	Somerville, Mass	Feb. 21, 1865	2, 033
Spoon and fork handle, Table	J. Gorham, G. Thurber, and L. Dexter, jr.	Providence, R. I	July 16, 1861	1, 439
Spoon and fork work, Fancy	G. Wilkinson	Providence, R. I	Mar. 22, 1870	3, 923
Spoon, fork, &c	W. Gale and N. Hayden	New York, N. Y	Sept. 11, 1847	149–150
Spoon, fork, &c	M. Gibney	New York, N. Y	Dec. 4, 1844	26
Spoon, fork, &c	M. Gibney	New York, N. Y	July 10, 1846	59
Spoon, fork, and ladle handle	G. W. Downing	New York, N. Y	July 12, 1870	4, 218
Spoon, fork, and ladle handle	J. R. Wendt	New York, N. Y	Apr. 19, 1870	3, 985
Spoon, fork, &c., handle	B. D. Beiderhase	New York, N. Y	Oct. 28, 1873	6, 967
Spoon-handle	B. D. Beiderhase	New York, N. Y	Sept. 22, 1868	3, 194
Spoon-handle	B. D. Beiderhase	New York, N. Y	Sept. 19, 1871	5, 267
Spoon-handle	J. Bingham, jr.	Philadelphia, Pa	Sept. 10, 1867	2, 779
Spoon-handle	L. and N. S. Boardman	East Haddam, Conn	Oct. 1, 1867	2, 794
Spoon-handle	A. Conradt	Philadelphia, Pa	Oct. 2, 1866	2, 475
Spoon-handle	A. Conradt	Philadelphia, Pa	July 19, 1870	4, 227
Spoon-handle	G. A. Eno	Philadelphia, Pa	Mar. 19, 1867	2, 596
Spoon-handle	H. C. Foster	Worcester, Mass	July 3, 1860	1, 276
Spoon-handle	J. Fradley	Brooklyn, N. Y	Oct. 3, 1871	5, 298
Spoon-handle	C. P. and G. B. Gordon	Boston, Mass	Nov. 19, 1850	336
Spoon-handle	A. Hebbard	New York, N. Y	Sept. 10, 1867	2, 780
Spoon-handle	A. Hebbard	New York, N. Y	Aug. 17, 1869	3, 616
Spoon-handle	H. Hebbard	New York, N. Y	Dec. 18, 1866	2, 531
Spoon-handle	H. Hebbard and J. Polhamus	New York, N. Y	Feb. 16, 1858	988
Spoon-handle	G. I. Mix	Wallingford, Conn	Jan. 30, 1866	2, 249
Spoon-handle	E. C. Moore	Yonkers, N. Y	Mar. 22, 1870	3, 917
Spoon-handle	J. C. Moore	New York, N. Y	Apr. 3, 1847	114
Spoon-handle	J. Polhamus	New York, N. Y	Apr. 10, 1860	1, 232
Spoon-handle	G. Sharp	Philadelphia, Pa	Jan. 5, 1864	1, 880
Spoon-handle	G. Sharp	Philadelphia, Pa	May 24, 1870	4, 066
Spoon-handle	J. L. D. Sullivan	Somerville, Mass	June 5, 1866	2, 3[illegible]1
Spoon-handle	R. Wallace	Wallingford, Conn	June 14, 1870	4, 155
Spoon-handle	R. Wendt	New York, N. Y	Aug. 8, 1865	2, 162
Spoon-handle	R. Wendt	New York, N. Y	Sept. 12, 1865	2, 172
Spoon, knife, or fork handle	P. B. Gilbert	New York, N. Y	May 7, 1867	2, 646
Spoon, Macaroni	W. Harding	Cambridge, Mass	Mar. 1, 1864	1, 906
Spoon or fork handle	A. Conradt	Philadelphia, Pa	June 30, 1868	3, 084–3, 085
Spoon or fork handle	J. Cook	Brooklyn, N. Y	Feb. 23, 1869	3, 384
Spoon or fork handle	W. B. Durgin	Concord, N. H	July 4, 1871	5, 071

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Spoon or fork handle	A. Hebbard	New York, N. Y	June 4, 1867	2,664
Spoon or fork handle	A. Hebbard	New York, N. Y	May 26, 1868	3,053
Spoon or fork handle	H. Hebbard	New York, N. Y	Aug. 23, 1859	1,136
Spoon or fork handle	H. Hebbard	New York, N. Y	Mar. 4, 1862	1,548
Spoon or fork handle	H. Hebbard	New York, N. Y	Jan. 5, 1869	3,315
Spoon or fork handle	G. I. Mix	Wallingford, Conn	May 29, 1866	2,328
Spoon or fork handle	E. C. Moore	Yonkers, N. Y	Apr. 18, 1871	4,831
Spoon or fork handle	E. C. Moore	Yonkers, N. Y	July 4, 1871	5,077
Spoon or fork handle	C. Osborne	Brooklyn, N. Y	Sept. 7, 1869	3,656
Spoon or fork handle	W. Parkin	Taunton, Mass	Mar. 14, 1871	4,710
Spoon or fork handle	H. G. Reed	Taunton, Mass	Dec. 29, 1868	3,302
Spoon or fork handle	C. F. Richers	New York, N. Y	June 7, 1864	1,949
Spoon or fork handle	C. F. Richers	New York, N. Y	Dec. 1, 1868	3,275
Spoon or fork handle	G. Sharp	Philadelphia, Pa	Mar. 23, 1869	3,425
Spoon or fork handle	G. Sharp	Philadelphia, Pa	Mar. 14, 1871	4,715
Spoon or fork handle	W. K. Vanderslice and L. Thompson.	San Francisco, Cal	Mar. 2, 1869	3,402
Spoon or fork handle	L. S. White	Waterbury, Conn	Mar. 31, 1868	2,992
Spoon or fork handle	H. C. Wilcox	West Meriden, Conn	May 14, 1867	2,654
Spoon or fork handle	G. Wilkinson	Providence, R. I	June 7, 1864	1,952
Spoon or fork handle	G. Wilkinson	Providence, R. I	Mar. 14, 1871	4,719
Spoon or fork handle	G. Wilkinson	Providence, R. I	Mar. 21, 1871	4,731
Spoon or fork handle	G. Wilkinson	Providence, R. I	July 4, 1871	5,093
Spoon-shank	G. I. Mix	Wallingford, Conn	Aug. 19, 1862	1,651
Spoon, Table	B. D. Beiderhase	New York, N. Y	May 28, 1872	5,876
Spoon, Trolling	J. H. Mann	Syracuse, N. Y	Sept. 26, 1871	5,291
Stair-rod	W. B. Gould	New York, N. Y	Aug. 8, 1871	5,177–5,178
Stair-rod	W. T. Mersereau	Orange, N. J	Oct. 15, 1872	6,204
Stair-rod	W. T. Mersereau	Orange, N. J	Apr. 29, 1873	6,615
Stair-rod	D. S. Plume	Newark, N. J	Jan. 19, 1864	1,887
Stair-rod	A. Pohl	Brooklyn, N. Y	Mar. 15, 1870	3,907
Stair-rod fastening	W. B. Gould	New York, N. Y	Aug. 15, 1871	5,203
Stamp	C. C. Morgan	Brooklyn, N. Y	Aug. 13, 1872	6,025
Stamp, Canceling and embossing	R. B. Carsley	Boston, Mass	Feb. 9, 1869	3,363
Stamp, Canceling	B. B. Hill	Springfield, Mass	Sept. 25, 1866	2,434
Stamp frame, Hand	J. P. Barnes	Rochester, N. Y	Feb. 21, 1871	4,665
Stamp, Hand	R. B. Carsley	Chelsea, Mass	July 25, 1871	5,133
Stamp, Hand	S. P. Cooper	Cincinnati, Ohio	July 25, 1871	5,135
Stamp, Hand	W. H. Golding	Chelsea, Mass	Feb. 13, 1872	5,510
Stamp, Hand	W. B. Gorham	Boston, Mass	July 25, 1871	5,137
Stamp, Hand	H. H. Grosskoff	Philadelphia, Pa	May 1, 1866	2,301
Stamp, Hand	B. B. Hill	Springfield, Mass	Dec. 26, 1871	5,449
Stamp, Hand	S. J. Hoggson	New Haven, Conn	June 7, 1870	4,142
Stamp, Hand	H. W. Hubbard and F. P. Follet.	Hartford, Conn	Apr. 12, 1870	3,967
Stamp, Hand	C. G. Mortimer	New York, N. Y	May 17, 1870	4,037
Stamp, Hand	A. L. Munson	New Haven, Conn	May 10, 1870	4,017
Stamp, Hand	W. E. Osborn	Brooklyn, N. Y	Apr. 9, 1872	5,763
Stamp, Hand	J. F. Pages	San Francisco, Cal	Aug. 16, 1870	4,296
Stamp, Hand	F. Waters	Philadelphia, Pa	Apr. 11, 1871	4,803
Stamp, Hand	W. N. Weeden	Boston, Mass	Nov. 14, 1871	5,364
Stamp pad and rack	G. K. Cook	New York, N. Y	Aug. 12, 1873	6,798
Stall-guard	G. R. Jackson	New York, N. Y	May 24, 1864	1,948
Stationery articles, Frame for containing	C. H. Wight	Baltimore, Md	Apr. 5, 1870	3,962
Statuary	A. Van Wart	New York, N. Y	Nov. 22, 1870	4,490
Statuary	A. Van Wart	New York, N. Y	Mar. 28, 1871	4,744
Statuary, Group of	H. C. Brix	Copenhagen, Denmark	July 18, 1871	5,127
Statuary, Group of	J. Rogers	New York, N. Y	Oct. 10, 1865	2,195
Statuary, Group of	J. Rogers	New York, N. Y	Jan. 17, 1865	2,094
Statuary, Group of	J. Rogers	New York, N. Y	July 9, 1867	2,704
Statuary, Group of	J. Rogers	New York, N. Y	Aug. 25, 1868	3,169
Statuary, Group of	J. Rogers	New York, N. Y	Feb. 9, 1869	3,364
Statuary, Group of	J. Rogers	New York, N. Y	Feb. 8, 1870	3,843
Statuary, Group of	J. Rogers	New York, N. Y	Aug. 9, 1870	4,287
Statuary, Group of	J. Rogers	New York, N. Y	Nov. 22, 1870	4,487
Statuary, Group of	J. Rogers	New York, N. Y	Mar. 14, 1871	4,714
Statuary, Group of	J. Rogers	New York, N. Y	July 25, 1871	5,142–5,143
Statuary, Group of	J. Rogers	New York, N. Y	May 14, 1872	5,854
Statuary, Group of	J. Rogers	New York, N. Y	Oct. 15, 1872	6,207
Statuary, Group of	J. Rogers	New York, N. Y	Apr. 1, 1873	6,548
Statuary, Group of	J. Rogers	New York, N. Y	Dec. 2, 1873	7,016
Statuary, Group of	A. Van Wart	New York, N. Y	July 4, 1871	5,089–5,090
Statue	A. L. Blanchard	Albany, N. Y	Aug. 26, 1843	8
Statue	A. Fusary	New York, N. Y	Apr. 4, 1871	4,750
Statue	J. Rogers	New York, N. Y	Oct. 14, 1873	6,960
Statue, Equestrian	C. Mills	Washington, D. C	May 15, 1855	704
Statue, Masonic group	W. Christiaenssen	New York, N. Y	Dec. 26, 1865	2,235
Statue of Daniel Webster	T. Ball	Boston, Mass	Aug. 9, 1853	590
Statue of General Warren	H. Dexter	Cambridge, Mass	Aug. 4, 1857	919
Statuette	J. A. Bailly	Philadelphia, Pa	Feb. 17, 1863	1,719
Statuette	H. Billings	Boston, Mass	Oct. 1, 1867	2,793
Statuette	S. Conkey	New York, N. Y	July 10, 1866	2,353
Statuette	T. H. Dorian	Washington, D. C	May 7, 1867	2,644
Statuette	O. Kornemann and J. Jungbluth.	New York, N. Y	June 1, 1869	3,517
Statuette	E. J. Kuntze	New York, N. Y	Jan. 17, 1865	2,018
Statuette	J. S. McKaye and H. E. McKay	New York, N. Y	Aug. 6, 1867	2,717
Statuette	J. S. McKaye and H. G. McKay	New York, N. Y	Aug. 13, 1867	2,748
Statuette	J. S. McKaye and H. G. McKay	New York, N. Y	Aug. 27, 1867	2,769
Statuette	C. Müller	New York, N. Y	Feb. 4, 1868	2,919
Statuette	N. Müller	New York, N. Y	June 28, 1870	4,187
Statuette	G. Starkey	New York, N. Y	Dec. 12, 1865	2,233
Statuette	A. Van Wart	New York, N. Y	Nov. 22, 1870	4,491
Statuette and clock-case	W. A. Giles	Chicago, Ill	Apr. 3, 1866	2,290
Statuette, Equestrian	N. Müller	New York, N. Y	Feb. 8, 1870	3,841
Statuette-group, "Camp-life"	J. Rogers	New York, N. Y	Apr. 1, 1862	1,559
Statuette-group of figures	J. Rogers	New York, N. Y	Apr. 19, 1864	1,934–1,936
Statuette-group of figures	J. Rogers	New York, N. Y	May 17, 1864	1,947

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Statuette-group of figures	J. Rogers	New York, N. Y	June 28, 1864	1, 967
Statuette-group of figures	J. Rogers	New York, N. Y	May 9, 1865	2, 062
Statuette-group of figures	J. Rogers	New York, N. Y	Jan. 30, 1866	2, 251
Statuette-group of figures	J. Rogers	New York, N. Y	July 3, 1866	2, 352
Statuette-group of figures	J. Rogers	New York, N. Y	Dec. 4, 1866	2, 521
Statuette-group of figures	J. Rogers	New York, N. Y	Mar. 31, 1868	2, 983
Statuette-group, "The picket-guard"	J. Rogers	New York, N. Y	Apr. 1, 1862	1, 558
Statuette of Abraham Lincoln	J. A. Bailly	Philadelphia, Pa	June 13, 1865	2, 084
Statuette of Henry Clay	F. Ball	Boston, Mass	Nov. 9, 1858	1, 060
Statuette of Schiller	E. J. Kuntze	New York, N. Y	Aug. 16, 1864	1, 983
Statuette of Shakespeare	E. J. Kuntze	New York, N. Y	June 13, 1865	2, 091
Statuette of Stephen A. Douglas	L. W. Volk	Chicago, Ill	Feb. 14, 1860	1, 203
Statuette of W. E. Channing	T. R. Gould	Boston, Mass	May 5, 1868	3, 011
Statuettes, Pair of	N. Müller	New York, N. Y	June 28, 1870	4, 188
Stave-machine back-piece	O. Redmond	Rochester, N. Y	July 9, 1867	2, 703
Steam-engine	C. M. Farrar	Buffalo, N. Y	Aug. 1, 1871	5, 146
Steam-engine	C. M. Farrar	Buffalo, N. Y	Apr. 16, 1872	5, 776
Steam-engine	P. L. Weimer	Lebanon, Pa	Apr. 18, 1871	4, 834
Steam-engine, Upright	A. A. Wilson	New Haven, Conn	Oct. 3, 1871	5, 305
Steam-heater screen	C. L. Hubbard	New Haven, Conn	May 9, 1871	4, 886
Steam-pipe screen	J. L. Jackson	New York, N. Y	Apr. 13, 1858	997-998
Steam-tube and hot-air cover	J. O. Morse and J. W. Adams	New York, N. Y., and Lexington, Ky.	Nov. 27, 1855	744
Step and hitching-post	M. Dyer	Elmira, N. Y	May 24, 1870	4, 057
Stereoscope-case	A. Beckers	New York, N. Y	Mar. 1, 1859	1, 086
Stereoscope-case	W. Loyd	Philadelphia, Pa	Feb. 22, 1859	1, 085
Stirrup, Safety	R. Reniff	Bloomington, Ill	Aug. 19, 1873	6, 807
Stocking	T. Appleton	Lake Village, N. H	Oct. 11, 1870	4, 389
Stocking	J. Hogg	Philadelphia, Pa	Mar. 14, 1871	4, 704
Stocking-fabric	C. Button	Philadelphia, Pa	Mar. 2, 1869	3, 392-3, 393
Stocking-fabric	C. Button	Philadelphia, Pa	Mar. 23, 1869	3, 404-3, 407
Stocking-fabric	C. Button	Philadelphia, Pa	July 19, 1870	4, 251
Stocking-fabric	C. Button	Philadelphia, Pa	July 11, 1871	5, 099-5, 101
Stocking-fabric	C. Button	Philadelphia, Pa	May 27, 1873	6, 665-6, 672
Stocking-fabric	T. Dolan	Philadelphia, Pa	July 14, 1868	3, 105-3, 107
Stocking-fabric	T. Dolan	Philadelphia, Pa	Jan. 26, 1869	3, 350-3, 352
Stocking-fabric	T. Dolan	Philadelphia, Pa	May 18, 1869	3, 499-3, 500
Stocking-fabric	T. Dolan	Philadelphia, Pa	Apr. 12, 1870	3, 965-3, 966
Stocking-fabric	T. Dolan	Philadelphia, Pa	May 3, 1870	4, 003
Stocking-fabric	T. Dolan	Philadelphia, Pa	June 21, 1870	4, 157
Stocking-fabric	T. Dolan	Philadelphia, Pa	Feb. 14, 1871	4, 647-4, 648
Stocking-fabric	T. Dolan	Philadelphia, Pa	Feb. 28, 1871	4, 686
Stocking-fabric	T. Dolan	Philadelphia, Pa	Apr. 18, 1871	4, 826-4, 827
Stocking-fabric	T. Dolan	Philadelphia, Pa	June 6, 1871	4, 975-4, 976
Stocking-fabric	M. Landenberger, jr	Philadelphia, Pa	May 20, 1873	6, 651-6, 659
Stocking-fabric	M. Landenberger, jr	Philadelphia, Pa	May 27, 1873	6, 689
Stocking-fabric	J. W. Parks	Philadelphia, Pa	May 20, 1873	6, 664
Stocking-fabric	H. Pye	Philadelphia, Pa	Aug. 22, 1871	5, 228
Stocking-fabric	C. H. Salmon	Philadelphia, Pa	June 1, 1869	3, 527
Stocking-fabric pattern	T. Dolan	Philadelphia, Pa	Sept. 22, 1868	3, 197-3, 199
Stocking-leg	C. Spencer	Philadelphia, Pa	Mar. 2, 1869	3, 397-3, 398
Stone-drag	J. P. Adams and G. Hyde	Whitney's Point, N. Y	Mar. 28, 1871	4, 732
Stool or ottoman frame, Foot	C. Zeuner	Cincinnati, Ohio	Jan. 3, 1854	616-617
Stool pan and cover	J. Clarke	Boston, Mass	Feb. 1, 1870	3, 827
Stove	J. G. Abbott and A. Lawrence	Philadelphia, Pa	Jan. 6, 1852	431-432
Stove	J. F. Allan and J. Stewart	Philadelphia, Pa	Mar. 21, 1854	636
Stove	F. W. Allen	Waterford, N. Y	Aug. 10, 1848	192
Stove	W. Ames	Nassau, N. Y	Dec. 9, 1851	429
Stove	A. Atwood	Troy, N. Y	July 14, 1845	33
Stove	L. S. Bacon	Le Roy, N. Y	July 25, 1846	61
Stove	L. S. Bacon	Rochester, N. Y	Feb. 26, 1850	268
Stove	J. C. Bailey and R. Wheeler	Utica, N. Y	May 28, 1850	286
Stove	R. Barber and M. Hoffman	Bridgeton, N. J	July 10, 1846	56
Stove	T. Barry	New York, N. Y	Jan. 5, 1847	103-104
Stove	T. Barry	New York, N. Y	Oct. 2, 1847	154
Stove	T. Barry	New York, N. Y	Aug. 25, 1857	923-928
Stove	T. Barry	New York, N. Y	Sept. 1, 1857	939
Stove	A. C. Barstow	Providence, R. I	Jan. 19, 1858	986
Stove	A. C. Barstow	Providence, R. I	Mar. 26, 1861	1, 396
Stove	D. L. Bartlett	Baltimore, Md	Apr. 9, 1850	278
Stove	D. L. Bartlett	Baltimore, Md	Mar. 24, 1863	1, 740
Stove	I. J. Baxter	Peekskill, N. Y	Apr. 21, 1868	3, 001
Stove	P. D. Beckwith	Dowagiac, Mich	Dec. 14, 1869	3, 784
Stove	J. Beesley and E. Delany	Philadelphia, Pa	Aug. 10, 1852	485
Stove	J. Beesley and E. J. Delany	Philadelphia, Pa	June 23, 1857	901
Stove	A. L. Blanchard	Albany, N. Y	July 25, 1846	66
Stove	R. J. Blanchard	Albany, N. Y	Aug. 13, 1850	307
Stove	R. J. Blanchard	Albany, N. Y	Sept. 24, 1850	321
Stove	R. J. Blanchard	Albany, N. Y	Nov. 12, 1850	332
Stove	R. J. Blanchard	Albany, N. Y	July 29, 1851	401-403
Stove	G. P. Bowers and J. Pratt	Roxbury and Boston, Mass	Apr. 10, 1847	115
Stove	H. E. Bridge	Saint Louis, Mo	Oct. 14, 1856	845
Stove	A. G. Bristol	Rochester, N. Y	Jan. 23, 1846	45
Stove	A. C. Brownell	Boston, Mass	Aug. 14, 1847	143
Stove	A. C. Brownell	Providence, R. I	May 28, 1850	285
Stove	J. Burgess	Troy, N. Y	July 3, 1847	133
Stove	J. Burgess	Troy, N. Y	Apr. 11, 1848	175
Stove	M. C. Burleigh	Somersworth, N. H	May 28, 1861	1, 423
Stove	S. Burnam	Waterford, N. Y	Jan. 6, 1852	433
Stove	S. H. Burton	Cincinnati, Ohio	Oct. 9, 1849	237
Stove	R. Bush	Rochester, N. Y	Sept. 11, 1847	147
Stove	J. V. B. Carter	Albany, N. Y	Mar. 23, 1869	3, 408
Stove	A. E. Chamberlain	Cincinnati, Ohio	Jan. 27, 1863	1, 705
Stove	A. E. Chamberlain and J. B. Crowley.	Cincinnati, Ohio	Apr. 27, 1869	3, 452
Stove	A. E. Chamberlain and J. B. Crowley.	Cincinnati, Ohio	Sept. 28, 1869	3, 669

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Stove	G. W. Chambers	Troy, N. Y	Oct. 9, 1849	235-236
Stove	G. Chilson	Boston, Mass	Aug. 1, 1865	2, 150
Stove	S. Clark	Troy, N. Y	Nov. 13, 1849	249-251
Stove	L. Cobb	Akron, Ohio	Oct. 14, 1851	417
Stove	W. G. Coggeshall	Fall River, Mass	Nov. 3, 1857	963
Stove	J. H. Conklin	Peekskill, N. Y	Sept. 11, 1847	148
Stove	J. H. Conklin	Peekskill, N. Y	June 27, 1848	189
Stove	J. H. Conklin	New York, N. Y	Aug. 22, 1848	196
Stove	J. H. Conklin	Peekskill, N. Y	Feb. 19, 1850	266
Stove	J. H. Conklin	New York, N. Y	Mar. 12, 1850	272
Stove	J. H. Conklin	Peekskill, N. Y	Jan. 6, 1852	436
Stove	J. H. Conklin	Peekskill, N. Y	Sept. 11, 1855	729
Stove	J. H. Conklin and A. W. Jones	New York, N. Y	July 22, 1850	302
Stove	A. Cox, E. Johnson, and D. B. Cox.	Troy, N. Y	June 10, 1851	382-383
Stove	J. Crandall	Troy, N. Y	Apr. 9, 1850	279
Stove	J. Crandall	Troy, N. Y	July 2, 1850	297
Stove	W. P. Cresson	Philadelphia, Pa	May 23, 1846	48
Stove	W. P. Cresson, J. Beesley, and D. Stuart.	Philadelphia, Pa	Jan. 13, 1847	108
Stove	W. P. Cresson, S. H. Sailor, J. Beesley, and D. Stuart.	Philadelphia, Pa	Jan. 18, 1848	163
Stove	W. P. Cresson, S. H. Sailor, D. Stuart, and J. Beesley.	Philadelphia, Pa	Apr. 17, 1847	117
Stove	W. P. Cresson, D. Stuart, and J. Beesley.	Philadelphia, Pa	July 25, 1846	75
Stove	W. P. Cresson, D. Stuart, J. Beesley, and L. A. Watson.	Philadelphia, Pa	Apr. 17, 1847	116
Stove	W. P. Cresson, D. Stuart, and J. Beesley.	Philadelphia, Pa	Mar. 28, 1848	171
Stove	Cresson, Stewart, Beesley, and Sailor.	Philadelphia, Pa	Oct. 3, 1846	88
Stove	W. P. Cresson, D. Stuart, and P. Seibert.	Philadelphia, Pa	Feb. 5, 1850	261-262
Stove	W. P. Cresson, D. Stuart, and P. Seibert.	Philadelphia, Pa	Mar. 12, 1850	270-271
Stove	E. J. Cridge	Troy, N. Y	Nov. 2, 1858	1, 059
Stove	R. A. Culter and D. C. Proctor	Peoria, Ill	Nov. 4, 1873	6, 972
Stove	W. C. Davis	Cincinnati, Ohio	July 8, 1851	390
Stove	J. V. De Witt	Buffalo, N. Y	July 8, 1851	393
Stove	I. De Zouche	Saint Louis, Mo	July 3, 1860	1, 280
Stove	I. De Zouche	Saint Louis, Mo	Dec. 4, 1860	1, 350
Stove	I. Diller	Lancaster, Pa	June 17, 1856	801
Stove	C. Doane	Braintree, Mass	July 9, 1850	298
Stove	R. Donovan	Pittsburgh, Pa	Aug. 20, 1850	309
Stove	J. J. Dulley	Troy, N. Y	Nov. 4, 1856	848
Stove	J. J. Dulley and R. Mann	Troy, N. Y	Aug. 4, 1857	920
Stove	B. W. Dunklee	Boston, Mass	Dec. 15, 1857	969
Stove	H. Eaton	Amherst, N. H	Jan. 1, 1867	2, 535
Stove	H. Eaton	Amherst, N. H	Jan. 5, 1869	3, 304
Stove	L. Eddy	Taunton, Mass	Oct. 29, 1850	329
Stove	J. Elberweiser and E. Kettler	Cincinnati, Ohio	Feb. 11, 1862	1, 524
Stove	H. C. Fay	Troy, N. Y	Mar. 10, 1849	210
Stove	E. B. Finch	Peekskill, N. Y	Oct. 16, 1849	241
Stove	J. D. Flansburg	Philadelphia, Pa	Oct. 11, 1870	4, 400
Stove	C. Fulton	Rochester, N. Y	Sept. 25, 1849	234
Stove	C. Fulton	Rochester, N. Y	Mar. 23, 1869	3, 409
Stove	G. Geer	Troy, N. Y	May 1, 1847	119
Stove	S. W. Gibbs	Albany, N. Y	Oct. 3, 1846	84
Stove	S. W. Gibbs	Albany, N. Y	Oct. 23, 1847	158
Stove	S. W. Gibbs	Albany, N. Y	Nov. 27, 1847	160
Stove	S. W. Gibbs	Albany, N. Y	Mar. 20, 1849	211
Stove	S. W. Gibbs	Albany, N. Y	June 26, 1849	222
Stove	S. W. Gibbs	Albany, N. Y	July 10, 1849	227
Stove	S. W. Gibbs	Albany, N. Y	Oct. 9, 1849	240
Stove	S. W. Gibbs	Albany, N. Y	Jan. 21, 1851	345-346
Stove	S. W. Gibbs	Albany, N. Y	Mar. 4, 1851	356-357
Stove	S. W. Gibbs	Albany, N. Y	Mar. 4, 1851	359
Stove	S. W. Gibbs	Albany, N. Y	Apr. 8, 1851	366
Stove	S. W. Gibbs	Albany, N. Y	June 10, 1851	380
Stove	S. W. Gibbs	Albany, N. Y	July 8, 1851	394
Stove	S. W. Gibbs	Albany, N. Y	Nov. 11, 1851	422
Stove	S. W. Gibbs	Albany, N. Y	Sept. 6, 1853	596
Stove	S. W. Gibbs	Albany, N. Y	Feb. 20, 1855	692
Stove	S. W. Gibbs	Albany, N. Y	May 20, 1856	793
Stove	S. W. Gibbs	Albany, N. Y	June 17, 1856	806
Stove	S. W. Gibbs	Albany, N. Y	June 24, 1856	808
Stove	S. W. Gibbs	Albany, N. Y	Oct. 7, 1856	840
Stove	S. W. Gibbs	Albany, N. Y	June 16, 1857	895
Stove	S. W. Gibbs	Albany, N. Y	July 7, 1857	906-908
Stove	S. W. Gibbs	Albany, N. Y	July 14, 1857	912-913
Stove	S. W. Gibbs	Albany, N. Y	Aug. 4, 1857	921
Stove	S. W. Gibbs	Albany, N. Y	Jan. 10, 1860	1, 188
Stove	S. W. Gibbs	Albany, N. Y	June 12, 1860	1, 251
Stove	S. W. Gibbs	Albany, N. Y	May 7, 1861	1, 404
Stove	S. W. Gibbs	Albany, N. Y	Mar. 24, 1863	1, 741
Stove	C. Gilbert and W. G. Hallman	Philadelphia, Pa	Jan. 1, 1851	342
Stove	W. B. Gleason	Boston, Mass	Nov. 26, 1850	337
Stove	D. F. Goodhue and C. Guild	Cincinnati, Ohio	Aug. 18, 1846	83
Stove	D. F. Goodhue and C. Guild	Cincinnati, Ohio	Jan. 13, 1847	107
Stove	D. F. Goodhue and C. Guild	Cincinnati, Ohio	Dec. 4, 1849	252
Stove	J. G. Gordon	Schaghticoke, N. Y	Oct. 2, 1847	155
Stove	L. Gravline	Albany, N. Y	July 10, 1846	57
Stove	J. D. Green	Troy, N. Y	July 18, 1848	190
Stove	J. D. Green	Troy, N. Y	Oct. 2, 1847	156
Stove	J. D. Green	Troy, N. Y	Dec. 9, 1851	428
Stove	J. D. Green and G. Warren	Troy, N. Y	Feb. 19, 1850	267
Stove	J. Greer and R. I. King	Dayton, Ohio	May 15, 1860	1, 242

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Stove	R. A. Gregory	New York, N. Y	Oct. 3, 1846	86
Stove	C. Guild	Cincinnati, Ohio	Oct. 23, 1847	159
Stove	W. Hailes	Albany, N. Y	Feb. 4, 1868	2, 913
Stove	W. Hailes	Albany, N. Y	Sept. 22, 1868	3, 203–3, 206
Stove	W. G. Hallman	Philadelphia, Pa	June 10, 1851	381
Stove	A. Haney	Troy, N. Y	Apr. 17, 1849	219
Stove	A. Haney	Troy, N. Y	May 8, 1849	221
Stove	A. Haney	Troy, N. Y	Nov. 6, 1849	248
Stove	J. Hanfbaner and H. Waas	Cincinnati, Ohio	Feb. 27, 1855	695
Stove	S. Hanley	Troy, N. Y	Oct. 10, 1846	93
Stove	C. Harris and E. Kummer	Cincinnati, Ohio	Jan. 28, 1873	6, 369–6, 372
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Feb. 10, 1852	445
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 28, 1851	347
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Nov. 3, 1868	3, 227
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	May 18, 1869	3, 502
Stove	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Nov. 2, 1869	3, 735–3, 736
Stove	L. W. Harwood	Troy, N. Y	May 30, 1871	4, 947
Stove	W. L. Hathaway	Dighton, Mass	May 27, 1851	375
Stove	D. Hathaway	Troy, N. Y	Jan. 12, 1858	976–979
Stove	D. Hathaway	Troy, N. Y	June 20, 1865	2, 101
Stove	J. Heermans	Nassau, N. Y	Oct. 2, 1847	153
Stove	W. Hickok	New York, N. Y	Aug. 14, 1847	144
Stove	W. Hickok	New York, N. Y	Apr. 4, 1848	173
Stove	S. Hill and W. B. Cline	Philadelphia, Pa	July 17, 1849	228
Stove	S. Hill and W. B. Cline	Philadelphia, Pa	Dec. 4, 1849	253
Stove	C. S. Hine	New York, N. Y	May 1, 1845	29
Stove	J. Horton	Philadelphia, Pa	June 29, 1858	1, 016
Stove	J. Horton and J. Martino	Philadelphia, Pa	Mar. 19, 1861	1, 391
Stove	S. A. House	Mechanicsville, N. Y	Mar. 26, 1850	274
Stove	S. A. House	Mechanicsville, N. Y	June 24, 1851	388
Stove	H. S. and A. S. Hubbell	Buffalo, N. Y	Nov. 4, 1873	6, 977–6, 978
Stove	H. S. Hubbell, F. H. Wood, and J. E. Roberts.	Buffalo and Utica, N.Y	Feb. 21, 1860	1, 207
Stove	Z. Hunt	Hudson, N. Y	Dec. 4, 1860	1, 347
Stove	H. Hunt	Abington, Mass	May 16, 1865	2, 067
Stove	H. H. Huntley	Cincinnati, Ohio	Oct. 23, 1849	244
Stove	H. H. Huntley	Cincinnati, Ohio	Dec. 25, 1849	257
Stove	H. H. Huntley	Cincinnati, Ohio	July 26, 1853	584
Stove	D. K. Innes and W. W. Magill	Cincinnati, Ohio	Oct. 19, 1869	3, 719
Stove	W. Jackson	Syracuse, N. Y	July 25, 1846	64–65
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	Oct. 3, 1846	91–92
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	Oct. 9, 1849	238
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	July 9, 1850	300
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	Aug. 13, 1850	308
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	May 3, 1859	1, 099
Stove	S. S. Jewett and F. H. Root	Buffalo, N. Y	Dec. 14, 1869	3, 786
Stove	B. F. Johnson	Troy, N. Y	May 9, 1865	2, 058
Stove	A. W. Jones	New York, N. Y	Oct. 1, 1850	325
Stove	A. W. Jones	New York, N. Y	Sept. 2, 1851	408
Stove	J. H. Keyser	New York, N. Y	Apr. 18, 1871	4, 816
Stove	J. G. Lamb	Cincinnati, Ohio	Sept. 24, 1850	322–323
Stove	J. G. Lamb	Cincinnati, Ohio	Jan. 21, 1851	344
Stove	J. G. Lamb	Cincinnati, Ohio	June 17, 1851	386–387
Stove	J. G. Lamb and C. Harris	Cincinnati, Ohio	Aug. 7, 1849	229
Stove	J. G. Lamb and C. Harris	Cincinnati, Ohio	Dec. 11, 1849	254
Stove	J. G. Lamb and C. Harris	Cincinnati, Ohio	Feb. 5, 1850	260
Stove	C. A. Lambard	Augusta, Me	Dec. 10, 1850	340
Stove	J. Leffel	Springfield, Ohio	Feb. 24, 1852	448
Stove	F. Leibrandt and W. L. McDowell.	Philadelphia, Pa	Mar. 31, 1868	2, 970
Stove	A. A. Lincoln	Norton, Mass	Dec. 22, 1846	102
Stove	A. Low	Albany, N. Y	Feb. 12, 1845	27
Stove	A. Low	Albany, N. Y	Oct. 7, 1845	37
Stove	P. Low	Troy, N. Y	May 22, 1847	123
Stove	J. D. Marshbank	Lancaster, Pa	Nov. 13, 1860	1, 341
Stove	J. D. Marshbank	Lancaster, Pa	Dec. 16, 1862	1, 697
Stove	J. Martino	Philadelphia, Pa	Oct. 14, 1873	6, 958
Stove	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	July 17, 1866	2, 361
Stove	S. Merchant	Cleveland, Ohio	Sept. 2, 1851	410
Stove	I. T. Montross	Peekskill, N. Y	July 19, 1870	4, 236
Stove	W. N. Moore	Neenah, Wis	July 28, 1868	3, 137
Stove	A. Morrison	Troy, N. Y	Mar. 8, 1848	169
Stove	J. L. Mott	New York, N. Y	Feb. 12, 1844	17
Stove	R. P. Myers, B. F. Rouse, and J. M. Osborn.	Cleveland, Ohio	Nov. 23, 1869	3, 763
Stove	J. B. Nickels	Bangor, Me	Jan. 5, 1869	3, 317
Stove	G. M. Norton	Rochester, N. Y	July 25, 1846	72
Stove	A. O'Neill	Portsmouth, Ohio	Oct. 30, 1855	740
Stove	J. E. Owens, J. Ebert, and E. G. Dyer.	Hamilton, Ohio	June 25, 1850	294
Stove	J. E. Owens, J. Ebert, and E. G. Dyer.	Hamilton, Ohio	July 22, 1850	303
Stove	L. O. Palmer	Utica, N. Y	Oct. 10, 1846	94–95
Stove	L. O. Palmer	Utica, N. Y	Dec. 18, 1847	162
Stove	P. A. Palmer	Le Roy, N. Y	Apr. 30, 1850	281
Stove	P. A. Palmer	Troy, N. Y	Jan. 12, 1858	980
Stove	A. Paul	South New Market, N. H	June 11, 1850	289
Stove	N. P. Peck	Springfield, Mass	Jan. 23, 1849	209
Stove	J. S. and M. Peckham	Utica, N. Y	Oct. 16, 1845	39
Stove	J. S. and M. Peckham	Utica, N. Y	Oct. 3, 1846	85
Stove	J. S. and M. Peckham	Utica, N. Y	Oct. 3, 1846	89
Stove	E. P. Penniman	Rochester, N. Y	Sept. 9, 1843	35
Stove	E. P. Penniman	Rochester, N. Y	Apr. 17, 1847	118
Stove	E. P. Penniman	Rochester, N. Y	Apr. 18, 1848	177
Stove	E. P. Penniman	Rochester, N. Y	June 18, 1850	290
Stove	J. S. Perry	Albany, N. Y	Mar. 4, 1851	358

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Stove	R. Peterson, D. Stuart, and P. Seibert.	Philadelphia County, Pa	Mar. 26, 1850	275
Stove	S. Pierce	Troy, N. Y	Dec. 3, 1850	338
Stove	M. Pratt	Carver, Mass	Aug. 15, 1848	195
Stove	S. F. Pratt	Boston, Mass	June 24, 1856	809
Stove	W. Race	Seneca Falls, N. Y	May 14, 1850	283
Stove	W. Race	Seneca Falls, N. Y	June 25, 1850	295
Stove	S. H. Ransom	Albany, N. Y	July 10, 1845	31
Stove	S. H. Ransom	Albany, N. Y	Jan. 5, 1847	106
Stove	S. H. Ransom	Albany, N. Y	Aug. 7, 1847	141
Stove	S. H. Ransom	Albany, N. Y	Aug. 1, 1848	191
Stove	S. H. Ransom	Albany, N. Y	Apr. 24, 1849	220
Stove	S. H. Ransom	Albany, N. Y	June 26, 1849	224–225
Stove	S. H. Ransom	Albany, N. Y	Aug. 25, 1857	929–934
Stove	J. F. Rathbone	Albany, N. Y	Mar. 20, 1847	113
Stove	J. F. Rathbone	Albany, N. Y	Aug. 7, 1847	142
Stove	J. F. Rathbone	Albany, N. Y	Oct. 23, 1847	157
Stove	J. F. Rathbone	Albany, N. Y	Dec. 5, 1848	207
Stove	J. F. Rathbone	Albany, N. Y	Oct. 23, 1849	245–247
Stove	J. F. Rathbone	Albany, N. Y	June 18, 1850	291–292
Stove	J. F. Rathbone	Albany, N. Y	June 10, 1851	384
Stove	G. W. Rathbun	Le Roy, N. Y	Oct. 24, 1848	202
Stove	J. A. Read	Philadelphia, Pa	June 29, 1858	1, 017
Stove	J. Resor	Cincinnati, Ohio	May 15, 1860	1, 244
Stove	W. Resor	Cincinnati, Ohio	May 23, 1846	47
Stove	W. Resor	Cincinnati, Ohio	July 17, 1847	134
Stove	W. Resor	Cincinnati, Ohio	Dec. 4, 1866	2, 516–2, 518
Stove	W. and R. P. Resor	Cincinnati, Ohio	Oct. 10, 1846	96
Stove	N. P. Richardson	Portland, Me	May 27, 1851	376
Stove	N. P. Richardson and W. W. Stevens.	Portland, Me	Oct. 13, 1857	954
Stove	N. P. Richardson	Portland, Me	Sept. 7, 1858	1, 048
Stove	A. Richmond	Providence, R. I	Aug. 30, 1848	198
Stove	A. Richmond	Providence, R. I	July 16, 1850	301
Stove	A. Richmond	Providence, R. I	Nov. 12, 1850	333
Stove	A. Richmond	Brooklyn, Conn	Feb. 1, 1859	1, 080
Stove	A. and S. G. Richmond	Brooklyn, N. Y., and Norwich, Conn.	Jan. 19, 1869	3, 346
Stove	G. W Ring and J. Crandall	Troy, N. Y	Sept. 19, 1848	200
Stove	E. Ripley	Troy, N. Y	July 14, 1845	32
Stove	E. Ripley	Troy, N. Y	Oct. 16, 1845	41
Stove	E. Ripley	Troy, N. Y	Nov. 12, 1845	43
Stove	E. Ripley	Troy, N. Y	July 25, 1846	73–74
Stove	E. Ripley	Troy, N. Y	Oct. 3, 1846	87
Stove	E. Ripley	Troy, N. Y	Feb. 27, 1847	111
Stove	E. Ripley	Troy, N. Y	Sept. 11, 1847	151
Stove	E. Ripley	Troy, N. Y	Aug. 10, 1848	193
Stove	E. Ripley	Troy, N. Y	Oct. 22, 1850	327–328
Stove	E. Ripley	Troy, N. Y	May 27, 1851	377
Stove	E. Ripley	Troy, N. Y	Oct. 28, 1851	421
Stove	R. A. Robbins	Baltimore, Md	Aug. 7, 1847	140
Stove	H. W. Robbins	Baltimore, Md	Nov. 28, 1854	680
Stove	L. Rollins	Bangor, Me	Apr. 18, 1871	4, 821
Stove	D. Root	Cincinnati, Ohio	Sept. 9, 1845	34
Stove	D. Root	Cincinnati, Ohio	May 21, 1850	284
Stove	D. Root	Cincinnati, Ohio	Nov. 12, 1850	334
Stove	J. R. Rose and E. L. Calely	Philadelphia, Pa	June 15, 1869	3, 549
Stove	I. N. Ross	Holden, Mass	June 15, 1869	3, 550–3, 551
Stove	J. Rowe	Cincinnati, Ohio	Apr. 27, 1869	3, 460
Stove	S. H. Sailor	Kensington, Pa	Sept. 2, 1851	409
Stove	S. H. Sailor	Philadelphia, Pa	Nov. 9, 1852	524
Stove	S. H. Sailor	Philadelphia, Pa	Aug. 23, 1853	592
Stove	S. H. Sailor and J. Steffe	Philadelphia, Pa	Oct. 9, 1860	1, 337
Stove	W. L. Sanderson	Troy, N. Y	June 27, 1848	188
Stove	W. L. Sanderson	Troy, N. Y	Aug. 21, 1849	230
Stove	W. L. Sanderson	Troy, N. Y	Dec. 18, 1849	255
Stove	W. L. Sanderson	Troy, N. Y	Feb. 26, 1850	269
Stove	W. L. Sanderson	Troy, N. Y	Aug. 27, 1850	311
Stove	W. L. Sanderson	Troy, N. Y	June 3, 1851	379
Stove	W. Sanford	New York, N. Y	Sept. 28, 1869	3, 675
Stove	W. Savery	New York, N. Y	Oct. 9, 1849	239
Stove	W. Savery	New York, N. Y	Sept. 24, 1850	324
Stove	W. Savery	New York, N. Y	Oct. 21, 1851	420
Stove	W. Savery	New York, N. Y	Jan. 6, 1852	435
Stove	W. Savery and J. H. Conklin	New York, N. Y	Nov. 21, 1848	204
Stove	W. Savery, J. H. Conklin, H. V. Losea, G. P. Bowers, and J. Pratt.	New York, N. Y., and Boston, Mass.	June 13, 1848	185
Stove	R. Scorer and R. Ham	Troy, N. Y	Nov. 28, 1871	5, 394
Stove	W. Shaw	Albany, N. Y	July 10, 1846	58
Stove	C. J. Shepard	New York, N. Y	Aug. 28, 1847	145
Stove	C. J. Shepard	Brooklyn, N. Y	Jan. 5, 1858	975
Stove	C. J. Shepard	New York, N. Y	Feb. 4, 1862	1, 523
Stove	H. L. Sheperd	Dayton, Ohio	Jan. 8, 1850	258
Stove	P. J. Simmons	Troy, N. Y	Mar. 20, 1847	112
Stove	P. J. Simmons	Troy, N. Y	Feb. 5, 1850	259
Stove	G. W. and H. Sizer	Springfield, Mass	July 25, 1846	70–71
Stove	G. W. and H. Sizer	Springfield, Mass	Sept. 4, 1847	146
Stove	E. Smith	Troy, N. Y	June 12, 1847	126
Stove	E. Smith	Albany, N. Y	Jan. 18, 1848	164
Stove	E. Smith	Albany, N. Y	Jan. 7, 1851	343
Stove	G. Smith and H. Brown	Philadelphia County, Pa	Oct. 4, 1853	601
Stove	G. Smith and H. Brown	Philadelphia, Pa	Oct. 4, 1853	603
Stove	G. Smith and H. Brown	Philadelphia, Pa	Oct. 20, 1857	962
Stove	G. Smith and H. Brown	Philadelphia, Pa	July 20, 1858	1, 029
Stove	G. Smith and H. Brown	Philadelphia, Pa	Sept. 21, 1858	1, 052
Stove	G. Smith and H. Brown	Philadelphia, Pa	Apr. 19, 1859	1, 094
Stove	G. Smith and H. Brown	Philadelphia, Pa	July 5, 1859	1, 118

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Stove	G. Smith and H. Brown	Philadelphia, Pa	Aug. 16, 1859	1,133
Stove	G. Smith and H. Brown	Philadelphia, Pa	Oct. 4, 1859	1,153
Stove	G. Smith and H. Brown	Philadelphia, Pa	Nov. 1, 1859	1,167
Stove	G. Smith and H. Brown	Philadelphia, Pa	Oct. 2, 1860	1,322
Stove	G. Smith and H. Brown	Philadelphia, Pa	Dec. 18, 1860	1,362
Stove	G. Smith and H. Brown	Philadelphia, Pa	May 28, 1861	1,430
Stove	G. Smith and H. Brown	Philadelphia, Pa	Sept. 22, 1863	1,819
Stove	G. Smith and H. Brown	Philadelphia, Pa	July 12, 1864	1,968
Stove	G. Smith and H. Brown	Philadelphia, Pa	May 11, 1869	3,487
Stove	G. Smith and H. Brown	Philadelphia, Pa	June 15, 1869	3,554
Stove	G. Smith, H. Brown, and J. Holzer.	Philadelphia, Pa	Jan. 2, 1855	686
Stove	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	June 17, 1856	805
Stove	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Sept. 16, 1856	830
Stove	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Oct. 7, 1856	844
Stove	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Oct. 13, 1857	955
Stove	G. Smith, H. Brown, and S. H. Sailor.	Philadelphia, Pa	May 26, 1857	891
Stove	G. Smith, H. Brown, and S. H. Sailor.	Philadelphia, Pa	Sept. 8, 1857	942
Stove	J. C. Smith	Troy, N. Y	July 7, 1857	905
Stove	M. Smith and B. S. Gleason	Le Roy, N. Y	Dec. 3, 1850	339
Stove	W. H. Smith	Newport, R. I	Feb. 21, 1860	1,208
Stove	I. Snider, and J. and J. M. Woodruff.	Salem, Ohio	Mar. 23, 1869	3,427
Stove	W. D. Southard	New York, N. Y	Aug. 26, 1873	6,831
Stove	J. Spear	Philadelphia, Pa	Oct. 15, 1867	2,803
Stove	G. T. and W. A. Spicer and C. H. Peekham.	Providence, R. I	July 19, 1870	4,239
Stove	W. W. Stanard	Buffalo, N. Y	Apr. 9, 1861	1,399
Stove	W. W. Stanard	Buffalo, N. Y	Apr. 9, 1861	1,401
Stove	W. W. Stanard	Buffalo, N. Y	Apr. 15, 1862	1,565-1,566
Stove	H. Stanley	Poultney, Vt	Oct. 16, 1845	40
Stove	J. Steffe	Philadelphia, Pa	Sept. 12, 1865	2,170
Stove	J. Steffe	Philadelphia, Pa	Oct. 17, 1865	2,207
Stove	J. Steffe, J. Horton, and J. Currie.	Philadelphia, Pa	May 5, 1857	885
Stove	J. Steffe, J. Horton, and J. Currie.	Philadelphia, Pa	Aug. 17, 1858	1,041-1,042
Stove	J. Steffe and S. H. Sailor	Philadelphia, Pa	Nov. 13, 1860	1,344
Stove	D. Stuart and J. Beesley	Philadelphia, Pa	June 10, 1851	385
Stove	L. L. Thomas	North Dighton, Mass	Nov. 9, 1858	1,061
Stove	G. H. Tryday	Philadelphia County, Pa	Oct. 4, 1853	600
Stove	S. L. Utter	Brooklyn, N. Y	Sept. 28, 1869	3,680
Stove	S. S. Utter	Brooklyn, N. Y	May 17, 1870	4,053
Stove	N. S. Vedder	Troy, N. Y	July 29, 1851	404
Stove	N. S. Vedder	Troy, N. Y	June 23, 1857	900
Stove	N. S. Vedder	Troy, N. Y	July 14, 1857	911
Stove	N. S. Vedder	Troy, N. Y	Sept. 1, 1857	938
Stove	N. S. Vedder	Troy, N. Y	Jan. 5, 1858	973
Stove	N. S. Vedder	Troy, N. Y	July 13, 1858	1,027
Stove	N. S. Vedder	Troy, N. Y	Apr. 24, 1860	1,235
Stove	N. S. Vedder	Troy, N. Y	Sept. 4, 1860	1,312
Stove	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Sept. 28, 1869	3,681
Stove	N. S. Vedder and E. Ripley	Troy, N. Y	Jan. 12, 1858	982
Stove	N. S. Vedder and E. Ripley	Troy, N. Y	Mar. 5, 1861	1,389
Stove	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	June 24, 1856	810
Stove	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Oct. 7, 1856	839
Stove	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Jan. 12, 1858	983-984
Stove	S. D. Vose	Albany, N. Y	July 25, 1846	62-63
Stove	S. D. Vose	Albany, N. Y	July 25, 1846	67
Stove	S. D. Vose	Albany, N. Y	Aug. 18, 1846	79
Stove	S. D. Vose	Albany, N. Y	Aug. 18, 1846	81-82
Stove	S. D. Vose	Albany, N. Y	Feb. 12, 1850	263-265
Stove	J. Wager	Troy, N. Y	Oct. 10, 1846	97
Stove	J. Wager	Troy, N. Y	June 26, 1847	129
Stove	J. Wager	Troy, N. Y	Apr. 11, 1848	176
Stove	J. Wager	Troy, N. Y	Sept. 25, 1849	232-233
Stove	J. Wager	Troy, N. Y	Oct. 23, 1849	242
Stove	J. Wager	Troy, N. Y	Apr. 2, 1850	277
Stove	J. Wager, D. Pratt, and V. Richmond.	Troy, N. Y	June 18, 1850	293
Stove	J. Wager, D. Pratt, and V. Richmond.	Troy, N. Y	May 20, 1851	373
Stove	J. Wager, D. Pratt, and V. Richmond.	Troy, N. Y	Jan. 13, 1852	437
Stove	A. S. Wallace and J. S. Lithgow.	Louisville, Ky	June 12, 1847	127
Stove	B. Wardwell	Fall River, Mass	Nov. 20, 1855	743
Stove	G. E. Waring	Stamford, Conn	Apr. 10, 1849	217
Stove	C. W. Warnick	Philadelphia, Pa	May 30, 1848	183
Stove	C. W. Warnick	Philadelphia, Pa	Aug. 30, 1848	199
Stove	C. W. Warnick	Philadelphia, Pa	June 26, 1849	223
Stove	C. W. Warnick	Philadelphia, Pa	Aug. 27, 1850	312
Stove	J. D. Warren, J. B. Scofield, I. Wardwell, and A. T. Jones.	Stamford, Conn	Feb. 5, 1861	1,369
Stove	A. Wemyss	Philadelphia, Pa	Apr. 27, 1869	3,468
Stove	R. Wheeler and S. A. Bailey	Utica, N. Y	May 19, 1857	887
Stove	A. White	Geneseo, Ill	Aug. 31, 1869	3,653
Stove	A. Whitney	Albany, N. Y	July 19, 1844	22

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Invention.	Inventor.	Residence.	Date.	No.
Stove	A. Whitney	Albany, N. Y	Jan. 5, 1847	105
Stove	S. Williams, jr	Nashua, N. H	Apr. 8, 1851	365
Stove	C. Wolff	Cincinnati, Ohio	Jan. 21, 1847	109
Stove	T. H. Wood and H. S. and A. S. Hubbell.	Utica and Buffalo, N. Y	Jan. 7, 1862	1,513
Stove	C. J. Woolson	Cleveland, Ohio	July 17, 1847	135–136
Stove	C. J. Woolson	Cleveland, Ohio	Apr. 10, 1849	218
Stove	C. J. Woolson	Cleveland, Ohio	Oct. 14, 1851	418
Stove	T. D. Worrall	Lowell, Mass	Aug. 25, 1857	937
Stove, Air-chamber for parlor	M. B. Hudson	Canandaigua, N. Y	July 6, 1869	3,576
Stove, Air-tight	M. Pond	Boston, Mass	Oct. 23, 1849	243
Stove, Air-tight	J. F. Rathbone	Albany, N. Y	July 10, 1846	50
Stove, Air-tight	N. P. Richardson	Portland, Me	Apr. 1, 1851	363
Stove, Air-tight	A. and S. G. Richmond	Brooklyn, N. Y., and Norwich, Conn.	Jan. 19, 1869	3,348
Stove, Air-tight	F. Schultz	Philadelphia, Pa	Apr. 1, 1851	364
Stove, Air-tight	G. Smith and H. Brown	Philadelphia, Pa	Apr. 25, 1854	642
Stove, Air-tight	G. Smith and H. Brown	Philadelphia, Pa	June 17, 1856	803
Stove, Air-tight	G. Smith and H. Brown	Philadelphia, Pa	Apr. 12, 1859	1,093½
Stove, Air-tight	S. D. Vose	Albany, N. Y	June 26, 1847	130
Stove, Air-tight cooking	J. E. Thomas	Albany, N. Y	July 10, 1846	53
Stove and fire-place	W. Ames	Nashua, N. H	Aug. 28, 1855	721
Stove, Bar-room	J. Beesley	Philadelphia, Pa	Nov. 7, 1854	677
Stove-base	T. J. Hodgkins, jr	Peekskill, N. Y	Aug. 25, 1868	3,164
Stove-base	N. S. Vedder	Troy, N. Y	Aug. 1, 1865	2,154–2,155
Stove base and top	N. S. Vedder	Troy, N. Y	Jan. 5, 1869	3,324
Stove base and top	N. S. Vedder and F. Ritchie	Troy, N. Y	Jan. 5, 1869	3,331
Stove, Base-burning	D. Smith	Albany, N. Y	Sept. 10, 1872	6,135
Stove, Base-burning	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 2, 1873	7,012
Stove, Bas-relief ornament for	G. F. Seavey	Boston, Mass	June 1, 1858	1,011
Stove, Box	E. J. Cridge	Troy, N. Y	Oct. 4, 1859	1,151
Stove, Box	J. F. Rathbone	Albany, N. Y	July 10, 1846	49
Stove, Box	J. F. Rathbone	Albany, N. Y	July 10, 1846	51
Stove, Box	A. Snyder and A. Delaney	Richmond, Va	May 12, 1868	3,043
Stove, Box	J. Stewart	Baltimore, Md	Dec. 5, 1854	681
Stove, Box	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6,309
Stove, Box	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 2, 1873	7,011
Stove, Box	N. S. Vedder and E. Ripley	Troy, N. Y	Aug. 10, 1858	1,037
Stove, Box	S. D. Vose	Albany, N. Y	June 22, 1852	464
Stove, Box	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Dec. 14, 1852	532
Stove, Cannon	W. Resor	Cincinnati, Ohio	Jan. 31, 1854	623
Stove, Cannon	W. Caven	Cincinnati, Ohio	July 30, 1867	2,714
Stove, Cannon	S. H. Sailor	Philadelphia, Pa	Nov. 9, 1852	523
Stove cap and base, Parlor	S. W. Gibbs	Albany, N. Y	Aug. 13, 1861	1,458
Stove, Charcoal	A. J. Redway	Cincinnati, Ohio	Aug. 6, 1867	2,718
Stove, Coal	J. Burgess	Troy, N. Y	Jan. 13, 1852	439
Stove, Coal	J. T. Davy	Troy, N. Y	June 4, 1850	288
Stove, Coal	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Feb. 21, 1854	631
Stove, Coal	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 23, 1855	691
Stove, Coal	D. Hathaway	Troy, N. Y	July 31, 1860	1,291
Stove, Coal	J. Horton	Philadelphia, Pa	Oct. 30, 1855	739
Stove, Coal	G. Knapp and A. H. Neal	Honesdale, Pa	Dec. 14, 1852	534
Stove, Coal	J. F. Rathbone	Albany, N. Y	Aug. 13, 1850	306
Stove, Coal	L. Rathbone	Albany, N. Y	May 7, 1867	2,651
Stove, Coal	W. L. Sanderson	Troy, N. Y	Sept. 7, 1852	497
Stove, Coal	G. Smith and H. Brown	Philadelphia, Pa	Nov. 6, 1855	742
Stove, Coal	S. D. Vose	Albany, N. Y	June 22, 1852	463
Stove, Coal	S. D. Vose	Albany, N. Y	Mar. 28, 1854	638
Stove, Coal and air-tight	J. G. Lamb and C. Loiner	Cincinnati, Ohio	Feb. 15, 1848	166
Stove, Coal and wood cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Sept. 13, 1871	4,349
Stove, Coal cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 23, 1857	896
Stove-column	E. Ripley	Troy, N. Y	Aug. 12, 1843	5
Stove, Cook	W. P. Abendroth	Port Chester, N. Y	Aug. 31, 1858	1,044
Stove, Cook	J. Abendroth	New York, N. Y	May 21, 1867	2,655
Stove, Cook	J. J. Anderson	Rochester, Pa	May 26, 1868	3,055
Stove, Cook	T. J. and W. Armstrong	Port Deposit, Md	Oct. 22, 1867	2,813
Stove, Cook	G. W. Ball	Cincinnati, Ohio	July 9, 186[illegible]	2,694–2,696
Stove, Cook	A. C. Barstow	Providence, R. I	Nov. 16, 1858	1,063
Stove, Cook	A. C. Barstow	Providence, R. I	Mar. 22, 1859	1,089
Stove, Cook	E. Bolton	Northern Liberties, Pa	June 21, 1853	571
Stove, Cook	A. E. Chamberlain and J. B. Crowley.	Cincinnati, Ohio	June 4, 1867	2,662
Stove, Cook	J. G. Clarke	Cincinnati, Ohio	June 6, 1865	2,080
Stove, Cook	J. G. Clarke	Cincinnati, Ohio	Apr. 27, 1869	3,453
Stove, Cook	D. E. Conklin	Baltimore, Md	June 8, 1869	3,532
Stove, Cook	E. J. Cridge	Troy, N. Y	Dec. 13, 1864	2,006
Stove, Cook	J. B. Crowley	Cincinnati, Ohio	Nov. 26, 1867	2,837
Stove, Cook	H. H. Culver	Kansas City, Mo	Sept. 27, 1870	4,365
Stove, Cook	W. C. Davis	Cincinnati, Ohio	Jan. 1, 1851	341
Stove, Cook	W. C. Davis	Cincinnati, Ohio	July 21, 1868	3,116–3,117
Stove, Cook	J. T. Davy	Troy, N. Y	June 21, 1853	569
Stove, Cook	E. J. Delany	Philadelphia, Pa	July 13, 1858	1,096
Stove, Cook	E. J. Delany and J. Martino	Philadelphia, Pa	June 1, 1858	1,010
Stove, Cook	C. H. Frost	Peekskill, N. Y	Apr. 29, 1862	1,568
Stove, Cook	A. J. Gallagher	Philadelphia, Pa	Oct. 25, 1859	1,157
Stove, Cook	A. J. Gallagher and J. Beesley	Philadelphia, Pa	June 7, 1859	1,106
Stove, Cook	S. W. Gibbs	Albany, N. Y	May 11, 1858	1,003
Stove, Cook	S. W. Gibbs	Albany, N. Y	Jan. 30, 1866	2,247
Stove, Cook	R. Ham	Troy, N. Y	Aug. 3, 1858	1,031
Stove, Cook	R. Ham	Troy, N. Y	Jan. 7, 1862	1,509
Stove, Cook	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 4, 1859	1,076
Stove, Cook	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 12, 1866	2,337–2,339

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Stove, Cook	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Dec. 3, 1867	2, 844
Stove, Cook	D. Hathaway	Troy, N. Y	July 26, 1859	1, 125
Stove, Cook	T. A. Herrick	Boston, Mass	May 18, 1852	457
Stove, Cook	H. S. and A. S. Hubbell	Buffalo, N. Y	Dec. 9, 1862	1, 678–1, 680
Stove, Cook	H. S. and A. S. Hubbell	Buffalo, N. Y	Oct. 10, 1865	2, 185–2, 186
Stove, Cook	J. R. Hyde	Troy, N. Y	Sept. 23, 1862	1, 659
Stove, Cook	J. R. Hyde	Troy, N. Y	Sept. 25, 1866	2, 437
Stove, Cook	A. Ingraham and G. H. Phillips	Center Cambridge and Troy, N. Y.	Mar. 31, 1863	1, 744
Stove, Cook	S. S. Jewett and F. H. Root	Buffalo, N. Y	Apr. 26, 1859	1, 095
Stove, Cook	G. Knapp	Honesdale, Pa	Sept. 3, 1861	1, 473
Stove, Cook	C. S. Lord and W. N. Walker	Otter River, Mass	Nov. 3, 1868	3, 223
Stove, Cook	J. D. Marshbank	Lancaster, Pa	June 2, 1857	893
Stove, Cook	J. Martino	Philadelphia, Pa	Sept. 20, 1859	1, 147
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	July 3, 1866	2, 350
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Apr. 9, 1867	2, 611
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	June 25, 1867	2, 687
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Aug. 6, 1867	2, 729
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Mar. 17, 1868	2, 953
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	Mar. 31, 1868	2, 971
Stove, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	May 11, 1869	3, 483
Stove, Cook	J. Mersereau	Port Chester, N. Y	Sept. 17, 1861	1, 474
Stove, Cook	T. S. Mitchell	Pittsburgh, Pa	May 26, 1868	3, 056
Stove, Cook	C. Olhaber and N. S. Vedder	Cincinnati, Ohio, and Troy, N. Y.	Aug. 6, 1867	2, 732
Stove, Cook	C. W. Palmer	Troy, N. Y	Oct. 29, 1861	1, 485
Stove, Cook	C. W. Palmer	Troy, N. Y	Apr. 15, 1862	1, 564
Stove, Cook	G. W. and J. Pittock	Union Mills, N. Y	July 26, 1859	1, 126
Stove, Cook	G. W. Pittock, G. G. Richmond, and C. Phelps.	Troy, N. Y	Apr. 6, 1858	996
Stove, Cook	S. H. Ransom	Albany, N. Y	Sept. 9, 1862	1, 655
Stove, Cook	W. Resor	Cincinnati, Ohio	Dec. 4, 1866	2, 519–2, 520
Stove, Cook	I. B. Resor	Cincinnati, Ohio	July 6, 1869	3, 577
Stove, Cook	A. and S. G. Richmond	Brooklyn, N. Y., and Norwich, Conn.	Jan. 19, 1869	3, 347
Stove, Cook	E. Ripley and N. S. Vedder	Troy, N. Y	Dec. 7, 1852	541
Stove, Cook	I. N. Ross	Holden, Mass	June 15, 1869	3, 552–3, 553
Stove, Cook	S. Sailor	Philadelphia, Pa	June 18, 1867	2, 680
Stove, Cook	F. Schultz	Philadelphia County, Pa	Aug. 30, 1853	594
Stove, Cook	R. Scorer and R. Ham	Troy, N. Y	May 4, 1869	3, 474
Stove, Cook	D. M. Scypes and S. Smith	Springville, Pa	July 23, 1861	1, 456
Stove, Cook	W. G. Semple	Cincinnati, Ohio	Apr. 1, 1873	6, 549
Stove, Cook	I. A. Sheppard and J. Holger	Philadelphia, Pa	June 13, 1865	2, 098
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	Dec. 8, 1857	967
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	June 29, 1858	1, 018–1, 019
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	June 30, 1863	1, 793
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	Jan. 30, 1866	2, 252–2, 253
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	Feb. 12, 1867	2, 574
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	Oct. 22, 1867	2, 809–2, 810
Stove, Cook	G. Smith and H. Brown	Philadelphia, Pa	Mar. 31, 1868	2, 985–2, 986
Stove, Cook	G. Smith, H. Brown, and S. H. Sailor.	Philadelphia, Pa	Jan. 5, 1858	974
Stove, Cook	G. T. Spicer	Providence, R. I	May 29, 1866	2, 329
Stove, Cook	W. W. Stanard	Buffalo, N. Y	July 24, 1860	1, 289
Stove, Cook	W. W. Stanard	Buffalo, N. Y	July 31, 1860	1, 296
Stove, Cook	W. W. Stanard	Buffalo, N. Y	July 31, 1860	1, 298
Stove, Cook	W. W. Stanard	Buffalo, N. Y	Sept. 25 1860	1, 316–1, 317
Stove, Cook	J. Steffe	Philadelphia, Pa	Oct. 2, 1866	2, 485
Stove, Cook	J. Steffe	Philadelphia, Pa	Aug. 4, 1868	3, 153
Stove, Cook	N. S. Vedder	Troy, N. Y	Sept. 14, 1852	501
Stove, Cook	N. S. Vedder	Troy, N. Y	Nov. 2, 1852	519
Stove, Cook	N. S. Vedder	Troy, N. Y	June 28, 1853	572
Stove, Cook	N. S. Vedder	Troy, N. Y	Oct. 5, 1858	1, 055
Stove, Cook	N. S. Vedder	Troy, N. Y	June 12, 1860	1, 255
Stove, Cook	N. S. Vedder	Troy, N. Y	July 31, 1860	1, 294
Stove, Cook	N. S. Vedder	Troy, N. Y	Mar. 5, 1861	1, 388
Stove, Cook	N. S. Vedder	Troy, N. Y	May 28, 1861	1, 431
Stove, Cook	N. S. Vedder	Troy, N. Y	Jan. 5, 1864	1, 881
Stove, Cook	N. S. Vedder	Troy, N. Y	Aug. 1, 1865	2, 156
Stove, Cook	N. S. Vedder	Troy, N. Y	Oct. 10, 1865	2, 198
Stove, Cook	N. S. Vedder and F. Ritchie	Troy, N. Y	Mar. 31, 1868	2, 990
Stove, Cook	N. S. Vedder and F. Ritchie	Troy, N. Y	June 29, 1869	3, 563
Stove, Cook	N. S. Vedder and F. Ritchie	Troy, N. Y	Nov. 2, 1869	3, 740
Stove, Cook	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	May 18, 1852	458
Stove, Cook	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Oct. 21, 1856	846
Stove, Cook	S. Pierce and J. J. Dulley	Troy, N. Y	July 12, 1853	579
Stove, Cook	S. D. Vose	Albany, N. Y	Sept. 14, 1852	500
Stove, Cook	R. Wheeler	Utica, N. Y	Dec. 10, 1867	2, 847
Stove, Cook	R. Wheeler and S. A. Bailey	Utica, N. Y	May 4, 1858	999
Stove, Cook	R. Wheeler and S. A. Bailey	Utica, N. Y	Dec. 6, 1864	2, 005
Stove, Cook	R. Wheeler and S. A. Bailey	Utica, N. Y	Aug. 1, 1865	2, 158
Stove, Cook	T. H. Wood, J. E. Roberts, and H. S. Hubbell.	Buffalo, N. Y	May 11, 1858	1, 002
Stove, Cook	T. H. Wood, J. E. Roberts, and H. S. Hubbell.	Utica and Buffalo, N. Y	Oct. 25, 1859	1, 160
Stove, Cook	T. H. Wood and H. S. and A. S. Hubbell.	Utica and Buffalo, N. Y	Jan. 7, 1862	1, 514–1, 515
Stove, Cook	E. Young	Cincinnati, Ohio	Dec. 1, 1857	966

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Invention.	Inventor.	Residence.	Date.	No.
Stove, Cooking	W. Abendroth	Port Chester, N. Y	May 9, 1848	178
Stove, Cooking	J. Abendroth	Port Chester, N. Y	Apr. 15, 1861	368
Stove, Cooking	J. Abendroth	New York, N. Y	Apr. 18, 1871	4, 810
Stove, Cooking	J. F. Allan	Philadelphia, Pa	June 17, 1856	807
Stove, Cooking	W. Ames	Nashua, N. H	Dec. 20, 1853	612
Stove, Cooking	O. W. Andrews	Providence, R. I	Sept. 21, 1852	505
Stove, Cooking	D. Arnold	Providence, R. I	Apr. 15, 1851	367
Stove, Cooking	T. Barry	New York, N. Y	July 26, 1853	586
Stove, Cooking	A. C. Barstow	Providence, R. I	July 10, 1849	227
Stove, Cooking	J. Beesley	Philadelphia, Pa	Aug. 10, 1852	486
Stove, Cooking	J. Beesley	Spring Garden District, Pa.	Apr. 19, 1853	553
Stove, Cooking	J. Beesley and E. J. Delany	Philadelphia, Pa	May 23, 1854	652
Stove, Cooking	J. Beesley and E. J. Delany	Philadelphia, Pa	Mar. 20, 1855	697
Stove, Cooking	J. Beesley and E. J. Delany	Philadelphia, Pa	May 19, 1857	886
Stove, Cooking	A. J. Blanchard	South Reading, Mass	May 29, 1855	712
Stove, Cooking	H. E. Bridge	Saint Louis, Mo	Oct. 7, 1856	837
Stove, Cooking	C. H. Buck and W. S. Wright	Saint Louis, Mo	Feb. 27, 1872	5, 557-5, 558
Stove, Cooking	W. H. Burrows	New York, N. Y	June 6, 1871	4, 971
Stove, Cooking	E. Bussey	Troy, N. Y	Nov. 26, 1872	6, 271
Stove, Cooking	S. M. Carpenter	Erie, Pa	Mar. 30, 1852	450
Stove, Cooking	W. T. Coggeshall	Fall River, Mass	Apr. 18, 1854	639
Stove, Cooking	W. T. Coggeshall	Fall River, Mass	Sept. 4, 1855	726
Stove, Cooking	A. Comstock	Quincy, Ill	Mar. 10, 1857	873
Stove, Cooking	J. H. Conklin	Peekskill, N. Y	June 29, 1852	468
Stove, Cooking	M. M. Coppuck	Philadelphia, Pa	Apr. 29, 1873	6, 618
Stove, Cooking	W. C. Davis	Cincinnati, Ohio	Apr. 5, 1870	3, 951
Stove, Cooking	J. T. Davy	Troy, N. Y	May 30, 1848	182
Stove, Cooking	J. T. Davy	Troy, N. Y	Dec. 23, 1856	856
Stove, Cooking	I. De Zouche	Saint Louis, Mo	Oct. 20, 1863	1, 836
Stove, Cooking	J. J. Dulley	Troy, N. Y	July 19, 1853	521
Stove, Cooking	H. Eaton	Nashua, N. H	July 11, 1854	660
Stove, Cooking	H. Eaton	Amherst, N. H	Aug. 11, 1868	3, 155
Stove, Cooking	S. Eberly	Mechanicsburgh, Pa	Aug. 3, 1852	477
Stove, Cooking	R. R. Finch	Peekskill, N. Y	May 27, 1873	6, 685
Stove, Cooking	C. Fulton	Rochester, N. Y	Aug. 18, 1846	80
Stove, Cooking	A. J. Gallagher	Philadelphia, Pa	May 13, 1856	789
Stove, Cooking	A. J. Gallagher and J. J. Baker	Philadelphia, Pa	Apr. 20, 1852	452
Stove, Cooking	A. J. Gallagher and J. J. Baker	Philadelphia, Pa	May 31, 1853	568
Stove, Cooking	S. W. Gibbs	Albany, N. Y	Sept. 19, 1848	201
Stove, Cooking	S. W. Gibbs	Albany, N. Y	June 22, 1852	467
Stove, Cooking	S. W. Gibbs	Albany, N. Y	Feb. 20, 1855	693
Stove, Cooking	S. W. Gibbs	Albany, N. Y	Dec. 9, 1856	852-853
Stove, Cooking	S. W. Gibbs	Albany, N. Y	June 23, 1857	899
Stove, Cooking	S. W. Gibbs	Albany, N. Y	May 7, 1861	1, 406
Stove, Cooking	A. J. Gilbert	New York, N. Y	Nov. 5, 1872	6, 238
Stove, Cooking	W. P. Gray	Penn Township, Pa	Sept. 6, 1853	597
Stove, Cooking	W. P. Gray	Philadelphia, Pa	Oct. 17, 1854	674
Stove, Cooking	J. D. Green and G. Warren	Troy, N. Y	Apr. 16, 1850	280
Stove, Cooking	J. Greer and R. I. King	Dayton, Ohio	July 5, 1859	1, 112
Stove, Cooking	J. Hackett	Louisville, Ky	July 29, 1856	817
Stove, Cooking	W. Hailes	Albany, N. Y	Oct. 25, 1870	4, 433
Stove, Cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 24, 1854	620
Stove, Cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 31, 1854	624
Stove, Cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Aug. 28, 1855	724
Stove, Cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Dec. 11, 1855	749
Stove, Cooking	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Dec. 12, 1865	2, 229-2, 230
Stove, Cooking	L. W. Harwood	Troy, N. Y	Dec. 10, 1872	6, 284
Stove, Cooking	F. Heller and E. Young	Cincinnati, Ohio	Aug. 15, 1854	665
Stove, Cooking	T. A. Herrick	East Bridgewater, Mass	May 20, 1856	795
Stove, Cooking	J. Holzer	Spring Garden, Pa	May 10, 1853	565
Stove, Cooking	J. Holzer	Philadelphia, Pa	Aug. 2, 1853	588
Stove, Cooking	J. Holzer	Philadelphia, Pa	Oct. 4, 1853	599
Stove, Cooking	S. A. House	Mechanicsville, N. Y	Feb. 4, 1851	348
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	May 11, 1852	456
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	July 26, 1853	585
Stove, Cooking	H. H. Huntley	Cincinnati, Ohio	Oct. 4, 1853	602
Stove, Cooking	J. R. Hyde	Troy, N. Y	July 14, 1857	915
Stove, Cooking	J. R. Hyde	Troy, N. Y	Jan. 18, 1859	1, 079
Stove, Cooking	S. S. Jewett and F. H. Root	Buffalo, N. Y	Dec. 21, 1852	536
Stove, Cooking	S. S. Jewett and F. H. Root	Buffalo, N. Y	Jan. 25, 1853	540
Stove, Cooking	S. S. Jewett and F. H. Root	Buffalo, N. Y	Jan. 25, 1853	542
Stove, Cooking	J. L. Kuechler	Reading, Pa	Apr. 18, 1871	4, 815
Stove, Cooking	J. G. Lamb	Cincinnati, Ohio	Jan. 25, 1853	543
Stove, Cooking	J. Long	Massillon, Ohio	Feb. 19, 1861	1, 386
Stove, Cooking	P. Low	Troy, N. Y	Oct. 10, 1846	99
Stove, Cooking	P. Low	Cleveland, Ohio	June 28, 1870	4, 183
Stove, Cooking	J. Maguire, J. A. Read, and D. Wright.	Philadelphia, Pa	July 14, 1857	910
Stove, Cooking	R. Mann	Troy, N. Y	July 3, 1855	714
Stove, Cooking	J. Mason	Providence, R. I	July 19, 1853	580
Stove, Cooking	E. Mingay	Boston, Mass	Oct. 21, 1873	6, 965
Stove, Cooking	S. F. Moore	Batavia, N. Y	Nov. 29, 1853	611
Stove, Cooking	J. Morrison	Troy, N. Y	July 10, 1846	55
Stove, Cooking	H. Paul	Rockingham, N. H	Aug. 29, 1854	667
Stove, Cooking	J. Peckover	Cincinnati, Ohio	May 27, 1873	6, 692
Stove, Cooking	E. P. Penniman	Rochester, N. Y	Feb. 10, 1847	110
Stove, Cooking	J. S. Perry	Albany, N. Y	Aug. 17, 1852	489-490
Stove, Cooking	S. Pierce and S. Burnam	Troy, N. Y	Feb. 12, 1856	766
Stove, Cooking	S. Pierce and J. J. Dulley	Troy and Yonkers, N. Y	Feb. 12, 1856	764
Stove, Cooking	S. Pierce and J. J. Dulley	Troy, N. Y	Aug. 5, 1856	823
Stove, Cooking	J. C. Potts	Albany, N. Y	Jan. 25, 1848	165
Stove, Cooking	J. Pratt	Boston, Mass	Nov. 2, 1852	516
Stove, Cooking	J. Pratt	Boston, Mass	Jan. 25, 1853	544
Stove, Cooking	W. F. Pratt and G. W. Bosworth.	Milford, N. H	July 13, 1852	470
Stove, Cooking	S. H. Ransom	Albany, N. Y	Apr. 1, 1856	775
Stove, Cooking	S. H. Ransom	Albany, N. Y	Apr. 15, 1856	781

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Stove, Cooking	S. H. Ransom	Albany, N. Y	July 3, 1860	1, 277-1, 279
Stove, Cooking	J. F. Rathbone	Albany, N. Y	July 10, 1846	54
Stove, Cooking	J. F. Rathbone	Albany, N. Y	July 8, 1851	389
Stove, Cooking	J. F. Rathbone	Albany, N. Y	July 8, 1851	396
Stove, Cooking	L. Rathbone	Albany, N. Y	Mar. 5, 1872	5, 598
Stove, Cooking	W. Resor	Cincinnati, Ohio	June 3, 1856	799-800
Stove, Cooking	N. P. Richardson	Portland, Me	Oct. 25, 1853	605
Stove, Cooking	N. P. Richardson	Portland, Me	May 2, 1854	640
Stove, Cooking	N. P. Richardson	Portland, Me	Dec. 12, 1854	682
Stove, Cooking	A. Richmond	Providence, R. I	May 11, 1852	455
Stove, Cooking	A. Richmond	Providence, R. I	June 13, 1854	656
Stove, Cooking	A. Richmond	Providence, R. I	Aug. 14, 1855	719
Stove, Cooking	E. Ripley and N. S. Vedder	Troy, N. Y	Oct. 30, 1855	741
Stove, Cooking	E. F. Robinson	Boston, Mass	May 10, 1853	566
Stove, Cooking	F. H. Root	Buffalo, N. Y	June 11, 1872	5, 933
Stove, Cooking	J. R. Rose and E. L. Calely	Philadelphia, Pa	Dec. 13, 1870	4, 515
Stove, Cooking	J. R. Rose and E. L. Calely	Philadelphia, Pa	May 16, 1871	4, 910
Stove, Cooking	J. Sabey, jr	Rochester, N. Y	June 21, 1853	570
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	Feb. 25, 1851	351
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	Apr. 27, 1852	453
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	Apr. 19, 1853	554
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	Apr. 26, 1853	558
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	May 10, 1853	564
Stove, Cooking	S. H. Sailor	Philadelphia, Pa	Aug. 8, 1854	663
Stove, Cooking	W. L. Sanderson	Troy, N. Y	June 25, 1850	296
Stove, Cooking	J. J. Savage	Troy, N. Y	Apr. 13, 1852	451
Stove, Cooking	F. Schultz	Northern Liberties District, Pa.	Aug. 10, 1852	484
Stove, Cooking	P. Seibert	Pittsburgh, Pa	Jan. 31, 1854	625
Stove, Cooking	A. Skinner	Brownville, N. Y	Sept. 14, 1843	9
Stove, Cooking	E. Smith	Albany, N. Y	Oct. 19, 1852	511
Stove, Cooking	J. C. Smith	Philadelphia, Pa	July 11, 1854	658
Stove, Cooking	G. and H. Smith	Philadelphia, Pa	June 16, 1863	1, 776
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	Dec. 23, 1856	854
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	Oct. 20, 1857	960
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	July 3, 1860	1, 281-1, 286
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	May 14, 1861	1, 420
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	Oct. 6, 1863	1, 829
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	June 21, 1870	4, 171
Stove, Cooking	G. Smith and H. Brown	Philadelphia, Pa	June 10, 1873	6, 701
Stove, Cooking	G. Smith, H. Brown, and J. Holzer.	Philadelphia, Pa	Aug. 3, 1852	480
Stove, Cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Jan. 2, 1855	684
Stove, Cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Jan. 22, 1856	756
Stove, Cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	June 17, 1856	802
Stove, Cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	June 24, 1856	811
Stove, Cooking	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Oct. 13, 1857	956
Stove, Cooking	W. M. Snow	Providence, R. I	Aug. 8, 1854	662
Stove, Cooking	W. A. Spicer	Providence, R. I	Sept. 12, 1871	5, 263
Stove, Cooking	J. Steffe	Philadelphia, Pa	Dec. 18, 1860	1, 363
Stove, Cooking	J. Steffe	Philadelphia, Pa	Apr. 18, 1871	4, 823
Stove, Cooking	J. Steffe, J. Horton, and J. Currie.	Philadelphia, Pa	Dec. 22, 1857	972
Stove, Cooking	W. W. Stevens	Portland, Me	Feb. 14, 1860	1, 200
Stove, Cooking	W. W. Stevens	Portland, Me	Mar. 25, 1862	1, 557
Stove, Cooking	J. E. Stevenson	Albany, N. Y	Feb. 10, 1857	870
Stove, Cooking	W. S. Stevenson	Philadelphia, Pa	July 1, 1873	6, 737
Stove, Cooking	D. Stuart and L. Bridge	Philadelphia, Pa	Mar. 15, 1870	3, 911
Stove, Cooking	C. B. Tuttle	Amherst, N. H	Oct. 5, 1852	506
Stove, Cooking	J. W. Van Cleve	Dayton, Ohio	Aug. 16, 1853	591
Stove, Cooking	N. S. Vedder	Troy, N. Y	Nov. 8, 1853	609
Stove, Cooking	N. S. Vedder	Troy, N. Y	Aug. 19, 1856	824
Stove, Cooking	N. S. Vedder	Troy, N. Y	Oct. 7, 1856	843
Stove, Cooking	N. S. Vedder	Troy, N. Y	Jan. 13, 1857	865-866
Stove, Cooking	N. S. Vedder	Troy, N. Y	Mar. 24, 1857	878
Stove, Cooking	N. S. Vedder	Troy, N. Y	Aug. 10, 1858	1, 038
Stove, Cooking	N. S. Vedder	Troy, N. Y	Feb. 21, 1860	1, 204
Stove, Cooking	N. S. Vedder	Troy, N. Y	Apr. 2, 1861	1, 397
Stove, Cooking	N. S. Vedder and T. S. Heister.	Troy and Lansingburgh, N. Y.	Aug. 1, 1871	5, 159-1, 162
Stove, Cooking	N. S. Vedder and T. S. Heister.	Lansingburgh, N. Y	May 14, 1872	5, 859
Stove, Cooking	N. S. Vedder and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 306-6, 308
Stove, Cooking	N. S. Vedder and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 2, 1873	7, 008-7, 010
Stove, Cooking	N. S. Vedder and E. Ripley	Troy, N. Y	Aug. 19, 1856	825
Stove, Cooking	N. S. Vedder and F. Ritchie	Troy, N. Y	Jan. 24, 1871	4, 611
Stove, Cooking	N. S. Vedder and F. Ritchie	Troy, N. Y	Aug. 1, 1871	5, 156
Stove, Cooking	N. S. Vedder and F. Ritchie	Troy, N. Y	Dec. 17, 1872	6, 313
Stove, Cooking	N. S. Vedder and F. Ritchie	Troy, N. Y	Dec. 2, 1873	7, 007
Stove, Cooking	N. S. Vedder and F. Ritchie	Troy, N. Y	Dec. 9, 1873	7, 048
Stove, Cooking	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Sept. 26, 1856	828-829
Stove, Cooking	I. J. Vincent	Pittston, Pa	Nov. 5, 1872	6, 240-6, 241
Stove, Cooking	S. D. Vose	Albany, N. Y	July 13, 1852	471
Stove, Cooking	S. D. Vose	Albany, N. Y	Sept. 14, 1852	498
Stove, Cooking	S. D. Vose	Albany, N. Y	June 28, 1853	573-575
Stove, Cooking	S. D. Vose	Albany, N. Y	Feb. 14, 1854	626-628
Stove, Cooking	S. D. Vose	Albany, N. Y	Mar. 28, 1854	637
Stove, Cooking	S. D. Vose	Albany, N. Y	May 29, 1855	706-708
Stove, Cooking	J. Wager	Troy, N. Y	Oct. 16, 1855	735-736

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Stove, Cooking	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Oct. 26, 1852	515
Stove, Cooking	B. Wardwell and E. R. Barstow	Fall River, Mass., and Providence, R. I.	July 29, 1856	819
Stove, Cooking	B. Wardwell, E. R. Barstow, and G. C. Harkness.	Providence, R. I	May 8, 1855	703
Stove, Cooking	G. Warren, S. H. Swetland, and E. C. Little.	Crescent, N. Y	May 1, 1855	701
Stove, Cooking	G. Wellhouse	Akron, Ohio	Apr. 18, 1871	4, 825
Stove, Cooking	R. Wheeler and S. A. Bailey	Utica, N. Y	Aug. 3, 1852	479
Stove, Cooking	R. Wheeler and S. A. Bailey	Utica, N. Y	Aug. 28, 1855	722
Stove, Cooking	R. Wheeler and S. A. Bailey	Utica, N. Y	Oct. 13, 1863	1, 833
Stove, Cooking	J. B. Wiggenhorn	Saint Louis, Mo.	Mar. 22, 1870	3, 921
Stove, Cooking	A. C. Williams	Albany, N. Y	Nov. 5, 1872	6, 242
Stove, Cooking	D. Wilson	Nashua, N. H	Oct. 7, 1856	835
Stove, Cooking	G. G. Wolf, N. S. Vedder, and F. Ritchie.	Troy, N. Y	July 9, 1872	5, 979
Stove, Cooking	H. A. Wood	Bangor, Me	Jan. 28, 1873	6, 377
Stove, Cooking	T. H. Wood, H. S. Hubbell, and J. E. Roberts.	Utica, N. Y	June 2, 1857	892
Stove, Cooking	E. Young	Cincinnati, Ohio	Aug. 4, 1857	922
Stove-cover lifter	E. B. Wilbur	Raynham, Mass	Sept. 26, 1871	5, 294
Stove, Cylinder	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Nov. 2, 1869	3, 737
Stove, Cylinder	J. Martino and J. Horton	Philadelphia, Pa	Sept. 20, 1859	1, 148
Stove, Cylinder coal	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Dec. 20, 1853	614
Stove, Cylindrical coal	R. Wheeler and S. A. Bailey	Utica, N. Y	Oct. 7, 1856	836
Stove, Dining-room	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 24, 1854	619
Stove, Dining-room	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 23, 1857	898
Stove, Dining-room	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Jan. 4, 1859	1, 075
Stove, Dining-room	W. L. Sanderson	Troy, N. Y	June 22, 1852	466
Stove, Dining-room	G. D. Sprecher	Lancaster, Pa	Dec. 7, 1858	1, 071
Stove-door	R. H. N. Bates	Providence, R. I	June 8, 1858	1, 013
Stove-door	J. Beesley	Philadelphia, Pa	May 11, 1858	1, 005
Stove-door	M. C. Burleigh	Great Falls, N. H	Mar. 10, 1857	874
Stove-door	D. S. Colby and R. Scorer	Troy, N. Y	Mar. 31, 1868	2, 963
Stove-door	R. A. Cutter	Peoria, Ill	Apr. 23, 1872	5, 807
Stove-door	T. A. Dorgan	Baltimore, Md	Oct. 15, 1867	2, 800
Stove-door	G. F. Filley	Saint Louis, Mo	July 12, 1864	1, 970
Stove-door	D. G. Littlefield	Albany, N. Y	May 24, 1870	4, 062
Stove-door	J. R. Rose and E. L. Calely	Philadelphia, Pa	Mar. 31, 1868	2, 984
Stove-door	S. Sailor	Philadelphia, Pa	Aug. 13, 1867	2, 749
Stove-door	I. A. Sheppard	Philadelphia, Pa	July 13, 1869	3, 583
Stove-door	N. S. Vedder	Troy, N. Y	Aug. 6, 1867	2, 738–2, 740
Stove-door	N. S. Vedder and T. S. Heister.	Troy and Lansingburgh, N. Y.	Jan. 5, 1869	3, 330
Stove-door	T. Walker	Troy, N. Y	Mar. 31, 1868	2, 991
Stove-door	C. J. Woolson	Cleveland, Ohio	Apr. 16, 1867	2, 625
Stove door and leg, Cook	N. S. Vedder	Troy, N. Y	Mar. 31, 1868	2, 989
Stove door and oven	J. A. Read	Philadelphia, Pa	May 13, 1856	792
Stove door and panel	M. C. Burleigh	Somersworth, N. H	May 13, 1851	370
Stove door and panel	M. C. Burleigh	Great Falls, N. H	July 19, 1870	4, 226
Stove door and panel, Cooking	M. C. Burleigh	Great Falls, N. H	Apr. 25, 1854	640
Stove-door bracket	A. Wemyss	Philadelphia, Pa	June 29, 1869	3, 565
Stove door, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	May 12, 1868	3, 046
Stove door, Cook	N. S. Vedder	Troy, N. Y	Jan. 3, 1860	1, 187
Stove door, Cook	N. S. Vedder and A. Murray	Troy, N. Y	Jan. 3, 1860	1, 184
Stove door, Cook	C. J. Woolson	Cleveland, Ohio	June 30, 1868	3, 080
Stove door, Cooking	C. J. Woolson	Cleveland, Ohio	Dec. 4, 1860	1, 348
Stove-door frame	A. Wemyss	Philadelphia, Pa	June 22, 1869	3, 553
Stove, Double lamp	W. B. Tatro	Hartford, Conn	Sept. 27, 1864	1, 991
Stove, Dwarf	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 314
Stove, "Egg"	D. Stuart	Philadelphia, Pa	Nov. 7, 1854	678
Stove, Egg cylinder	S. H. Sailor	Philadelphia, Pa	Oct. 8, 1861	1, 476
Stove, Elevated-oven	S. W. Gibbs	Albany, N. Y	Mar. 18, 1856	770
Stove, Elevated-oven cooking	S. H. Ransom	Albany, N. Y	Apr. 1, 1856	776
Stove, Fire-board	G. Smith and H. Brown	Philadelphia, Pa	June 30, 1863	1, 795
Stove, Fire-place	E. S. Heath	Baltimore, Md	Sept. 24, 1872	6, 150
Stove, Fire-place	W. J. Keep	Troy, N. Y	June 11, 1872	5, 925
Stove, Fire-place	J. R. Rose and E. L. Calely, jr	Philadelphia, Pa	Nov. 23, 1869	3, 765
Stove, Fire-place	J. R. Rose and E. Calely	Philadelphia, Pa	Oct. 18, 1870	4, 425
Stove, Fire-place	S. B. Sexton	Baltimore, Md	Sept. 9, 1873	6, 877
Stove, Fire-place	G. Smith and H. Brown	Philadelphia, Pa	Dec. 1, 1863	1, 875
Stove-flange	P. Smith	New York, N. Y	June 13, 1865	2, 1[illegible]0
Stove, Franklin	J. F. Allan and J. Stewart	Philadelphia, Pa	Aug. 8, 1854	664
Stove, Franklin	J. Pratt	Boston, Mass	Nov. 16, 1852	526
Stove, Franklin	S. F. Pratt	Boston, Mass	Nov. 30, 1852	529
Stove, Franklin	W. Resor	Cincinnati, Ohio	Oct. 3, 1854	669
Stove, Franklin	W. Resor	Cincinnati, Ohio	Oct. 17, 1854	673
Stove-front	E. Ripley	Troy, N. Y	Sept. 30, 1851	416
Stove-front	G. Smith and H. Brown	Philadelphia, Pa	May 28, 1872	5, 882
Stove front and side plate, Cooking	D. Arnold	Providence, R. I	July 27, 1852	475
Stove front, Parlor	S. A. House	Mechanicsville, N. Y	Aug. 31, 1852	494
Stove, Furnace	G. Smith and H. Brown	Philadelphia, Pa	Oct. 6, 1863	1, 828
Stove, Gas-burner	A. C. Barstow	Providence, R. I	Apr. 15, 1862	1, 563
Stove, Gas-burning cylinder	S. H. Sailor	Philadelphia, Pa	Oct. 8, 1861	1, 477
Stove, Gas cooking	W. Craig	Brooklyn, N. Y	Oct. 6, 1863	1, 822
Stove, Hall	W. Resor	Cincinnati, Ohio	Jan. 3, 1854	615
Stove, Hall	J. Van Wormer	Albany, N. Y	Sept. 12, 1865	2, 171
Stove-handle	J. S. Simmerman	Millville, N. J	Apr. 16, 1867	2, 621
Stove, Heating	I. J. Baxter	Peekskill, N. Y	Jan. 14, 1873	6, 340
Stove, Heating	P. D. Beckwith	Dowagiac, Mich	Jan. 2, 1872	5, 453
Stove, Heating	J. Beesley	Philadelphia, Pa	June 3, 1873	6, 697
Stove, Heating	N. Brayer	Rochester, N. Y	Jan. 24, 1871	4, 588
Stove, Heating	J. V. B. Carter	Detroit, Mich	Aug. 6, 1872	6, 018

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Stove, Heating	J. V. B. Carter	Detroit, Mich	June 17, 1873	6, 704
Stove, Heating	C. H. Castle	Quincy, Ill	June 4, 1872	5, 901
Stove, Heating	S. E. Hewes	Albany, N. Y	May 9, 1871	4, 885
Stove, Heating	W. J. Keep	Troy, N. Y	June 11, 1872	5, 929
Stove, Heating	J. Magee	Chelsea, Mass	Nov. 4, 1873	6, 979
Stove, Heating	J. D. Miller	Detroit, Mich	Oct. 3, 1871	5, 201
Stove, Heating	E. Mingay	Boston, Mass	June 11, 1872	5, 930
Stove, Heating	W. Sanford	New York, N. Y	Apr. 2, 1872	5, 749–5, 750
Stove, Heating	R. Scorer and R. Ham	Troy, N. Y	Nov. 7, 1871	5, 349
Stove, Heating	G. Smith and H. Brown	Philadelphia, Pa	June 21, 1870	4, 172
Stove, Heating	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Aug. 1, 1871	5, 158
Stove, Heating	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	June 11, 1872	5, 936
Stove, Heating	N. S. Vedder and F. Ritchie	Troy, N. Y	Aug. 1, 1871	5, 157
Stove, Heating	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 316
Stove, Heating	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 2, 1873	7, 014
Stove illuminating-ring, Gas	G. Smith and H. Brown	Philadelphia, Pa	May 26, 1868	3, 059
Stove, Kitchen	S. W. Gibbs	Albany, N. Y	Nov. 25, 1856	850
Stove, Laundry	A. C. Barstow	Providence, R. I	Dec. 15, 1857	968
Stove, Laundry	W. A. Greene	Albany, N. Y	Aug. 13 1861	1, 466
Stove, Laundry	W. Resor	Cincinnati, Ohio	Jan. 17, 1854	618
Stove leg and door	D. S. Colby and R. Scorer	Troy, N. Y	Mar. 31, 1868	2, 964
Stove, Nine-plate	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	June 17, 1856	804
Stove, Open-grate	J. Hackett	Louisville, Ky	Apr. 9, 1872	5, 758
Stove or furnace, Ventilating	E. P. Penniman	Rochester, N. Y	Sept. 16, 1851	414
Stove or range, Cooking	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	May 9, 1871	4, 900
Stove or summer-range, Cooking	J. Abendroth	Port Chester, N. Y	May 2, 1854	644
Stove-ornament	I. De Zouche	Cincinnati, Ohio	Mar. 14, 1865	2, 037
Stove-ornament	J. Dwyer	Detroit, Mich	Nov. 3, 1868	3, 218
Stove-ornament	I. A. Sheppard	Philadelphia, Pa	Mar. 29, 1870	3, 945
Stove-ornament	J. Spear	Philadelphia, Pa	Nov. 10, 1868	3, 234
Stove-ornament	S. S. Utter	New York, N. Y	Sept. 25, 1866	2, 467
Stove-ornament	S. D. Vose	Albany, N. Y	July 7, 1857	902–904
Stove-oven	D. Hathaway	Troy, N. Y	Jan. 7, 1862	1, 512
Stove, Oven	S. F. Pratt	Boston, Mass	Sept. 23, 1856	834
Stove, Oven cook	W. W. Stevens	Westbrook, Me	Sept. 7, 1858	1, 047
Stove oven, Cooking	G. W. Chambers	Troy, N. Y	Sept. 18, 1855	730
Stove oven, Cooking	C. W. Palmer	Troy, N. Y	May 7, 1861	1, 407
Stove, Oven parlor	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 315
Stove-panel	C. H. Drew	Great Falls, N. H	July 3, 1866	2, 345
Stove-panel	G. Smith and H. Brown	Philadelphia, Pa	June 27, 1865	2, 106
Stove-panel ornament	I. De Zouche	Troy, N. Y	Mar. 14, 1854	635
Stove, Parlor	W. Ames	Nashua, N. H	Nov. 1, 1853	607
Stove, Parlor	D. Arnold	Providence, R. I	Aug. 17, 1852	487
Stove, Parlor	D. Arnold	Providence, R. I	Nov. 30, 1852	528
Stove, Parlor	A. C. Barstow	Providence, R. I	Oct. 6, 1863	1, 821
Stove, Parlor	J. Beesley and E. J. Delaney	Philadelphia, Pa	May 23, 1854	653
Stove, Parlor	J. Beesley and E. J. Delaney	Philadelphia, Pa	Oct. 7, 1856	841
Stove, Parlor	A. J. Blanchard	South Reading, Mass	May 29, 1855	711
Stove, Parlor	G. Chilson	Boston, Mass	Nov. 5, 1861	1, 487
Stove, Parlor	W. T. Coggeshall	Fall River, Mass	Feb. 19, 1856	767
Stove, Parlor	J. H. Conklin	New York, N. Y	Feb. 1, 1853	545
Stove, Parlor	E. J. Cridge	Troy, N. Y	July 14, 1857	914
Stove, Parlor	I. De Zouche	Saint Louis, Mo	Apr. 24, 1860	1, 233
Stove, Parlor	W. Doyle	Albany, N. Y	Apr. 15, 1873	6, 586
Stove, Parlor	J. J. Dulley	Troy, N. Y	Sept. 14, 1852	502
Stove, Parlor	J. D. Flansbury and J. Gardiner.	Philadelphia, Pa	Oct. 6, 1863	1, 823
Stove, Parlor	J. B. Geyser	Pittsburgh, Pa	July 14, 1868	3, 099
Stove, Parlor	S. W. Gibbs	Albany, N. Y	May 11, 1858	1, 004
Stove, Parlor	S. W. Gibbs	Albany, N. Y	Jan. 11, 1859	1, 077
Stove, Parlor	S. W. Gibbs	Albany, N. Y	May 7, 1861	1, 405
Stove, Parlor	S. W. Gibbs	Albany, N. Y	May 28, 1861	1, 427
Stove, Parlor	C. Goodwin and W. Littlejohn	New York, N. Y	Dec. 10, 1846	101
Stove, Parlor	J. D. Green	Troy, N. Y	July 6, 1852	469
Stove, Parlor	W. Hailes	Albany, N. Y	Oct. 25, 1870	4, 434
Stove, Parlor	R. Ham	Troy, N. Y	Aug. 9, 1859	1, 128
Stove, Parlor	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Sept. 14, 1852	499
Stove, Parlor	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Oct. 25, 1859	1, 158
Stove, Parlor	C. Harris and P. W. Zoiner	Cincinnati, Ohio	June 12, 1866	2, 338
Stove, Parlor	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Mar. 26, 1867	2, 606
Stove, Parlor	L. W. Harwood	Troy, N. Y	Dec. 24, 1872	6, 322
Stove, Parlor	D. Hathaway	Troy, N. Y	Aug. 19, 1856	826
Stove, Parlor	D. Hathaway	New York, N. Y	May 20, 1856	794
Stove, Parlor	S. A. House	Mechanicsville, N. Y	Feb. 4, 1851	349
Stove, Parlor	H. S. and A. S. Hubbell	Buffalo, N. Y	Oct. 10, 1865	2, 187–2, 188
Stove, Parlor	J. Martino and J. Currie	Philadelphia, Pa	Apr. 18, 1871	4, 818
Stove, Parlor	J. Martino and J. Currie	Philadelphia, Pa	Feb. 20, 1872	5, 547
Stove, Parlor	L. Meyer	Saint Louis, Mo	June 19, 1860	1, 257
Stove, Parlor	S. Pierce and J. J. Dulley	Troy, N. Y	Aug. 5, 1856	822
Stove, Parlor	J. Pratt	Boston, Mass	July 8, 1851	391
Stove, Parlor	S. F. Pratt	Boston, Mass	Sept. 23, 1856	833
Stove, Parlor	S. F. Pratt	Boston, Mass	Jan. 13, 1857	864
Stove, Parlor	W. Race	Seneca Falls, N. Y	Nov. 3, 1852	520
Stove, Parlor	S. H. Ransom	Albany, N. Y	Apr. 1, 1856	772
Stove, Parlor	S. H. Ransom	Albany, N. Y	July 3, 1860	1, 278
Stove, Parlor	G. W. King	Troy, N. Y	Aug. 27, 1850	310
Stove, Parlor	E. Ripley	Troy, N. Y	July 3, 1847	131–132
Stove, Parlor	E. Ripley	Troy, N. Y	Aug. 31, 1852	491
Stove, Parlor	E. Ripley and N. S. Vedder	Troy, N. Y	Nov. 25, 1851	426
Stove, Parlor	E. Ripley and N. S. Vedder	Troy, N. Y	Nov. 8, 1853	608
Stove, Parlor	S. H. Sailor	Philadelphia, Pa	Nov. 9, 1852	522

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Invention.	Inventor.	Residence.	Date.	No.
Stove, Parlor	R. Scorer and R. Ham	Troy, N. Y	Nov. 28, 1871	5, 395
Stove, Parlor	R. Scorer and R. Ham	Troy, N. Y	Dec. 17, 1872	6, 305
Stove, Parlor	E. Smith	Albany, N. Y	July 26, 1853	583
Stove, Parlor	E. Smith	Albany, N. Y	Nov. 11, 1856	849
Stove, Parlor	G. Smith and H. Brown	Philadelphia, Pa	Oct. 20, 1857	961
Stove, Parlor	G. Smith and H. Brown	Philadelphia, Pa	Aug. 30, 1853	595
Stove, Parlor	G. Smith and H. Brown	Philadelphia, Pa	Dec. 14, 1858	1, 072
Stove, Parlor	G. Smith and H. Brown	Philadelphia, Pa	Dec. 20, 1859	1, 177
Stove, Parlor	W. W. Stanard	Buffalo, N. Y	July 31, 1860	1, 297
Stove, Parlor	W. W. Stanard	Buffalo, N. Y	Apr. 9, 1861	1, 400
Stove, Parlor	W. W. Stevens	Portland, Me	May 15, 1860	1, 246
Stove, Parlor	J. Van Wormer and M. McGarvey.	Albany, N. Y	Sept. 10, 1867	2, 781
Stove, Parlor	N. S. Vedder	Troy, N. Y	Oct. 12, 1852	510
Stove, Parlor	N. S. Vedder	Troy, N. Y	Feb. 14, 1854	630
Stove, Parlor	N. S. Vedder	Troy, N. Y	Aug. 10, 1858	1, 039–1, 040
Stove, Parlor	N. S. Vedder	Troy, N. Y	Feb. 14, 1860	1, 202
Stove, Parlor	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 310
Stove, Parlor	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 2, 1873	7, 013
Stove, Parlor	N. S. Vedder and E. Ripley	Troy, N. Y	Jan. 23, 1855	690
Stove, Parlor	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 317
Stove, Parlor	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Feb. 24, 1852	449
Stove, Parlor	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Apr. 8, 1856	779
Stove, Parlor	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	May 13, 1856	790
Stove, Parlor	S. D. Vose	Albany, N. Y	Dec. 19, 1848	208
Stove, Parlor	S. D. Vose	Albany, N. Y	June 22, 1852	462
Stove, Parlor	S. D. Vose	Albany, N. Y	May 24, 1853	567
Stove, Parlor	S. D. Vose	Albany, N. Y	June 28, 1853	576
Stove, Parlor	S. D. Vose	Albany, N. Y	Feb. 14, 1854	629
Stove, Parlor	S. D. Vose	Albany, N. Y	May 29, 1855	709
Stove, Parlor	S. D. Vose	Albany, N. Y	Mar. 4, 1856	768
Stove, Parlor	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Dec. 20, 1853	613
Stove, Parlor	J. Wager, V. Richmond, and H. Smith.	Troy, N. Y	Jan. 2, 1855	683
Stove, Parlor	R. Wheeler and S. A. Bailey	Utica, N. Y	Oct. 13, 1863	1, 832
Stove, Parlor	C. Williams	Manchester, N. H	Nov. 7, 1865	2, 219
Stove, Parlor and cook	N. S. Vedder	Troy, N. Y	Feb. 14, 1860	1, 201
Stove, Parlor coal	I. De Zouche	Saint Louis, Mo	Aug. 9, 1859	1, 131
Stove, Parlor coal	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Dec. 11, 1855	747
Stove, Parlor cook	W. Caven and C. Stemler	Cincinnati, Ohio	Oct. 22, 1867	2, 804
Stove, Parlor cook	D. Hathaway	Troy, N. Y	Mar. 22, 1859	1, 088
Stove, Parlor cook	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	Jan. 2, 1855	685
Stove, Parlor cook	N. S. Vedder	Troy, N. Y	Jan. 27, 1857	867
Stove, Parlor cook	S. D. Vose	Albany, N. Y	June 22, 1852	465
Stove, Parlor cooking	J. T. Davy	Troy, N. Y	Dec. 23, 1856	857
Stove, Parlor cooking	W. W. Stevens	Westbrook, Me	July 26, 1859	1, 127
Stove, Parlor cooking	N. S. Vedder	Troy, N. Y	Nov. 13, 1860	1, 339
Stove, Parlor cooking	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Dec. 17, 1872	6, 311
Stove, Parlor cooking	D. Wilson	Nashua, N. H	Feb. 10, 1857	871
Stove, Parlor open-front	N. S. Vedder	Troy, N. Y	Jan. 23, 1855	689
Stove, Parlor wood	C. Harris and P. W. Zoiner	Cincinnati, Ohio	Dec. 11, 1855	745
Stove-plate	J. G. Abbott	Philadelphia, Pa	Jan. 30, 1866	2, 244
Stove-plate	R. Backus	Albany, N. Y	May 11, 1869	3, 493
Stove-plate	A. C. Barstow	Providence, R. I	Apr. 14, 1857	881
Stove-plate	P. D. Beckwith	Dowagiac, Mich	Jan. 2, 1872	5, 432
Stove-plate	J. Beesley and J. J. Ferris	Philadelphia, Pa	May 23, 1871	4, 916
Stove-plate	J. Burgess	Troy, N. Y	Apr. 25, 1854	643
Stove plate	S. Burnam	Troy, N. Y	Feb. 12, 1856	765
Stove-plate	D. S. Colby and R. Scorer	Troy, N. Y	June 25, 1867	2, 682–2, 683
Stove-plate	J. L. Collins	Chicago, Ill	Apr. 14, 1863	1, 746
Stove-plate	W. P. Cresson, D. Stuart, and S. H. Sailor.	Philadelphia, Pa	Oct. 24, 1846	100
Stove-plate	E. J. Cridge	Troy, N. Y	Jan. 7, 1862	1, 508
Stove-plate	E. J. Cridge	Troy, N. Y	Mar. 17, 1863	1, 735
Stove-plate	E. J. Delany and J. Martino	Philadelphia, Pa	Feb. 16, 1858	987
Stove-plate	G. W. Eddy	Waterford, N. Y	Sept. 13, 1870	4, 347
Stove-plate	J. D. Flansburgh	Philadelphia, Pa	June 30, 1863	1, 792
Stove-plate	C. Fulton	Rochester, N. Y	Nov. 1, 1845	42
Stove-plate	C. Fulton	Rochester, N. Y	Sept. 2, 1851	406
Stove-plate	C. Fulton	Rochester, N. Y	Oct. 30, 1855	738
Stove-plate	S. W. Gibbs	Albany, N. Y	June 26, 1855	713
Stove-plate	S. W. Gibbs	Albany, N. Y	June 22, 1858	1, 015
Stove-plate	S. W. Gibbs	Albany, N. Y	June 14, 1859	1, 107–1, 108
Stove-plate	S. W. Gibbs	Albany, N. Y	Sept. 23, 1862	1, 656
Stove-plate	S. W. Gibbs	Albany, N. Y	Aug. 21, 1866	2, 427
Stove-plate	S. W. Gibbs	Albany, N. Y	Nov. 2, 1869	3, 731
Stove-plate	D. F. Goodhue and C. Guild	Cincinnati, Ohio	Dec. 4, 1847	161
Stove-plate	R. Ham	Troy, N. Y	Nov. 3, 1863	1, 838
Stove-plate	L. S. Hapgood	Boston, Mass	June 3, 1851	378
Stove-plate	L. W. Harwood	Troy, N. Y	July 9, 1867	2, 700
Stove-plate	L. W. Harwood	Troy, N. Y	Oct. 4, 1870	4, 376
Stove-plate	D. Hathaway	Troy, N. Y	May 17, 1859	1, 102
Stove-plate	D. Hathaway	Troy, N. Y	June 25, 1867	2, 686
Stove-plate	D. Hathaway	Troy, N. Y	Aug. 13, 1867	2, 746
Stove-plate	D. Hathaway	Troy, N. Y	Aug. 20, 1867	2, 752
Stove-plate	G. Himrod and C. G. Moulton	Chicago, Ill	Sept. 25, 1866	2, 435–2, 436
Stove-plate	J. Hobzer	Philadelphia, Pa.	Dec. 16, 1862	1, 696
Stove-plate	J. Horton and J. Martino	Philadelphia, Pa	Sept. 25, 1860	1, 314

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Invention.	Inventor.	Residence.	Date.	No.
Stove-plate	J. Horton and J. Martino	Philadelphia, Pa	June 13, 1865	2,090
Stove-plate	H. S. and A. S. Hubbell	Buffalo, N. Y	Nov. 26, 1867	2,839
Stove-plate	H. S. Hubbell and T. H. Wood	Buffalo, N. Y	May 15, 1860	1,243
Stove-plate	S. S. Jewett and F. H. Root	Buffalo, N. Y	Dec. 21, 1852	535
Stove-plate	J. W. Lane	Newton, N. J	May 10, 1859	1,101
Stove-plate	W. L. McDowell	Philadelphia, Pa	July 23, 1867	2,711
Stove-plate	J. Martino	Philadelphia, Pa	June 13, 1865	2,093
Stove-plate	D. E. Paris	Troy, N. Y	Dec. 15, 1863	1,877–1,878
Stove-plate	D. E. Paris	Troy, N. Y	Aug. 16, 1864	1,984
Stove-plate	D. E. Paris and N. S. Vedder	Troy, N. Y	Dec. 1, 1863	1,871–1,874
Stove-plate	E. P. Penniman	Rochester, N. Y	July 15, 1851	397–398
Stove-plate	S. H. Ransom	Albany, N. Y	Apr. 1, 1856	774
Stove-plate	S. H. Ransom	Albany, N. Y	Apr. 5, 1859	1,092
Stove-plate	S. H. Ransom	Albany, N. Y	Mar. 20, 1860	1,214
Stove-plate	S. H. Ransom	Albany, N. Y	May 17, 1870	4,045–4,049
Stove-plate	L. Rathbone	Albany, N. Y	Jan. 16, 1866	2,241
Stove-plate	E. Ripley	Troy, N. Y	Nov. 26, 1844	25
Stove-plate	E. Ripley	Troy, N. Y	May 16, 1848	180–181
Stove-plate	E. Ripley	Troy, N. Y	Aug. 10, 1848	194
Stove-plate	S. H. Sailor	Philadelphia, Pa	Nov. 9, 1852	525
Stove-plate	W. Savery and J. H. Conklin	New York, N. Y	Nov. 28, 1848	205
Stove-plate	R. Scorer and R. Ham	Troy, N. Y	Sept. 28, 1869	3,676
Stove-plate	I. A. Sheppard	Philadelphia, Pa	June 11, 1867	2,673
Stove-plate	I. A. Sheppard	Philadelphia, Pa	Sept. 24, 1867	2,790
Stove-plate	J. Siddons and J. C. Hart	Rochester, N. Y	May 15, 1860	1,245
Stove-plate	S. Smith	Greenfield, Mass	Jan. 2, 1866	2,240
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	July 7, 1863	1,803
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	June 27, 1865	2,105
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	Feb. 27, 1866	2,270–2,272
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	Aug. 7, 1866	2,379
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	June 25, 1867	2,689
Stove-plate	G. Smith and H. Brown	Philadelphia, Pa	July 27, 1869	3,590–3,591
Stove-plate	H. Smith and F. A. Sheldon	Troy, N. Y	Apr. 22, 1856	785
Stove-plate	W. M. Snow	Providence, R. I	Nov. 2, 1852	518
Stove-plate	W. W. Standard	Buffalo, N. Y	Apr. 1, 1862	1,561
Stove-plate	N. S. Vedder	Troy, N. Y	Aug. 5, 1856	821
Stove-plate	N. S. Vedder	Troy, N. Y	Feb. 2, 1864	1,894
Stove-plate	N. S. Vedder	Troy, N. Y	Aug. 16, 1864	1,986
Stove-plate	N. S. Vedder	Troy, N. Y	Dec. 13, 1864	2,013–2,014
Stove-plate	N. S. Vedder	Troy, N. Y	Aug. 6, 1867	2,734–2,737
Stove-plate	N. S. Vedder	Troy, N. Y	Mar. 31, 1868	2,988
Stove-plate	N. S. Vedder	Troy, N. Y	Jan. 5, 1869	3,325
Stove-plate	N. S. Vedder	Troy, N. Y	Feb. 22, 1870	3,859–3,861
Stove-plate	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Jan. 5, 1869	3,326–3,327
Stove-plate	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Feb. 22, 1870	3,862–3,866 4,054
Stove-plate	N. S. Vedder and T. S. Heister	Lansingburgh, N. Y	May 17, 1870	
Stove-plate	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	July 19, 1870	4,240–4,245
Stove-plate	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Sept. 20, 1870	4,360
Stove-plate	N. S. Vedder and B. F. Johnson	Troy, N. Y	Jan. 26, 1864	1,893
Stove-plate	N. S. Vedder and E. Ripley	Troy, N. Y	Feb. 23, 1858	992
Stove-plate	N. S. Vedder and E. Ripley	Troy, N. Y	Dec. 18, 1860	1,364
Stove-plate	N. S. Vedder and E. Ripley	Troy, N. Y	Sept. 23, 1862	1,661
Stove-plate	N. S. Vedder and E. Ripley	Troy, N. Y	Dec. 13, 1864	2,015
Stove-plate	N. S. Vedder and F. Ritchie	Troy, N. Y	Jan. 5, 1869	3,332
Stove-plate	N. S. Vedder and F. Ritchie	Troy, N. Y	Feb. 22, 1870	3,867
Stove-plate	N. S. Vedder and F. Ritchie	Troy, N. Y	Sept. 27, 1870	4,374
Stove plate	N. S. Vedder and F. Ritchie	Troy, N. Y	Feb. 7, 1871	4,645
Stove-plate	N. S. Vedder, F. Ritchie, and T. S. Heister.	Troy and Lansingburgh, N. Y.	July 19, 1870	4,246
Stove-plate	N. S. Vedder and W. L. Sanderson.	Troy, N. Y	Dec. 18, 1860	1,365
Stove-plate	S. D. Vose	Albany, N. Y	Nov. 23, 1858	1,065–1,068
Stove-plate	C. J. Woolson	Cleveland, Ohio	Dec. 4, 1860	1,349
Stove plate and door	N. S. Vedder	Troy, N. Y	Aug. 6, 1867	2,736
Stove plate and door, Cooking	I. A. Sheppard	Philadelphia, Pa	Aug. 30, 1870	4,319
Stove plate and foot, Cooking	J. Martino and J. Currie	Philadelphia, Pa	June 21, 1870	4,167
Stove plate, Box	W. Ames	Nashua, N. H	July 15, 1856	816
Stove plate, Cook	D. S. Colby and R. Scorer	Troy, N. Y	Feb. 26, 1867	2,589
Stove plate, Cook	D. S. Colby and R. Scorer	Troy, N. Y	May 26, 1868	3,050
Stove plate, Cook	I. De Zouche	Saint Louis, Mo	July 26, 1864	1,979
Stove plate, Cook	I. De Zouche	Saint Louis, Mo	Aug. 2, 1864	1,981
Stove plate, Cook	J. D. Flansburgh	Philadelphia, Pa	Sept. 1, 1868	3,188
Stove plate, Cook	S. W. Gibbs	Albany, N. Y	May 15, 1866	2,314
Stove plate, Cook	L. W. Harwood	Troy, N. Y	Nov. 3, 1868	3,222
Stove plate, Cook	D. Hathaway	Troy, N. Y	Jan. 7, 1862	1,511
Stove plate, Cook	J. Martino, J. Beesley, and J. Currie.	Philadelphia, Pa	May 4, 1869	3,470
Stove plate, Cook	S. H. Ransom	Albany, N. Y	Apr. 5, 1859	1,093
Stove plate, Cook	S. H. Ransom	Albany, N. Y	May 15, 1866	2,318–2,320
Stove plate, Cook	L. Rathbone	Albany, N. Y	Feb. 28, 1865	2,034–2,035
Stove plate, Cook	J. R. Rose and E. L. Calely	Philadelphia, Pa	Apr. 9, 1867	2,612
Stove plate, Cook	J. R. Rose and E. L. Calely	Philadelphia, Pa	Sept. 1, 1868	3,193
Stove plate, Cook	I. A. Sheppard	Philadelphia, Pa	Oct. 10, 1865	2,196
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	July 17, 1860	1,288
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	Oct. 2, 1860	1,323
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	June 21, 1864	1,965
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	Aug. 1, 1865	2,153
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	Mar. 27, 1866	2,287
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	Feb. 26, 1867	2,587
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	May 26, 1868	3,058
Stove plate, Cook	G. Smith and H. Brown	Philadelphia, Pa	Mar. 23, 1869	3,426
Stove plate, Cook	W. W. Stevens	Portland, Me	Feb. 28, 1865	2,036
Stove plate, Cook	N. S. Vedder	Troy, N. Y	Nov. 13, 1860	1,346

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Invention.	Inventor.	Residence.	Date.	No.
Stove plate, Cook	N. S. Vedder and T. S. Heister	Troy and Lansingburgh, N. Y.	Jan. 5, 1869	3,328–3,329
Stove plate, Cooking	R. H. N. Bates	Providence, R. I	June 19, 1860	1,259
Stove plate, Cooking	J. C. Fay	Troy, N. Y	July 16, 1861	1,438
Stove plate, Cooking	S. W. Gibbs	Albany, N. Y	Mar. 20, 1860	1,212
Stove plate, Cooking	L. W. Harwood	Troy, N. Y	Nov. 23, 1869	3,761
Stove plate, Cooking	J. Horton and J. Martino	Philadelphia, Pa	July 16, 1861	1,442
Stove plate, Cooking	A. M. Mothershead	Indianapolis, Ind	May 9, 1871	4,895
Stove plate, Cooking	C. Noble	Philadelphia, Pa	Apr. 18, 1871	4,819
Stove plate, Cooking	S. H. Ransom	Albany, N. Y	July 7, 1863	1,799–1,802
Stove plate, Cooking	S. H. Ransom	Albany, N. Y	June 24, 1873	6,726–6,731
Stove plate, Cooking	J. F. Rathbone	Albany, N. Y	June 23, 1863	1,789–1,791
Stove plate, Cooking	J. R. Rose and E. L. Calely	Philadelphia, Pa	May 9, 1871	4,902
Stove plate, Cooking	W. L. Sanderson and N. S. Vedder.	Troy, N. Y	May 13, 1856	791
Stove plate, Cooking	N. S. Vedder	Troy, N. Y	Oct. 7, 1856	842
Stove plate, Cooking	N. S. Vedder	Troy, N. Y	Apr. 14, 1857	884
Stove plate, Cooking	G. W. Wood	Utica, N. Y	Apr. 4, 1848	174
Stove plate, Cylinder	J. Horton and J. Martino	Philadelphia, Pa	Sept. 25, 1860	1,315
Stove plate, Franklin	J. F. Rathbone	Albany, N. Y	July 8, 1851	395
Stove plate, Hall	J. Van Wormer	Albany, N. Y	Sept. 25, 1866	2,468
Stove plate, Hop	N. S. Vedder	Troy, N. Y	Mar. 17, 1868	2,958
Stove plate, Ornamenting	S. W. Gibbs	Albany, N. Y	Aug. 14, 1855	718
Stove plate, Parlor	D. S. Colby and R. Scorer	Troy, N. Y	Aug. 6, 1867	2,723
Stove plate, Parlor	D. S. Colby and R. Scorer	Troy, N. Y	May 26, 1868	3,051
Stove plate, Parlor	I. De Zouche	Saint Louis, Mo	Oct. 20, 1863	1,835
Stove plate, Parlor	S. W. Gibbs	Albany, N. Y	May 15, 1866	2,315
Stove plate, Parlor	L. W. Harwood	Troy, N. Y	Jan. 7, 1862	1,510
Stove plate, Parlor	J. Horton and J. Martino	Philadelphia, Pa	July 16, 1861	1,441
Stove plate, Parlor	S. A. House	Mechanicsville, N. Y	Aug. 31, 1852	492
Stove plate, Parlor	L. Rathbone	Albany, N. Y	Jan. 16, 1866	2,242
Stove plate, Parlor	A. Richmond	Providence, R. I	July 15, 1851	399
Stove plate, Parlor	A. Richmond	Providence, R. I	Nov. 18, 1851	424
Stove plate, Parlor	A. Paul	South New Market, N. H	July 20, 1852	474
Stove plate, Parlor	S. H. Ransom	Albany, N. Y	May 15, 1866	2,321–2,322
Stove plate, Parlor	J. Wager	Troy, N. Y	Oct. 16, 1855	737
Stove plate, Parlor-cook	I. De Zouche	Saint Louis, Mo	July 26, 1864	1,980
Stove plate, Parlor or heating	S. H. Ransom	Albany, N. Y	June 24, 1873	6,732–6,733
Stove platform or support	W. M. Conger	Newark, N. J	Oct. 15, 1872	6,202
Stove, Radiator	S. H. Sailor and J. C. Smith	Philadelphia, Pa	July 11, 1854	659
Stove, Radiator	N. S. Vedder	Troy, N. Y	Mar. 24, 1857	877
Stove, Railway-car	J. L. Howard	Hartford, Conn	Jan. 27, 1857	868
Stove, Range	J. R. Rose and E. L. Calely, jr	Philadelphia, Pa	Sept. 10, 1872	6,134
Stove, Range	G. Smith and H. Brown	Philadelphia, Pa	May 7, 1872	5,843
Stove-register	D. Stuart and J. Beesley	Philadelphia, Pa	Dec. 2, 1851	427
Stove-register	N. S. Vedder	Troy, N. Y	Oct. 2, 1860	1,336
Stove, Sad-iron	S. W. Gibbs	Albany, N. Y	Sept. 8, 1857	941
Stove-shelf	W. C. Davis	Cincinnati, Ohio	Nov. 15, 1870	4,469
Stove, Ship's caboose	A. A. Lincoln, jr	Norton, Mass	Dec. 18, 1855	751
Stove side and door, Cooking	J. Greer and R. I. King	Dayton, Ohio	July 5, 1859	1,113
Stove side-plate	N. S. Vedder	Troy, N. Y	Jan. 3, 1860	1,186
Stove side-plate, Box	N. S. Vedder and E. Ripley	Troy, N. Y	Jan. 3, 1860	1,185
Stove, Six-plate	D. Hathaway	Troy, N. Y	July 31, 1860	1,290
Stove, Six-plate	S. F. Pratt	Boston, Mass	Aug. 17, 1852	488
Stove, Six-plate	S. H. Ransom	Albany, N. Y	Apr. 1, 1856	773
Stove, Six-plate	N. P. Richardson and W. W. Stevens.	Portland, Me	Oct. 13, 1857	953
Stove, Six-plate	N. S. Vedder and E. Ripley	Troy, N. Y	Aug. 26, 1856	827
Stove, Six-plate box	C. Harris and P. W. Zolner	Cincinnati, Ohio	Dec. 11, 1855	748
Stove, Tinman's	D. W. Pepper	Philadelphia, Pa	May 5, 1868	3,014
Stove-top	W. L. McDowell	Philadelphia, Pa	Aug. 6, 1867	2,716
Stove-top	N. S. Vedder	Troy, N. Y	Aug. 1, 1865	2,157
Stove top and base	S. W. Gibbs	Albany, N. Y	Mar. 20, 1860	1,211
Stove top and case, Sheet-iron	S. W. Gibbs	Albany, N. Y	June 14, 1859	1,109
Stove top and front-plate, Parlor	S. A. House	Mechanicsville, N. Y	Aug. 31, 1852	493
Stove, Upright	A. J. Blanchard	South Reading, Mass	Jan. 6, 1856	860
Stove-urn	D. S. Colby and R. Scorer	Troy, N. Y	Mar. 31, 1868	2,965
Stove, Wood	A. C. Barstow	Providence, R. I	Feb. 17, 1857	872
Stove, Wood	S. S. Jewett and F. H. Root	Buffalo, N. Y	Jan. 25, 1853	541
Stove, Wood	L. Rathbone	Albany, N. Y	May 7, 1867	2,650
Stove, Wood	G. Smith and H. Brown	Philadelphia, Pa	June 30, 1863	1,794
Stove, Wood parlor	C. Harris and P. W. Zolner	Cincinnati, Ohio	June 23, 1857	897
Stoves, Fire-cylinder cap for	J. R. Rose and E. L. Calely	Philadelphia, Pa	May 5, 1868	3,015
Strainer, Coffee	A. Shafer and A. Barckley	Philadelphia, Pa	Feb. 12, 1867	2,582
Striped fabric	C. H. Landenberger	Philadelphia, Pa	June 3, 1873	6,695
Stud, Trace-supporting	J. Letchworth	Buffalo, N. Y	July 5, 1870	4,202
Summer-furnace	J. Beesley	Philadelphia, Pa	Apr. 15, 1856	783
Sun-dial	N. Carroll	Philadelphia, Pa	Oct. 10, 1865	2,182
Sun-dial	W. W. Wilson	Pittsburgh, Pa	July 5, 1859	1,115
Sun-dial, Pocket	D. W. Wright	New York, N. Y	Aug. 25, 1868	3,185
Surcingle-fastening	M. Wesson	Springfield, Mass	June 27, 1871	5,060
Suspender-link	E. Oldfield	Norwich, Conn	Jan. 31, 1871	4,621
Swivel and snap-hook	P. G. Beckley	Newark, N. J	June 27, 1871	5,041
Sword	E. S. Warren	Springfield, Mass	Mar. 21, 1871	4,730
Sword-guard	V. Price	New York, N. Y	July 26, 1870	4,265
Sword hilt and scabbard	V. Price	New York, N. Y	Jan. 7, 1873	6,338
Sword hilt and scabbard	V. Price	Woodside, N. Y	July 8, 1873	6,763
Sword hilt and scabbard	V. Price	New York, N. Y	Oct. 7, 1873	6,953
Sword-scabbard tip	V. Price	New York, N. Y	July 26, 1870	4,264
T.				
Table	N. Chapin	Syracuse, N. Y	Sept. 30, 1851	415
Table	W. H. Groff	Lawrenceburgh, Ind	Jan. 16, 1872	5,473
Table-cover	J. R. Wasley	Boston, Mass	Nov. 6, 1866	2,503
Table-fork	J. W. Gardner	Shelburne Falls, Mass	Mar. 20, 1855	696
Table-fork	J. W. Gardner	Shelburne Falls, Mass	Sept. 22, 1868	3,102
Table-fork	N. E. Russell	New York, N. Y	Aug. 9, 1859	1,132

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Invention.	Inventor.	Residence.	Date.	No.
Table frame and leg	W. Bryent	Boston, Mass	Oct. 5, 1852	508
Table-knife	B. Raven	Pleasantville, Pa	July 6, 1869	3, 572
Table knife and fork	J. W. Gardner	Shelburne Falls, Mass	Dec. 25, 1855	752
Table-leg	W. Jefts	Battle Creek, Mich	Apr. 21, 1868	3, 004
Tablet, Cast-metal	E. Clark	Portland, Me	Oct. 26, 1858	1, 058
Tablet, Ivory	W. C. Comstock	Essex, Conn	July 28, 1868	3, 131
Tack-head	O. L. Bassett	Taunton, Mass	Oct. 19, 1869	3, 713–3, 714
Tack-head	O. L. Bassett	Taunton, Mass	Oct. 26, 1869	3, 724–3, 725
Tack-head	O. L. Bassett	Taunton, Mass	Dec. 21, 1869	3, 790–3, 791
Tack-head	T. R. Bearse	Taunton, Mass	Oct. 19, 1869	3, 715
Tack-head	G. A. Fields	Taunton, Mass	Mar. 8, 1870	3, 883–3, 884
Tailor's goose	J. Hargrave	Cincinnati, Ohio	Sept. 2, 1873	6, 832
Tassel-hook	H. L. Judd	Brooklyn, N. Y	Jan. 23, 1872	5, 480
Tazza, Cake	G. Gill	Taunton, Mass	Dec. 19, 1871	5, 442
Tazza, Cake	W. Parkin	Taunton, Mass	Jan. 5, 1869	3, 319
Tazza, Cake	W. Parkin	Taunton, Mass	Aug. 31, 1869	3, 648
Tazza, Fruit	W. Parkin	Taunton, Mass	Mar. 30, 1869	3, 440
Tazza or flower-stand, Cake	W. Parkin	Taunton, Mass	Dec. 19, 1871	5, 445
Tea and coffee pot	A. Leonard	Hartford, Conn	Feb. 23, 1858	991
Tea and coffee pot base	E. B. Manning	Middletown, Conn	Sept. 30, 1873	6, 898
Tea and coffee service	A. Meisel	New York, N. Y	June 16, 1863	1, 764
Tea and coffee service	E. G. Webster	Brooklyn, N. Y	Oct. 11, 1870	4, 418
Tea-can	J. Britton	Green Point, N. Y	Nov. 5, 1872	6, 235
Tea, coffee, &c., canister	S. A. Ilsley	Brooklyn, N. Y	Dec. 23, 1873	7, 069–7, 070
Tea or coffee pot	W. Hattersley and C. Dickinson.	Newark, N. J	July 4, 1854	657
Tea or coffee pot	G. Jones	Saugerties, N. Y	June 18, 1867	2, 681
Tea or coffee pot	H. C. Wilcox	West Meriden, Conn	July 19, 1870	4, 247
Tea-pot	G. Gill	Taunton, Mass	Apr. 18, 1871	4, 813
Tea-pot	C. Hodgetts	Brooklyn, N. Y	July 2, 1872	5, 969
Tea-pot	G. W. Smith	Hartford, Conn	Apr. 26, 1859	1, 096
Tea-pot	H. Young	New York, N. Y	May 7, 1861	1, 419
Tea-pot handle	L. C. Clark	Plantsville, Conn	July 27, 1869	3, 586
Tea-service	G. Gill	Taunton, Mass	Mar. 1, 1870	3, 872
Tea-service	G. Gill	Taunton, Mass	Sept. 17, 1872	6, 143
Tea-service	G. Gill	Taunton, Mass	Aug. 12, 1873	6, 802
Tea-service	W. Parkin	Taunton, Mass	Jan. 5, 1869	3, 320
Tea-service	W. Parkin	Taunton, Mass	Jan. 12, 1869	3, 339
Tea-service	W. Parkin	Taunton, Mass	Oct. 5, 1869	3, 705
Tea-service	W. Parkin	Taunton, Mass	July 5, 1870	4, 211
Tea-service	W. Parkin	Taunton, Mass	May 21, 1872	5, 873
Tea-service	H. G. Reed	Taunton, Mass	Jan. 12, 1858	981
Tea-service	H. G. Reed	Taunton, Mass	Nov. 13, 1860	1, 343
Tea-service	H. Vasseur	Wallingford, Conn	Nov. 16, 1869	3, 754
Tea-set	H. Vasseur	Wallingford, Conn	Mar. 8, 1870	3, 890
Tea-set	H. Vasseur	Wallingford, Conn	Oct. 25, 1870	4, 441
Tea-set	H. C. Wilcox	West Meriden, Conn	Oct. 22, 1870	6, 217–6, 218
Tea-set, Metal	E. Kaufmann	Philadelphia, Pa	Dec. 15, 1863	1, 876
Terret-ring	C. H. Thornton	Newark, N. J	June 29, 1869	3, 562
Thermometer	C. R. Sherman and W. Macy	New Bedford, Mass	Mar. 15, 1870	3, 909
Thill-coupling	H. Newby	Cincinnati, Ohio	May 9, 1871	4, 901
Thill-coupling	H. Newby	Avondale, Ohio	Oct. 3, 1871	5, 302
Thill-coupling	D. E. Wolff	Welsh Run, Pa	Oct. 3, 1871	5, 306
Thread and needle case	T. R. Timby	Saratoga, N. Y	Jan. 31, 1871	4, 622
Thread-holder	T. W. Carter	West Meriden, Conn	Nov. 12, 1872	6, 244
Tile	W. H. Humphrey	Lansingburgh, N. Y	June 7, 1870	4, 144
Tile, Filling-in	B. Kreischer	New York, N. Y	Aug. 8, 1871	5, 186
Tile, Hollow	B. Kreischer	New York, N. Y	July 25, 1871	5, 140
Toaster and broiler	P. B. Sheldon	Rochester, N. Y	Nov. 8, 1870	4, 463
Toaster, Bread	S. Fawcett and H. R. Corkhill	Rochester, N. Y	Feb. 8, 1870	3, 840
Tobacco-box	C. M. Bull	New Baltimore, N. Y	Mar. 31, 1868	2, 961
Tobacco-box	C. J. Hauck	Brooklyn, N. Y	Apr. 23, 1867	2, 631
Tobacco-box	C. Parker	Meriden, Conn	Apr. 6, 1869	3, 443
Tobacco-knife	J. Kinzer	Pittsburgh, Pa	May 17, 1870	4, 036
Tobacco-pipe	G. C. Britner	Philadelphia, Pa	Nov. 27, 1866	2, 507
Tobacco-pipe	F. W. Burrows	New York N. Y	Nov. 3, 1868	3, 214
Tobacco-pipe	J. Harvey	Philadelphia, Pa	Nov. 13, 1866	2, 505
Tobacco-pipe	G. H. Pond	Rutland, Vt	Apr. 5, 1870	3, 961
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	Mar. 27, 1866	2, 286
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	May 1, 1866	2, 304
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	May 8, 1866	2, 309
Tobacco-pipe	L. Saarbach	Philadelphia, Pa	Feb. 12, 1867	2, 573
Tobacco-pipe stem	J. Watts	Philadelphia, Pa	Jan. 17, 1871	4, 587
Tool-box	H. Aiken	Franklin, N. H	May 11, 1858	1, 001
Tools, machinery, &c., Group of	E. A. Elsworth	Washington, D. C	Oct. 25, 1870	4, 442
Tooth-pick	J. H. Knapp	New York, N. Y	Apr. 19, 1864	1, 937
Tomb, Cast-iron	H. K. Flinchbaugh	Conestoga, Pa	July 22, 1851	400
Tongs, Coal	J. A. Ervien	Philadelphia, Pa	Nov. 7, 1871	5, 348
Tongs, Fire	S. S. Greene	Henrietta, N. Y	May 10, 1870	4, 013
Tongs, Sugar	J. Hall, 2d	Wallingford, Conn	Oct. 10, 1871	5, 307
Tongs, Sugar	G. Pashley and E. Davies	New York, N. Y	Oct. 15, 1872	6, 206
Tongs, Sugar	R. Wallace	Wallingford, Conn	May 24, 1870	4, 069–4, 074
Tongue-support	J. Keller	Laury's Station, Pa	Aug. 15, 1871	5, 204
Top	J. Pusey	Philadelphia, Pa	Feb. 4, 1868	2, 927
Top frame, Gyroscopic	C. P. Arnold	New York, N. Y	July 21, 1868	3, 114
Towel-stand	N. Waterman	Boston, Mass	May 25, 1852	460
Towel-stand	N. Waterman	Boston, Mass	May 25, 1858	1, 007
Towel-stand	N. Waterman	Boston, Mass	Aug. 3, 1858	1, 032
Toy	R. S. Jennings	New York, N. Y	July 28, 1868	3, 135
Toy-bank	F. W. Smith	Bridgeport, Conn	July 1, 1873	6, 744
Toy-bank	D. A. Stiles	Middletown, Conn	June 25, 1872	5, 962
Toy-bank	D. A. Stiles	Middletown, Conn	July 30, 1872	6, 016
Toy-bank	D. A. Stiles	Durham, Conn	Sept. 24, 1872	6, 156
Toy-bank	D. A. Stiles	Durham, Conn	Oct. 8, 1872	6, 199
Toy-bank	T. Swann	Philadelphia, Pa	Oct. 7, 1873	6, 946
Toy-block	J. A. H. Ellis	Springfield, Vt	May 24, 1870	4, 058
Toy-boat	J. M. Dodge	Newark, N. J	Oct. 15, 1872	6, 203

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Invention.	Inventor.	Residence.	Date.	No.
Toy-bow	I. S. Clough and V. Fountain, jr	Brooklyn and Castleton, N. Y	Aug. 16, 1864	1,982
Toy building-blocks	R. G. Britton	Springfield, Vt	Dec. 5, 1871	5,404
Toy-carriage	F. W. Porter	Springfield, Vt	Oct. 25, 1870	4,445
Toy-carriage body	F. W. Porter	Springfield, Vt	June 11, 1872	5,931
Toy, Child's	S. T. Duff	Pittsburgh, Pa	May 9, 1871	4,877
Toy figure, Mechanical	W. C. Goodwin	Hamden, Conn	Sept. 27, 1870	4,368–4,370
Toy-gun	S. H. Brown and C. H. Willets	New York, N. Y	June 30, 1868	3,081
Toy rail-car	W. A. Harwood	Brooklyn, N. Y	Sept. 2, 1873	6,868
Toy-safe	A. M. Smith	Brooklyn, N. Y	Jan. 23, 1872	5,494
Toy savings-bank	R. Frisbie	Cromwell, Conn	Apr. 29, 1873	6,619
Toy steam-engine	G. A. Brown	Farmington, Mich	Sept. 17, 1872	6,149
Toy steam-engine	A. Buckman and J. W. Huffington.	Brooklyn, N. Y	Mar. 28, 1871	4,733
Toy steam-engine	W. Holt	Brooklyn, N. Y	Feb. 15, 1870	3,849
Toy steam-engine	E. P. Ryder	New York, N. Y	Apr. 25, 1871	4,849
Toy steam-engine	E. P. Ryder	Brooklyn, N. Y	June 13, 1871	5,004
Toy steam-engine	A. P. Tyler	Boston, Mass	May 17, 1870	4,052
Toy-target	S. Hamm	Philadelphia, Pa	Oct. 28, 1873	6,966
Toys, Ornamentation of	E. F. Kelly	Chicago, Ill	July 3, 1866	2,349
Trade-mark	J. H. Ackerman	New York, N. Y	Mar. 30, 1869	3,431
Trade-mark	J. Adams	Birmingham, Pa	July 26, 1870	4,257
Trade-mark	H. Albers	Warsaw, Ill	July 21, 1868	3,113
Trade-mark	J. Ames	Lansingburgh, N. Y	Oct. 10, 1865	2,179
Trade-mark	J. H. Armbruster	Philadelphia, Pa	Feb. 11, 1868	2,929
Trade-mark	L. L. Arnold	New York, N. Y	Apr. 23, 1867	2,627
Trade-mark	H. Asbury	Philadelphia, Pa	Aug. 3, 1869	3,593
Trade-mark	E. W. Bailey	Philadelphia, Pa	Apr. 23, 1867	2,628
Trade-mark	J. T. Bailey	Philadelphia, Pa	Nov. 5, 1867	2,819
Trade-mark	T. Bakewell	Pittsburgh, Pa	Oct. 1, 1867	2,792
Trade-mark	C. E. Barber	Auburn, N. Y	Aug. 17, 1869	3,612
Trade-mark	H. I. Barbey	New York, N. Y	Apr. 27, 1869	3,450
Trade-mark	S. E. Barney	New Haven, Conn	June 12, 1866	2,332
Trade-mark	J. M. Batchelder	Cambridge, Mass	Apr. 23, 1867	2,629
Trade-mark	J. L. Bates	Boston, Mass	Aug. 13, 1867	2,743
Trade-mark	J. P. Baxter	Portland, Me	Oct. 10, 1865	2,181
Trade-mark	J. P. Baxter	Portland, Me	Apr. 23, 1867	2,630
Trade-mark	P. Behr	Saint Louis, Mo	Sept. 10, 1867	2,775
Trade-mark	R. W. Bell	Buffalo, N. Y	May 10, 1870	4,011
Trade-mark	C. O. Benton	Cleveland, Ohio	Aug. 6, 1867	2,722
Trade-mark	J. L. Bernecker	Saint Louis, Mo	Aug. 13, 1867	2,744–2,745
Trade-mark	A. Berney	Jersey City, N. J	Nov. 10, 1868	3,232
Trade-mark	P. A. Berthold and M. Thompson.	Saint Louis, Mo	May 8, 1866	2,305
Trade-mark	T. Blow	Saint Louis, Mo	Feb. 9, 1869	3,361
Trade-mark	O. T. Bragg and M. Burrowes	Saint Louis, Mo	Dec. 20, 1859	1,172
Trade-mark	G. Brett	North Easton, Mass	Aug. 20, 1867	2,751
Trade-mark	J. L. Brickey	Hannibal, Mo	Aug. 3, 1869	3,595
Trade-mark	R. P. and C. Bruff and G. A. Seaver.	New York, N. Y	Oct. 5, 1858	1,054
Trade-mark	H. Brunner	Baltimore, Md	July 6, 1869	3,568
Trade-mark	C. C. Buckley and L. Dovell	Newark, N. J	Jan. 1, 1867	2,533
Trade-mark	W. A. Burke	Lowell, Mass	June 21, 1870	4,156
Trade-mark	J. W. Carroll	Lynchburgh, Va	Oct. 9, 1866	2,487–2,488
Trade-mark	J. B. Chargois	New York, N. Y	Dec. 9, 1862	1,676
Trade-mark	S. M. Clark	Washington, D. C	June 30, 1868	3,083
Trade-mark	W. J. Clark	Providence, R. I	May 17, 1870	4,025
Trade-mark	L. L. Coleman	Nashville, Tenn	Dec. 1, 1868	3,265
Trade-mark	P. M. Consuegra	New York, N. Y	June 15, 1869	3,537
Trade-mark	I. Cook	Saint Louis, Mo	July 9, 1867	2,697
Trade-mark	F. E. Covell	Portland, Me	May 16, 1865	2,066
Trade-mark	J. B. Crump	Portland, Me	Aug. 6, 1867	2,725
Trade-mark	H. Damon	Boston, Mass	July 12, 1864	1,960
Trade-mark	R. F. Danforth	Cleveland, Ohio	Apr. 27, 1869	3,455
Trade-mark	F. O. Day and W. S. Stewart	Saint Louis, Mo	May 1, 1866	2,298–2,300
Trade-mark	D. M. and J. J. Demarest and N. H. Joralemon.	New York, N. Y., and Jersey City and Hoboken, N. J.	July 12, 1870	4,216
Trade-mark	S. W. and D. S. Dexter	Pawtucket, R. I	Mar. 30, 1869	3,433
Trade-mark	H. R. Dickinson, G. P. Kinney, and M. F. Wilson.	Painesville, Ohio	June 29, 1869	3,558
Trade-mark	A. Edwards	Elizabeth, N. J	Nov. 10, 1868	3,233
Trade-mark	T. W. Evans	Philadelphia, Pa	Aug. 12, 1862	1,626
Trade-mark	N. Ezekiel	Richmond, Va	Jan. 24, 1860	1,191
Trade-mark	A. W. Fagin	Saint Louis, Mo	Mar. 13, 1866	2,280
Trade-mark	B. L. Fahnestock	Pittsburgh, Pa	Aug. 11, 1868	3,156
Trade-mark	J. Fahnestock	Astoria, N. Y	May 5, 1868	3,010
Trade-mark	N. Fairbrother and G. S. Fales	Pawtucket, R. I	Feb. 5, 1867	2,568
Trade-mark	H. A. Fanshawe	New York, N. Y	Apr. 13, 1869	3,447
Trade-mark	G. P. Farmer	Philadelphia, Pa	May 26, 1868	3,052
Trade-mark	J. Farrell	Baltimore, Md	Feb. 23, 1869	3,385
Trade-mark	H. Fenn	Plymouth, Conn	Nov. 30, 1869	3,769
Trade-mark	M. V. B. Ferris	South Norwalk, Conn	May 7, 1867	2,645
Trade-mark	G. F. Filley	Saint Louis, Mo	June 4, 1867	2,663
Trade-mark	H. Fletcher	Providence, R. I	June 12, 1866	2,335–2,336
Trade-mark	H. Fletcher	Providence, R. I	June 28, 1870	4,178
Trade-mark	D. Foerster	Zanesville, Ohio	Nov. 17, 1868	3,260–3,261
Trade-mark	W. Freudenau	Saint Louis, Mo	Oct. 9, 1866	2,489
Trade-mark	W. Freudenau	Saint Louis, Mo	Oct. 30, 1866	2,501
Trade-mark	G. F. Gantz	New York, N. Y	Feb. 16, 1869	3,369
Trade-mark	J. H. Garnhart	Saint Louis, Mo	Apr. 21, 1868	3,003
Trade-mark	J. H. Garnhart	Saint Louis, Mo	Mar. 29, 1870	3,943
Trade-mark	C. Gautier	Washington, D. C	Feb. 4, 1868	2,911
Trade-mark	J. Getz	Buffalo, N. Y	Jan. 5, 1869	3,306
Trade-mark	P. Gibson and A. Tyler	Minneapolis, Minn	May 10, 1870	4,012
Trade-mark	H. H. Glidden and E. P. House	Springfield, Ill	Feb. 16, 1869	3,370
Trade-mark	D. L. Gold and J. B. Adams	Springfield, Ill	Aug. 1, 1865	2,151
Trade-mark	A. F. Goodnow	New York, N. Y	June 13, 1865	2,089
Trade-mark	J. Gorham	Providence, R. I	Dec. 31, 1867	2,854

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Invention.	Inventor.	Residence.	Date.	No.
Trade-mark	C. Griffith	New York, N. Y	Oct. 22, 1867	2,815
Trade-mark	S. Gwynn	New York, N. Y	Apr. 11, 1865	2,043
Trade-mark	S. Gwynn	New York, N. Y	Oct. 1, 1867	2,797
Trade-mark	S. Hainemann	New York, N. Y	Feb. 26, 1861	1,387
Trade-mark	S. and S. Hainemann and D. Steiner.	New York, N. Y	Feb. 11, 1868	2,931
Trade-mark	J. A. and L. B. Hamlin	Elgin, Ill	Mar. 30, 1869	3,435
Trade-mark	T. and S. Hardgrove	Richmond, Va	Nov. 1, 1859	1,163
Trade-mark	F. A. Hasenclever	New York, N. Y	Sept. 22, 1868	3,207
Trade-mark	A. Heidelberger	New York, N. Y	Jan. 22, 1867	2,561
Trade-mark	J. C. Hoagland	Fort Wayne, Ind	Mar. 31, 1868	2,967
Trade-mark	J. Hoge and R. D. Schultz	Zanesville, Ohio	Jan. 30, 1866	2,248
Trade-mark	G. Hosmer	Boston, Mass	Aug. 8, 1865	2,160
Trade-mark	W. C. Hutchings	Hartford, Conn	Feb. 16, 1869	3,374
Trade-mark	J. H. Jessop	Cambridge, Mass	Sept. 22, 1868	3,208
Trade-mark	A. F. Johnson	Boston, Mass	May 28, 1861	1,426
Trade-mark	H. Kellogg	Chicago, Ill	Apr. 26, 1870	3,993
Trade-mark	R. and J. P. Kerr	Paisley, Scotland	Jan. 18, 1870	3,819
Trade-mark	D. B. Kimball	New York, N. Y	Dec. 11, 1866	2,527
Trade-mark	J. S. Kirk	Chicago, Ill	Mar. 29, 1870	3,944
Trade-mark	O. Kornemann and J. Jungbluth.	New York, N. Y	May 3, 1870	4,005
Trade-mark	M. Landenberger	Philadelphia, Pa	June 28, 1870	4,182
Trade-mark	M. Landenberger	Philadelphia, Pa	June 28, 1870	4,186
Trade-mark	G. W. and J. D. Langhorne and N. B. Johnston.	Lynchburgh, Va	May 31, 1870	4,078–4,079
Trade-mark	M. Leippe	Lancaster, Pa	Nov. 14, 1865	2,220
Trade-mark	T. Lewis	Malden, Mass	Sept. 4, 1855	725
Trade-mark	G. H. Lincoln	Providence, R. I	Feb. 5, 1867	2,569
Trade-mark	J. I. Livingston	Pittsburgh, Pa	June 15, 1869	3,539
Trade-mark	E. Locher	Newark, N. J	July 24, 1866	2,372
Trade-mark	R. S. Lyon	West Morrisania, N. Y	Mar. 6, 1866	2,277
Trade-mark	F. M. Maas	New York, N. Y	July 13, 1869	3,581
Trade-mark	J. G. Mackintosh	New York, N. Y	Sept. 24, 1867	2,786
Trade-mark	W. Maddox	Ripley, Ohio	June 1, 1869	3,519
Trade-mark	D. D. Mallory	Baltimore, Md	July 14, 1868	3,102
Trade-mark	S. S. Marvin	Pittsburgh, Pa	Mar. 31, 1868	2,972
Trade-mark	O. C. Maxwell, T. L. Neal, and C. L. Long.	Dayton, Ohio	Mar. 8, 1870	3,887
Trade-mark	S. McCartney	Saint Louis, Mo	June 4, 1867	2,666–2,667
Trade-mark	G. S. McKenzie	Cleveland, Ohio	June 16, 1868	3,071
Trade-mark	J. H. McLean	Saint Louis, Mo	Oct. 11, 1859	1,155
Trade-mark	T. G. Meier	Saint Louis, Mo	Jan. 28, 1868	2,867–2,868
Trade-mark	D. L. Meineke	Saint Louis, Mo	July 31, 1860	1,292
Trade-mark	F. Meussing	New York, N. Y	Oct. 22, 1867	2,808
Trade-mark	J. Meyer, jr	New York, N. Y	Jan. 3, 1866	1,183
Trade-mark	C. J. Miller	Philadelphia, Pa	Jan. 28, 1868	2,869
Trade-mark	H. J. and J. T. Monsch	Louisville, Ky	Aug. 27, 1867	2,771
Trade-mark	C. L. Morehouse	Cleveland, Ohio	June 29, 1869	3,561
Trade-mark	T. H. Morris and E. Seeley	Washington, D. C	Nov. 2, 1869	3,738
Trade-mark	A. C. Mueller	Saint Louis, Mo	Oct. 10, 1865	2,191
Trade-mark	J. M. Mumford	South Reading, Mass	July 28, 1868	3,139
Trade-mark	H. M. Myers	Allegheny City, Pa	July 21, 1868	3,118
Trade-mark	D. Neumann	New York, N. Y	Nov. 9, 1869	3,747
Trade-mark	S. B. Newell	Cincinnati, Ohio	Jan. 26, 1864	1,889
Trade-mark	D. O'Sullivan	Leicester, Mass	Nov. 26, 1867	2,842
Trade-mark	D. F. Packer	Mystic River, Conn	Mar. 2, 1869	3,395
Trade-mark	D. A. Page	Dover, N. H	Apr. 19, 1870	3,984
Trade-mark	H. Parker and J. C. Sleeper	Boston, Mass	Mar. 3, 1868	2,945
Trade-mark	D. F. Packer	Pittsburgh, Pa	Apr. 19, 1864	1,932
Trade-mark	W. I. Peake	New York, N. Y	Nov. 3, 1868	3,225
Trade-mark	W. Pearson and P. Hogoboom	Ripon, Wis	Mar. 15, 1870	3,906
Trade-mark	J. S. Pemberton	Atlanta, Ga	June 1, 1869	3,521
Trade-mark	E. F. Peugeot	Chicago, Ill	Sept. 25, 1866	2,456
Trade-mark	C. Perkes	Philadelphia, Pa	Dec. 21, 1869	3,803
Trade-mark	C. A. Perry	Chicago, Ill	July 10, 1866	2,355
Trade-mark	I. A. Powell	Lawrenceville, Ill	Dec. 20, 1864	2,017
Trade-mark	S. S. Putnam	Dorchester, Mass	Aug. 7, 1866	2,378
Trade-mark	A. Ray	Chicago, Ill	Apr. 6, 1869	3,444
Trade-mark	R. H. Rice	Newport, R. I	Mar. 23, 1869	3,424
Trade-mark	J. C. Richard	New York, N. Y	Apr. 11, 1865	2,053
Trade-mark	E. A. Robbins	Wrentham, Mass	Nov. 17, 1868	3,251
Trade-mark	R. J. Roberts	New York, N. Y	July 24, 1866	2,373
Trade-mark	W. Robotham	Newark, N. J	May 10, 1864	1,944
Trade-mark	H. C. Rogers	Paris, N. Y	July 26, 1870	4,266
Trade-mark	H. Roundy	San Francisco, Cal	Aug. 3, 1869	3,599
Trade-mark	W. F. and F. C. Sayles	North Providence, R. I	Nov. 16, 1869	3,751
Trade-mark	C. E. Savery	Philadelphia, Pa	May 4, 1869	3,473
Trade-mark	J. Schedler	Hudson City, N. J	Feb. 27, 1866	2,268–2,269
Trade-mark	J. Schenck	New York, N. Y	Mar. 10, 1868	2,950
Trade-mark	J. Scholfield	Constantine, Mich	Nov. 19, 1867	2,834
Trade-mark	J. M. Schoonmaker	Pittsburgh, Pa	Nov. 5, 1867	2,827
Trade-mark	C. Schultz and T. Warker	New York, N. Y	May 5, 1868	3,017
Trade-mark	L. Seits	New York, N. Y	Mar. 21, 1865	2,039
Trade-mark	T. P. Shaffner	Louisville, Ky	Feb. 9, 1869	3,366
Trade-mark	D. Shirrell	Buffalo, N. Y	July 24, 1866	2,374
Trade-mark	B. C. Smith	Auburn, N. Y	Oct. 12, 1869	3,711
Trade-mark	L. and A. J. Sohl and D. Gibson	Indianapolis, Ind	June 26, 1866	2,341
Trade-mark	F. Stearns	Detroit, Mich	June 20, 1865	2,102
Trade-mark	D. F. Stevens	Boston, Mass	May 12, 1868	3,048
Trade-mark	D. W. Storer	Bangor, Me	Nov. 17, 1868	3,254
Trade-mark	S. F. Stowe	Providence, R. I	May 22, 1866	2,325
Trade-mark	G. L. Swett	Leominster, Mass	Dec. 5, 1865	2,227
Trade-mark	S. P. M. Tasker	Philadelphia, Pa	June 14, 1870	4,154
Trade-mark	H. Tetlow	Philadelphia, Pa	June 4, 1867	2,670
Trade-mark	G. C. Thilenius	Cape Girardeau, Mo	Oct. 5, 1869	3,707
Trade-mark	G. C. Thilenius	Cape Girardeau, Mo	Mar. 8, 1870	3,889
Trade-mark	T. Thurber	Auburn, N. Y	Apr. 26, 1864	1,938

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Invention.	Inventor.	Residence.	Date.	No.
Trade-mark	I. L. Towers	Boston, Mass	June 11, 1861	1,432
Trade-mark	G. W. Tucker	Manchester, N. H	Sept. 28, 1869	3,678
Trade-mark	E. H. Turner	Quincy, Ill	Nov. 17, 1868	3,257
Trade-mark	H. G. Tyer	Andover, Mass	Aug. 12, 1862	1,629
Trade-mark	G. W. Waitt	Philadelphia, Pa	May 26, 1868	3,054
Trade-mark	W. C. Walker	Saint Louis, Mo	Feb. 11, 1868	2,934
Trade-mark	C. H. Warren	Toledo, Ohio	June 1, 1869	3,531
Trade-mark	J. S. Waters	Saint Louis, Mo	July 16, 1867	2,707
Trade-mark	J. S. Waters	Saint Louis, Mo	May 12, 1868	3,044
Trade-mark	M. Werk	Cincinnati, Ohio	Nov. 17, 1868	3,258
Trade-mark	G. W. Westbrook	New York, N. Y	June 7, 1864	1,950
Trade-mark	G. W. Westbrook	New York, N. Y	Nov. 27, 1866	2,513
Trade-mark	W. P. and B. F. Weyman	Pittsburgh, Pa	Dec. 26, 1865	2,238
Trade-mark	J. White	Cleveland, Ohio	May 18, 1869	3,505
Trade-mark	F. Whittaker	Saint Louis, Mo	Sept. 24, 1867	2,784
Trade-mark	B. B. Wilcox	New Haven, Conn	Nov. 24, 1868	3,264
Trade-mark	E. Wilhelm	Buffalo, N. Y	Mar. 23, 1869	3,430
Trade-mark	J. Williams	Philadelphia, Pa	Jan. 7, 1862	1,516
Trade-mark	H. J. Willing	Chicago, Ill	May 18, 1869	3,506
Trade-mark	G. Wilson	Ware, Mass	Oct. 22, 1867	2,812
Trade-mark	S. S. Winchester	Boston, Mass	Feb. 7, 1865	2,030
Trade-mark	W. H. and E. Winslow	Boston, Mass	Aug. 25, 1868	3,184
Trade-mark	A. H. Wirz	Philadelphia, Pa	Oct. 10, 1865	2,109
Trade-mark	G. L. Witsil	Philadelphia, Pa	Apr. 21, 1868	3,007
Trade-mark	W. Ziock	Saint Louis, Mo	Aug. 27, 1867	2,774
Trade-mark for lead-pencil	E. Faber	New York, N. Y	Oct. 8, 1861	1,475
Trade-mark for lead-pencil	L. H. Flersheim	Chicago, Ill	May 29, 1866	2,326
Trade-mark for lead-pencil	J. Rosenthal	New York, N. Y	Apr. 3, 1860	1,229
Trade-mark for lead-pencil	J. Schedler	New York, N. Y	May 9, 1865	2,063
Trade-mark for neuralgic pills	S. Armitage	Saint Louis, Mo	Apr. 3, 1860	1,215
Trade-mark for pen and pen-box	J. B. Waring	New York, N. Y	Jan. 16, 1866	2,243
Trade-mark for soap-box	T. and S. Lincoln	Providence, R. I	Dec. 20, 1859	1,173
Trade-mark on sword-blade	J. W. Hayes	Newark, N. J	Feb. 18, 1862	1,539
Trade-mark, Pencil	E. Faber	New York, N. Y	Nov. 3, 1868	3,219
Tray, Ink	G. L. Underwood	Boston, Mass	July 21, 1868	3,128–3,129
Trellis	J. G. Konvalinka	Astoria, N. Y	Jan. 9, 1872	5,465
Trellis-frame	S. Hayes	Prattsburgh, N. Y	Feb. 4, 1862	1,522
Trimming	J. B. Clarke	Brooklyn, N. Y	Apr. 8, 1873	6,572
Trimming	F. A. Kursheedt	New York, N. Y	Jan. 2, 1872	5,458–5,460
Trimming	J. Phipps	Philadelphia, Pa	May 6, 1873	6,637–6,638
Trimming, Drapery	C. Lambert	New York, N. Y	Oct. 9, 1866	2,490
Trimming, Dress	J. and J. Cash	Coventry, England	Jan. 17, 1871	4,567–4,584
Trimming, Dress	M. Landenberger	Philadelphia, Pa	Oct. 25, 1870	4,443
Trimming, Dress	R. Werner	Hoboken, N. J	Nov. 29, 1870	4,500
Trimming, Fabric	T. Merry	Philadelphia, Pa	Feb. 6, 1866	2,259–2,262
Trimming, Fur	A. Molnar	New York, N. Y	Dec. 16, 1873	7,064
Trunk-corner clamp	W. Bruen	Newark, N. J	June 11, 1872	5,924
Trunk-corner clamp	W. S. Jessup	Newark, N. J	July 5, 1870	4,200
Trunk-corner clamp	T. L. Rivers	Newark, N. J	Sept. 13, 1870	4,355
Trunk-cover	H. Braunhohl	New York, N. Y	Nov. 8, 1864	1,996
Trunk-cover	N. B. Williams	New York, N. Y	Nov. 2, 1869	3,741
Trunk-covering	J. S. Eaton	Boston, Mass	Oct. 26, 1869	3,727
Trunk-handle cap	T. L. Rivers	Newark, N. J	May 23, 1871	4,933
Trunk-lock	C. Walsh	Newark, N. J	May 3, 1870	4,010
Trunk, &c., Ornamenting	H. Wolf	Detroit, Mich	Apr. 21, 1868	3,008
Tuck-comb	E. Brown	Wappinger's Falls, N. Y	Dec. 20, 1870	4,523
Tug-clip	J. Letchworth	Buffalo, N. Y	Sept. 16, 1873	6,883
Tumbler	C. S. Chaffee	East Cambridge, Mass	June 25, 1861	1,433
Tumbler, Drinking	J. Matthews, jr	New York, N. Y	Sept. 25, 1866	2,440
Tumbler-holder	C. Lippincott and J. Patterson	Philadelphia, Pa	Apr. 1, 1873	6,544
Twine-box	J. B. Sargent	Hartford, Conn	Apr. 30, 1861	1,403
Twine-holder	E. M. Judd and R. L. Smith	Wolcottville, Conn	July 28, 1868	3,136
Twine-holder	E. J. Steele	New Haven, Conn	Nov. 26, 1872	6,276
Twine-reel	C. H. Tiebout	New York, N. Y	June 20, 1871	5,039
Type	H. Brehmer	Brooklyn, N. Y	Apr. 2, 1872	5,739–5,741
Type	D. W. Bruce	New York, N. Y	Apr. 23, 1872	5,814–5,815
Type	G. Bruce	New York, N. Y	Nov. 9, 1842	1
Type	G. Bruce	New York, N. Y	Sept. 8, 1857	940
Type	G. Bruce	New York, N. Y	Jan. 19, 1858	985
Type	R. Bruce	Brooklyn, N. Y	Oct. 11, 1870	4,392
Type	W. Bruce	Brooklyn, N. Y	Oct. 11, 1870	4,393
Type	J. Conner	New York, N. Y	July 6, 1858	1,020
Type	H. Flinsch	Frankfort, Prussia	Feb. 7, 1871	4,626
Type	A. Gilbert	Boston, Mass	Jan. 10, 1871	4,563
Type	A. Gilbert	Boston, Mass	Feb. 7, 1871	4,627
Type	A. Gilbert	Boston, Mass	Feb. 6, 1872	5,507
Type	J. Herriet	New York, N. Y	Oct. 11, 1870	4,401–4,402
Type	J. Herriet	New York, N. Y	Jan. 3, 1871	4,552–4,553
Type	J. Herriet	New York, N. Y	June 13, 1871	4,990–4,991
Type	J. Herriet	New York, N. Y	Apr. 23, 1872	5,816
Type	J. Herriet	New York, N. Y	May 6, 1873	6,626–6,627
Type	C. E. Heyer	West Roxbury, Mass	Mar. 26, 1872	5,729
Type	C. E. Heyer	West Roxbury, Mass	Apr. 9, 1872	5,759
Type	C. C. Hine	Newark, N. J	July 16, 1872	5,989
Type	H. Ilenburg	Philadelphia, Pa	May 24, 1870	4,061
Type	A. Kay	Philadelphia, Pa	June 27, 1871	5,046
Type	J. Lindsay	Brooklyn, N. Y	Feb. 13, 1872	5,514
Type	A. Little	New York, N. Y	July 5, 1870	4,203
Type	A. Little	New York, N. Y	Feb. 21, 1871	4,673
Type	A. Little	New York, N. Y	Dec. 26, 1871	5,450
Type	A. Little	New York, N. Y	July 16, 1872	5,984
Type	A. McLeester	Philadelphia, Pa	Oct. 31, 1871	5,342
Type	W. H. Page	Norwich, Conn	Mar. 15, 1870	3,901–3,905
Type	W. H. Page	Norwich, Conn	Aug. 9, 1870	4,279–4,283
Type	W. H. Page	Norwich, Conn	Mar. 21, 1871	4,726–4,727
Type	W. H. Page	Norwich, Conn	Apr. 18, 1871	4,820
Type	J. K. Rogers	Brookline, Mass	Dec. 20, 1870	4,529–4,530
Type	J. K. Rogers	Brookline, Mass	June 6, 1871	4,981

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Invention.	Inventor.	Residence.	Date.	No.
Type	C. Schraubstädter	Brookline, Mass	Dec. 20, 1870	4, 531
Type	C. Schraubstädter	Brookline, Mass	Jan. 23, 1872	5, 493
Type	R. Smith	Philadelphia, Pa	May 3, 1870	4, 008
Type	R. Smith	Philadelphia, Pa	July 5, 1870	4, 213
Type	R. Smith	Philadelphia, Pa	July 26, 1870	4, 267
Type	R. Smith	Philadelphia, Pa	Aug. 9, 1870	4, 289
Type	R. Smith	Philadelphia, Pa	Jan. 3, 1871	4, 559–4, 661
Type	R. Smith	Philadelphia, Pa	Mar. 28, 1871	4, 743
Type	R. Smith	Philadelphia, Pa	June 27, 1871	5, 056
Type	R. Smith	Philadelphia, Pa	Jan. 2, 1872	5, 456
Type	R. Smith	Philadelphia, Pa	Jan. 16, 1872	5, 477
Type	J. A. St. John	Boston, Mass	June 6, 1871	4, 982
Type-border	W. H. Page	Norwich, Conn	Aug. 9, 1870	4, 284–4, 285
Type-border	W. H. Page	Norwich, Conn	Mar. 21, 1871	4, 728
Type-case	A. H. Bailey	Somerville, Mass	Mar. 26, 1872	5, 728
Type-case stand, Printer's	N. C. Hawks	Milwaukee, Wis	Nov. 9, 1869	3, 743
Type-font	J. Conner	New York, N. Y	June 1, 1858	1, 009
Type, Letter-press	D. Bruce	Newtown, N. Y	Nov. 17, 1863	1, 850
Type, Letter-press	A. Little	New York, N. Y	Apr. 18, 1865	2, 054
Type, Ornamental	E. C. Ruthven	Philadelphia, Pa	Nov. 19, 1867	2, 833
Type, Printer's	D. Bruce	Newtown, N. Y	Apr. 16, 1867	2, 618
Type, Printer's	D. Bruce	Brooklyn, N. Y	Nov. 19, 1867	2, 831
Type, Printer's	D. Bruce	Brooklyn, N. Y	Nov. 17, 1868	3, 236
Type, Printer's	G. Bruce	New York, N. Y	June 15, 1858	1, 014
Type, Printer's	G. Bruce	New York, N. Y	Aug. 10, 1858	1, 033
Type, Printer's	T. M. Cash	San Francisco, Cal	Jan. 11, 1870	3, 811
Type, Printer's	J. Conner	New York, N. Y	July 6, 1858	1, 021–1, 022
Type, Printer's	J. Herriet	New York, N. Y	Feb. 12, 1867	2, 577–2, 578
Type, Printer's	J. Herriet	New York, N. Y	Nov. 19, 1867	2, 832
Type, Printer's	J. Herriet	New York, N. Y	Feb. 16, 1869	3, 371
Type, Printer's	J. Herriet	New York, N. Y	June 1, 1869	3, 516
Type, Printer's	J. Herriet	New York, N. Y	Nov. 30, 1869	3, 770
Type, Printer's	H. Ilenburg	Philadelphia, Pa	Dec. 1, 1868	3, 270–3, 271
Type, Printer's	H. Ilenburg	Philadelphia, Pa	Apr. 27, 1869	3, 456
Type, Printer's	H. Ilenburg	Philadelphia, Pa	Jan. 11, 1870	3, 813
Type, Printer's	P. A. Jordan	Philadelphia, Pa	Dec. 1, 1868	3, 272
Type, Printer's	A. Little	New York, N. Y	May 15, 1866	2, 316
Type, Printer's	A. Little	New York, N. Y	Mar. 26, 1867	2, 607
Type, Printer's	A. Little	New York, N. Y	June 16, 1868	3, 070
Type, Printer's	A. Little	New York, N. Y	Dec. 1, 1868	3, 273
Type, Printer's	E. C. Ruthven	Philadelphia, Pa	Feb. 23, 1869	3, 389
Type, Printer's	G. W. Witham	Philadelphia, Pa	Oct. 26, 1869	3, 730
Type, Printer's ornamental	J. Herriet	New York, N. Y	Nov. 17, 1868	3, 244–3, 245
Type, Printing	G. Bruce	New York, N. Y	Dec. 2, 1856	851
Type, Printing	G. Bruce	New York, N. Y	Jan. 6, 1857	863
Type, Printing	G. Bruce	New York, N. Y	May 25, 1858	1, 006
Type, Printing	J. M. Conner	New York, N. Y	Nov. 19, 1872	6, 265–6, 267
Type, Printing	J. M. Conner	New York, N. Y	Nov. 26, 1872	6, 272
Type, Printing	J. M. Conner	New York, N. Y	Apr. 8, 1873	6, 573–6, 574
Type, Printing	J. M. Conner	Greenville, N. J	Dec. 30, 1873	7, 080
Type, Printing	H. Ilenburg	New York, N. Y	Aug. 20, 1872	6, 074–6, 075
Type, Printing	H. Ilenburg	New York, N. Y	Nov. 11, 1873	6, 989–6, 990
Type, Printing	L. Johnson	Philadelphia, Pa	Feb. 12, 1856	760
Type, Printing	A. Little	New York, N. Y	Aug. 31, 1869	3, 644
Type, Printing	A. Little	New York, N. Y	June 14, 1870	4, 152
Type, Printing	A. Little	New York, N. Y	Jan. 21, 1873	6, 359
Type, Printing	A. Little	New York, N. Y	July 1, 1873	6, 735
Type, Printing	A. Little	New York, N. Y	July 8, 1873	6, 761
Type, Printing	W. H. Page	Norwich, Conn	Dec. 23, 1873	7, 072–7, 074
Type, Printing	E. C. Ruthven	Philadelphia, Pa	Aug. 25, 1868	3, 170
Type, Printing	E. C. Ruthven	Philadelphia, Pa	Sept. 23, 1873	6, 890
Type, Printing	E. C. Ruthven	Philadelphia, Pa	Oct. 7, 1873	6, 954
Type, Printing	R. Smith	Philadelphia, Pa	Sept. 24, 1867	2, 791
Type, Printing	R. Smith	Philadelphia, Pa	Jan. 21, 1873	6, 351
Type, Printing	R. Smith	Philadelphia, Pa	July 1, 1873	6, 736
Type, Printing	R. Smith	Philadelphia, Pa	July 8, 1873	6, 769
Type, Printing	R. Smith	Philadelphia, Pa	Sept. 23, 1873	6, 892–6, 893
Type, Ray-shaded printer's	D. W. Bruce	New York, N. Y	Nov. 17, 1868	3, 237
Type, Script	J. Conner	New York, N. Y	Nov. 16, 1858	1, 064
Type, Wood	J. F. Blackman	Brooklyn, N. Y	Jan. 21, 1873	6, 342
U.				
Umbrella-stand	C. Blake	Boston, Mass	Mar. 22, 1870	3, 925
Umbrella-stand	C. Blake	Boston, Mass	Nov. 1, 1870	4, 447
Umbrella-stand	W. Bryent	Boston, Mass	June 4, 1850	287
Umbrella-stand	E. J. Delany	Philadelphia, Pa	Feb. 18, 1851	350
Umbrella-stand	W. L. Miller	New York, N. Y	Sept. 13, 1845	36
Umbrella-stand	J. C. Sidney	Philadelphia, Pa	May 31, 1870	4, 080
Upright drill	F. A. Pratt	Hartford, Conn	Aug. 10, 1869	3, 611
Urinal and water-closet, Public	F. J. Smith	Chicago, Ill	Apr. 18, 1871	4, 833
Urn for hot water, &c	P. P. Meyer	New York, N. Y	Feb. 4, 1873	6, 382
Urn, Garden	G. T. Spicer	Providence, R. I	Aug. 13, 1867	2, 750
Urn, Ornamental	N. Brayer	Rochester, N. Y	July 29, 1873	6, 785
V.				
Valve	W. B. Le Van	Philadelphia, Pa	Jan. 26, 1864	1, 891–1, 892
Valve case, Steam	J. Johnson	New York, N. Y	May 12, 1868	3, 045
Valve-handle	J. Mathews, jr	New York, N. Y	Sept. 12, 1865	2, 166
Vane, Wind	A. L. Jewell	Waltham, Mass	Sept. 12, 1865	2, 165
Vase	J. B. Clute	Schenectady, N. Y	July 25, 1846	68
Vase	N. L. Glauber and A. Schlank	New York, N. Y	June 11, 1872	5, 918
Vase	B. Levene	New York, N. Y	Aug. 13, 1872	6, 024
Vase	W. and R. P. Resor	Cincinnati, Ohio	Oct. 10, 1846	98
Vase	W. H. Wilkinson	New York, N. Y	Feb. 4, 1873	6, 384
Vase-border	J. Moore	Brooklyn, N. Y	Feb. 20, 1872	5, 548
Vase, Flower	J. Mersereau	Port Chester, N. Y	June 17, 1873	6, 709

Index of designs issued from the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Vase, Fountain	J. Moore and W. Wilkinson	Brooklyn, N. Y	Apr. 11, 1871	4, 809
Vase, Garden	R. Wood	Philadelphia, Pa	May 7, 1872	5, 845
Vase, Hanging	M. L. Snow	West Sterling, Mass	July 11, 1871	5, 120
Vase, Hanging	J. Runey	Somerville, Mass	Dec. 5, 1871	5, 406
Vase-rim	J. Moore	Brooklyn, N. Y	Jan. 9, 1872	5, 466
Veil	S. M. Meyenberg and R. Collinge.	Paterson, N. J	Sept. 2, 1873	6, 870
Velocipede-frame	S. F. Pratt	Boston, Mass	June 8, 1869	3, 535
Vessel, Base of sheet-metal	J. H. Stone	Philadelphia, Pa	Jan. 30, 1866	2, 254
Vest-chain lock	K. Kauffmann	New York, N. Y	Mar. 5, 1872	5, 574
Vise	Q. S. Backus	Winchendon, Mass	July 28, 1868	3, 130
Vise, Saw-filing	W. A. Perkins	Salem, Mass	Apr. 25, 1871	4, 848
W.				
Waffle-baker	N. Waterman	Boston, Mass	July 5, 1853	578
Wagon-seat riser	P. P. Child	Saint Louis, Mo	Sept. 5, 1871	5, 251
Wardrobe-hook	M. Judd	New Haven, Conn	Dec. 21, 1869	3, 795–3, 797
Wash-stand	J. R. Lancaster	Morrisania, N. Y	Dec. 17, 1872	6, 319
Wash-stand	J. L. Mott	Mott Haven, N. Y	Apr. 16, 1867	2, 619–2, 620
Wash-stand slab, Iron	J. L. Mott	Mott Haven, N. Y	Oct. 19, 1869	3, 721
Watch-bridge	J. L. Mathey	Hoboken, N. J	Sept. 3, 1872	6, 098
Watch-case	C. K. Colby	New York, N. Y	Oct. 15, 1872	6, 201
Watch-case	J. C. Dueber	Cincinnati, Ohio	Dec. 10, 1872	6, 282
Watch-chain	M. Buffum	Leominster, Mass	Apr. 19, 1870	3, 975
Watch-chain	A. D. Varran	North Attleborough, Mass	June 14, 1864	1, 963
Watch-chain charm	W. B. Hamm	Philadelphia, Pa	July 8, 1873	6, 759
Watch-guard	G. Blanchard	New York, N. Y	May 10, 1859	1, 100
Watch-hand	B. A. Goodell	Waltham, Mass	Oct. 17, 1871	5, 316
Watch-hand	B. A. Goodell	Waltham, Mass	June 3, 1873	6, 698
Watch-key or charm	J. Goldsborough	Philadelphia, Pa	Apr. 9, 1872	5, 757
Watch-plate	A. Gerard	Somerset County, N. J	Oct. 1, 1867	2, 795
Watch-plate	V. Gerard	New York, N. Y	Sept. 3, 1872	6, 097
Watch-plate	E. Howard	Boston, Mass	July 24, 1866	2, 370
Watch-plate	F. A. Jones	Boston, Mass	Nov. 8, 1870	4, 459
Watch-plate	E. Marcile	New York, N. Y	Apr. 11, 1871	4, 795
Watch-plate	E. H. Perry	Boston, Mass	Apr. 11, 1871	4, 799
Watch-plate	G. P. Reed	Boston, Mass	Dec. 21, 1869	3, 804–3, 805
Watch top-plate	F. A. Giles	New York, N. Y	Feb. 27, 1866	2, 266
Watch top-plate	F. A. Giles	New York, N. Y	Mar. 13, 1866	2, 281
Watch top-plate	E. Paulus	Philadelphia, Pa	Aug. 25, 1868	3, 167–3, 168
Watch top-plate and balance-cock	F. A. Giles	New York, N. Y	May 9, 1865	2, 055
Watch top-plate, barrel-bridge, and cock	F. S. Giles	New York, N. Y	Mar. 8, 1870	3, 885–3, 886
Water-closet container	W. S. Carr	New York, N. Y	Mar. 31, 1868	2, 962
Water-closet receiver	J. Hayden, jr	Haydensville, Mass	Jan. 12, 1869	3, 335
Water-closet receiver	W. Smith	San Francisco, Cal	May 26, 1868	3, 060
Water-cooler	W. Burnet	Cincinnati, Ohio	July 8, 1851	392
Water-cooler	J. L. Hadden	Philadelphia, Pa	Mar. 19, 1867	2, 597
Water-cooler	G. Hodgetts	New York, N. Y	May 22, 1855	705
Water-cooler	E. M. Manigle and G. Phipps	Philadelphia County, Pa	Apr. 19, 1853	549
Water-cooler	P. Maloney	Cincinnati, Ohio	Aug. 3, 1852	478
Water-cooler	C. Müller	New York, N. Y	Apr. 3, 1860	1, 227
Water-cooler	G. Smith, H. Brown, and J. A. Read.	Philadelphia, Pa	May 1, 1855	702
Water-cooler and refrigerator	J. Liming	Philadelphia, Pa	June 20, 1871	5, 031
Water-cooler stand	C. C. Savery	Philadelphia, Pa	Nov. 29, 1870	4, 498
Water-proof goods	B. Metz	New York, N. Y	Dec. 19, 1871	5, 429–5, 432
Water-vessel base, Sheet-metal	J. H. Stone	Philadelphia, Pa	Dec. 5, 1865	2, 226
Weather-boarding	J. H. Clark and J. Rhinesmith	Fort Wayne, Ind	May 1, 1866	2, 297
Weather-boarding	J. Jacoby	Johnstown, Pa	May 30, 1871	4, 964
Weather-glass	C. F. Martine	Boston, Mass	May 5, 1868	3, 013
Well-casing	E. S. Cummins	Clarence, Iowa	Nov. 22, 1870	4, 483
Well-curb	D. Benson	Nanuet, N. Y	Nov. 10, 1868	3, 230–3, 231
Well-curb	W. and B. Douglas	Middletown, Conn	July 11, 1854	661
Wheel	A. Rank	Salem, Ohio	Oct. 2, 1866	2, 484
Whip-rack	C. A. Warren	Watertown, Conn	Oct. 22, 1872	6, 216
Whistle, Child's	H. Dubosq	Philadelphia, Pa	May 6, 1844	20
Window-catch, French	O. F. Fogelstrand	Kensington, Conn	Jan. 30, 1872	5, 501
Window-fastener	G. B. Kirkham	New York, N. Y	Dec. 17, 1867	2, 848
Window-fastener	W. Nelson	Anderson, Ind	Feb. 28, 1871	4, 692
Window-fastening	G. B. Kirkham	New York, N. Y	July 6, 1869	3, 571
Window-shade material	G. L. Kelty	New York, N. Y	July 9, 1861	1, 437
Wood, Bundle of kindling	J. L. Seymour	Washington, D. C	May 23, 1871	4, 935
Wood-incased can	J. G. Evenden	Chicago, Ill	June 20, 1871	5, 022–5, 023
Wood, Joining	C. B. Knapp	Waterloo, Wis	Aug. 23, 1870	4, 302
Wood, Shape of	M. Laudenberger	Philadelphia, Pa	June 21, 1870	4, 165
Work-basket stand	H. Hubermund	New York, N. Y	Aug. 7, 1866	2, 376
Work-holder	R. W. Perkins	West Meriden, Conn	Mar. 11, 1873	6, 491
Work-holder	C. A. Shaw	Biddeford, Me	Aug. 13, 1861	1, 468
Woven fabric	R. C. Taft, W. B. Weeden, and J. W. Taft.	Providence, R. I	Dec. 13, 1870	4, 518–4, 520
Woven fabric	R. C. Taft, W. B. Weeden, and J. W. Taft.	Providence, R. I	Dec. 20, 1870	4, 532
Woven fabric	W. B. Weeden	Providence, R. I	Oct. 1, 1867	2, 799
Wrench	A. Kindermann	Cleveland, Ohio	Jan. 25, 1870	3, 821
Wrench-head	C. N. Morgan	Granby, Mass	July 13, 1869	3, 582
Y.				
Yoke, Eccentric	D. Appel	Cincinnati, Ohio	July 11, 1871	5, 096
Yoke, Ox	W. T. Remington	Bridgeport, Conn	Sept. 12, 1865	2, 169
Yoke ring and slide, Neck	R. L. Reat	Charleston, Ill	Aug. 9, 1870	4, 286

ALPHABETICAL LIST OF EXTENSIONS.

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Invention.	Inventor.	Date.
A.		
Abdominal supporter. (Reissued September 15, 1857)	J. M. Milligan	Feb. 10, 1857
Acid, Concentrating-apparatus for sulphuric	W. T. Clough	July 1, 1856
Acid, Separating oleic and stearic	J. S. Gwynne	Sept. 3, 1846
Addressing machine, Newspaper	H. Moeser	June 24, 1851
Advertising, Mode of	E. Wiebe	Nov. 15, 1859
Agricultural caldron and furnace	J. L. Mott	Dec. 1, 1840
Air-engine. (Reissued July 17, 1860, and April 23, 1861)	P. Shaw	May 2, 1854
Air-heating furnace	C. R. Harvey	Jan. 24, 1854
Alkali, Manufacture of caustic. (Reissued February 1, 1859, and April 16, 1867, Nos. 2,569, 2,570, and 2,571.)	G. Thompson	Oct. 21, 1856
Anchor. (Extended by act of Congress July 20, 1868)	S. N. Miller	June 29, 1852
Animal-trap	A. Blake	Apr. 26, 1850
Anti-friction box	J. Rice	Aug. 2, 1853
Auger	R. Cook	June 17, 1851
Auger. (Reissued October 3, 1865, and January 16, 1866)	R. Jennings	Jan. 30, 1855
Auger-handle and brace-socket	A. H. McKinley	Aug. 16, 1853
Auger, Hollow. (Reissued March 13, 1866)	A. Wyckoff	July 12, 1859
Ax-polls, Making	D. P. Estep	Oct. 14, 1856
Axes, Machine for making	C. Hutchins	Mar. 3, 1857
Axle and gudgeon box	I. Babbitt	July 17, 1839
Axle-box	J. Lightner	Nov. 21, 1848
B.		
Baking-apparatus	J. P. Hayes	Jan. 30, 1849
Bale-band, Non-elastic	D. McComb	June 17, 1856
Baling, Metallic band for. (Reissued April 27, 1869)	G. Brodie	Mar. 22, 1859
Banding for machinery, Manufacturing leather	G. Miller	Nov. 7, 1854
Bark-mill	R. Montgomery and L. W. Harris.	Aug. 12, 1840
Barrel crozing and chamfering machine	H. Littlejohn	Mar. 1, 1859
Barrel-making machinery	G. N. Livermore	Mar. 21, 1854
Barrel-machinery	R. Murdock	June 12, 1849
Barrel-machinery. (Reissued March 10, 1849)	W. Trapp	Oct. 1, 1845
Barrel-machinery. (Reissued, Nos. 1,946 and 1,947; No. 1,946 extended by act of Congress June 10, 1872.)	W. Trapp	Oct. 1, 1845
Barrels and casks, Machine for making. (Reissued March 2, 1858)	I. Crossett	July 1, 1844
Beam, Corrugated	R. Montgomery	Sept. 25, 1855
Beam, Sheet-metal. (Reissued July 2, 1867)	R. Montgomery	July 12, 1853
Bed bottom	B. F. S. Monroe	Jan. 25, 1859
Bedstead-fastening	L. W. Buxton	Apr. 5, 1859
Bedstead-fastening	D. Stotlemeyer	May 29, 1849
Bedstead, Folding. (Reissued July 24, 1860)	T. B. Bleecker	Apr. 17, 1847
Bedstead-slat	T. Howe	Sept. 27, 1859
Bedstead, Sofa. (Reissued December 25, 1855, and August 27, 1867)	C. F. Martine	June 6, 1854
Bedstead, Sofa. (Reissued January 7, 1851)	R. Scarritt	Oct. 8, 1850
Bee-hive. (Reissued May 26, 1863)	L. L. Langstroth	Oct. 5, 1852
Bee-hive, Moth-trap for	E. W. Phelps	Apr. 6, 1852
Bell, Electro-magnetic alarm	M. G. Farmer	May 4, 1852
Bell machinery, Hotel, &c. (Reissued December 26, 1848)	A. Judson and T. D. Jackson	Oct. 17, 1846
Bell, Pressure. (Reissued October 25, 1864)	J. Barton	Apr. 8, 1856
Belting, Making rubber	D. C. Gately	Nov. 22, 1859
Belting, Rubber	D. C. Gately	Nov. 22, 1859
Bending machine, Wood. (Reissued May 27, 1862)	J. C. Morris	Mar. 11, 1856
Bending wood. (Reissued November 15, 1859)	T. Blanchard	Dec. 18, 1849
Beveling the edges of skelps or metallic strips, &c., Machinery for	R. Knight	Sept. 21, 1852
Biscuit and cracker machine. (Extended by act of Congress February 22, 1847)	J. and C. Bruce	Mar. 13, 1832
Bit-brace. (Reissued April 23, 1867)	N. Spofford	Nov. 1, 1859
Blind-rods, Hand-machine for wiring	B. C. Davis	Oct. 11, 1859
Blind-slat-tenoning machine	S. C. Ellis	Feb. 3, 1857
Blind-stile boring or mortising machine	L. Worcester	July 5, 1859
Blinds, Machine for mortising window	J. A. Peabody	July 17, 1855
Blower, Fan. (Reissued January 25, 1848)	F. P. Dimpfel	Dec. 28, 1839
Blowing-machine	P. W. McKenzie	Jan. 2, 1855
Boats and other vessels, Building	W. Annesley	Nov. 6, 1830
Boats and other vessels, Sheet-iron	J. Francis	Mar. 26, 1845
Bolt and rivet machine	W. E. Ward	July 30, 1850
Bolt-heading machine	H. M. Clark	Jan. 15, 1856
Bomb-lance for killing whales. (Reissued August 26, 1856)	C. C. Brand	June 22, 1852
Books, Curving the backs of	J. A. Elder	July 26, 1853
Boot and shoe stretcher	W. Holden	May 1, 1855
Boot and shoe tip. (Reissued September 2, 1862, and August 4, 1868)	N. Silverthorn	Nov. 29, 1859
Boot-crimp. (Reissued August 11, 1857)	J. Copeland	Jan. 20, 1844
Boot-tree. (Reissued March 25, 1862, and January 29, 1867)	C. T. Eames	May 27, 1856
Boot-tree	J. Howe	Oct. 24, 1848
Boot-tree	W. Upfield	June 25, 1850
Boring-machine. (Reissued October 14, 1856)	A. Wyckoff and E. R. Morrison	Sept. 25, 1855
Bottle-corking apparatus	T. W. Gillett	July 11, 1854
Bottle, Nursing. (Reissued January 14, 1868)	F. J. La Forme	Nov. 29, 1859
Bottle-ornamenting, (Design)	L. Q. C. Wishart	Oct. 25, 1859
Bottle-stopper fastening. (Reissued January 19, 1864)	H. W. Putnam	Mar. 15, 1859
Bottling fluids under gaseous pressure. (Reissued October 27, 1868, and January 19, 1869)	A. Quantin	Mar. 4, 1856
Box-joints, Machine for making	J. Stimpson	Nov. 8, 1859
Boxes, &c., Method of joining	J. Stimpson	Feb. 3, 1857

Index of extensions granted by the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Date.
Brick-burning	J. W. Andrews	Mar. 21, 1843
Brick molding and pressing machine	N. Adams	Sept. 8, 1837
Brick-press	A. Hall	Sept. 3, 1842
Brick-press, Hydraulic	E. Rogers	Sept. 23, 1856
Bridge	A. Fink	May 9, 1854
Bridge, Iron truss	S. Whipple	Apr. 24, 1841
Bridge, Swinging	J. Ross	Jan. 2, 1849
Bridge, Truss	W. Howe	Aug. 28, 1846
Bridge truss-frame	C. and T. W. Pratt	Apr. 4, 1844
Bridge, Wooden	G. W. Thayer	Apr. 22, 1845
Bridge, Wooden-frame suspension	S. H. Long	Nov. 7, 1839
Bridges, Construction of	W. Bollman	Jan. 16, 1852
Bridle-winkers	W. and W. F. Boyd	June 26, 1855
Bristle cleaning and assorting machine	G. E. Burt	Feb. 7, 1854
Bronzing-machine	G. H. Babcock	Oct. 25, 1859
Buckle. (Reissued May 26, 1868)	S. S. Hartshorn	Nov. 7, 1854
Buckle	S. S. Hartshorn	July 10, 1855
Buckle	S. S. Hartshorn	Dec. 11, 1855
Buckle for wearing-apparel	E. Parker	Sept. 2, 1856
Building-block	A. Foster	Jan. 16, 1855
Buildings, Frame, roof, and floor of iron	J. Bogardus	May 7, 1850
Buildings, Heating and ventilating. (Reissued August 14, 1855; additional improvement granted November 6, 1858.)	H. Ruttan	Dec. 5, 1848
Buildings, Machine for removing	L. Pullman	Aug. 21, 1841
Bung-cutting machine	J. Kirby	Sept. 12, 1848
Burglar-alarm	A. Q. Ross	Sept. 27, 1859
Burner, Gas	W. Blake	Aug. 9, 1845
Burnishing-machine	L. S. White	Apr. 5, 1859
Button	J. Hatch	Feb. 20, 1845
Button-backs and connecting the eyes thereto, Machine for forming. (Reissued April 7, 1863; extended by act of Congress February 22, 1867.)	J. C. Cook	July 27, 1852
C.		
Cable, Working and stopping chain. (Reissued March 25, 1856, and February 15, 1859)	T. Brown	July 25, 1854
Cakes, Cutting and panning	J. H. Shrote	Oct. 11, 1859
Camera plate-holder. (Reissued September 25, 1860)	A. S. Southworth	Apr. 10, 1855
Canal-lock gate	C. Neer	Mar. 9, 1852
Canal-lock gate	C. W. Williams	Apr. 12, 1859
Candle-mold apparatus. (Reissued January 22, 1861, and November 14, 1865)	W. Humiston	July 24, 1855
Candle-molding apparatus. (Reissued March 6, 1866)	W. Humiston	Apr. 4, 1854
Candles, Machine for making	J. Stainthorp	Mar. 6, 1855
Caoutchouc and other vulcanizable gums, Treating. (Reissued August 16, 1859)	L. O. P. Meyer	Apr. 4, 1854
Caoutchouc to cloth, &c., Mode of and machinery for applying	E. M. Chaffee	Aug. 31, 1836
Car and carriage body support, Railway	R. Imlay	Sept. 21, 1837
Car and carriage, Railway	R. Winans	Oct. 1, 1834
Car-brake, Iron	S. Morse	Sept. 6, 1853
Car brake, Railway	F. A. Stevens	Nov. 25, 1851
Car brake, Railway	L. F. Thompson and A. G. Bachelder.	July 6, 1852
Car-brakes, Operating. (Reissued March 1, 1853)	N. Hodge	Oct. 2, 1849
Car brakes, Operating railway	C. B. Turner	Nov. 14, 1848
Car, Railway. (Reissued March 18, 1856)	B. J. La Mothe	Apr. 4, 1854
Car, Railway. (Reissued March 21, 1865)	L. Myers	June 24, 1851
Car roof, Railway. (Reissued August 8, 1865)	A. P. Winslow	Aug. 9, 1859
Car seat and couch, Railway	T. T. Woodruff	Dec. 2, 1856
Car seat and couch, Railway	T. T. Woodruff	May 31, 1859
Car seat and couch, Railway. (Reissued March 17, 1863)	T. T. Woodruff	Dec. 2, 1856
Car seat, Railway	E. Wheeler	Sept. 20, 1859
Car seats into beds or lounges, Converting railway. (Reissued May 3, 1859, and October 8, 1861.)	H. B. Myer	Sept. 19, 1854
Car, Sleeping	J. Danner	Oct. 18, 1859
Car-spring. (Reissued January 6, 1863, and March 17, 1863)	A. B. Davis	Feb. 15, 1859
Car-wheel, Cast-iron. (Reissued June 9, 1857, No. 468, and September 22, 1857, Nos. 497 and 498; Nos. 468, 497, and 498 extended.)	A. Atwood	May 15, 1847
Car wheel, Cast-iron railway	E. A. Lester	Aug. 10, 1844
Car-wheels, Annealing and cooling cast-iron	A. Whitney	Apr. 25, 1848
Car-wheels, Method of regulating contraction of	J. Murphy	Aug. 7, 1849
Car-windows, Dust-deflector for	J. M. Cook	Oct. 16, 1855
Cars, Arranging couches in railway	E. C. Knight	June 28, 1859
Cars, Body-bolster for railway	A. Ward	June 21, 1859
Cars, Dust-excluder for railway. (Reissued February 15, 1853)	N. Goodyear	May 27, 1851
Cars, Mode of arranging couches in railway	E. C. Knight	Sept. 27, 1859
Cars upon railway-track, Replacing	L. B. Flanders	Dec. 6, 1853
Cars, Ventilating railway	C. Reed and B. K. Mould	Aug. 8, 1854
Card-teeth, Machine for sticking	G. W. Coats and J. Russell	Aug. 1, 1854
Carding-engine	J. Dyson	Feb. 20, 1849
Carding-engines, Machinery for cleaning top-flats of. (Reissued March 13, 1866)	H. Woodman	July 8, 1856
Carding-machine. (Reissued November 17, 1857)	H. N. Gambrill and T. D. Bond	Feb. 27, 1855
Carding-machines, Cleaning top cards of. (Reissued December 8, 1857)	H. Woodman	Aug. 1, 1854
Carding-machines, Stripping top-flats in. (Reissued July 30, 1867)	G. Wellman	Dec. 6, 1853
Carding-machines, Stripping top-flats in. (Reissued July 30, 1867)	G. Wellman	Mar. 18, 1856
Carpet, Printed	T. Crossley	Aug. 16, 1853
Carpet-sweeper	N. B. Pratt	Feb. 8, 1859
Carpets, Manufacture of two and three ply	A. Smith	Dec. 10, 1850
Carriage-bodies, Hanging	B. F. Brown	Dec. 12, 1854
Carriage-top prop	G. Cook and H. I. Kimball	Dec. 27, 1859
Carriage-tops, Raising and lowering	S. Goddard and H. Warfield	Feb. 19, 1850
Cartridge	E. Maynard	June 17, 1856
Cartridge	H. Smith and D. B. Wesson	Aug. 8, 1854
Carving-machine	H. Auger	Dec. 23, 1846
Casting copper cylinders	F. Adams	Aug. 2, 1859
Casting, Molding for metal	J. P. Broadmeadow	Nov. 29, 1859
Cellar wall and floor. (Reissued April 8, 1856; extended by act of Congress May 4, 1870)	A. R. Moen	Feb. 26, 1856
Cement or earthen tubes, Mold for	B. S. and C. M. Pierce	Aug. 1, 1854
Chair-bottom, Elastic	L. Spooner	June 3, 1856
Chest and safe, Fire-proof	D. Fitzgerald	June 1, 1843
Chimney-stack	B. F. Miller	Oct. 2, 1855
Chuck, Lathe	E. Horton	Nov. 13, 1855
Chuck, Universal lathe	S. Fairman	July 18, 1840

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Invention.	Inventor.	Date.
Chucks, Arrangement for lathe	L. A. Dole	July 25, 1854
Churn	E. Spain	May 16, 1848
Cider-mill. (Reissued August 14, 1866; extended by act of Congress April 6, 1870)	T. J. Kindleberger	May 29, 1855
Cider-mill. (Reissued October 11, 1864)	J. Krauser	Aug. 30, 1853
Clap-board joint. (Reissued September 22, 1863)	W. Baker	May 16, 1854
Clock	A. D. Crane	Feb. 10, 1841
Clock, Alarm. (Extended by act of Congress July 27, 1868)	J. S. Turner	July 13, 1852
Clock, Calendar	W. H. Akins and J. C. Burritt	Sept. 19, 1854
Clock-case, (Design)	E. Ingraham	Dec. 3, 1861
Clock-case front, (Design)	E. Ingraham	Sept. 3, 1861
Clock-dial	S. E. Root	May 10, 1859
Cloth folding and measuring machinery	S. C. Durgin	Mar. 9, 1844
Cloth-folding machine	Z. Allen	July 16, 1850
Cloth measuring and folding machinery	J. D. Elliot	Sept. 11, 1855
Cloth of wool, hair, &c., Machine for forming web of. (Extended by act of Congress March 28, 1854.)	J. Arnold	July 15, 1829
Cloth of wool, hair, &c., Machine for forming web of	J. Arnold and G. G. Bishop	Oct. 20, 1836
Cloth, Reducing rags, &c., into fiber for making	R. Daniels	Oct. 10, 1840
Cloth-shearing machine	A. Woolson	May 28, 1850
Cloth-stretching roller	S. Simmons	Dec. 4, 1855
Cloth, Tentering	W. Shaw and P. G. Green	June 20, 1854
Clothes-dryer. (Reissued September 27, 1859)	S. Morrill	Nov. 11, 1256
Clothes-line spring-clamp	D. M. Smith	Oct. 25, 1853
Clothes-pins, Machine for cutting slots in	J. Humphrey	Mar. 31, 1857
Clothes-pins, Machine for wiring the joints of	A. C. Mason	Sept. 6, 1859
Coal-breaking machine	J. Battin	Oct. 6, 1843
Cock for steam-boilers, Try	J. F. Cook	Sept. 20, 1859
Cock for water-closets	D. Wellington	Nov. 15, 1859
Cock, Steam-gage	A. Bisbee	Sept. 18, 1855
Cocks, Method of governing the action of valve. (Reissued November 13, 1860, Nos. 1,071 and 1,072.)	F. H. Bartholomew	June 20, 1854
Coffee hulling and scouring machine	R. P. Walker	Dec. 20, 1853
Coffee-pot	J. MacGregor, jr	Apr. 11, 1854
Coffin. (Extended by act of Congress February 17, 1865)	A. D. Fisk	Nov. 14, 1848
Coffins, Construction of sheet-metal	I. C. Shuler	July 5, 1859
Collar and cuff, Lady's. (Reissued June 6, 1865, Nos. 1,981 and 1,982)	W. E. Lockwood	Apr. 26, 1859
Collar and cuff, Lady's. (Reissued January 28, 1873, No. 5,259)	W. E. Lockwood	Apr. 26, 1859
Collar, Shirt	W. Hunt	Jan. 1, 1856
Collar, Shirt. (Reissued November 29, 1864, No. 1,828)	W. Hunt	July 25, 1854
Comb-dressing machine	C. B. Rogers	Dec. 20, 1845
Compass joint, Measuring	T. Alteneder	July 16, 1850
Composing-stick, Printer's	O. F. Grover	July 15, 1856
Condenser for steam-engines, Surface	J. M. Miller	May 20, 1856
Condenser for steam-engines, Surface. (Reissued August 10, 1858)	J. P. Pirsson	Apr. 2, 1850
Cooling and ventilating rooms, &c	A. S. Lyman	Mar. 25, 1856
Cord-making machinery. (Reissued January 20, 1857)	W. E. Nichols	Dec. 11, 1849
Cord-weaving machinery, Shade	T. Nelson	Dec. 16, 1856
Cordage, Machinery for manufacturing. (Reissued September 25, 1860)	W. Joslin	Jan. 19, 1847
Corded fabric, Weaving	W. Smith	Apr. 5, 1853
Cork-cutting machine	S. Sawyer	June 10, 1840
Cork, Machine for manufacturing	W. R. Crocker	Oct. 30, 1855
Corn husking and shelling machine	S. S. Allen	Jan. 15, 1840
Corn-husking machine	R. Bryson	Dec. 9, 1856
Corn-sheller	T. D. Burrall	Dec. 6, 1845
Corn-sheller. (Reissued October 10, 1865; extended by act of Congress March 2, 1867)	T. D. Burrall	Dec. 6, 1845
Corn-sheller	F. N. Smith	June 1, 1843
Corrugated boiler	R. Montgomery	Oct. 29, 1850
Corrugating sheet-metal	W. E. Worthen and H. B. Renwick.	July 5, 1859
Corrugating sheet-metal, Machine for	J. Wilson, C. Green, and W. Wilson, jr.	Apr. 19, 1859
Corsets and bustles, Manufacturing	D. Lamoureux	Jan. 4, 1859
Cotton and wool ginning machine	S. R. Parkhurst	May 1, 1845
Cotton-gin. (Reissued April 18, 1854)	F. McCarthey	July 3, 1840
Cotton-gin	L. G. Sturdevant	July 23, 1841
Cotton-gin, Saw	E. Carver	Jan. 4, 1845
Cotton-picker cylinder	J. Pitts	Feb. 28, 1854
Cotton-press. (Reissued May 1, 1847)	P. B. Tyler	Jan 16, 1845
Cotton, wool, fur, &c., Machinery for clearing and separating	I. Hayden	Mar. 17, 1857
Cracker-machine. (Reissued May 4, 1869)	J. Fox	Feb. 1, 1859
Cracker-machine. (Reissued May 31, 1859)	J. McCollum	Mar. 23, 1852
Crib, Horse. (Reissued April 8, 1862)	H. Eddy	Jan. 6, 1857
Crushing-machine	J. Rowe	Apr. 24, 1840
Culinary boiler. (Reissued July 28, 1868)	E. Whiteley	Apr. 8, 1856
Cultivator	M. Alden	May 10, 1859
Cultivator	G. Lichtenthaler	July 25, 1854
Cultivator. (Reissued May 16, 1871)	T. McQuiston	Oct. 18, 1859
Cultivator. (Reissued April 16, 1872)	R. M. Melton	May 31, 1859
Cultivator	D. W. Shares	Aug. 1, 1854
Cultivator	G. W. N. Yost	Mar. 20, 1855
Cultivator-plow	W. S. Hyde	June 21, 1853
Cultivator-teeth	J. P. Cramer	Jan. 6, 1857
Cultivator-teeth	D. B. Rogers	Nov. 1, 1845
Curry-comb	W. Beach	Mar. 13, 1849
Curry-comb	W. Wheeler	Apr. 25, 1846
Curtain fixture, Window. (Reissued March 31, 1857)	S. S. Putnam	Apr. 15, 1851
Curtains, Spring-roller for window	B. Bray	Sept. 5, 1854
Cut-off, Adjustable	J. King	Mar. 20, 1849
Cut-off and working-valve for steam-engines. (Reissued July 12, 1859, Nos. 758, 759, 760, 761, 762, and 763; extended.)	G. H. Corliss	Mar. 10, 1849
Cut-off valve for steam-engines	E. R. Arnold	Nov. 1, 1859
Cut-off valve for steam-engines	N. T. Greene	Mar. 13, 1855
Cut-off valves, Method of working steam-engine	R. L. and F. B. Stevens	Jan. 25, 1841
Cut-off valves, Mode of tripping	F. E. Sickels	Sept. 19, 1845
Cut-off valves of steam-engines, Operating	W. Wright	Jan. 3, 1854
Cylinder, Burring	C. G. Sargent	Oct. 9, 1849
Cylinders and cones, Casting chilled and other metallic	J. Harley	Mar. 3, 1835

Index of extensions granted by the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Date.
D.		
Daguerreotype-case. (Additional improvement February 19, 1856; extended by act of Congress, July 27, 1868.)	J. F. Mascher	Mar. 8, 1853
Damper, Stove-ventilating. (Reissued November 18, 1862)	J. Magee	May 20, 1856
Derrick	J. B. Holmes	Feb. 21, 1854
Desk, School	W. P. Uhlinger	Oct. 8, 1861
Diaper-pin	J. Rabbeth	Jan. 21, 1847
Disks, Securing cutters to rotary. (Reissued August 13, 1867)	J. Newton	June 19, 1855
Distilling acid and naphtha from rosin	L. S. Robbins	Nov. 4, 1851
Distilling salt water, Ship's galley for	E. Hutchinson	May 20, 1839
Dock, Dry	J. E. Simpson	Dec. 5, 1854
Door-lock	J. H. Butterworth	Apr. 11, 1846
Door-lock. (Reissued June 4, 1861; extended by act of Congress March 2, 1867)	J. H. Butterworth	Apr. 11, 1846
Door-lock	W. Moore	Sept. 14, 1852
Door-lock. (Reissued October 7, 1856)	J. P. Sherwood	Dec. 17, 1842
Door locks, Keeper for right and left hand	C. Adams	Feb. 24, 1857
Dovetails, Machine for cutting square-joint	W. Perrin	Mar. 24, 1841
Drain-pipes, Machine for making. (Reissued February 25, 1865, January 14, 1868, and April 27, 1869.)	B. S. and M. R. Pierce	Apr. 19, 1859
Dredging-machine	D. Carmichael and J. C. Osgood	May 30, 1846
Dredging-machine	C. H. Fondé	Apr. 17, 1855
Dredging-machine	J. Hamilton	Dec. 16, 1845
Drilling-machine, Steam	J. W. Fowle	Mar. 11, 1851
Drop-press	M. Peck	Nov. 25, 1851
Dye-wood, Machine for cutting	B. Swift	Aug. 10, 1836
E.		
Eave-troughs, Suspending	C. D. Woodruff	Mar. 7, 1854
Edge-key for making and polishing the edges of boot and shoe soles	G. C. Todd	Nov. 25, 1856
Edge-plane, Shoemaker's	I. A. Dunham	June 24, 1856
Electro-magnetic alarm. (Reissued June 8, 1858)	A. R. Pope	June 21, 1853
Electro-magnetic signal. (Reissued January 15, 1846, and June 13, 1848)	S. F. B. Morse	June 20, 1840
Electrotyping-machine	J. A. Adams	Sept. 4, 1855
Elevator for warehouses, factories, mines, &c	A. Betteley	Aug. 2, 1859
Elevator or hoisting-apparatus for hotels, &c	O. Tufts	Aug. 9, 1859
Emery wheels and sticks, Manufacture of	T. J. Mayall	Jan. 11, 1859
Emery with caoutchouc, Method of combining	T. J. Mayall	Oct. 11, 1859
Enameling molding, &c., Machinery for. (Reissued March 15, 1859, No. 674)	R. Marcher	Oct. 21, 1851
Engraving calico-printers' rollers, Machine for	J. and T. Hope	Aug. 21, 1855
Envelope	E. Harmon	Nov. 20, 1855
Envelope	S. E. Pettee	Mar. 22, 1859
Excavating machine, Earth	J. Taggart	July 4, 1854
Excavating-scoop	J. Taggart	May 20, 1856
Excavator for earth, Crane	W. S. Otis	Feb. 24, 1839
Eyelet-machine	H. L. Lipman	July 11, 1854
Eyelet-machine	H. L. Lipman	July 25, 1854
F.		
Fabrics, Machine for rolling. (Reissued August 6, 1872)	T. H. Murphy	May 17, 1859
Fan, Buckwheat	A. Platt	Jan. 13, 1852
Fan-mill	I. T. Grant	July 10, 1845
Fatty bodies, Process for purifying	R. A. Tilghman	Oct. 3, 1854
Faucet. (Reissued July 5, 1859)	A. Fuller	Oct. 16, 1855
Faucet	G. W. Randall	Apr. 5, 1859
Faucet	E. A. Sterry	June 12, 1855
Fences, Ornamental connection for iron. (Reissued September 6, 1859)	H. Jenkins	Jan. 13, 1852
Fences, Ornamental connection for iron. (Reissued September 6, 1859)	H. Jenkins	Jan. 13, 1852
Felly-bending machine, Carriage	E. Reynolds	July 17, 1835
Felt fabrics, Machinery for disintegrating waste	J. F. Greene	Apr. 12, 1859
Felted fabrics, Obtaining fibers from waste. (Reissued October 10, 1865)	J. F. Greene	Apr. 12, 1859
Felting, Coat, hat, &c	M. Osborne	May 28, 1842
File-cutting machinery	J. Crum	July 1, 1851
File, Paper	H. L. Smith	June 7, 1853
Fire-alarm apparatus, Electro-magnetic	M. G. Farmer	Feb. 22, 1859
Fire-arm	S. Colt	Feb. 25, 1836
Fire-arm	C. Sharps	Sept. 12, 1848
Fire-arm, Accelerating	A. S. Lyman	Feb. 3, 1857
Fire-arm, Breech-loading. (Reissued December 21, 1869)	B. Burton	Dec. 20, 1859
Fire-arm, Breech-loading. (Reissued May 9, 1865, January 18, 1870, and March 1, 1870)	W. C. Hicks	Mar. 10, 1857
Fire-arm, Breech-loading. (Reissued January 1, 1867, Nos. 2,445 and 2,446)	W. M. Storm	July 8, 1856
Fire-arm, Many-barreled. (Reissued June 18, 1861, and February 12, 1867, No. 2,480)	C. Sharps	Jan. 25, 1859
Fire-arm, Repeating. (Reissued October 10, 1854; extended by act of Congress February 25, 1868.)	H. Smith and D. B. Wesson	Feb. 14, 1854
Fire-arm, Trigger-operating revolving. (Reissued August 21, 1860)	S. W. Marston	Jan. 7, 1851
Fire-arms and appurtenances for the same, Movable breeches for	B. Chambers	July 31, 1849
Fire-engines, Mode of applying water to	F. Ransom and U. Wenman	Feb. 13, 1841
Fire-kindling composition. (Reissued August 7, 1866)	E. Bollinger	Dec. 13, 1859
Fire-plug. (Reissued August 14, 1860, and July 30, 1872)	J. L. Lowry	Feb. 22, 1859
Fishing-reel	W. Billinghurst	Aug. 9, 1859
Flock and paperstock cutting machine	J. N. Pitts	Jan. 29, 1856
Floor-cloth, Machine for printing	S. Savage	Mar. 2, 1852
Flour from bran, Machinery for separating. (Reissued March 13, 1855, May 11, 1858, and February 25, 1862.)	I. Frost and J. Monroe	Feb. 27, 1849
Flour-packer	N. Kinman	Oct. 30, 1849
Flour-packer. (Reissued November 7, 1871)	S. Taggart	Aug. 2, 1859
Fluid-meter	J. Cochrane	Mar. 31, 1857
Forge	C. V. Queen	Nov. 18, 1845
Forging machine, Iron	S. S. Putnam	Dec. 9, 1856
Friction coupling, Double. (Reissued March 25, 1873)	J. Hendy	Oct. 11, 1859
Fruit, &c., Revolving frame for drying	J. C. Dickey	June 3, 1851
Fuel from brush-wood and twigs, Manufacture of granular	R. Daniels	June 15, 1852
Furnace boiler and steamer, Portable. (Reissued December 13, 1859, and October 8, 1872)	D. R. Prindle	Sept. 13, 1859
Furnace-door frame	P. A. Sabbaton	June 21, 1859
Furnace for burning wet fuel. (Reissued October 7, 1856, and March 31, 1857)	M. Thompson	Apr. 10, 1855
Furnace or heat generator and radiator. (Reissued September 27, 1864)	G. Chilson	Sept. 26, 1854

Index of extensions granted by the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Date.
G.		
Gas, Apparatus for the manufacture of. (Reissued March 8, 1870, No. 3,872)	L. D. Gale	Nov. 8, 1859
Gas-apparatus, Portable	W. and M. Stratton	Feb. 1, 1853
Gas-generator	A. M. Giles	Mar. 17, 1857
Gas-lighting by electricity	A. Wilson	Aug. 16, 1859
Gas, Manufacture of. (Reissued March 8, 1870, No. 3, 873)	L. D. Gale	Nov. 8, 1859
Gas-regulator	E. H. Covel	May 31, 1859
Gas-retort	W. Beaumont	June 28, 1859
Gear-teeth, Machine for cutting beveled	G. H. Corliss	Mar. 10, 1849
Glass-furnace	F. Schaum	Apr. 25, 1854
Gold-preparing process	A. J. Watts	Apr. 26, 1853
Governor, Steam-engine. (Reissued February 28, 1865)	J. Judson	Mar. 4, 1851
Governor, Windmill	D. Halladay	Aug. 29, 1854
Grain, Drying. (Reissued June 27, 1854)	H. G. Bulkley	Mar. 2, 1852
Grain raking and binding machine	J. E. Heath	July 22, 1850
Grain-separator. (Reissued September 25, 1860, and November 29, 1864)	J. L. Booth	Sept. 20, 1859
Grain-separator	P. Geiser	Oct. 19, 1852
Grain-separator	P. Geiser	Oct. 9, 1855
Grain-separator. (Reissued March 23, 1858, and May 17, 1859)	J. R. Moffitt	Nov. 30, 1852
Grain-separator. (Reissued June 15, 1869)	C. Roberts and J. Cox	Mar. 25, 1856
Grain-separator	A. Smith	Apr. 11, 1848
Grate and floor, Rotary. (Reissued September 17, 1832)	E. Nott	Mar. 23, 1826
Grate-bar. (Reissued June 9, 1868)	S. Van Syckels	Oct. 31, 1854
Grate-bar, Interlocking	S. Van Syckels	Oct. 9, 1855
Grate bar, Stove. (Reissued May 31, 1864)	G. W. Gardner	Nov. 18, 1851
Grate, Fire	W. H. Pulver	Aug. 7, 1847
Grating, Manufacturing wire. (Reissued June 28, 1859)	H. Jenkins	Mar. 6, 1847
Grinding-mill. (Reissued November 16, 1858)	E. Harrison	June 6, 1854
Grinding-mill	O. Nichols	Oct. 12, 1852
Grinding-mill	B. Swift	Aug. 16, 1845
Grinding-mill for cane, &c	I. A. Hedges	Feb. 1, 1859
Grommets, Metallic	J. Allender	June 20, 1854
Gum-elastic cloth. (*See* Caoutchouc)	H. G. Tyer and J. Helm	May 6, 1856
Gutta-percha, Manufacturing	J. Rider	June 1, 1852
H.		
Hair and feather renovator	W. Wisdom	Dec. 20, 1853
Hammer, Direct-action steam	J. H. Towne	Sept. 3, 1850
Hammer, Machine	D. Noyes	Oct. 25, 1853
Hammer to its helve, Attachment of the forge	D. Hicks	Apr. 2, 1850
Hammer, Trip. (Reissued November 6, 1866)	B. Hotchkiss	June 14, 1859
Hammer, Trip	B. Hughes	May 16, 1854
Harbors, rivers, &c., Machinery for removing obstructions from	J. R. Putnam	May 6, 1841
Harness-saddle tree. (Reissued January 2, 1872)	S. E. Tompkins and J. Maclure	Feb. 1, 1859
Harrow. (Reissued August 30, 1859)	S. S. Hoyle	Mar. 17, 1857
Harrow. (Reissued March 12, 1861)	D. W. Shares	Jan. 27, 1857
Harvester	E. Ball	Oct. 18, 1859
Harvester. (Reissued January 28, 1862)	B. Densmore	Feb. 10, 1852
Harvester. (Reissued July 8, 1856, April 19, 1859, and May 23, 1865, Nos. 1,972, 1,973, 1,974, and 1,975.)	E. B. Forbush	July 20, 1852
Harvester. (Reissued January 15, 1861)	J. Gore	Dec. 27, 1859
Harvester	L. and J. Miller	July 5, 1859
Harvester. (Reissued June 5, 1866, Nos. 2,266, 2,267, 2,268, 2,269, and 2, 270)	W. K. Miller	Feb. 8, 1859
Harvester. (Reissued January 1, 1861, and May 31, 1864)	A. Palmer and S. G. Williams	July 1, 1851
Harvester. (Reissued April 17, 1866, and March 26, 1872, Nos. 4,824 and 4,826)	S. Ray and M. R. Shalters	Apr. 19, 1859
Harvester	I. S. and H. R. Russell	Mar. 29, 1859
Harvester	W. H. Seymour	Mar. 28, 1854
Harvester. (Reissued May 17, 1859, and May 14, 1867, Nos. 722 and 2,608)	P. Sylla and A. Adams	Sept. 20, 1853
Harvester. (Reissued January 3, 1860, No. 876, and May 14, 1867, No. 2,610)	C. Wheeler, jr	Dec. 5, 1854
Harvester. (Reissued June 5, 1860, and May 28, 1867)	C. Wheeler, jr	Feb. 6, 1855
Harvester, Clover and grass seed. (Reissued June 19, 1860, June 20, 1865, and June 5, 1866, Nos. 986, 2,009, and 2,279.)	T. S. Steadman	May 23, 1854
Harvester-cutters, Arrangement for controlling. (Reissued January 2, 1855, No. 288)	J. H. Manny	Sept. 23, 1851
Harvester-frames, Arrangement of joints for attaching trucks to. (Reissued January 2, 1855, No. 287.)	J. H. Manny	Sept. 23, 1851
Harvester, Grain	A. Palmer and S. G. Williams	Jan. 24, 1854
Harvester, Grain	J. E. Newcomb	Jan. 9, 1855
Harvester, Grain and grass. (Reissued January 3, 1860, Nos. 875, 877, 878, 879, and 881)	C. Wheeler, jr	Dec. 5, 1854
Harvester, Grain and grass (Reissued May 17, 1859, Nos. 721, 722, 723, 724, 725, and 726)	P. Sylla and A. Adams	Sept. 20, 1853
Harvester, Grass. (Reissued February 28, 1854, and June 2, 1857)	W. F. Ketchum	Feb. 10, 1852
Harvester, Grass. (Reissued January 1, 1861, Nos. 9, 10, 11, and 12)	J. S. and D. Lake	July 20, 1852
Harvester, Grass. (Reissued April 13, 1858, and June 16, 1868, No. 2,986; again reissued April 13, 1858, and June 23, 1868, Nos. 2,997, and 2,998.)	J. Haines	Sept. 4, 1855
Harvester-rake	C. B. Brown	July 11, 1854
Harvester-rake. (Reissued October 23, 1860, and June 9, 1868)	O. Dorsey	Mar. 4, 1856
Harvester-rake. (Reissued May 17, 1870, No. 3,978)	M. Young, jr	June 28, 1859
Harvesting-machine	G. Esterly	Mar. 24, 1857
Harvesting-machine. (Reissued November 6, 1855)	J. Haines	Mar. 27, 1849
Harvesting-machine	M. G. Hubbard	May 10, 1859
Harvesting-machine. (Reissued June 25, 1861, and February 2, 1864, Nos. 1,614 and 1,615)	W. N. Whiteley, jr	Nov. 25, 1856
Harvesting-machine teeth	E. B. Forbush	Nov. 27, 1849
Hat-bodies, Machine for forming	I. Gill	Jan. 13, 1857
Hat-bodies, Machinery for making. (Reissued March 23, 1858)	W. Fosket	Jan. 23, 1846
Hat-bodies, Machinery for making. (Reissued September 30, 1856, No. 396, and October 7, 1856, No. 400.)	H. A. Wells	Apr. 25, 1846
Hat-bodies, Machine for shrinking	J. S. Taylor	May 3, 1853
Hatch for warehouse, Safety. (Additional improvement April 14, 1857)	W. H. Thompson and E. P. Morgan.	June 24, 1856
Hay and cotton press	S. W. Bullock	Mar. 23, 1842
Hay-fork, Elevating. (Reissued April 18, 1865, No. 1,939)	T. T. Garrett	May 30, 1854
Hay-making machine	G. A. Brown	Jan. 23, 1855
Hay-press	L. Dederick	June 6, 1854
Hay-press	S. Hewitt	Dec. 30, 1843
Hay-press	C. F. Paine	Apr. 25, 1844
Hay-rake, Horse	S. Lessig	Dec. 27, 1859
Hay-rake, Horse. (Reissued February 28, 1865, Nos. 1,893, 1,894, 1,895, and 2,156)	R. Pratt	Jan. 8, 1856

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Invention.	Inventor.	Date.
Hay-spreader. (Reissued June 1, 1869)	J. C. Stoddard	June 28, 1859
Heating buildings by steam, Apparatus for. (Reissued February 6, 1872)	S. F. Gold	June 21, 1859
Heel for boots and shoes	S. Dodge, jr., and B. Potter, jr.	Sept. 13, 1859
Hem-folder	L. Clark	Oct. 18, 1859
Hinge	J. D. Browne	Feb. 24, 1857
Hinge and fastening, Window-blind	W. Baker	Sept. 17, 1842
Hinge for ink-stand cover	J. Nock	Dec. 13, 1853
Hinge-making machine	E. Brown	May 16, 1854
Hinge, Self-fastening shutter	A. Nicholson	Mar. 21, 1854
Hinge, Shutter	H. Lull	Jan. 31, 1854
Hoe, Weeding	J. M. Adams	Oct. 18, 1859
Hoops, Machine for notching	D. Lamson	Sept. 23, 1856
Horse-power	J. Bogardus	Aug. 29, 1848
Horse-power	D. Cary	June 27, 1846
Horse-power. (Reissued May 14, 1861)	J. A. Pitts	July 4, 1854
Horse-power	D. Woodbury	Aug. 26, 1846
Horse-power, Double-geared. (Reissued April 15, 1862)	C. Russell	May 1, 1855
Horse-power, Endless-chain. (Reissued May 29, 1855)	A. and W. C. Wheeler	July 8, 1841
Horse-rake	D. Dewey	Nov. 23, 1837
Horse-rake	H. W. Sabin	Dec. 3, 1850
Horse-rake. (Reissued February 16, 1869)	J. J. Squire	Dec. 23, 1856
Horseshoes, Machine for making	H. Burden	Nov. 23, 1835
Hose-coupling. (Reissued February 27, 1866)	R. J. Falconer	June 7, 1853
Hose, Manufacture of India-rubber. (Reissued October 22, 1872)	T. J. Mayall	Nov. 29, 1859
Hose-tubing, Elastic	J. C. Boyd	Aug. 30, 1859
Hot-air furnace	R. Hillson	Feb. 29, 1848
Hot-air register. (Reissued October 14, 1862)	C. F. Tuttle	Jan. 23, 1849
Hot-air register. (Reissued February 17, 1863)	E. A. Tuttle	Jan. 3, 1854
Hot-water apparatus. (Reissued August 14, 1855)	J. Brown	May 30, 1854
Hydrant. (Reissued June 6, 1865)	C. L. Stacy	Oct. 4, 1859
Hydraulic press, Portable	R. Dudgeon	July 8, 1851
Hydrocarbon-vapor apparatus	E. H. Covel	May 31, 1859
Hydrocarbon-vapor with air, Apparatus for combining. (Reissued November 15, 1864)	O. P. Drake	Aug. 30, 1853
I.		
Ice, Manufacturing	A. C. Twining	Nov. 8, 1853
Ice, Manufacturing. (Extended by act of Congress, July 7, 1870)	A. C. Twining	Nov. 8, 1853
India-rubber and steel spring, Combined	E. T. Bussell	Nov. 29, 1853
India-rubber cloth, Process of rolling	F. D. Hayward and J. C. Bickford.	Mar. 19, 1850
India-rubber fabric. (Reissued December 25, 1849)	C. Goodyear	June 15, 1844
India-rubber fabric	N. Goodyear	May 13, 1845
India rubber, Making hollow articles of	C. Goodyear	Apr. 25, 1848
India rubber, Manufacture of. (Reissued May 18, 1858, No. 556)	N. Goodyear	May 5, 1851
India rubber, Manufacture of. (Reissued May 18, 1858, No. 557)	N. Goodyear	May 6, 1851
India rubber, Manufacture of	D. Hayward	Aug. 29, 1854
India rubber, Process of treating	E. D. S. Goodyear	Mar. 28, 1854
Inkstand, (Design)	M. Phineas	Aug. 19, 1862
Insulator, Lightning-rod	G. W. Otis	Aug. 26, 1851
Invalid-chair. (Extended by act of Congress, January 25, 1859)	J. G. Holmes	Sept. 24, 1844
Iron at the rolls, Machine for moving	C. Hewitt	June 7, 1859
Iron direct from the ore, Process of making malleable	M. S. Salter	Nov. 20, 1849
Iron, Machine for rolling horseshoe. (Reissued March 30, 1859)	W. W. Lewis	Feb. 1, 1859
Iron, Manufacture of	B. Lauth	Aug. 23, 1859
Iron, Protecting surfaces of articles of	T. Selleck	July 5, 1859
Iron-rolling machine	H. B. Comer	Mar. 29, 1859
Iron tubes, Heating skelp for the manufacture of wrought	J. McCarty	Apr. 4, 1854
Ivory, Process of bleaching	U. Pratt	July 6, 1851
J.		
Jacquard-machine	A. Babbett	Oct. 18, 1859
Jewelry, Rolling metal for	J. S. Palmer	June 14, 1859
Journal-box	J. A. Montgomery	Aug. 2, 1859
K.		
Kettle, Brass. (Extended seven years, and also by act of Congress March 3, 1873, and reissued February 13, 1866, and May 24, 1870, No. 3,996.)	H. W. Hayden	Dec. 16, 1851
Kettle, Brass. (Reissued May 14, 1861)	F. J. Seymour	May 13, 1856
Kettle-making machine. (Extended seven years, and also by act of Congress, March 3, 1873, reissued February 13, 1866, and May 24, 1870, No. 3,995.)	H. W. Hayden	Dec. 16, 1851
Kettles, &c., from disks of metal, Machinery for making	H. W. Hayden	Dec. 16, 1851
Knitting-machine	T. Bailey	Nov. 20, 1855
Knitting-machine	H. Burt	Sept. 23, 1843
Knitting-machine	J. Hollen	July 16, 1850
Knitting-machine. (Reissued October 25, 1864)	M. Marshall	Mar. 15, 1853
Knitting-machine. (Reissued September 15, 1863)	J. Pepper	July 17, 1855
Knitting-machine. (Reissued May 15, 1860)	C. Tompkins and J. Johnson	Sept. 18, 1855
Knitting machine, Circular. (Reissued October 27, 1863)	J. Pepper	Dec. 5, 1854
Knitting-machine needle	J. Hibbert	Jan. 9, 1849
Knitting-machine, Rotary	S. M. Park and E. S. Ells	Aug. 5, 1856
Knitting-machine, Rotary	D. Tainter	Nov. 30, 1852
L.		
Label-card	J. Sharp	June 15, 1852
Labels, Metallic book for	S. B. Fay	July 1, 1856
Lamp	E. J. Hale and C. H. Chandler	Mar. 1, 1859
Lamp. (Reissued June 6, 1871, and December 5, 1871)	H. Halvorson	Sept. 20, 1859
Lamp, Camphene	E. B. Horn	Feb. 6, 1849
Lamp, Essential oil	M. B. Dyott	May 30, 1842
Lamp-holder	C. Monson	Jan. 18, 1859
Lamp-shade. (Reissued August 14, 1860)	C. and A. C. Wilhelm	May 3, 1859
Lamp, Spirit	A. J. Walker	May 24, 1853
Lamps to lanterns, Securing	W. Porter	Oct. 24, 1854
Lantern. (Reissued August 21, 1855)	H. and J. Sangster	June 19, 1851

Index of extensions granted by the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Date.
Lasting boots and shoes, Machine for. (Reissued January 6, 1863)	J. Purinton	Oct. 4, 1859
Lath for fire-proof ceiling, Metallic	P. Sumner	Apr. 25, 1844
Lath-machine	H. C. Smith	Sept. 28, 1852
Lathing and plastering, Mode of	J. G. Vaughan	Jan. 13, 1857
Lathe for cutting irregular forms. (Extended by act of Congress January 20, 1834; also by act of Congress January 20, 1848.)	T. Blanchard	Jan. 12, 1820
Lathe for turning irregular forms	C. and A. Spring	May 10, 1859
Lathe for turning irregular forms, Automatic	W. D. Sloan	Mar. 31, 1857
Lathes, Slide-rest for	C. Van Horn	Apr. 17, 1855
Lead-pipe machinery	S. G. Cornell	Aug. 21, 1847
Lead, White	E. Clark	Dec. 4, 1828
Leather-splitting machine	J. F. Flanders and J. A. Marden.	Aug. 29, 1854
Leather-splitting machine	A. Richardson	Sept. 16, 1851
Leather-splitting machinery	A. Richardson	Apr. 17, 1844
Leg, Artificial	B. F. Palmer	Nov. 4, 1846
Leg, Artificial	W. Selpho	May 6, 1856
Lever-jack	J. Leffel	Dec. 10, 1850
Life-protector	R. Bulkley	May 8, 1840
Lightning-rod	D. Munson	Aug. 5, 1856
Lime-kiln	L. Averill	Aug. 19, 1856
Lime-kiln	R. E. Schweder	May 6, 1851
Lock	R. G. Holmes and W. H. Butler	Oct. 30, 1855
Lock-gates, Manner of suspending, opening, and closing	H. McCarty	Mar. 16, 1844
Locomotive-engines, Regulating waste-steam in	R. Winans	Nov. 26, 1840
Locomotive steam-engine	M. W. Baldwin	Aug. 25, 1842
Loom. (Reissued March 14, 1865)	E. W. Brown	July 25, 1854
Loom	B. G. Dawley	Dec. 23, 1856
Loom. (Reissued July 4, 1865, No. 2,018)	C. Duckworth	June 28, 1853
Loom. (Reissued April 21, 1857)	W. W. Dutcher	June 27, 1846
Loom. (Improvements July 8, 1856, and March 3, 1857, Nos. 147 and 159)	J. O. Leach	Oct. 30, 1865
Loom	S. T. Thomas	July 3, 1855
Loom	L. Van Riper	Mar. 20, 1855
Loom, Brussels. (Reissued September 11, 1849)	E. B. Bigelow	Mar. 20, 1847
Loom, Brussels carpet. (Reissued October 9, 1849, and May 5, 1857)	E. B. Bigelow	Mar. 10, 1849
Loom, Figured fabric. (Reissued April 24, 1860)	M. Marshall	Dec. 11, 1849
Loom, Figure power	W. Crompton	Nov. 25, 1837
Loom for coach-lace, &c., Power. (Reissued September 10, 1846)	E. B. Bigelow	Apr. 20, 1837
Loom for piled fabric	J. and J. Turnbull, jr	Jan. 29, 1850
Loom for weaving figured fabric. (Reissued December 28, 1858)	G. Crompton	Nov. 14, 1854
Loom for weaving plaids, Power. (Reissued October 9, 1849)	E. B. Bigelow	Apr. 10, 1845
Loom, Hand	S. C. Mendenhall	Nov. 9, 1852
Loom-harness, Counterbalancing	J. Greenhalgh	Nov. 2, 1852
Loom-heddles, Machine for casting metallic eyes or mails for	J. Senneff	Aug. 22, 1854
Loom, Jacquard	E. B. Bigelow	Oct. 23, 1849
Loom, Knitting	J. Mee	May 10, 1853
Loom, Power. (Reissued July 4, 1865, and March 13, 1866, Nos. 2,193 and 2,194)	C. Duckworth	June 28, 1853
Loom, Power	R. Reynolds	June 1, 1852
Loom-shuttle. (Reissued March 30, 1869)	L. Litchfield	May 1, 1855
Loom shuttle-boxes, Operating. (Reissued May 20, 1862)	R. B. Goodyear	Sept. 13, 1848
Loom-treadle cam	R. Garsed	July 20, 1846
Loom-treadles, Operating	R. W. Andrews	Jan. 18, 1853
Loom-temple	E. and W. W. Dutcher	Dec. 28, 1852
Looms, Pattern-card for Jacquard	S. T. Thomas and E. Everett	Mar. 16, 1852
Looms, Picker-motion for power	W. Stearns	July 5, 1859
Looms, Throwing shuttles in	S. C. Mendenhall	Nov. 9, 1852
Lubricating-compound. (Reissued June 14, 1853)	P. S. Devlan	Jan. 16, 1849
M.		
Mail-bag	T. J. Lamdin	May 10, 1859
Malt-kiln floor-plate	M. Stewart	Jan. 3, 1854
Maps, Mode of coloring	L. Stebbins	Mar. 12, 1840
Match-splints, Machine for making and dipping	A. Fessenden and L. L. Knight	Apr. 26, 1845
Matches, Manufacture of friction	A. D. Philips	Oct. 24, 1836
Mattress	W. H. Robertson	Dec. 17, 1846
Mattress, Spring	W. T. Ressegiue	June 10, 1850
Meat-cutter	J. G. Perry	Aug. 2, 1859
Meat-cutting apparatus. (Reissued February 25, 1862)	J. G. Perry	Feb. 26, 1850
Meat, Process of curing	J. C. Schooley	Mar. 14, 1855
Melodeon. (Reissued February 26, 1867, and May 26, 1868)	L. Louis	Nov. 18, 1856
Metal-burnishing machine. (Reissued October 11, 1859, and July 2, 1861)	J. Stever	May 1, 1855
Metal-cutting tool	L. F. Goodyear	Mar. 29, 1859
Metal grinding and shaping apparatus	S. Darling	Aug. 30, 1853
Metal-scraping machine	J. Stever	Dec. 12, 1854
Metal tube, Seamless	W. F. Brooks	Apr. 1, 1856
Metallic-pipe or tube	B. and G. M. Tatham	Oct. 11, 1841
Mills, Grinding-surface in	C. Ross	Oct. 17, 1854
Millstone-eye	E. Munson	July 19, 1853
Mincer, Meat. (Reissued December 26, 1865)	A. W. Hale	Mar. 15, 1859
Miter-machine. (Reissued May 18, 1869)	G. W. La Baw	May 29, 1855
Moldings, Machinery for making. (Reissued January 7, 1851, and June 21, 1853)	A. T. Serrell	May 16, 1848
Moldings, Tool for grooving	R. I. Marcher	May 22, 1855
Moorings and piles, Screw	A. Mitchell	Mar. 26, 1845
Mop-head	H. March	June 14, 1853
Mop-head. (Reissued November 10, 1868, November 24, 1868, and October 19, 1869)	L. Taylor	Feb. 15, 1859
Mortising-machine. (Reissued December 11, 1855)	J. Guild	Nov. 30, 1852
Mortising-machine	H. B. Smith	Jan. 10, 1854
Mowing-machine and harvester. (Reissued January 2, 1855, No. 286)	J. H. Manny	Sept. 23, 1851
Mule-regulator, Self-acting	E. C. Sanger	July 3, 1849
Musical instrument, Bellows for. (Reissued June 24, 1856, and August 18, 1857)	J. Carhart	Dec. 28, 1846
N.		
Nail-machine	D. Dodge	June 3, 1856
Nail-machine	D. Dodge	Aug. 23, 1859
Nail-machine	D. Dodge	Aug. 30, 1859

Index of extensions granted by the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Date.
Nail or spike, Yellow-metal. (Reissued February 24, 1863)	L. Crocker	Apr. 17, 1849
Nail, Screw	S. Pratt	Oct. 25, 1853
Net-fabric, Warp	J. Mee	May 10, 1853
Netting-machine	J. McMullen	June 27, 1846
Nut and washer machine. (Reissued June 19, 1855)	H. Carter and J. Rees	Aug. 26, 1851
Nut-machine	H. Carter and J. Rees	Nov. 29, 1853
Nut-making machine. (Reissued January 1, 1867)	W. E. Ward	Oct. 7, 1856
Nuts, Making	I. H. Steer	June 19, 1855
Nuts, washers, &c., Machine for making. (Reissued March 18, 1856, and February 15, 1859.)	W. Kenyon	Oct. 14, 1851
O.		
Obstetric chair and supporter	A. Blood	Aug. 27, 1850
Oil-cloth, Machinery for printing floor. (Extended by act of Congress June 10, 1872)	S. Savage	Mar. 2, 1852
Oil from rosin, Lubricating	L. S. Robbins	Nov. 4, 1851
Oil from rosin, Tanner's	L. S. Robbins	Nov. 4, 1851
Oil-press	D. L. Latourette	Oct. 28, 1851
Oil, Treating	P. Marsh	Jan. 1, 1856
Ordnance, Casting	T. J. Rodman	Aug. 14, 1847
Ore, Method of working Franklinite	T. Selleck	Jan. 30, 1855
Ore-separator	W. O. Bourne	June 14, 1859
Ore-washer	H. Bradford	Aug. 12, 1856
Ore-washer	W. L. Carter	Mar. 11, 1856
Ore-washer	S. Thomas	Sept. 30, 1856
Oven. (Reissued October 12, 1869, and June 14, 1870)	H. Ball	Sept. 23, 1856
Oven, Baker's. (Reissued March 5, 1872)	G. C. Jennison	Feb. 1, 1859
P.		
Packing, Compound hard and soft metal	A. Fulton	Mar. 26, 1850
Packing for stuffing-boxes, &c	J. H. Tuck	June 26, 1855
Padlock	H. Ritchie	Aug. 23, 1853
Padlock, Clam-shell	S. Andrews	Dec. 5, 1840
Paging-machine. (Reissued January 26, 1858)	J. McAdams	Aug. 12, 1851
Pails, &c., Metallic ears for attaching handles to. (Reissued August 4, 1868)	T. Evans	June 21, 1859
Paint-can, &c	J. W. Masury	July 12, 1859
Paint-mill. (Extended by act of Congress August 11, 1848)	O. C. Harris	Mar. 15, 1832
Painter stopper, Cat-head and shank	C. Perley	Apr. 2, 1850
Paper bags, Machine for making. (Reissued September 4, 1860)	E. W. Goodale	May 29, 1855
Paper bags, Machine for making	W. Goodale	July 12, 1859
Paper bags, Machine for making	W. Goodale	Aug. 23, 1859
Paper boxes, Machine for making. (Reissued May 17, 1870)	S. B. Terry	Sept. 6, 1859
Paper-cutting and book-trimming machine. (Reissued June 22, 1852)	F. J. Austin	June 16, 1841
Paper-cutting machinery	N. Gavit	May 9, 1854
Paper-folding machine. (Reissued July 26, 1870)	C. Chambers, jr	Oct. 7, 1856
Paper-folding machine	C. Chambers, jr	Apr. 5, 1859
Paper-folding machine. (Reissued August 12, 1873)	C. Chambers, jr	Nov. 15, 1859
Paper-folding machine. (Reissued April 3, 1860)	G. K. Snow	Oct. 15, 1850
Paper-folding machine	T. Thompson	Feb. 12, 1856
Paper-folding machinery. (Reissued October 26, 1869)	C. O. Crosby	Dec. 23, 1856
Paper, Making thick. (Reissued October 22, 1867)	S. G. Lewis	Feb. 14, 1854
Paper, Manufacturing copying. (Extended by act of Congress February 28, 1867)	W. Mann	Jan. 11, 1853
Paper-pulp, Apparatus for the manufacture of. (Reissued July 3, 1860, and August 13, 1867, No. 2,730.)	J. B. Palser and G. Howland	June 21, 1859
Paper-pulp engine	J. Kingsland, jr	Dec. 23, 1856
Paper-pulp-grinding machinery. (Reissued June 28, 1859, and January 6, 1863)	J. Kingsland, jr	Dec. 16, 1856
Paper-pulp, Making	M. A. C. Mellier	May 26, 1857
Paper-pulp, Making boxes of	A. French	July 1, 1856
Paper-pulp, Manufacture of. (Reissued July 3, 1860, and August 13, 1867, No. 2,731)	J. B. Palser and G. Howland	June 21, 1859
Paper-pulp, Preparation of straw for. (Reissued July 3, 1860, and December 15, 1863, No. 1,590.)	J. B. Palser and G. Howland	June 21, 1859
Paper-pulp, Process of grinding. (Reissued June 28, 1859, and January 6, 1863)	J. Kingsland, jr	Dec. 23, 1856
Paper-pulp, Process of treating wood or other vegetable substances in manufacture of. (Reissued October 5, 1858, and April 7, 1863, Nos. 1,448 and 1,449.)	C. Watt and H. Burgess	July 18, 1854
Paper-pulp, Reducing wood-fiber to. (Reissued April 6, 1869)	H. Voelter	Aug. 10, 1858
Paper-stock, Machine for washing. (Reissued January 8, 1856, and March 19, 1867)	H. W. Peaslee	Jan. 23, 1855
Paper-stock, Rag boiling and washing machine for. (Reissued June 11, 1850)	G. Spafford	Sept. 2, 1840
Paper, &c., Treating cane-fiber for	B. A. Lavender and H. Lowe	Apr. 4, 1854
Paraffine-oil, Making	J. Young	Mar. 23, 1852
Parer and slicer, Apple	D. H. Whittemore	Jan. 13, 1857
Parer, Apple	D. H. Whittemore	Feb. 17, 1857
Paring machine, Apple	E. L. Pratt	Oct. 4, 1853
Pasteboard for boxes, Machine for cutting	E. E. Clarke	Mar. 3, 1857
Pavement, Cast-iron	W. D. Terry	July 12, 1843
Pavement, Wooden. (Reissued December 1, 1863, and August 20, 1867)	S. Nicolson	Aug. 8, 1854
Peg-cutting machine, Shoe	S. K. Baldwin	July 16, 1842
Peg-cutting tool for boots and shoes	D. D. Allen	Oct. 19, 1852
Pegging-jack	A. Bailey	July 29, 1856
Pegging machine, Boot and shoe. (Extended by act of Congress February 18, 1867)	A. C. Gallahue	Aug. 16, 1853
Pegging machine, Boot and shoe. (Reissued July 4, 1854, and April 26, 1859, Nos. 698, 699, 700, 701, 702, 703.)	J. J. Greenough	Jan. 17, 1854
Pencil, Slate	N. C. Harris	Apr. 24, 1855
Photographic-camera plate-holder	W. and W. H. Lewis	Oct. 7, 1856
Pill-making machine	E. A. Pond	Dec. 7, 1852
Pin-papering machine	S. Slocum	Sept. 30, 1841
Pin-sticking machine	J. W. Naramore	July 5, 1859
Pipe cutter, Gas	J. E. Stanwood	Apr. 26, 1859
Pipe-molding. (Reissued April 28, 1863)	J. Firth and J. Ingham	Dec. 20, 1859
Planing and tonguing machine	W. Woodworth	Dec. 27, 1828
Planing curved surfaces, Machine for	J. P. Grosvenor	Dec. 27, 1859
Planing-machine	J. E. Andrews	Nov. 21, 1845
Planing-machine	J. A. Woodbury	Nov. 13, 1855
Planing machine, Lumber. (Reissued April 17, 1860)	S. S. Gray	Aug. 22, 1854
Planing machine, Plank-board and clapboard	B. Langdon	Jan. 9, 1838
Planing-machine pressure-bar	H. Snow	Nov. 21, 1854
Planing-machines, Clamping cutters in the cutter-heads for	J. P. Grosvenor	Dec. 2, 1856
Planing-machines, Feed-apparatus for	J. Whitney	Apr. 13, 1852

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Invention.	Inventor.	Date.
Planing-machines, Gearing for feed-rollers of	C. Burleigh	Feb. 12, 1856
Planter, Corn	E. C. Allen	Nov. 8, 1859
Planter, Corn. (Reissued November 16, 1858, and April 17, 1866)	J. Case	Jan. 16, 1855
Planter, Cotton-seed	A. W. Washburn	Mar. 25, 1856
Planter, Hand seed	J. H. Jones	Aug. 26, 1856
Planter, Seed	W. Blessing,	Dec. 13, 1859
Planter, Seed. (Reissued February 16, 1858, and September 11, 1860, Nos. 1,036, 1,037, 1,038, and 1,039.)	G. W. Brown	Feb. 2, 1853
Planter, Seed. (Reissued November 10, 1857, and December 11, 1860, Nos. 1,091, 1,092, 1,093, 1,094, and 1,095.)	G. W. Brown	May 8, 1855
Planter, Seed	L. Moore	Apr. 18, 1848
Planter, Seed. (Reissued October 12, 1852, and August 26, 1862)	L. Moore	July 2, 1850
Planter, Seed. (Reissued December 9, 1854)	M. and S. Pennock	Mar. 12, 1841
Planter, Seed. (Reissued January 26, 1869)	E. M. Stevens, J. B. Crosby, and J. W. Pearson.	May 22, 1855
Planter, Seed	C. A. Wakefield	July 25, 1854
Plow	B. F. Avery	Jan. 8, 1856
Plow	J. Gibbs	Aug. 15, 1854
Plow	S. Hall	Apr. 25, 1848
Plow	T. J. Hall	Apr. 3, 1855
Plow	J. M. May	May 2, 1846
Plow	B. Woodcock	June 14, 1837
Plow-castings, Machine for grinding	J. Gibbs	Oct. 4, 1853
Plow, Gang	T. J. Hall	May 1, 1855
Plows, Constructing	A. Gardner and W. L. Hunter	Oct. 26, 1852
Porous ware, Manufacture of	B. S. and M. R. Pierce	Dec. 27, 1859
Powder-keg. (Reissued January 6, 1863, and December 7, 1869)	J. Wilson, C. Green, and W. Wilson, jr.	July 12, 1859
Preserve-cans, Hermetically sealing	C. Branwhite	Mar. 18, 1856
Press	D. Dick	Oct. 10, 1848
Pressure-gage	E. Bourdon	June 18, 1849
Printers' rules, Machine for mitering. (Reissued March 17, 1868)	W. McDonald	July 3, 1855
Printing-press	I. Adams	Oct. 4, 1830
Printing-press. (Reissued July 31, 1860, Nos. 1,021 and 1,022)	G. P. Gordon	Aug. 5, 1851
Printing-press	R. M. Hoe	May 1, 1845
Printing-press. (Reissued March 22, 1870)	R. M. Hoe	Aug. 5, 1856
Printing-press	L. T. Wells	Mar. 20, 1855
Printing-press	J. Wilkinson	Jan. 4, 1853
Printing-press, Power. (Additional improvement March 2, 1836; extended by act of Congress, August 16, 1856.)	I. Adams	Oct. 14, 1830
Printing-press, Power	I. Adams	Mar. 2, 1836
Printing-press, Rotary	R. M. Hoe	July 24, 1847
Printing-presses, Checking momentum of	A. B. Taylor	Apr. 4, 1846
Printing-presses, Feeding paper to. (Reissued June 20, 1871)	R. M. Hoe	Aug. 23, 1859
Printing-presses, Machine for feeding paper to	H. Clark	Apr. 25, 1854
Printing railway and other tickets, Machine for	R. M. Hoe	Mar. 8, 1859
Printing woolen and other goods, Machine for	T. Crossley	June 20, 1854
Prisons, Construction of	E. May	Oct. 4, 1859
Propeller, Screw	E. Beard	Apr. 10, 1841
Propeller, Screw	J. Montgomery	Apr. 12, 1859
Propellers, Application of high-pressure engines to screw	H. Whitaker	Oct. 18, 1853
Propellers to driving-shafts, Attaching	J. L. Cathcart	Apr. 18, 1854
Puddler's balls, Rolling and compressing	J. F. Winslow	Dec. 13, 1847
Pulley for belts and brakes, Binder	M. Bryant	Nov. 13, 1849
Pump	J. Reed	Apr. 16, 1841
Pump	W. Wright	Nov. 15, 1859
Pump and fire engine	B. T. Babbitt, S. C. Higbee, and P. W. Plants.	Oct. 7, 1842
Pump-box	F. and J. Stock	Apr. 26, 1859
Pump, Centrifugal	W. D. Andrews	Aug. 22, 1854
Pump, Elliptical rotary	B. Holly	Feb. 6, 1855
Pump, Portable. (Reissued February 26, 1861)	W. T. Vose	Nov. 15, 1859
Pump, Rotary	J. S. Gwynne	Jan. 14, 1851
Pumps, Packing rotary	A. W. Cary	May 15, 1849
Pumping-engine	H. R. Worthington	July 19, 1859
Punching machine, Metal	G. and D. Fowler	Apr. 17, 1855
Pyrotechnic night-signal	B. F. Coston	Apr. 5, 1859
R.		
Railway and canal transportation	J. Elgar	Nov. 7, 1835
Railway-bar	H. Webb	June 14, 1859
Railway-bars, Repairing	J. D. Cawood	Sept. 9, 1856
Railway-carriage. (Reissued December 3, 1850)	C. Davenport and A. Bridges	May 4, 1841
Railway-carriage	I. Knight	Mar. 18, 1829
Railway-carriage wheel	J. Elgar	Nov. 19, 1833
Railway-chairs, Machine for bending lips of wrought-iron. (Reissued July 14, 1857, and August 12, 1862.)	S. A. Cox	Aug. 28, 1849
Railway-chairs, Machine for making wrought-iron. (Reissued August 12, 1858)	W. Van Anden	Apr. 30, 1850
Railway-curves, Mode of turning short	J. Stimpson	Aug. 23, 1831
Railway-frog. (Reissued January 5, 1864)	D. D. Lewis	May 17, 1859
Railway-frog, Elastic	G. P. Sanborn and W. Mansfield.	July 5, 1859
Railway-plates for streets, Wrought-iron	J. Stimpson	Aug. 23, 1831
Railway-propeller, Reciprocating	H. Boynton	June 19, 1855
Railway-switches, Dispensing with. (Reissued April 3, 1860)	W. Wharton, jr	Dec. 13, 1859
Railways, Wooden splice-piece for	I. R. Trimble	Apr. 10, 1855
Rake	H. Haynes	June 18, 1839
Range, Cooking	G. Chilson	Jan. 4, 1859
Range, Cooking	B. W. Dunklee	Apr. 19, 1859
Range, Cooking	P. Rollhaus	Sept. 11, 1849
Rattan-cutting machinery. (Extended by act of Congress March 2, 1867)	S. Sawyer	June 24, 1851
Rattan-machine	S. Sawyer	Dec. 12, 1854
Rattan-splitting machine	A. M. Sawyer	Mar. 7, 1854
Rattan-splitting machine	S. Sawyer	Jan. 2, 1855
Rattle, Policeman's	J. McCord	Nov. 20, 1855
Reaping and mowing machine	H. Waterman	Aug. 28, 1855

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Invention.	Inventor.	Date.
Reaping-machine. (Reissues Nos. 449 and 451, April 14, 1857; extended; reissue April 14, 1857, No. 450; reissued June 21, 1859, Nos. 742 and 743; No. 743 reissued February 28, 1860, No. 917; Nos. 742 and 917 extended.)	O. Hussey	Aug. 7, 1847
Reaping-machine	J. J. and H. F. Mann	June 3, 1856
Reaping-machine	J. Read	Mar. 12, 1842
Reaping-machine. (Reissued July 10, 1860, May 7, 1861, and May 31, 1864)	W. H. Seymour	July 8, 1851
Refrigerator. (Reissued April 21, 1857)	D. W. C. Sanford	Nov. 13, 1855
Register and ventilator. (Reissued November 12, 1861)	E. A. Tuttle	June 10, 1856
Rein, Bridle	K. Goddard	July 24, 1855
Rendering lard. (Reissued May 7, 1850)	E. Wilson	Oct. 9, 1844
Rolling machine, Iron	H. Burden	Dec. 10, 1840
Rolling-mill	J. and G. Fritz	Sept. 27, 1859
Roofing-cement	N. A. Dyar	May 3, 1859
Roofing-composition. (Reissued September 8, 1857)	J. West	Oct. 30, 1855
Roofing, Metallic	H. Outcalt	July 11, 1854
Rope-laying machinery	S. and J. A. Bazin	Apr. 25, 1854
Rope-laying machinery	G. W. Pittman and W. C. Boone.	Apr. 5, 1859
Rotary press for woolen and cotton goods. (Reissued September 5, 1840)	M. Bayley	July 5, 1837
Ruling-machine	J. B. Blair	Mar. 8, 1859
Ruling-machine	L. Edwards	Oct. 9, 1845
Ruling machine, Paper	G. L. Wright	May 28, 1842
Ruling-machines, Regulator for the pen-beam in	W. O. Hickok	June 17, 1851
S		
Sad-irons, Furnace for heating	J. T. Davy	Mar. 12, 1850
Saddle and winch, Combined adjustable	A. G. Polhameus	Mar. 27, 1849
Saddle-trees, Attaching pads to	J. Ives	June 10, 1856
Saddle-trees, Machine for covering	J. Maclure	Oct. 18, 1859
Safe, Fire-proof. (Reissued December 18, 1849, and March 6, 1860)	E. and J. L. Hall	Aug. 21, 1849
Safe, Fire-proof	L. Lillie	July 15, 1851
Safe, Iron	W. Alford and J. D. Spear	May 18, 1852
Salines, Process for treating the mother-water of	E. Stieven	Dec. 12, 1854
Sand-paper-cutting machine	W. Adamson	July 3, 1855
Sausage-stuffer	J. Wagner	Mar. 29, 1859
Saw	J. H. Tuttle	June 21, 1853
Saw-blades, &c., Machinery for grinding or polishing	W. Southwell	May 4, 1852
Saw for cutting off piles under water, Circular	E. E. Cole	Sept. 14, 1844
Saw-frame, Wood. (Reissued August 12, 1863)	J. Haynes	Aug. 9, 1859
Saw-grinding machine. (Reissued June 19, 1866)	E. Andrews	Dec. 16, 1856
Saw-gummer	L. A. Dole	Sept. 9, 1856
Saw-mill. (Reissued March 10, 1849)	P. Crosby	Nov. 3, 1841
Saw-mill	T. J. Wells	Apr. 11, 1846
Saw-mill-carriage journal-box	W. M. Ferry	Nov. 29, 1859
Saw-mill dog	G. W. Hill	May 6, 1856
Saw-mill head and tail block	E. H. Stearns	Apr. 15, 1856
Saw mill, Portable circular	G. Page	July 16, 1841
Saw-plates, &c., Machinery for grinding and polishing	R. M. Hoe	May 30, 1842
Saws, Grinding circular	W. Clemson	May 27, 1856
Saws, Mode of driving reciprocating. (Reissued February 3, 1857)	I. Brown	July 19, 1853
Sawing-machine. (Reissued)	I. D. Russell and S. Waterman.	May 19, 1843
Sawing machine, Board, &c	J. Myers and R. G. Eunson	May 23, 1854
Sawing-machines, Feeding lumber laterally in	S. R. Smith	Jan. 20, 1857
Sawing volutes, Machine for	E. Whiten	Sept. 30, 1851
Scales	E. M. Manigle	Sept. 6, 1859
Scales	A. Turnbull	Sept. 13, 1859
Scales, Platform. (Reissued March 31, 1857)	T. Fairbanks	Jan. 13, 1857
Scales, Platform	T. Fairbanks	Dec. 20, 1859
Scales, Platform. (Extended by act of Congress July 15, 1870)	F. M. Strong and T. Ross	Jan. 15, 1856
Scales, Platform	F. M. Strong and T. Ross	May 24, 1859
Scales, Railway platform	L. Pusey	Dec. 23, 1856
Scales, Weighing	F. M. Strong and T. Ross	Aug. 16, 1859
Scoop and elevator	E. Morris	Dec. 12, 1848
Scraper, Cotton	J. H. Mitchell	Sept. 13, 1859
Screw-blanks, Machine for arranging and feeding. (Reissued March 29, 1853)	T. J. Sloan	Feb. 25, 1851
Screw-blanks, rivets, &c., Method of heading. (Extended by act of Congress March 2, 1867.)	W. E. Ward	Dec. 28, 1852
Screw-capping	C. T. Grilley	Apr. 20, 1852
Screw-cutting die	P. W. Gates	May 8, 1847
Screw-cutting machinery. (Reissued December 28, 1858)	T. W. Harvey	May 30, 1846
Screw-head-dressing machinery. (Reissued January 4, 1859)	T. W. Harvey	Aug. 18, 1846
Screw-jack	T. C. Ball	Feb. 27, 1855
Screw-machine feeder. (Reissued May 7, 1850)	S. Merrick	Mar. 7, 1846
Screw threading and pointing machine	T. J. Sloan	Apr. 26, 1853
Screw-threading machine, Wood. (Reissued March 5, 1850, and June 13, 1856)	C. Whipple	Aug. 18, 1842
Screw, Wood. (Reissued February 22, 1848, and November 23, 1858)	T. J. Sloan	Aug. 20, 1846
Screw-wrench	L. Coes	Apr. 16, 1841
Screw-wrench	S. Menick	Aug. 17, 1835
Screws in lathes, Arrangement for cutting	J. Nason	Jan. 3, 1854
Screws, Machinery for shaving, nicking, and reshaving wood	T. J. Sloan	Oct. 21, 1851
Scythe-fastening. (Reissued February 9, 1858)	P. Frost	Jan. 11, 1833
Seaming machine, Double	J. Wilson, C. Green, and W. Wilson, jr.	Apr. 19, 1859
Seat for public buildings. (Reissued January 15, 1861)	A. H. Allen	Dec. 5, 1854
Seeding-machine	L. B. and H. A. Myers	Mar. 3, 1857
Self-acting brake	B. S. Healy	Aug. 16, 1859
Sewing-machine. (Reissued April 11, 1863)	W. H. Akins and J. D. Felthousen.	Aug. 5, 1851
Sewing-machine	J. Bachelder	May 8, 1849
Sewing-machine. (Reissued December 12, 1865; extended by act of Congress July 14, 1870.)	J. Bachelder	May 8, 1849
Sewing-machine. (Reissued January 5, 1864)	W. Butterfield	July 4, 1854
Sewing-machine. (Reissued November 24, 1868, No. 3,214)	J. S. Conant	Jan. 16, 1855
Sewing-machine. (Reissued June 15, 1858)	C. A. Durgin	May 22, 1855
Sewing-machine	J. Gray	May 17, 1859
Sewing-machine. (Reissued December 3, 1861)	W. O. Grover and W. E. Baker	Feb. 11, 1851

Index of extensions granted by the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Date.
Sewing-machine. (Reissued July 6, 1858)	W. O. Grover and W. E. Baker.	June 22, 1852
Sewing-machine. (Reissued March 4, 1873)	W. C. Hicks	Apr. 12, 1859
Sewing-machine	E. Howe, jr	Sept. 10, 1846
Sewing-machine	A. F. Johnson	Jan. 13, 1857
Sewing-machine. (Reissued February 26, 1856)	W. H. Johnson	Mar. 7, 1854
Sewing-machine	L. W. Langdon	Oct. 30, 1855
Sewing-machine	G. A. Leighton	July 11, 1854
Sewing-machine. (Reissued November 3, 1863)	C Parham	Nov. 21, 1854
Sewing-machine	S. J. Parker	Apr. 11, 1854
Sewing-machine. (Reissued October 3, 1854)	I. M. Singer	Aug. 12, 1851
Sewing-machine	I. M. Singer	Oct. 9, 1855
Sewing-machine. (Reissued May 16, 1855, and March 25, 1865)	S. S. Turner	Aug. 22, 1854
Sewing-machine. (Reissued November 1, 1864)	K. Vogel	Oct. 4, 1859
Sewing-machine	W. Wickersham	Apr. 19, 1853
Sewing-machine. (Reissued January 22, 1856, Nos. 345, 346; No. 345 reissued December 9, 1856; No. 346 extended.)	A. B. Wilson	Nov. 12, 1850
Sewing-machine. (Reissued February 28, 1860, Nos. 913 and 914)	A. B. Wilson	Aug. 12, 1851
Sewing-machine	A. B. Wilson	June 15, 1852
Sewing-machine	S. Wright	Jan. 2, 1855
Sewing-machine, (Design)	J. E. A. Gibbs	Feb. 21, 1860
Sewing-machine case. (Reissued February 26, 1861, No. 40)	F. A. Ross	Aug. 28, 1855
Sewing-machine folding-guide	B. C. Boyes	July 22, 1856
Sewing on binding, Guide for	H. L. Sweet	Dec. 20, 1853
Shawl and diaper pin, Shielded	T. Woodward	May 7, 1842
Sheet-metal cutting and bending machine	E. Savage	Mar. 17, 1857
Shingle-machine	E. Hedley	May 20, 1856
Shingle-machine	H. H. Evarts	Oct. 31, 1854
Shingle riving and dressing machine	W. S. George	May 29, 1841
Shingle-shaving machine	B. Langdon	Jan. 9, 1838
Ship's block. (Reissued June 9, 1857)	I. D. Russell and S. Waterman.	Jan. 31, 1844
Ship-building. (Reissued May 7, 1861)	R. F. Loper	Nov. 13, 1847
Ships, Side-light for. (Reissued September 8, 1863, and March 15, 1864)	E. Hidden	June 21, 1853
Shoe-pegs, Blank for. (Reissued June 12, 1866)	B. F. Sturtevant	Aug. 16, 1859
Shot, Manufacturing drop	D. Smith	May 22, 1849
Shovel-blades to handle-straps, Uniting	J. White	Nov. 15, 1853
Shovel-handles, Machine for making	R. D. Bartlett	Mar. 14, 1854
Shovel-handles, Machine for making the heads of	R. D. Bartlett	July 11, 1854
Shutters, Rolling iron	C. Mettam	Jan. 23, 1855
Shuttle for weaving cloth	J. Baldwin	Jan. 31, 1840
Sieve, Grain	T. B. Wheeler	Dec. 16, 1851
Skate-fastening. (Reissued March 23, 1869)	J. H. Coe and W. B. Sniffen	May 3, 1859
Skirt, Skeleton. (Reissued December 27, 1859, and August 1, 1865)	J. Draper	Oct. 4, 1859
Smelting furnace, Iron	T. H. Powers	May 6, 1856
Smelting furnace, Iron-ore	I. A. Roth	Oct. 31, 1839
Smoke-consuming furnace. (Reissued July 11, 1848)	F. P. Dimpfel	May 9, 1839
Smoothing-iron	N. Taliaferro and W. D. Cummings.	Mar. 30, 1852
Smut-machine	J. M. Earls	Apr. 27, 1852
Smut-machine	H. B. Ingham	Oct. 28, 1856
Smut-machine	L. Smith	Oct. 18, 1839
Smut-machine	L. Smith	Feb. 12, 1850
Smut-mill and grain-separator. (Reissued November 3, 1863)	D. Shaw	Apr. 6, 1852
Soda-powders, farinaceous food, &c., Pulverulent acid for use in. (Reissued May 7, 1867, and June 9, 1868.)	E. N. Horsford	Apr. 22, 1856
Solar-camera. (Reissued July 10, 1866)	D. A. Woodward	Feb. 24, 1857
Sole cutting machine, Boot and shoe	C. H. Griffin	June 12, 1855
Sole cutting machine, Boot and shoe. (Reissued July 24, 1866)	J. W. Hatch and H. Churchill.	Jan. 2, 1855
Sole trimming machine, Boot and shoe	J. H., J. M., and H. Q. Thompson.	Nov. 15, 1853
Soles, Channeling boot and shoe. (Reissued December 1, 1863)	M. Wesson	May 24, 1859
Sowing fertilizers, Machine for. (Reissued May 18, 1858)	W. S. Bartle	Apr. 22, 1856
Spark-arrester	W. C. Grimes	Feb. 12, 1842
Spark-arrester	D. Matthew	Dec. 31, 1840
Spark-arrester. (Reissued January 16, 1855)	J. Radley and J. W. Hunter	Jan. 22, 1850
Speaking-tube	T. J. Woolcocks and W. Ostrander.	May 4, 1852
Spectacle-frame. (Reissued November 9, 1869)	T. Noel	Jan. 11, 1859
Spike-machine	J. H. Swett	Mar. 14, 1854
Spinner, Ring	G. H. Dodge	Jan. 27, 1852
Spinning cotton, Throstle for	C. Danforth	Dec. 12, 1854
Spinning-machine drawing-regulator. (Reissued July 12, 1864)	N. Wyllys	Jan. 28, 1851
Spinning-machines, Preventing fiber from winding on drawing-rollers in	J. C. Dodge	May 14, 1850
Spinning-machinery	A. Woodworth, 3d	May 15, 1855
Spinning, Machinery for preparing fibrous substances for	J. Apperly and W. Clissold	Dec. 22, 1857
Spinning-mule, Self-acting. (Reissued March 15, 1853)	W. Rouse	Nov. 2, 1852
Spinning, Railway drawing-head for	W. B. Leonard	Sept. 16, 1833
Spinning woolen roving	E. M. Titcomb	July 29, 1837
Splint, Surgeon's	B. Welch	Sept. 3, 1850
Spoke-machines, Device for holding pieces in	I. Starks and L. Perrigo	June 13, 1854
Spools, Machine for manufacturing	A. D. Waymoth	July 29, 1856
Spoon-handle, (Design)	G. Sharp	Jan. 5, 1864
Spoons, &c., Buff for polishing. (Reissued October 7, 1856)	L. Boardman	Dec. 15, 1843
Spoons, Making wire-strengthened. (Reissued August 4, 1857)	W. Mix	May 1, 1849
Squares, Machine for figuring carpenter's	N. Wellington and D. J. George	Oct. 18, 1853
Squares, Machine for graduating carpenter's	N. Wellington and D. J. George	Aug. 8, 1854
Stair, Iron	B. F. Miller	Oct. 23, 1849
Stammering, Instrument for the cure of	R. Bates	Sept. 30, 1851
Stamp, Post-marking	M. P. Norton	Aug. 9, 1859
Stamps, Operating steam	W. Ball	May 27, 1856
Steam-boiler	F. P. Dimpfel	July 16, 1850
Steam-boiler	J. Harrison, jr	Oct. 4, 1859
Steam-boiler. (Reissued August 15, 1848)	J. Montgomery	Dec. 26, 1845
Steam-boiler explosion, Apparatus to prevent. (Reissued November 23, 1852)	C. Evans	Apr. 15, 1839
Steam-boiler furnace. (Reissued August 29, 1865)	J. Amory	Apr. 19, 18[illegible]9
Steam-boiler furnace. (Reissued December 2, 1862)	B. Crawford	Jan. 29, 1864
Steam-boiler safety-apparatus. (Reissued August 28, 1860)	T. Clark	Aug. 21, 1847
Steam-boilers, Apparatus for skimming the surface of water in	A. M. Sprague	Mar. 22, 1859

Index of extensions granted by the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Date.
Steam-boilers, Fusible disk in	W. Burnett and J. Absterdam	Feb. 28, 1854
Steam-brake for railway-cars	T. E. Sickels	Mar. 24, 1857
Steam-chests, Connecting side-pipes with	H. R. Dunham	Mar. 20, 1847
Steam-engine, Condensing	C. W. Copeland	June 11, 1841
Steam-generator	A. B. Latta	June 6, 1854
Steam-generator	A. B. Latta	Apr. 10, 1855
Steam-heater for buildings	S. J. Gold	Jan. 29, 1856
Steam-heater for houses	S. J. Gold	Oct. 3, 1854
Steam-pressure gage	T. W. Lane	Feb. 22, 1859
Steam-pressure regulator	A. P. Pitkin	June 14, 1859
Steel direct from the ore, Process of making. (Reissued August 14, 1866, Nos. 2,333 and 2,334.)	G. H. Smith	July 18, 1854
Steel, Making cast	J. Neville	Dec. 9, 1856
Steering-apparatus	J. Reed	June 5, 1849
Steering apparatus, Vessel	G. W. and E. B. Robinson	Sept. 30, 1842
Stone and marble, Machine for sawing	A. H. Tingley	July 18, 1854
Stone-cutting. (Reissued March 4, 1851)	C. Wilson	Mar. 13, 1847
Stone-drilling machine	J. J. Couch	Nov. 23, 1852
Stone-sawing machine	A. T. Merriman	June 21, 1859
Stove	P. Dodge	Feb. 1, 1859
Stove	F. L. Hedenberg	May 7, 1845
Stove	J. H. B. Latrobe	Sept. 5, 1846
Stove. (Reissued December 3, 1861, and February 16, 1864, No. 1,622)	S. B. Sexton	Apr. 19, 1859
Stove	J. G. Widmann	May 10, 1859
Stove, Air-heating. (Reissued September 11, 1855)	J. M. Thatcher	Mar. 23, 1852
Stove, Anthracite-coal	J. L. Mott	July 21, 1835
Stove, Base-burning. (Reissued June 30, 1868, Nos. 3,009 and 3,010)	J. Easterly	Feb. 13, 1855
Stove, Coal	H. Stanley	Jan. 4, 1845
Stove, Cooking. (Reissued August 27, 1850)	D. Buck	May 20, 1839
Stove, Cooking. (Reissued December 27, 1859)	G. F. Filley	June 14, 1853
Stove, Cooking	R. D. Granger	June 13, 1846
Stove, Cooking	H. G. Leonard	May 10, 1859
Stove, Cooking. (Reissued April 24, 1847, and July 31, 1847)	S. Pierce	Dec. 6, 1845
Stove, Cooking. (Reissued May 31, 1864, July 7, 1868, and May 18, 1869, No. 3,452)	P. P. Stewart	Jan. 18, 1859
Stove, Cooking. (Reissued May 17, 1864, and April 7, 1868)	P. P. Stewart	Apr. 12, 1859
Stove, Cooking	C. Wilson	Oct. 10, 1834
Stove, Cooking	C. J. Woolson	Sept. 9, 1845
Stove, Fire-place heating. (Reissued November 12, 1872)	H. R. Robbins	Mar. 29, 1859
Stove, Gas cooking	H. B. Musgrave	Jan. 8, 1856
Stove, Heating	Z. Bosworth	Apr. 6, 1842
Stove, Heating. (Reissued December 3, 1861, February 16, 1864, September 27, 1864, and February 12, 1867, No. 2,476.)	S. B. Sexton	Apr. 19, 1859
Stove-plate, (Design)	C. J. Woolson	Dec. 4, 1860
Stove-register	W. Race	Apr. 4, 1846
Stoves, Molding covers for cook	G. W. Gardner	Feb. 22, 1859
Straw-carrier	W. Pierpont	May 7, 1850
Straw-cutter	D. C. Cumings	Aug. 7, 1855
Straw-cutter	R. Daniels	June 21, 1859
Straw-cutter	R. Daniels	July 2, 1850
Straw-cutter. (Reissued June 26, 1866)	W. Gale	Mar. 7, 1854
Straw-cutter. (Reissued April 3, 1860, October 25, 1864, and November 13, 1866)	W. Gale	Sept. 12, 1854
Straw-cutter	A. S. Macomber	Nov. 5, 1850
Straw-cutter	H. M. Smith	Feb. 20, 1844
Straw-cutters, Feed-roller for	R. Sinclair, jr., and R. F. Maynard.	Nov. 15, 1853
Street sweeping and cleaning machine	J. Whitworth	June 1, 1843
Sugar-cleaning. (Reissued September 29, 1858)	J. Hurd	Oct. 3, 1844
Sugar-cutting machine, Loaf	A. and F. Brown	Mar. 25, 1856
Sugar-pan	A. Stillman	May 16, 1846
Sugar-works. (Reissued March 17, 1857)	N. Rilleaux	Aug. 26, 1843
Surgical instrument	D. Ahl	May 17, 1859
Syringe, Enema. (Reissued April 25, 1865)	C. H. Davidson	Mar. 31, 1857
Syringe, Enema	M. Mattson	Apr. 4, 1854
T.		
Tackle-block. (Reissued September 8, 1863, April 11, 1865, and December 8, 1868)	I. E. Palmer	Nov. 1, 1859
Tacks, Machine for leathering	M. M. and J. C. Rhodes	May 8, 1855
Tailor's shears	R. Heinisch	Sept. 20, 1859
Tan-vat	L. C. England	Dec. 24, 1850
Tap, Screw	W. and R. Foster	Dec. 20, 1859
Tea-kettle	E. Ripley	Mar. 14, 1846
Teeth, Plate for artificial	M. Loomis	May 2, 1854
Telegraph, Electro-magnetic. (Reissued December 10, 1872)	M. G. Farmer	Nov. 15, 1859
Telegraph, Electro-magnetic. (Reissued June 13, 1848)	S. F. B. Morse	Apr. 11, 1846
Telegraph, Magnetic printing. (Reissued September 20, 1859)	R. E. House	Apr. 18, 1846
Telegraph manipulators, Electric	A. F. Park	Aug. 27, 1850
Telegraph, Printing. (Reissued January 25, 1870)	H. N. Baker	Apr. 29, 1856
Telegraphic machine	G. M. Phelps	Nov. 1, 1859
Tenoning-tool, Adjustable	T. J. Knapp	May 15, 1855
Thrashing and cleaning machine, Grain	I. A. and H. A. Pitts	June 29, 1837
Thrashing and winnowing machine, Grain. (Reissued January 15, 1856)	A. Ralston	Feb. 21, 1842
Thread on spools, Machine for winding. (Antedated June 22, 1859)	H. Conant	Dec. 13, 1859
Tills, Alarm attachment for	E. B. White	July 5, 1859
Tire-upsetting machine	C. L. Crowell and R. Smith	May 17, 1859
Tobacco-press	R. Kinsley	Nov. 13, 1855
Tobacco-stems, Coloring and curing	B. Payn	Jan. 18, 1859
Tonguing and grooving machine. (Reissued February 5, 1856)	C. W. Brown	Aug. 14, 1844
Tool-socket	H. Aiken	Dec. 27, 1839
Toy, Elastic	L. P. Porter	Feb. 15, 1859
Tree-nails, Machinery for dressing. (Reissued July 17, 1855)	J. Fitzgerald	Aug. 28, 1849
Truck, Railway	J. F. Rogers	Nov. 27, 1849
Trunk-lock hasp	C. Liebrich	May 2, 1854
Truss-pad	F. M. Butler	July 22, 1850
Truss-spring. (Reissued October 10, 1871)	J. W. Riggs	Jan. 18, 1850
Tubes, Roller for scarfing skelps for lap-welded	J. McCarty	Jan. 31, 1854
Tubes to boilers, Tool for attaching	T. Prosser	Apr. 17, 1849
Tunnel, Submarine. (Reissued March 12, 1867)	J. R. Miller	Aug. 2, 1853

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Invention.	Inventor.	Date.
Turbine wheels, Mode of manufacturing	C. H. Bigelow	May 30, 1854
Turn-table, Railway	J. Myers	May 8, 1837
Turnkey	M. Jinks	Dec. 13, 1853
Turning irregular forms, Machine for	P. S. Beers	Feb. 18, 1851
Turning irregular forms, Machine for	R. Ward	June 28, 1853
Turning or cutting irregular forms, Machine for	N. Gear	Nov. 8, 1853
Type-casting machine	D. Bruce, jr	Nov. 6, 1843
Type-casting machine	D. Bruce	June 7, 1845
Type-composing machinery	W. H. Mitchel	May 16, 1854
Type, Machine for composing and distributing	W. H. Houston	Mar. 31, 1857
Type, Preparing the face of metallic	L. Vander Veer	Aug. 20, 1850
U.		
Umbrella-covers, Hemming and cording	S. C. Blodgett	Jan. 3, 1854
Universal mill. (Extended by act of Congress January 18, 1846)	J. Bogardus	Jan. 18, 1832
Upholstery-springs, Securing	W. Wright	Dec. 16, 1856
V.		
Valve-arrangement for steam-hammers	J. Watt	Dec. 6, 1853
Valve-gear for steam-engines. (Reissued August 27, 1867)	C. H. Brown and C. Burleigh	Jan. 15, 1856
Valve, Governor	B. Fitts	Aug. 9, 1859
Valve, Governor. (Reissued January 10, 1854)	J. and A. Judson	Nov. 5, 1850
Valve of steam-engines, Balancing slide	R. Waddell	June 6, 1854
Valve, Safety. (Reissued July 9, 1867)	H. Waterman	Nov. 15, 1853
Valves in direct-acting steam-engines, Operating. (Reissued July 29, 1856)	W. H. Guild and W. G. Garrison.	Mar. 27, 1855
Valves in direct-action engines, Operating slide. (Reissued September 18, 1866)	G. W. Hubbard and W. E. Conant.	Jan. 9, 1855
Valves in pumping-engines, Operating	H. R. Worthington and W. H. Baker.	Apr. 3, 1849
Valves, Method of opening and closing steam-engine	F. E. Sickels	Oct. 19, 1844
Valves, Method of operating steam	N. W. Wheeler	July 31, 1855
Valves of pumping-engines, Method of operating	L. J. Knowles	Jan. 4, 1859
Valves of steam-engines, Operating	S. R. Wilmot	Feb. 17, 1857
Valves, Operating and lubricating slide	J. Cochrane	Jan. 1, 1856
Vapor apparatus, Benzole	C. Cunningham	Mar. 13, 1855
Vault-cover. (Reissued April 3, 1855)	T. Hyatt	Nov. 12, 1845
Vault-cover. (Reissued April 3, 1855, and extended by act of Congress July 26, 1866)	T. Hyatt	Nov. 12, 1845
Vault-cover, Illuminating	T. Hyatt	Mar. 27, 1855
Vaults, safes, &c., Metallic door for	I. L. Cady	Apr. 29, 1851
Vehicle-coupling	W. H. Saunders	May 27, 1856
Veneer-cutting machine	P. Cook	Feb. 3, 1857
Veneer-cutting machine	C. Hart	Apr. 4, 1854
Veneers from the log, Machine for cutting	J. H. Goodell	Dec. 23, 1856
Veneers, Lathe-attachment for cutting	B. F. Sturtevant	Dec. 27, 1859
Ventilating-furnace	H. Ruttan	Jan. 31, 1851
Vessel for holding liquids	J. Stimpson	Oct. 17, 1854
Vessel, Steam	J. Montgomery	Mar. 1, 1859
Vessels, Constructing gaff of sail	J. Brown	Dec. 31, 1838
Vessels, Supporting the topping-lift and peak-halyard block of sail	W. and S. G. Coleman	Mar. 15, 1853
Vise	C. C. Walworth	Oct. 7, 1856
Vise, Cast-iron	C. Parker	June 20, 1854
Vulcanizing caoutchouc compounds, Process of	L. O. P. Meyer	Dec. 20, 1853
Vulcanizing India rubber and other gums	L. O. P. Meyer	Feb. 28, 1854
W.		
Wagon. (Reissued March 5, 1867)	E. Huson	Dec. 17, 1857
Wagon, Dumping	T. Castor	Aug. 3, 1852
Wagons, Cast seamless thimble-skeins for. (Reissued July 27, 1858, and October 8, 1861, Nos. 1,229 and 1,228.)	A. Leonard	Feb. 24, 1857
Warm and hot bath, Portable. (Extended by act of Congress March 3, 1843)	S. K. Jennings	Jan. 21, 1814
Warp-dressing brush	S. Taylor	May 28, 1842
Wash-board	J. Keech	Oct. 16, 1855
Washing machine, Rag. (Reissued March 25, 1851)	J. Phelps	Nov. 24, 1843
Washing-machine. (Reissued July 30, 1861)	J. Young	Sept. 19, 1848
Watch-cases, Manufacture of	J. Boss	May 3, 1859
Watches in lathes, Securing pinions, &c., of. (Reissued July 8, 1856)	J. M. Bottum	July 15, 1851
Water-closet	W. S. Carr	Aug. 5, 1856
Water-closet basin	W. Boch, sr	Nov. 29, 1859
Water-gage for boilers, Magnetic	G. Faber	Nov. 26, 1845
Water-meter	H. R. Worthington	July 24, 1855
Water pipes, Coating. (Reissued September 5, 1857)	J. Ball	Dec. 15, 1843
Water-trap	J. A. Lowe	Dec. 20, 1859
Water-traps, Molding	J. A. Lowe	Sept. 27, 1859
Water-wheel	L. W. and G. W. Blake	Apr. 21, 1842
Water-wheel. (Reissued September 1, 1863)	N. F. Burnham	Feb. 22, 1859
Water-wheel. (Reissued June 12, 1860, and May 13, 1873)	J. P. Collins	Dec. 6, 1859
Water-wheel	S. Reynolds	Mar. 24, 1857
Water-wheel	R. Rich	July 8, 1842
Water-wheel	T. Rose	Sept. 24, 1850
Water-wheel. (Reissued February 10, 1863)	J. Temple	Feb. 8, 1859
Water-wheel. (Reissued June 30, 1868; extended by act of Congress July 7, 1870)	J. Tyler	July 8, 1856
Water-wheel and steam-engine regulator	N. Scholfield	May 17, 1836
Water-wheel curb	J. Tyler	May 22, 1855
Water-wheel, Percussion and reaction	Z. and A. Parker	Oct. 19, 1829
Weaver's harness, Machine for making	J. S. Winsor	Jan. 2, 1855
Weaver's harness, Wire heddle for	A. Howe and S. S. Grannis	Oct. 11, 1841
Weaver's heddle	J. Senneff	July 18, 1854
Weight raising and lowering machine	E. Morris	July 5, 1845
Wheels to axles, Safety washer for securing	W. Thornley	Sept. 19, 1854
Whiffletree-hook	E. A. Palmer and A. J. Simmons	Sept. 7, 1852
Winch, Direct and counter motion. (Reissued May 2, 1861)	C. Perley	May 29, 1849
Windmill, Self-regulating	A. P. Brown	July 3, 1855
Windlass, Ship's. (Reissued July 31, 1860)	J. Emerson	Apr. 17, 1855
Windlasses, Method of fitting heaving-sockets and heads of	C. Perley	Nov. 13, 1849

Index of extensions granted by the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Date.
Windlasses, Method of operating. (Reissued March 4, 1873)	P. Philip	July 12, 1859
Wire heddles. (Extended by act of Congress February 28, 1867)	J. Senneff	Jan. 13, 1852
Wood, Shaping irregular surfaces in	W. Hale and A. Goodman	July 22, 1845
Wood-splitting machine	J. A. Conover	May 15, 1855
Wooden troughs, Machine for manufacturing	S. T. Field	Feb. 1, 1859
Wooden ware, Machine for cutting out	G. R. Hay	Aug. 9, 1859
Wool and other fibrous substances, Mode of manufacturing. (Reissued July 29, 1836; extended by act of Congress May 30, 1862.)	J. Goulding	Dec. 15, 1826
Wool-burring and cotton-ginning machine. (Reissued July 31, 1849)	M. D. Whipple	Oct. 28, 1840
Wool-combing machine	M. H. Simpson	Mar. 17, 1857
Wrench	W. Baxter	Feb. 12, 1856
Wrench	D. P. Foster	Feb. 15, 1859
Wringing-machine. (Reissued June 28, 1864, November 8, 1864, and April 8, 1865)	J. Allender	Jan. 11, 1859
Wringing machine, Clothes. (Reissued June 28, 1864, and May 14, 1867)	S. A. Bailey	Apr. 5, 1859
Z.		
Zinc-white, Making	J. E. Burrows	Aug. 14, 1855
Zinc-white, Manufacture of	S. T. Jones	Feb. 24, 1852
Zinc-white, Process for making	S. Wetherill	Nov. 13, 1855

ALPHABETICAL LIST OF DISCLAIMERS.

Index of disclaimers filed in the United States Patent Office from 1790 to 1873, inclusive.

Invention.	Inventor.	Residence.	Original date.	Date of filing.
A.				
Alkali, Caustic. (Reissued February 1, 1859)	G. Thompson	East Tarentum, Pa	Oct. 21, 1856	Feb. 23, 1859
Animal-power to machinery, Portable machine for conveying.	J. C. Gentry	Washington, D. C	Dec. 14, 1836	Nov. 4, 1837
Axle box, Railway. (Reissued May 10, 1870)	C. B. Boynton	Saint Paul, Minn	Nov. 12, 1867	Nov. 25, 1870
Axle and gudgeon boxes, Mode of making	I. Babbitt	Boston, Mass	July 17, 1839	Aug. 6, 1840
B.				
Bale tie, Metallic cotton	F. Cook	Saint Landry Parish, La	Mar. 2, 1858	Jan. 31, 1872
Beam and girder, Wrought-iron	A. Pollak	Washington, D. C	June 5, 1855	Aug. 21, 1855
Bedstead-fastening. (Extended)	L. W. Buxton	Nashua, N. H	Apr. 5, 1859	Apr. 1, 1873
Bell-attachment. (Reissued December 15, 1868)	A. E. Taylor	New Britain, Conn	Oct. 23, 1860	June 19, 1872
Benzole, Apparatus for vaporizing. (Reissued November 15, 1864.)	O. P. Drake	Boston, Mass	Aug. 30, 1853	Aug. 29, 1867
Boiler and washing-machine. (Reissued August 22, 1871.)	D. H. Hull	Plantsville, Conn	Apr. 5, 1870	Jan. 13, 1871
Boot-tree	J. Howe	Worcester, Mass	Oct. 24, 1848	June 13, 1861
Boot-tree	J. Howe	Brookfield, Mass	Oct. 24, 1848	Oct. 24, 1862
Bottle, &c., Glass. (Extended)	A. Stone	Philadelphia, Pa	Aug. 7, 1855	....
Bottle-mold	J. L. Mason	New York, N. Y	Nov. 23, 1858	Nov. 23, 1872
Boring-machine. (Reissued September 22, 1868)	L. Stevens	Elmira, N. Y	Dec. 15, 1857	Dec. 15, 1871
Bowl, Wooden	A. Everett	Middlefield, Mass	Sept. 25, 1849	June 26, 1850
Bridge	H. H. Burr	Northumberland, Pa	Apr. 3, 1817	Mar. 31, 1837
Broom-head, Metallic	O. L. Castle	Upper Alton, Ill	Oct. 4, 1864	Feb. 3, 1865
Burner, Argand	W. Blake	Boston, Mass	Aug. 9, 1845	Aug. 5, 1859
C.				
Canal-lock gate. (Extended)	C. W. Williams	Port Jervis, N. Y	Apr. 12, 1859	Apr. 11, 1873
Candle-mold. (Reissued January 22, 1861, and November 14, 1865, and extended.)	W. Humiston	Troy, N. Y	July 24, 1855	July 21, 1869
Car heating and ventilating, Railway	D. H. Dotterer	Philadelphia, Pa	Feb. 25, 1868	Mar. 27, 1868
Car spring, Railway. (Reissued January 6, 1863, and March 17, 1863.)	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859	Feb. 10, 1873
Car spring, Railway. (Reissued January 6, 1863, and March 17, 1869.)	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859	Feb. 15, 1873
Carding-engine. (Extended)	J. Dyson	Philadelphia, Pa	Feb. 20, 1849	Sept. 22, 1864
Carding-engines, Stripping top-flats of. (Reissued March 13, 1866.)	H. Woodman	Saco, Me	July 8, 1856	July 26, 1870
Carding-machine. (Reissued November 17, 1857.)	H. N. Gambrill and S. F. Burgee	Baltimore, Md	Aug. 22, 1854	....
Carriage-brake	E. Slifer	Boonsborough, Md	Jan. 16, 1826	June 20, 1839
Cartridge. (Extended)	G. W. Morse	Baton Rouge, La	June 29, 1858	June 29, 1872
Ceilings, Mode of making fire-proof. (Extended.)	P. Sumner	New York, N. Y	Apr. 25, 1844	July 17, 1858
Cider-mill. (Reissued August 14, 1866)	T. J. Kindleberger	Eaton, Ohio	May 29, 1855	....
Clock-front, (Design)	E. Ingraham	Bristol, Conn	Dec. 22, 1857	Jan. 30, 1864
Condensers, Tube-joint of surface. (Reissued May 8, 1866.)	H. Allen	New York, N. Y	July 20, 1858	July 20, 1872
Corks, Machine for manufacturing	W. R. Crocker	Norwich, Conn	Oct. 30, 1855	Oct. 27, 1869
Croquetries	L. and W. Bradley	Springfield, Mass	May 22, 1866	....
Culinary boiler	J. R. Stafford	Cleveland, Ohio	June 12, 1847	July 13, 1854
Cutting irregular forms, Cutter-head and table-rest for.	J. P. Grosvenor	Lowell, Mass	May 25, 1858	Aug. 19, 1872
D.				
Dough-rolling and cracker-cutting machine. (Reissued May 9, 1848.)	W. R. Nevins	New York, N. Y	Mar. 2, 1836	June 7, 1851
Dyeing-apparatus	E. Brierly	Lowell, Mass	Dec. 11, 1849	Mar. 6, 1852
E.				
Electro-magnetic alarm. (Extended, and reissued June 8, 1858.)	A. R. Pope	Somerville, Mass	June 21, 1853	June 8, 1867
Electro-magnetic signal. (Reissued June 13, 1848.)	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840	May 23, 1854
Electro-magnetic signal. (Reissued June 13, 1848.)	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840	June 14, 1854
Electro-magnetic signal. (Reissued June 13, 1848.)	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840	June 19, 1854
Electro-magnetic signal. (Reissued June 13, 1848.)	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840	June 20, 1854
F.				
Feathers, Cleansing and purifying	G. Reynolds	East Hartford, Conn	Sept. 11, 1835	Sept. 25, 1837
Fence	C. G. Lazear	Norwalk, Ohio	Nov. 27, 1866	....
Fences, Ornamental connection for iron. (Reissued September 6, 1859.)	H. Jenkins	Brooklyn, N. Y	Jan. 13, 1852	Dec. 28, 1865
File-cutting machinery	J. Crum	Ramapo, N. Y	July 1, 1851	....

Index of disclaimers filed in the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Original date.	Date of filing.
Fire-arm	S. Colt	Hartford, Conn	Aug. 29, 1839	Aug. 8, 1853
Fire-arm	A. S. Lyman	New York, N. Y	Feb. 3, 1857	Aug. 15, 1871
Fire-arm, Breech-loading. (Reissued December 21, 1869.)	B. Burton	Brooklyn, N. Y	Dec. 20, 1859	Dec. 4, 1873
Fire-arm, Breech-loading	G. W. Morse	Greenville, S. C	June 8, 1858	June 7, 1872
Fire-engines, Mode of applying water to. (Extended.)	F. Ransom and U. Wenman	New York, N. Y	Feb. 13, 1841	Sept. 25, 1860
Fire-proof chest or safe	B. Sherwood	New York, N. Y	May 8, 1837	May 25, 1843
Flexible tubing for illuminating-gas	W. B. S. Taylor	New York, N. Y	Feb. 21, 1865	Dec. 22, 1870
Flour-packer. (Reissued November 7, 1871, and extended.)	S. Taggart	Indianapolis, Ind	Aug. 2, 1859	July 19, 1873
Fruit and grain mill	W. N. Whiteley, J. Fassler, and O. S. Kelly.	Springfield, Ohio	Dec. 15, 1863	Apr. 20, 1865
Fruit-can. (Reissued June 16, 1868)	W. W. Lyman	West Meriden, Conn	Dec. 28, 1858	Feb. 13, 1869
G.				
Gas generator, Carbonic-acid. (Reissued July 13, 1869.)	J. F. Boynton	Syracuse, N. Y	Oct. 7, 1856	Sept. 2, 1870
Glove	J. F. Mason	Johnstown, N. Y	Nov. 26, 1872	Apr. 4, 1873
Grain-binder	W. W. Snell	Rushford, Minn	Feb. 23, 1869	
Grain-separator or fanning-mill. (Reissued July 23, 1861.)	J. Nash	Janesville, Wis	Sept. 27, 1859	July 6, 1863
Grate bar, Furnace	J. Vandercar	Brooklyn, N. Y	May 24, 1864	Oct. 22, 1867
Grinding and polishing machine	D. Lovejoy and G. F. Butterfield.	Lowell, Mass., and Bellows Falls, Vt.	Oct. 27, 1857	Oct. 19, 1871
Grinding-mill	J. J. Storer and J. D. Whelpley	Boston, Mass	Sept. 30, 1862	Mar. 4, 1870
Gun, Breech-loading	G. W. Morse	Washington, D. C	Oct. 28, 1856	Nov. 27, 1872
Gun, Cane	J. F. Thomas	Ilion, N. Y	Feb. 9, 1858	Jan. 25, 1872
H.				
Harvester. (Reissued May 4, 1858, and April 20, 1869.)	C. Crook	New Hope, Pa	May 5, 1857	Apr. 17, 1871
Harvester. (Reissued January 15, 1861)	J. Gore	Brattleborough, Vt	Dec. 27, 1859	Dec. 15, 1873
Harvester. (Reissued May 17, 1859)	P. Sylla and A. Adams	Elgin, Ill	Sept. 20, 1853	Sept. 17, 1867
Harvester	W. N. Whiteley and J. Fassler	Springfield, Ohio	Feb. 11, 1868	May 25, 1868
Harvester. (Reissued September 27, 1864)	H. Willard and R. Ross	Vergennes, Vt	Nov. 3, 1857	
Harvester-cutter, Lowering and raising. (Reissued May 14, 1867.)	J. F. Barret	North Granville, N. Y	July 10, 1855	
Harvester, Grain. (Reissued July 5, 1864, and extended.)	C. W. and W. W. Marsh	De Kalb, Ill	Aug. 17, 1858	Aug. 13, 1872
Harvester, Grain. (Reissued July 5, 1864, and extended.)	C. W. and W. W. Marsh	De Kalb, Ill	Aug. 17, 1858	Aug. 13, 1872
Harvester, Grass. (Reissued January 1, 1861)	J. S. and D. Lake	Smith's Landing, N. J	July 20, 1852	
Harvester, Grass. (Reissued January 1, 1861)	J. S. and D. Lake	Smith's Landing, N. J	July 20, 1852	
Harvester, Grass. (Reissued January 1, 1861)	J. S. and D. Lake	Smith's Landing, N. J	July 20, 1852	
Harvesting-machine	J. Haines	Pekin, Ill	Mar. 27, 1849	Mar. 9, 1863
Harvesting-machine. (Reissued June 25, 1861, and February 2, 1864.)	W. N. Whiteley	Springfield, Ohio	Nov. 25, 1856	
Harvesting-machine. (Reissued May 17, 1870, and extended.)	M. Young, jr	Frederick, Md	June 28, 1859	June 27, 1873
Harvesting-machine. (Reissued May 17, 1870, and extended.)	M. Young, jr	Frederick, Md	June 28, 1859	June 27, 1873
Hat-bodies, Machinery for manufacturing	L. E. Hopkins	New York, N. Y	Dec. 21, 1852	Sept. 15, 1860
Hay-elevator. (Reissued April 18, 1865)	T. T. Jarrett	Horsham, Pa	May 30, 1854	
Hay-rake, Horse. (Reissued February 28, 1865.)	R. Pratt	Maple Township, Pa	Jan. 8, 1856	
Hay-spreader. (Reissued June 1, 1869)	J. C. Stoddard	Lockport, N. Y	June 28, 1859	June 26, 1873
Heddles, Machine for making wire	A. J. Williams	Utica, N. Y	Sept. 11, 1849	Mar. 6, 1851
Hoe	H. A. Lothrop	Sharon, Mass	Dec. 29, 1857	Jan. 29, 1858
Horse-power	T. D. Burrall and J. F. Axtel	Geneva, N. Y	June 13, 1832	Jan. 29, 1841
Horse-rake. (Reissued December 1, 1868, and extended.)	M. Morgan	Mountville, Pa	Aug. 24, 1858	Aug. 23, 1872
Horse-rake. (Reissued February 16, 1869)	J. J. Squire	De Soto, Mo	Dec. 23, 1856	
Horseshoe-machine. (Reissued March 30, 1869)	W. W. Lewis	Cincinnati, Ohio	Feb. 1, 1859	Feb. 13, 1873
Horseshoes, Machinery for making	H. Burden	Troy, N. Y	June 30, 1857	
I.				
Ice-cutting machine	N. J. Wyeth	Cambridge, Mass	Mar. 18, 1829	Oct. 24, 1840
Iron by blasts of air, Refining. (Reissued February 10, 1863.)	C. Shunk	Canton, Ohio	May 17, 1859	Jan. 30, 1871
Ivory, bone, and wood comb	J. Pratt	Meriden, Conn	Dec. 28, 1830	Apr. 27, 1837
J.				
Jacquard-machine. (Extended)	A. Babbett	Auburn, N. Y	Oct. 18, 1859	Oct. 11, 1873
K.				
Kettles, &c., from disks of metal, Manufacture of.	H. W. Hayden	Waterbury, Conn	Dec. 16, 1851	Dec. 15, 1865
Knitting-machine	T. Bailey	Ballston Spa, N. Y	Nov. 20, 1855	Nov. 6, 1869
Knitting-machine	J. Dalton	Brooklyn, N. Y	Apr. 28, 1868	July 30, 1868
Knitting-machine	J. K. and E. E. Kilbourn	New Britain, Conn., and New Brunswick, N. J.	Feb. 16, 1858	Feb. 10, 1872
Knitting-machine	J. K. and E. E. Kilbourn	New Britain, Conn., and New Brunswick, N. J.	Oct. 12, 1858	Oct. 12, 1872
Knitting machine, Circular. (Reissued October 27, 1863.)	J. Pepper	Lake Village, N. J	Dec. 5, 1854	
Knitting-needle. (Extended)	J. Hibbert	Providence, R. I	Jan. 9, 1849	
L.				
Lamp	M. B. Dyott	Philadelphia, Pa	May 30, 1842	May 13, 1856
Lamp	A. V. H. Webb	New York, N. Y	Feb. 19, 1839	Apr. 15, 1839
Lamp-black, Making	J. G. Mini	Philadelphia, Pa	Aug. 24, 1852	Jan. 19, 1853

Index of disclaimers filed in the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Original date.	Date of filing.
Lamp, Lantern	R. M. Merrill	Chicago, Ill	Sept. 30, 1862	June 9, 1863
Lamp, Vapor. (Reissued September 4, 1860, and extended.)	A. M. Mace	Needham, Mass	June 22, 1858	July 15, 1872
Lantern. (Reissued November 23, 1869)	W. Westlake	Chicago, Ill	Apr. 26, 1864	Apr. 12, 1871
Lasting machine, Boot and shoe. (Reissued January 6, 1863, and extended.)	J. Purinton	Lynn, Mass	Oct. 4, 1859	Sept. 27, 1873
Latch, Thumb	P., E. W., and J. A. Blake	New Haven, Conn	July 21, 1840	Aug. 25, 1840
Leg, Artificial	D. Bly	Rochester, N. Y	Aug. 30, 1859	Oct. 27, 1862
Lever for pressing and raising substances, Compound.	H. G. Guyon	New York, N. Y	July 2, 1836	Nov. 14, 1842
Lock. (Extended, and reissued June 4, 1861)	J. H. Butterworth	Dover, N. J	Apr. 11, 1846	Sept. 14, 1869
Lock	L. F. Munger	Rochester, N. Y	July 14, 1857	
Loom	J. G. Melville and W. Brayshaw	Wetherdville, Md	Apr. 24, 1855	Jan. 21, 1856
Loom	S. T. Thomas	Lawrence, Mass	July 3, 1855	
Loom, Figure-power. (Extended, and reissued September 13, 1853.)	W. Crompton	Taunton, Mass	Nov. 25, 1837	Feb. 13, 1854
Loom, Figure or fancy power. (Extended, and reissued September 13, 1853.)	W. Crompton	Taunton, Mass	Nov. 25, 1837	Aug. 27, 1857
Loom for Brussels carpet. (Reissued September 11, 1849.)	E. B. Bigelow	Boston, Mass	Mar. 20, 1847	Dec. 19, 1860
Loom for weaving corded fabrics. (Extended, and reissued June 18, 1867, and June 30, 1868.)	W. Smith	New York, N. Y	Apr. 5, 1853	May 27, 1872
Loom, Jacquard	E. B. Bigelow	Boston, Mass	Oct. 23, 1849	Sept. 14, 1863
Looms, Picker-motion for power. (Extended)	W. Stearns	Manchester, N. H	July 5, 1859	June 30, 1873
M.				
Mail-bag. (Extended)	T. J. Lamdin	Baltimore, Md	May 10, 1859	May 9, 1873
Marine steam-engine	C. W. Copeland	New York, N. Y	June 11, 1841	June 1, 1855
Millstones, Dressing	S. Golay	Switzerland	Jan. 21, 1868	
Molding and casting apparatus	G. Ross	Newport, Ky	Apr. 10, 1866	Jan. 9, 1873
Molding, Machinery for making. (Reissued January 7, 1851.)	A. T. Serrell	New York, N. Y	May 16, 1848	Mar. 29, 1853
N.				
Nut-machine	S. H. Whittaker	Cincinnati, Ohio	June 9, 1857	Aug. 27, 1859
Nut-machine	S. H. Whittaker	Cincinnati, Ohio	Sept. 22, 1857	Aug. 27, 1859
Nut-machine	S. H. Whittaker	Cincinnati, Ohio	Oct. 19, 1858	Aug. 27, 1859
O.				
Ore-separator	W. O. Bourne	New York, N. Y	June 14, 1859	June 11, 1873
P.				
Packing for steam-engines, Compound hard and soft metal.	A. Fulton	Pittsburgh, Pa	Mar. 26, 1850	Feb. 29, 1864
Packing for stuffing-boxes, &c	J. H. Tuck	Brooklyn, N. Y	June 26, 1855	Feb. 8, 1867
Paper-folding machine. (Reissued July 26, 1870, and extended.)	C. Chambers, jr	Philadelphia, Pa	Oct. 7, 1856	
Paper-folding machine. (Extended)	C. Chambers, jr	Philadelphia, Pa	Apr. 5, 1859	Apr. 4, 1873
Paper-making machine	A. L. and W. Knight and E. F. Condit.	Whippany, N. J	Sept. 25, 1839	May 13, 1847
Paper, &c., Method of dampening	C. A. Waterbury	New York, N. Y	Apr. 27, 1858	Apr. 27, 1872
Paper, &c., Method of dampening. (Extended)	C. A. Waterbury	New York, N. Y	Apr. 27, 1858	Apr. 27, 1872
Paper-pulp, Apparatus for manufacture of. (Reissued July 3, 1860, and August 13, 1867.)	J. B. Palser and G. Howland	Aiken, S. C., and Mechanicsville, N. Y.	June 21, 1859	June 20, 1873
Paper-pulp, Apparatus for manufacture of. (Reissued July 3, 1860, and August 13, 1867.)	J. B. Palser and G. Howland	Aiken, S. C., and Mechanicsville, N. Y.	June 21, 1859	June 20, 1873
Passenger-elevator. (Extended)	O. Tufts	Boston, Mass	Aug. 9, 1859	Aug. 7, 1873
Pavement, Wooden	R. L. Ream	New York, N. Y	Oct. 8, 1867	Mar. 8, 1871
Piles	S. B. Cushing	Providence, R. I	Mar. 23, 1869	Nov. 23, 1870
Piles under water, Applying circular saws for cutting off.	E. E. Cole	Boston, Mass	Sept. 14, 1844	Sept. 19, 1844
Plane-cutter, Rotary	J. Sperry	New York, N. Y	Oct. 12, 1858	Oct. 12, 1872
Planing-machine	J. A. Woodbury	Boston, Mass	Nov. 13, 1855	
Planing-machine. (Reissued April 17, 1860)	S. S. Gray	Boston, Mass	Aug. 22, 1854	July 31, 1868
Planing, tonguing, and grooving, Method of. (Extended.)	W. Woodworth	Hudson, N. Y	Dec. 27, 1828	Jan. 6, 1843
Planing, tonguing, and grooving, Method of. (Extended.)	W. Woodworth	Hudson, N. Y	Dec. 27, 1828	Jan. 13, 1843
Planing, tonguing, and grooving, Method of	W. Woodworth	New York, N. Y	Dec. 27, 1828	Mar. 1, 1838
Planing, tonguing, and grooving, Method of	W. Woodworth	Hudson, N. Y	Dec. 27, 1828	June 8, 1840
Planing, tonguing, and grooving, Method of. (Extended.)	W. Woodworth	Hudson, N. Y	Dec. 27, 1828	July 27, 1844
Plow	B. F. Avery	Louisville, Ky	Jan. 8, 1856	
Plow	J. Buck	Fairfield, Ohio	Dec. 28, 1832	May 7, 1838
Plow. (Extended by act of Congress September 1, 1833.)	J. Wood	Ledyard, N. Y	Sept. 1, 1819	Feb. 24, 1838
Plow. (Extended by act of Congress September 1, 1833.)	J. Wood	Ledyard, N. Y	Sept. 1, 1819	May 26, 1838
Printer's ink-roller. (Reissued November 26, 1867.)	L. Francis and T. W. Lefmate	New York, N. Y	June 21, 1864	Mar. 26, 1870
Printing-press. (Reissued March 22, 1870)	R. M. Hoe	New York, N. Y	Aug. 5, 1856	July 21, 1870
Printing-press. (Reissued March 22, 1870)	R. M. Hoe	New York, N. Y	Aug. 5, 1856	Aug. 19, 1870
Puddler's ball, Rolling and compressing	J. F. Winslow	Troy, N. Y	Dec. 18, 1847	May 10, 1848
Pump	J. Reed	Marshfield, Mass	Apr. 16, 1841	Apr. 11, 1855
Pump, Steam	G. H. Corliss	Providence, R. I	June 2, 1857	
R.				
Railway-frog	J. W. Hoffman	Philadelphia, Pa	Dec. 4, 1849	June 6, 1850
Railway-switch. (Reissued December 17, 1867, and extended.)	G. R. Smith	Ithaca, N. Y	July 20, 1858	July 18, 1872
Railway turn-table	J. Myers	Meredith Village, N. H	May 8, 1837	Apr. 18, 1850
Reaper and mower. (Reissued November 6, 1866, February 12, 1867, and October 22, 1867.)	T. I. Stealey	Middlebourne, W. Va	Dec. 15, 1857	Jan. 26, 1872
Reaping-machine	A. J. Cook	Enon, Ohio	Nov. 20, 1846	Nov. 3, 1860
Reaping-machine	C. H. McCormick	Chicago, Ill	Jan 31, 1845	Nov. 18, 1857
Reaping and mowing machine. (Reissued November 29, 1859, and June 16, 1863.)	J. W. Mulley	Amsterdam, N. Y	Feb. 10, 1857	Feb. 16, 1864
Refrigerator	S. R. Scroggins	Baltimore, Md	Sept. 27, 1870	

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Invention.	Inventor.	Residence.	Original date.	Date of filing.
Rock cutting and drilling machine. (Reissued April 13, 1869.)	W. Plumer	Boston, Mass	Oct. 6, 1857	....
Roofing-composition. (Reissued July 16, 1867)	W. L. Potter	Newark, N. J	Feb. 21, 1865	May 6, 1871
Ruffle, Band	T. Robjohn	New York, N. Y	Sept. 1, 1863	May 8, 1872
Ruffles, Manufacture of	G. B. Arnold	New York, N. Y	May 8, 1860	Dec. 10, 1873
Ruffles, Manufacture of	The Magic Ruffle Company, assignee of G. B. Arnold.	New York, N. Y	May 8, 1860	Dec. 10, 1873
S.				
Saddle tree, Side. (Reissued May 24, 1870)	J. B. Gathright	Louisville, Ky	Feb. 25, 1868	....
Saw machine or bench, Circular	C. P. S. Wardwell	Lake Village, N. H	Mar. 10, 1857	Oct. 30, 1872
Saws, Machine for grinding. (Reissued June 19, 1866.)	E. Andrews	Williamsport, Pa	Dec. 16, 1856	....
Sawing-machine, Re-	R. G. Eunson and J. Myers	Newark, N. J	May 23, 1854	....
Sawing-machine, Re-	R. G. Eunson and J. Myers	Newark, N. J	May 23, 1854	....
Sawing-machine, Re-	J. Myers and R. G. Eunson	New York, N. Y	May 23, 1854	....
Sawing-machine, Re-. (Extended)	J. Myers and R. G. Eunson	New York, N. Y	May 23, 1854	....
Sawing-machine, Re-	J. Myers	New York, N. Y	May 23, 1854	Nov. 30, 1870
Sawing-machines, Feeding lumber to	S. R. Smith	Cincinnati, Ohio	Jan. 20, 1857	....
Scales, Platform	F. M. Strong and T. Ross	Vergennes, Vt	Jan. 15, 1856	....
Seal-lock	J. E. Thomson	Buffalo, N. Y	Sept. 23, 1873	Nov. 1, 1873
Seal-press and metallic box therefor	P. Evens, jr	Cincinnati, Ohio	June 28, 1853	Aug. 24, 1853
Seeding-machine	G. Esterly	Whitewater, Wis	Dec. 22, 1868	....
Seeding-machine	A. Ring	Wiscasset, Me	Feb. 14, 1860	Apr. 3, 1871
Sewing-machine. (Reissued November 24, 1868.)	A. B. Ely	Hackensack, N. J	Jan. 16, 1855	Jan. 15, 1869
Sewing-machine	W. O. Grover and W. E. Baker	New York, N. Y	June 22, 1852	Dec. 29, 1854
Sewing-machine	S. J. Parker	Ithaca, N. Y	Apr. 11, 1854	Mar. 6, 1868
Sewing-machine	T. C. Thompson	Ithaca, N. Y	Mar. 29, 1853	Feb. 16, 1854
Sewing-machine gage. (Reissued September 13, 1864, and January 30, 1866.)	D. Barnum	Jersey City, N. J	Feb. 12, 1861	....
Single-machine	G. Craine	Fairfield, Iowa	Feb. 16, 1858	Feb. 15, 1872
Single-machine. (Reissued October 6, 1863, and extended.)	J. R. Hall	Brunswick, Me	June 22, 1858	June 20, 1872
Shot and shell, Grinding and smoothing	J. Williams	Boston, Mass	Oct. 20, 1863	Feb. 16, 1864
Skate-fastening. (Reissued March 23, 1869)	J. H. Coe and W. B. Sniffen	Stratford, Conn	May 3, 1859	Apr. 30, 1873
Smut-mill and grain-separator. (Extended; reissued November 3, 1863, and January 11, 1870.)	D. Shaw	Cheshire, Ohio	Apr. 6, 1852	Oct. 26, 1870
Soap, Manufacture of	A. Warfield	Alexandria, Va	Mar. 22, 1870	....
Solar camera	D. A. Woodward	Baltimore, Md	Feb. 24, 1857	Feb. 23, 1871
Spades and shovels, Manufacturing	C. Richmond and S. Caswell, jr	Taunton, Mass	Apr. 7, 1831	Feb. 24, 1842
Spark-arrester	W. C. Grimes	York, Pa	Feb. 12, 1842	Mar. 19, 1853
Starch, Manufacture of	O. Jones	City Road, England	Mar. 12, 1841	Apr. 6, 1854
Steam-pressure gage	T. W. Lane	Meredith, N. H	Feb. 22, 1859	Feb. 15, 1873
Steamer and boiler. (Reissued December 13, 1859, October 8, 1872.)	D. R. Prindle	East Bethany, N. Y	Sept. 15, 1859	Sept. 12, 1873
Step-ladder. (Reissued March 22, 1872)	C. G. Udell	Chicago, Ill	June 8, 1869	June 9, 1873
Stove. (Reissued May 14, 1867)	D. G. Littlefield	Albany, N. Y	Dec. 9, 1862	Sept. 9, 1871
Stove. (Reissued December 3, 1861, February 16, 1864, September 27, 1864, February 12, 1867, and extended.)	S. B. Sexton	Baltimore, Md	Apr. 19, 1859	Apr. 18, 1873
Stove. (Reissued December 3, 1861, February 16, 1864, and extended.)	S. B. Sexton	Baltimore, Md	Apr. 19, 1859	Apr. 18, 1873
Stove, Cooking	J. Green	Rochester, N. Y	Aug. 11, 1843	May 8, 1844
Stove, Cooking	J. L. Mott	New York, N. Y	Sept. 19, 1838	Mar. 26, 1846
Stove, Cooking	E. Samson	Pierpont, N. Y	Oct. 10, 1835	June 1, 1837
Stove, Cooking	L. Tilden	Barre, Vt	July 18, 1840	Sept. 15, 1843
Stove, Base-burning	W. C. Durant	West Troy, N. Y	May 28, 1867	May 7, 1872
Stove, Summer and winter cooking	P. P. Stewart	Troy, N. Y	Sept. 12, 1838	Aug. 4, 1847
Stoves, Air-chamber for. (Reissued August 3, 1869.)	E. Hawkes	Troy, N. Y	Apr. 23, 1867	June 2, 1870
Stoves, Applying heat to cooking	J. G. Hathaway	Lancaster, Pa	Dec. 7, 1837	May 1, 1845
Stoves, Double oven for cooking	G. W. and H. Sizer	Springfield, Mass	July 25, 1846	May 29, 1845
Stoves, Regulating draft in	E. Foote	Seneca Falls, N. Y	May 26, 1842	Mar. 9, 1847
Straw-cutter	T. H. Willson	Harrisburgh, Pa	Feb. 23, 1858	....
T.				
Tanning hides	J. R. Innis	Easton, Pa	Mar. 19, 1850	Jan. 24, 1851
Telegraph, Electro-magnetic. (Reissued 1848)	S. F. B. Morse	New York, N. Y	June 20, 1840	Mar. 17, 1854
Telegraph, Electro-magnetic. (Reissued June 13, 1848.)	S. F. B. Morse	Poughkeepsie, N. Y	June 20, 1840	Apr. 20, 1854
Telegraph-instrument	G. Little	Hudson City, N. J	July 28, 1868	Oct. 30, 1868
Thrashing-machine. (Reissued February 16, 1864.)	D. M. Cochran	Richmond, Ind	Sept. 3, 1861	May 23, 1872
Tobacco-press	R. Kinsley	Springfield, Mass	Nov. 13, 1855	....
Tonguing, grooving, and planing flooring for houses, &c., Machine for.	J. McGregor	Milton, N. Y	Aug. 28, 1833	May 10, 1839
Top joint and its connection	C. W. Saladee	Saint Catharine's, Canada	Dec. 19, 1871	Feb. 2, 1872
Trunk-lock	L. Hillebrand	Philadelphia, Pa	Mar. 16, 1869	....
V.				
Vault-cover, Illuminating	G. R. Jackson	Rye, N. Y	Apr. 21, 1857	Jan. 9, 1858
Veneers, Lathe-attachment for cutting	B. F. Sturtevant	West Roxbury, Mass	Dec. 27, 1859	Dec. 26, 1873
Vessel for holding liquids	J. Stimpson	Baltimore, Md	Oct. 17, 1854	Nov. 12, 1858
Violins and other stringed instruments, Construction of.	W. B. Tilton	New York, N. Y	Sept. 2, 1851	Mar. 5, 1852
W.				
Wagon-brake	J. E. Blodgett	Hannibal, N. Y	Mar. 20, 1855	June 8, 1855
Wagon-spring	A. J. Ritter	Rahway, N. J	June 27, 1865	....
Washing-compound	H. K. White	Conneaut Township, Pa	July 14, 1868	....
Water-closet	F. H. Bartholomew	New York, N. Y	Oct. 12, 1858	Oct. 9, 1872
Water-wheel. (Reissued February 10, 1863, and extended.)	J. Temple	Middletown, Ohio	Feb. 8, 1859	Feb. 20, 1873
Weaving corded fabrics. (Extended, and reissued June 18, 1867, and June 30, 1868.)	W. Smith	New York, N. Y	Apr. 5, 1853	Jan. 22, 1870
Wood-splitting machine. (Reissued December 19, 1865.)	W. L. Williams	New York, N. Y	Apr. 14, 1857	Apr. 13, 1871

ALPHABETICAL LIST OF TRADE-MARKS.

Index of trade-marks registered in the United States Patent Office from 1790 to 1873, inclusive.

Invention.	Inventor.	Residence.	Date.	No.
A.				
Advertising-medium	K. Palmer	Richmond, Va	Oct. 24, 1871	500
Agricultural fork	Batcheller Manufacturing Company.	New York, N. Y	Jan. 10, 1871	131
Agricultural fork	F. P. Shumway	Leominster, Mass	Apr. 23, 1872	786
Agricultural implement	Hall & Speer	Pittsburgh, Pa	Jan. 3, 1871	123
Agricultural implement	L. M. Rumsey & Co	Saint Louis, Mo	Nov. 18, 1873	1,535
Agricultural implements	Soule, Kretsinger & Co	Fort Madison, Iowa	Oct. 1, 1872	1,017
Album, Photograph	W. W. Harding	Philadelphia, Pa	Mar. 5, 1872	683-687
Alcohol	C. H. Graves	Boston, Mass	Dec. 12, 1871	575
Ale and winter-beverage, Ginger	A. Carson and W. Lemon	Hartford, Conn	Feb. 14, 1871	159
Ale, Ginger	Vincent, Hathway & Co	Boston, Mass	July 2, 1872	883
Ale, seltzer, champagne-cider, soda-water, &c., Ginger.	Berlin Mineral-Water Company	Boston, Mass	July 29, 1873	1,383
Alpaca	W. R. Lewis	New York, N. Y	Aug. 26, 1873	1,428
Alpaca	W. I. Peake	New York, N. Y	May 16, 1871	259
Alpaca and mohair	Moore, Tingue & Co	New York, N. Y	Aug. 12, 1873	1,405
Alpaca dress-goods, Black	Bowen, Hunt & Winslow	Chicago, Ill	Nov. 22, 1870	66
Ammoniate, Concentrated	Narassa Phosphate Company	New York, N. Y	Feb. 20, 1872	665
Annatto	L. E. Ransom	New York, N. Y	Nov. 26, 1872	1,073
Apparel for protecting lungs, &c., Wearing	P. Lear	Boston, Mass	Dec. 5, 1871	569
Artist's material	C. P. Staab	New York, N. Y	Jan. 2, 1872	621
Atomizer for perfuming, &c	T. J. Holmes	Boston, Mass	Oct. 17, 1871	480
Ax	Biddle Hardware Company	Philadelphia, Pa	July 23, 1872	923
Ax	The Douglas Ax-Manufacturing Company.	Douglass, Mass	May 30, 1871	302-304
Ax	C. Gerber & Co	Toledo, Ohio	Dec. 19, 1871	593
Ax	J. W. Meyer	Saint Louis, Mo	Nov. 1, 1870	43
Ax	The Underhill Edge-Tool Company.	Nashua, N. H	May 28, 1872	840
Ax and hatchet	The Collins Company	Collinsville, Conn	Feb. 11, 1873	1,126
Ax and other tools	The Collins Company	Collinsville, Conn	June 17, 1873	1,328
Ax, Chopping	Boetticher, Kellogg & Co	Evansville, Ind	Dec. 6, 1870	83
Axle-grease	The Palm Oil Axle-Grease Company.	Charleston, S. C	Sept. 2, 1873	1,437
B.				
Badge, medal, shirt-stud, &c	H. Taplin	Lowell, Mass	Apr. 2, 1872	732-733
Baking-powder	B. T. Babbitt	New York, N. Y	Nov. 18, 1873	1,529
Baking-powder	G. F. Gantz	New York, N. Y	May 14, 1872	813
Baking-powder	W. N. Hedges	Springfield, Ohio	June 6, 1871	309
Baking-powder	Jewett, Sherman & Co	Milwaukee, Wis	Dec. 31, 1872	1,098
Baking-powder	J. H. Lippincott	Pittsburgh, Pa	Apr. 8, 1873	1,203
Baking-powder	Mooy Brothers	Indianapolis, Ind	Feb. 25, 1873	1,148
Baking-powder	Royal Baking-Powder Company	New York, N. Y	Oct. 14, 1873	1,495
Baking-powder	Steele & Price	Chicago, Ill	Dec. 17, 1872	1,085
Baking powder	Thompson & Steele	Chicago, Ill	Dec. 6, 1870	95
Baking-powder	Trentman, Monning & Son	Fort Wayne, Ind	Oct. 1, 1872	1,018
Baking and roasting apparatus	T. J. T. Cummings	Fort Wayne, Ind	Apr. 30, 1872	793
Bale band and tie, Cotton	J. J. McComb	Liverpool, England	Feb. 21, 1871	171
Bale tie, Cotton	J. J. McComb	Liverpool, England	June 6, 1871	314
Balm	D. Barnes	Brooklyn, N. Y	May 2, 1871	232
Bank-check	J. W. McKennan	Philadelphia, Pa	Sept. 3, 1872	981
Bank-checks, Chemical test and detector for	J. W. McKennan	Philadelphia, Pa	May 28, 1872	836
Base-ball	Reck & Snyder	New York, N. Y	Nov. 1, 1870	46
Beer	B. Bates	Baltimore, Md	Feb. 28, 1871	176
Beer	B. Bates	Baltimore, Md	May 23, 1871	268
Beer	F. E. Lester	Troy, N. Y	Oct. 17, 1871	483
Beer, Pine-apple	Q. A. Hooper	Attleborough, Mass	Nov. 14, 1871	533
Beer, Small	J. N. Hammond	Wayland, Mass	May 21, 1872	823
Beer, Small or root	S. F. Stowe	Providence, R. I	July 29, 1873	1,391
Beer, Tamarind	W. H. Goss	Boston, Mass	June 4, 1872	848
Beer, Tonic	B. Bates	Baltimore, Md	Oct. 1, 1872	1,010
Beer, Tonic or cream	C. L. Thompson	Baltimore, Md	Apr. 23, 1872	789
Bell	E. A. and G. R. Meneely	West Troy, N. Y	June 20, 1871	335
Beverage	S. F. Stowe	Providence, R. I	June 3, 1873	1,298
Beverage	A. S. Taylor	San Francisco, Cal	June 25, 1872	872
Beverage	E. J. Williamson	Saint Louis, Mo	July 25, 1871	401
Bible	A. J. Holman	Philadelphia, Pa	Jan. 2, 1872	612
Billiard-cushion	H. W. Collender	New York, N. Y	May 2, 1871	236
Billiard-table	Kavanagh & Decker	New York, N. Y	Nov. 14, 1871	536
Billiard-table	Phelan & Collender	New York, N. Y	May 2, 1871	242
Biscuit and crackers	J. B. Kupfer	Kenosha, Wis	June 11, 1872	856
Bitters	J. Cleve	Boston, Mass	Apr. 8, 1873	1,204
Bitters	W. H. Knoepfel	New York, N. Y	Jan. 28, 1873	1,112
Blacking	C. H. Young & Co	Boston, Mass	Nov. 7, 1871	526
Blacking and leather-dressing	B. F. Brown & Co	Boston, Mass	Aug. 1, 1871	403-405
Blacking, Boot and shoe	L. Amson & Co	New York, N. Y	Oct. 14, 1873	1,488
Blacking or grease for shoes, &c	L. Amson & Co	New York, N. Y	Oct. 14, 1873	1,489
Blacking, Shoe	C. H. Young & Co	Boston, Mass	Feb. 27, 1872	680
Blanket, Horse	S. W. Baker	Providence, R. I	Apr. 30, 1872	791
Blasting squib and fuse	S. H. Daddow	Saint Clair, Pa	Jan. 21, 1873	1,103
Bluing	H. Sawyer	Chelsea, Mass	Apr. 29, 1873	1,242
Bluing, Laundry	P. D. Viele	Rochester, N. Y	Aug. 29, 1871	438
Bobbin, Quill	D. Bass, jr	Woonsocket, R. I	July 15, 1873	1,362
Bone, horn, hard rubber, &c., Goods made of a composition substitute for.	Greanelle Manufacturing Company.	New York, N. Y	Dec. 16, 1873	1,574

Index of trade-marks registered in the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Book	D. C. Cutler	Carthage, Ill	June 10, 1873	1,309
Book, Blank	J. E. Tilton & Co	Boston, Mass	Apr. 2, 1872	734
Book, map, &c., School	University Publishing Company.	New York, N. Y	June 18, 1872	868
Boot	J. H. Walker	Worcester, Mass	July 23, 1872	932
Boot and shoe	J. W. Adams	Indianapolis, Ind	Dec. 26, 1871	600
Boot and shoe	H. H. Bigelow	Worcester, Mass	June 17, 1873	1,319
Boot and shoe	Burt & Mears	New York, N. Y	Feb. 18, 1873	1,141
Boot and shoe	H. B. Edgerly	Farmington, N. H	Jan. 2, 1872	610
Boot and shoe	T. Emerson's Sons	Wakefield, Mass	Apr. 1, 1873	1,188-1,189
Boot and shoe	Francis & Mallon	Boston, Mass	Dec. 5, 1871	565
Boot and shoe	Friedman Brothers	Memphis, Tenn., and Boston, Mass	July 2, 1872	878-880
Boot and shoe	C. B. Gay	Syracuse, N. Y	Apr. 23, 1872	782
Boot and shoe	C. Merritt	South Weymouth, Mass	Feb. 4, 1873	1,119
Boot and shoe	T. W. Seaverns, jr	West Roxbury, Mass	Mar. 11, 1873	1,164
Boot and shoe	E. Townsend	Boston, Mass	Jan. 17, 1871	140
Boot and shoe	H. E. Townsend	Boston, Mass	May 16, 1871	264-265
Boot and shoe	The Ventilating Water-Proof Shoe Company.	Boston, Mass	Dec. 12, 1871	583-584
Boot and shoe	J. H. Walker	Worcester, Mass	May 23, 1871	288
Boot and shoe	P. Ware, jr	Boston, Mass	Oct. 15, 1872	1,033
Boot and shoe peg	Kearsarge Peg Company	Andover, N. H	Sept. 23, 1873	1,466-1,467
Boot, Back-seamed	I. Hall	Boston, Mass	Nov. 26, 1872	1,070
Boot, Gentleman's	Clement, Colburn & Co	Boston, Mass	Nov. 7, 1871	516
Boot, India-rubber	The L. Candee & Co	New Haven, Conn	Oct. 14, 1873	1,498
Boot, Men's	Clement, Colburn & Co	Boston, Mass	Mar. 12, 1872	695
Boot or shoe	F. Winslow and J. W. Rogers	Boston, Mass	Jan. 30, 1872	643
Boots, Removable top for riding	C. H. Colburn	Milford, Mass	Apr. 16, 1872	766
Bottle cap, Brandy	Cazade & Crooks	New York, N. Y	Sept. 17, 1872	993
Bottle for brandy	Cazade & Crooks	New York, N. Y	Apr. 29, 1873	1,234
Bottle of brandy	Cazade & Crooks	New York, N. Y	Apr. 8, 1873	1,200
Bottle of brandy	H. Imhorst	New York, N. Y	July 22, 1873	1,376
Bottles of cordial, &c., Cap of	Cazade & Crooks	New York, N. Y	May 6, 1873	1,244
Braid, gimp, fringe, trimming, &c	T. Kohn	Hartford, Conn	May 27, 1873	1,283
Brandy	M. Doherty & Co	Boston, Mass	Sept. 30, 1873	1,479
Brandy	J. Hennessy & Co	Cognac, France	June 11, 1872	854-855
Brandy	Ives, Beecher & Co	New York, N. Y	Aug. 22, 1871	429
Brandy	Ives, Beecher & Co	New York, N. Y	Nov. 21, 1871	547-549
Brandy	Renauld, François, & Co	New York, N. Y	Nov. 5, 1872	1,052
Brandy, Blackberry	J. A. Jackson & Co	Saint Louis, Mo	June 17, 1873	1,325
Bread	J. F. Kohler	New York, N. Y	Nov. 14, 1871	537
Bread	J. F. Kohler	New York, N. Y	Feb. 13, 1872	653
Bread	MacWilliams & Pieper	Baltimore, Md	Mar. 4, 1873	1,158
Brick, Polishing	T. T. Tuscombe & Co	Saint Louis, Mo	May 7, 1872	805
Brick, tile, &c., Fire	McConnell, Porter & Co	Sciotoville, Ohio	Oct. 31, 1871	510
Bridle-bit and stirrup	K. Brodhurst	Blosewich, England	Aug. 13, 1872	946
Bronze alloy	Phosphor Bronze Company	Pittsburgh, Pa	Mar. 12, 1872	698
Bronze alloy for axles, &c., Bearings of	Phosphor Bronze Company	Pittsburgh, Pa	Mar. 12, 1872	699
Broom	R. W. English	Buffalo, N. Y	Dec. 6, 1870	86
Broom and brush	L. Y. Gardiner & Co	Amsterdam, N. Y	Dec. 13, 1870	100
Broom, XX	R. W. English	Buffalo, N. Y	Dec. 6, 1870	88
Broom, XXX	R. W. English	Buffalo, N. Y	Dec. 6, 1870	87
Brush	J. M. C. Martin	New York, N. Y	Oct. 14, 1873	1,493
Brush, Palm-leaf	J. L. Sheriff	Dedham, Mass	June 20, 1871	344
Brush, Toilet, &c	Thomson, Langdon & Co	New York, N. Y	May 20, 1873	1,277
Brush, Tooth	S. L. Mintzer	Philadelphia, Pa	June 3, 1873	1,290
Brush, Varnish	E. Clinton & Co	Philadelphia, Pa	June 24, 1873	1,330
Brush, Varnish, &c	C. C. Thum	Philadelphia, Pa	Sept. 2, 1873	1,438
Burner, Gas	A. H. Wood	Boston, Mass	Apr. 29, 1873	1,243
Burner, Lamp	Bristol Brass and Clock Company.	Bristol, Conn	Sept. 24, 1872	1,001
Burning-fluid	G. M. Danforth	New York, N. Y	Dec. 27, 1870	113
Burning-fluid	W. H. Read	Indianapolis, Ind	Mar. 19, 1872	708
Burning-fluid	R. G. Richards	New York, N. Y	Mar. 21, 1871	204
Burning-fluid	B. A. Rose	Urbana, Ohio	May 23, 1871	282
Burning-fluid	P. Weisenberger	Pittsburgh, Pa	Dec. 27, 1870	121
Burning-fluid and liniment	Nettlefield & Smith	Burr Oak, Mich	Dec. 16, 1873	1,575
Burning-fluid, Non-explosive	R. F. Danforth	Cleveland, Ohio	Nov. 22, 1870	67
Butter	S. Straight & Son	Hudson, Ohio	July 29, 1873	1,387
C.				
Calico-print	Coffin & Altemus	Philadelphia, Pa	Feb. 20, 1872	663
Candle	G. Delano	New Bedford, Mass	May 6, 1873	1,251
Candle	C. Harkness	Cincinnati, Ohio	July 25, 1871	390
Candle	Proctor & Gamble	Cincinnati, Ohio	Apr. 1, 1873	1,192
Candy	F. M. Whitelau	Cincinnati, Ohio	June 6, 1871	320
Candy, Prize	E. Myers & Co	Cincinnati, Ohio	Nov. 1, 1870	44
Candy, troches, and sirup, Sea-moss	W. J. Rand, jr	Brooklyn, N. Y	Jan. 3, 1871	125
Canned and preserved vegetables, &c	Sleeper, Wells & Aldrich	Burlington, N. J	Mar. 12, 1872	700-701
Canned goods	J. F. Mallory & Co	Baltimore, Md	Dec. 24, 1872	1,093
Car and other bearings, Composition	Jackson & Wiley	Detroit, Mich	July 18, 1871	378
Car-wheel	W. G. Hamilton	New York, N. Y	Oct. 25, 1870	8
Card, Playing	V. E. Manger	New York, N. Y	Nov. 28, 1871	556
Card, Playing	V. E. Manger	New York, N. Y	Sept. 3, 1872	980
Card, Playing	V. E. Manger	New York, N. Y	Apr. 1, 1873	1,191
Card, Playing	C. K. Pevey	Worcester, Mass	July 1, 1873	1,341
Card, Playing	C. K. Pevey	Worcester, Mass	July 1, 1873	1,348-1,349
Card-stock, Wedding and visiting papers, &c	Bergen & Bainbridge	New York, N. Y	May 28, 1872	833
Carpet	J. Dornan	Philadelphia, Pa	Dec. 9, 1873	1,571
Carpet	Lowell Manufacturing Company.	Lowell, Mass	Jan. 10, 1871	132
Carpet, drugget, rug, and mat	J. E. Hughes	Kidderminster, England	Aug. 26, 1873	1,420
Carpet-lining	G. W. Chipman	Boston, Mass	May 30, 1871	294
Carriage-bolt	Plumb & Burdict	Buffalo, N. Y	Aug. 20, 1872	967
Carriage-maker's hardware	H. D. Smith & Co	Plantsville, Conn	Nov. 7, 1871	521
Cassimere	Calinghan & Bro	Philadelphia, Pa	Apr. 18, 1871	232

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Invention.	Inventor.	Residence.	Date.	No.
Cement	Black Diamond Cement Company.	Louisville, Ky	June 18, 1872	861
Cement	Falls City Cement Company	Louisville, Ky	June 18, 1872	862
Cement	Wendt & Rammelsberg	New York, N. Y	Dec. 12, 1871	585
Cement, Akron	The Union Akron Cement Company.	Buffalo, N. Y	Jan. 17, 1871	141
Cement, Hydraulic	The Hydraulic Cement Company.	Akron, N. Y	June 20, 1871	347
Cement, Hydraulic	Utica Cement Company	Chicago, Ill	Aug. 22, 1871	433
Chairs, settees, and cars, Seat for	Gardner Manufacturing Company.	Glen Gardner, N. J., and New York, N. Y.	June 3, 1873	1, 289
Champagne	W. Chillingworth & Son	London, England	Oct. 21, 1873	1, 506
Champagne wine	F. De Bary & Co	New York, N. Y	Jan. 7, 1873	1, 069
Champagne wine	Renauld, François & Co	New York, N. Y	Nov. 5, 1872	1, 051
Chart and pattern for cutting dresses	W. Cornwell	Philadelphia, Pa	Feb. 11, 1873	1, 123
Chart, School	F. G. Johnson	New York, N. Y	Nov. 1, 1870	40
Cheese	Webb, Turner & Co	New York, N. Y	Sept. 30, 1873	1, 480
Chemical compound	J. W. Chisholm	New York, N. Y	Mar. 4, 1873	1, 157
Chemical, pharmaceutical, and galenic preparations.	F. E. Suire & Co	Cincinnati, Ohio	July 18, 1871	383
Cherry-juice	Mayer Bros. & Co	New York, N. Y	Oct. 22, 1872	1, 038
Chiccory	Blume & Co	New York, N. Y	Feb. 28, 1871	177
Chocolate	H. L. Pierce	Boston, Mass	July 2, 1872	882
Chuck, Lathe	E. Horton & Son	Windsor Locks, Conn	Nov. 7, 1871	518
Churn	P. Blanchard's Sons	Concord, N. H	May 16, 1871	254
Cigar	F. De Bary & Co	New York, N. Y	Jan. 21, 1873	1, 105
Cigar	F. De Bary & Co	New York, N. Y	Jan. 28, 1873	1, 109
Cigar	G. Falk & Bro	New York, N. Y	Aug. 13, 1872	952
Cigar	Gaullieur & André	Key West, Fla	July 23, 1872	927
Cigar	Gilmor & Gibson	Baltimore, Md	Dec. 30, 1873	1, 588
Cigar	Goldsmith Bros. & Benjamin	Chicago, Ill	Sept. 16, 1873	1, 453
Cigar	Haworth & Williams	Newark, N. J	Oct. 22, 1872	1, 037
Cigar	J. Heller	Chicago, Ill	Sept. 16, 1873	1, 454
Cigar	D. Hirsch & Co	New York, N. Y	Nov. 1, 1870	22–35
Cigar	S. Jacoby & Co	New York, N. Y	Jan. 28, 1873	1, 111
Cigar	Kerbs & Spiess	New York, N. Y	Mar. 25, 1873	1, 179–1, 180
Cigar	E. Parodi	Key West, Fla	May 14, 1872	815
Cigar	P. Pohalski & Co	New York, N. Y	Dec. 12, 1871	581
Cigar	Rawson & Philbrick	Key West, Fla	Dec. 6, 1870	92
Cigar	W. S. Roose	Washington, D. C	Nov. 29, 1870	80–81
Cigar	T. Russell	Washington, D. C	Oct. 1, 1872	1, 016
Cigar	Schmidlapp Bros	Memphis, Tenn	June 6, 1871	316
Cigar	Seidenberg & Co	New York, N. Y	Apr. 22, 1873	1, 227
Cigar	T. B. Slingerland	Rome, N. Y	Nov. 25, 1873	1, 541
Cigar	J. C. Smith & Son	Baltimore, Md	Apr. 25, 1871	230
Cigar	Smith, Crosby & Co	New York, N. Y	May 2, 1871	244
Cigar	Straiton, Schmitt & Storm	New York, N. Y	Jan. 3, 1871	126
Cigar	M. J. Swank	Philadelphia, Pa	Aug. 6, 1872	942
Cigar	E. W. Woodbury	New York, N. Y	July 16, 1872	900
Cigars and tobacco	The Consolidated Tobacco Company.	Gilroy, Cal	Nov. 25, 1873	1, 542
Cigars, cheroots, and cigarettes	F. S. Kinney	New York, N. Y	July 15, 1873	1, 365
Cigars, snuff, and tobacco	L. Palmer	New York, N. Y	Dec. 13, 1870	106
Cigars, tobacco, and snuff	Batchelor Bros	Philadelphia, Pa	May 27, 1873	1, 278
Cigars, tobacco, and snuff	J. C. Partridge & Co	Chicago, Ill	Nov. 15, 1870	65
Cleaning-powder	J. A. Wright & Co	Keene, N. H	Sept. 2, 1873	1, 441
Cleansing-powder	M. H. M. Magaw	Plainfield, N. J	June 18, 1872	865
Clock	E. Ingraham & Co	Bristol, Conn	Dec. 12, 1871	576–579
Clock-spring	W. Barns	Bristol, Conn	Oct. 17, 1871	474
Cloth and paper	The Manhattan Cloth and Paper Company.	New York, N. Y., and Newark, N. J.	Mar. 5, 1872	688
Cloth, Bleached long	Coffin & Altemus	Philadelphia, Pa	Mar. 5, 1872	681–682
Cloth, Bleached long	Coffin & Altemus	Philadelphia, Pa	Mar. 19, 1872	705
Cloth-cutting machine	I. Fenno & Co	Boston, Mass	Sept. 17, 1872	995
Cloth, Gray	L. Pomeroy's Sons	Pittsfield, Mass	Mar. 14, 1871	196
Cloth or men's wear	E. T. Steel & Co	Philadelphia, Pa	Jan. 13, 1871	147
Clothes-wringer	Bailey Washing and Wringing Machine Company.	Woonsocket, R. I	Feb. 18, 1873	1, 130–1, 131
Clothes-wringer	Queen City Wringer Company.	Cincinnati, Ohio	Oct. 14, 1873	1, 494
Clothes-wringer	A. H. Spencer	Providence, R. I	June 13, 1871	326
Clothes-wringing machine	Hailey, Morse & Co	Boston, Mass	Nov. 11, 1873	1, 523
Clothing	O. S. Baldwin	New York, N. Y	June 27, 1871	351
Clothing	Willoughby, Hill & Co	Boston, Mass., and Chicago, Ill.	Apr. 2, 1872	735
Clothing and furnishing goods, Men's	J. Seligman	Pontiac, Mich	May 21, 1872	828
Clothing for women and children	M. Newman and B. Liebman	New York, N. Y	Sept. 23, 1873	1, 469
Clothing, shirt, &c	Devlin & Co	New York, N. Y	Apr. 23, 1872	780
Coal	G. R. Tuttle	Cleveland, Ohio	May 14, 1872	818
Coal, Retail	E. Branson	Philadelphia, Pa	Oct. 25, 1870	3
Coating, Composition	D. B. Crockett	New Haven, Conn	Feb. 14, 1871	160
Coffee	J. Ashcroft	Brooklyn, N. Y	Nov. 28, 1871	553
Coffee	Stickney & Poor	Boston, Mass	Feb. 27, 1872	677
Coffee, Essence of	Butler, Earhart & Co	Columbus, Ohio	Aug. 22, 1871	425
Coffee, Ground	Hawley, Bowen & Co	San Francisco, Cal	Dec. 30, 1873	1, 590
Coffee-pot	J. Ashcroft	Brooklyn, N. Y	Jan. 2, 1872	608
Coffee, Roasted	Dilworth Brothers	Pittsburgh, Pa	July 15, 1873	1, 363
Coffee, Roasted	Zoller & Little	Baltimore, Md	Dec. 17, 1872	1, 088
Coffee, spice, &c	Chase & Co	Buffalo, N. Y	July 16, 1872	891
Coffee, spice, &c	W. H. Crawford & Co	Baltimore, Md	Mar. 4, 1873	1, 153
Coffee, spice, &c	J. M. Earle	New York, N. Y	Nov. 12, 1872	1, 055
Coffee, spice, baking-powder, &c	E. H. Garbutt & Co	New York, N. Y	May 7, 1872	803
Coffee, spice, mustard, and cream-tartar	Butler, Earhart & Co	Columbus, Ohio	Oct. 3, 1871	455
Collar, cuff, &c., Lady's	E. Husson	New York, N. Y	Oct. 17, 1871	481
Colors	B. Weber	New York, N. Y	Dec. 19, 1871	597
Colors and paints	A. T. Stevens	New York, N. Y	July 16, 1872	907
Colors, dye-stuffs, chemicals, &c	F. Bredt & Co	New York, N. Y	May 13, 1873	1, 263
Confectionery	H. Chaurant & Co	New Orleans, La	Dec. 3, 1872	1, 077

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Invention.	Inventor.	Residence.	Date.	No.
Confectionery and chocolate	H. Maillard	New York, N. Y	June 25, 1872	870
Copying-press	A. Le Clercq	New York, N. Y	Apr. 2, 1872	731
Cord, fringe, ribbon, &c	Silbermann, Heinemann & Co	New York, N. Y	Feb 21, 1871	172
Cord, Solid braided	The Silver Lake Company	Newtonville, Mass	Aug. 5, 1873	1,400
Cord, Welting	J. Atwell, jr	New York, N. Y	Feb. 20, 1872	662
Cordials, &c., Bottles of	Cazade & Crooks	New York, N. Y	May 6, 1873	1,246–1,247
Cordials, &c., Package of	Cazade & Crooks	New York, N. Y	May 6, 1873	1,245
Corn and wheat mills	H. D. Coleman	New Orleans, La	July 16, 1872	892
Corn-knife	The Greenwoods Scythe Company.	New Hartford, Conn	Apr. 16, 1872	774
Corn-meal, Kiln-dried	Kipe & Townsend	Chadd's Ford, Pa	Apr. 15, 1873	1,213
Corn, Sugar	J. P. Baxter	Portland, Me	July 18, 1871	375
Corset	M. Cohn & Co.	New York, N. Y	Nov. 14, 1871	529
Corset	Globe Collar Company	New York, N. Y	Aug. 13, 1872	953
Corset	T. F. Hamilton	New Haven, Conn	Oct. 15, 1872	1,029
Corset	Ottenheimer, Rothschild & Co	New York, N. Y	Apr. 9, 1872	750–762
Corset	Ottenheimer, Rothschild & Co	New York, N. Y	Sept. 24, 1872	1,008
Corset	Ottenheimer, Rothschild & Co	New York, N. Y	Oct. 29, 1872	1,043–1,045
Corset	Thomson Langdon & Co	New York, N. Y	Nov. 14, 1871	541–542
Corset	Thomas, Langdon & Co	New York, N. Y	Jan. 28, 1873	1,114
Corset, skirt, &c	Thomson, Langdon & Co	New York, N. Y	Nov. 14, 1871	539
Corset-spring, Steel	F. L. Egbert	Waterbury, Conn., and New York, N. Y.	Dec. 9, 1873	1,567
Corset-spring, Steel	F. L. Egbert	New York, N. Y	Oct. 14, 1873	1,491
Cosmetic	Miller Brothers	New York, N. Y	Apr. 22, 1873	1,224
Cosmetic	H. Schroeder	Quincy, Ill	June 6, 1871	317
Cosmetic	W. T. Wenzell	San Francisco, Cal	June 24, 1873	1,334
Cosmetic, pomade, and perfumery	Holbrook & Merrill	Boston, Mass	Jan. 17, 1871	135
Cotton and woolen fabric	Hamilton Woolen Company	Southbridge, Mass	July 16, 1872	916–917
Cotton-gin	The Brown Cotton Gin Company.	New London, Conn	Dec. 9, 1873	1,570
Cotton-gin	W. G. Clemons	Columbus, Ga	Nov. 26, 1872	1,067
Cotton-gin	The Gullett Gin Manufacturing Company.	Amite City, La	Aug. 19, 1873	1,410
Cotton goods	The Harris Manufacturing Company.	Coventry, R. I	Apr. 18, 1871	225
Cotton goods	B. B. & R. Knight	Providence, R. I	Apr. 11, 1871	220
Cotton-seed	H. J. Holmes	Atlanta, Ga	Nov. 1, 1870	37
Cotton, woolen, and other fabrics	Hamilton Woolen Company	Son hbridge, Mass	Mar. 26, 1872	716
Cough-balsam	F. W. Kinsman	Augusta, Me	Mar. 18, 1873	1,171
Cracker	W. N. Monies and L. Pughe	Scranton, Pa	July 18, 1871	382
Crackers and biscuit	J. B. Kupfer	Kenosha, Wis	Aug. 6, 1872	941
Crackers, Sponge or butter	J. Fox	Lansingburgh, N. Y	May 6, 1873	1,248
Cranberries, Package containing	N. H. Bishop	Manahawken, N. J	July 8, 1873	1,352
Cundurango	Bliss, Keene & Co	New York, N. Y	Nov. 7, 1871	514–515
Curtain-fixture	S. S. Putnam	Boston, Mass	Aug. 15, 1871	422
Cutlery	N. Joseph	San Francisco, Cal	Feb. 25, 1873	1,146
Cutlery	I. T. Meyer & Co	New York, N. Y	Nov. 18, 1873	1,533
Cutlery	R. J. Roberts	New York, N. Y	Dec. 13, 1870	108
Cutlery	F. Ward & Co	Sheffield, England	Apr. 9, 1872	755
Cutlery	G. Wostenholm & Son	Sheffield, England	Feb. 20, 1872	666
Cutlery and surgical instruments	W. Clauberg	Solingen, Prussia	Sept. 24, 1872	1,004
D.				
Detergent powder	J. S. Smith	Waverly, N. Y	Nov. 22, 1870	70
Deviled entremets	W. Underwood & Co	Boston, Mass	Nov. 29, 1870	82
Disinfectant, &c	Marcelin, Warren & Co	New York and Brooklyn, N. Y.	Jan. 9, 1872	629
Dress-pattern	The Domestic Sewing-Machine Company.	New York, N. Y	Aug. 12, 1873	1,402
Dress-trimmings	W. I. Peake	New York, N. Y	Dec. 3, 1872	1,079
Dressing, compound	E. R. Millard	Waltham, Mass	Mar. 14, 1871	190
Druggists' goods	Arnold & McNary	New York, N. Y	June 10, 1873	1,299
Druggists' sundries	R. H. Watson	Philadelphia, Pa	May 21, 1872	831
Drugs and medicines	J. Faber	New York, N. Y	Aug. 27, 1872	971
Dry goods	Emery, Ivey & Lee	New York, N. Y	Dec. 2, 1873	1,545
Dry goods	Dale, Ross & Co	Philadelphia, Pa	Oct. 25, 1870	12
Dry goods	A. T. Stewart & Co	New York, N. Y	Apr. 9, 1872	763
Dryer, paint, varnish, &c	G. C. Liszka	Williamsburgh, N. Y	Nov. 18, 1873	1,536
Dye, Aniline	Wells, Richardson & Co	Burlington, Vt	Dec. 23, 1873	1,585
Dyeing and coloring compound	W. H. Place & Co	Providence, R. I	May 9, 1871	252
Dyeing-chemicals	Weeks & Dupee	Boston, Mass	Nov. 7, 1871	525
Dynamite explosive compound	The Giant Powder Company and The Atlantic Giant Powder Company.	San Francisco, Cal	Dec. 23, 1873	1,582
E.				
Edge-tools	Dunn Edge-Tool Company	West Waterville, Me	Oct. 17, 1871	477
Edge-tools and agricultural implements	The Collins Company	Collinsville, Conn	June 4, 1872	849–850
Elastic webbing	J. Twamley	New York, N. Y	June 11, 1872	860
Electroplating without a battery, Gold and silver solution for.	A. B. Morrison	Portland, Me	Nov. 18, 1873	1,534
Emery	Abbott & Howard	Boston, Mass., and New York, N. Y.	Nov. 25, 1873	1,537
Emery	Baeder, Adamson & Co	Philadelphia, Pa	July 16, 1872	890
Emery	Tully & Davenport	New York, N. Y	Jan. 30, 1872	641
Emery-wheel	The Tanite Company	Stroudsburgh, Pa	Oct. 29, 1872	1,047
Emery wheel or block	J. Tyzick	Saint John, Canada	Nov. 12, 1872	1,061
Extracts, &c., Flavoring	Steele & Price	Chicago, Ill	June 10, 1873	1,306
F.				
Fancy and other dry goods	E. Flaxland & Co	Paris, France	Aug. 19, 1873	1,414–1,415
Fancy goods	Weil & Woodleaf	San Francisco, Cal	Aug. 27, 1872	975
Fancy goods for ladies' wear	Cochran, McLean & Co	New York, N. Y	Nov. 12, 1872	1,053
Felting, Non-conducting	The United States and Foreign Salamander Felting Company.	New York, N. Y	Dec. 17, 1872	1,086

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Invention.	Inventor.	Residence.	Date.	No.
Fertilizer	G. Bourne	Baltimore, Md	Feb. 21, 1871	169
Fertilizer	Charleston, S. C., Mining and Manufacturing Company.	Philadelphia, Pa	May 30, 1871	293
Fertilizer	G. Dugdale & Co	Baltimore, Md	Sept. 2, 1873	1,432–1,433
Fertilizer	G. Dugdale & Co	Baltimore, Md	Sept. 2, 1873	1,440
Fertilizer	G. Dugdale & Co	Baltimore, Md	Sept. 30, 1873	1,475–1,476
Fertilizer	Dugdale & Girvin	Baltimore, Md	Dec. 27, 1870	115–116
Fertilizer	T. J. Hand	New York, N. Y	Oct. 17, 1871	478
Fertilizer	J. Horner, jr	Baltimore, Md	Nov. 14, 1871	535
Fertilizer	J. Horner, jr	Baltimore, Md	Dec. 19, 1871	594
Fertilizer	Hunt, Rankin & Lamar	Macon, Ga	July 1, 1873	1,345
Fertilizer	Lorentz & Rittler	Baltimore, Md	Dec. 23, 1873	1,581
Fertilizer	Maryland Fertilizing and Manufacturing Company.	Baltimore, Md	Feb. 6, 1872	645–647
Fertilizer	Smith & Harris	Philadelphia, Pa	May 2, 1871	245
Fertilizer	M. J. Solomons	Savannah, Ga	Aug. 19, 1873	1,411
Fertilizer	Southern Fertilizing Company	Richmond, Va	June 18, 1872	866
Fertilizer	J. A. Tucker	Boston, Mass	May 2, 1871	248
Fertilizer	Walton, Whann & Co	Wilmington, Del	Nov. 22, 1870	75
Fertilizer	Walton, Whann & Co	Wilmington, Del	June 6, 1871	319
Fertilizer, Agricultural	O. Wittichen	Haymarket, Va	Aug. 5, 1873	1,396
Fertilizer, Ammoniated superphosphate	J. M. Rhodes & Co	Baltimore, Md	Dec. 9, 1873	1,569
Fertilizer, Commercial	Walton, Whann & Co	Wilmington, Del	Jan. 30, 1872	642
Fertilizing-compound	J. J. Turner & Co	Baltimore, Md	Oct. 25, 1870	16
Fever and ague cure	H. Van Riper and J. G. Beach	New York, N. Y	Sept. 30, 1873	1,477
File	W. & S. Butcher	Sheffield, England, and New York, N. Y.	Apr. 23, 1872	777
File	Crocker Cutter-Tooth File Company.	Norwich, Conn	Mar. 18, 1873	1,168
File	T. Jowitt & Son	Sheffield, England	Jan. 7, 1873	1,101
File and rasp	G. & H. Barnett	Philadelphia, Pa	May 27, 1873	1,281
File, edge-tool, razor, &c	W. & S. Butcher	Sheffield, England, and New York, N. Y.	Apr. 23, 1872	778
File, rasp, and steel	The Sheffield File Works	Albany, N. Y	July 1, 1873	1,350
Fire-extinguisher	Northwestern Fire-Extinguisher Company.	Chicago, Ill	June 27, 1871	356
Fish	The American Sardine Company.	New York, N. Y	May 27, 1873	1,280
Fish	A. T. Carew	Bay Port, N. Y	Oct. 17, 1871	476
Fish	T. Coit	New York, N. Y	Oct. 25, 1870	4
Fish, Cured or smoked	H. Mayo & Co	Boston, Mass	June 10, 1873	1,305
Fish-line	G. H. Mansfield	Canton, Mass	Oct. 31, 1871	509
Fish, Prepared and preserved	Dodd, Tarr & Co	Gloucester, Mass	Sept. 30, 1873	1,478
Fish, Preserved	The American Club Fish Company.	New York, N. Y	May 23, 1871	285
Fish, Preserved	J. H. Doxsee	Islip, N. Y	June 11, 1872	853
Fish, Preserved	I. C. Mayo	Gloucester, Mass	Jan. 16, 1872	633
Fish, Preserved	Ocean Trout Company	Port Monmouth, N. J	Oct. 28, 1873	1,514
Flour	S. H. Anderson & Co	Palmyra, Mo	May 30, 1871	290
Flour, &c	H. C. Cole & Co	Chester, Ill	May 16, 1871	256
Flour	Empire Mill Company	Saint Louis, Mo	Sept. 24, 1872	1,006
Flour	Farber, McPike & Co	Alton, Ill	July 16, 1872	895
Flour	The Gallego Mills Manufacturing Company.	Richmond, Va	May 13, 1873	1,266
Flour	W. M. Galt	Washington, D. C	Oct. 3, 1871	458
Flour	Haxall, Crenshaw & Co	Richmond, Va	Oct. 28, 1873	1,512–1,513
Flour	Jones, Williams & Faxon	Boston, Mass	Apr. 22, 1873	1,229
Flour	McCutcheon, Gordon & Co	Sparta, Ill	Apr. 9, 1872	747
Flour	A. Nones & Co	New York, N. Y	Apr. 23, 1872	784
Flour	W. H. Tenney & Sons	Georgetown, D. C	Dec. 5, 1871	572
Flour, Attrition	Chicago Attrition Pulverizing Company.	Chicago, Ill	July 9, 1872	884
Flour, Prepared	Hopkins & Co	New York, N. Y	Apr. 29, 1873	1,238
Flue for draft, ventilation, &c	H. R. Farmer	Danville, Va	May 20, 1873	1,270
Food, Cattle	G. Gordon	New York, N. Y., and Montreal, Canada.	Apr. 30, 1872	794
Forks, spoons, and other table-ware	C. B. Rogers & Brothers	Meriden, Conn	July 1, 1873	1,342
Frilling	F. Browett & Co	Coventry, England	Apr. 29, 1873	1,233
Frilling, gimp, ribbon, &c	F. Browett & Co	Coventry, England	Apr. 15, 1873	1,211
Fringe, ribbon, and trimming, Silk	Silbermann, Heinemann & Co	New York, N. Y	Jan. 10, 1871	134
Fruit-jar	The Consolidated Fruit-Jar Company.	New York, N. Y., and New Brunswick, N. J.	June 10, 1873	1,307–1,308
Fruit-jar	J. L. Mason	New York, N. Y	May 23, 1871	276
Frying-pan	S. Smith	New York, N. Y	May 23, 1871	284
Furnishing goods	Fisk, Clark & Flagg	New York, N. Y	Dec. 27, 1870	118
Furnishing goods, Gentlemen's	Fisk, Clark & Flagg	New York, N. Y	May 23, 1871	270–271
Furnishing goods, Gentlemen's	Fisk, Clark & Flagg	New York, N. Y	May 30, 1871	296–297
Furnishing goods, Gentlemen's	A. W. W. Miller	New York, N. Y	May 16, 1871	258
Furnishing goods, Men's	Fisk, Clark & Flagg	New York, N. Y	Sept. 2, 1873	1,434
G.				
Gaiter	T. R. Evans	Philadelphia, Pa	Aug. 22, 1871	426
Garment, ruffle, &c., Lady's under	G. A. Whiting	Boston, Mass	June 27, 1871	359
Garter	A. H. Pike	Somerville, Mass	May 30, 1871	298
Gas-machine	F. W. Ofeldt & Co	Newark, N. J	Aug. 26, 1873	1,429
Giant powder explosive compound	The Giant Powder Company and The Atlantic Giant Powder Company.	San Francisco, Cal	Dec. 23, 1873	1,583
Gin	Adams & Taylor	Boston, Mass	Feb. 13, 1872	658
Gin	Adams & Taylor	Boston, Mass	Mar. 5, 1872	691
Gin	Adams & Taylor	Boston, Mass	Mar. 5, 1872	693
Gin	Adams, Blake & Taylor	Boston, Mass	Mar. 26, 1872	712
Gin	A. W. Balch & Co	New York, N. Y	Dec. 19, 1871	588–589
Gin	J. W. Culbert	New York, N. Y	Oct. 7, 1873	1,481
Gin	Gill & Lootz	Boston, Mass	Nov. 14, 1871	531
Gin	L. Myers & Co	New York, N. Y	July 4, 1871	365
Gin	S. E. Pecker & Co	Boston, Mass	Jan. 2, 1872	616

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Invention.	Inventor.	Residence.	Date.	No.
Gin	I. D. Richards & Sons	Boston, Mass	Jan. 17, 1871	137
Gin	I. D. Richards & Sons	Boston, Mass	Oct. 17, 1871	485
Gin	I. D. Richards & Sons	Boston, Mass	Nov. 28, 1871	560
Gin	W. P. Sanger	New York, N. Y	Feb. 25, 1873	1, 150
Gin	F. Schuchardt	New York, N. Y	Oct. 24, 1871	502–503
Gin	T. L. Smith	Boston, Mass	Nov. 21, 1871	551
Gin	F. E. Suire & Co	Cincinnati, Ohio	Feb. 4, 1873	1, 120–1, 122
Gin	C. & W. A. Waters	Boston, Mass	Nov. 14, 1871	544
Gin, Cordial	J. Forster	New Orleans, La	Sept. 19, 1871	444
Ginger, Essence of Jamaica	F. Brown	Philadelphia, Pa	Mar. 26, 1872	715
Glass shade, cylinder, &c	S. J. Pardessus & Co	New York, N. Y	Oct. 28, 1873	1, 515
Glass-ware	T. G. Cook & Co	Philadelphia, Pa	Apr. 8, 1873	1, 201
Glove	P. & F. G. Conklin	San Francisco, Cal	July 30, 1872	934
Glove	K. Luckemeyer & Co	New York, N. Y	June 18, 1872	864
Glove	Ware, Marshall & Co	Boston, Mass	Dec. 19, 1871	596
Glove, Kid	F. Hegle	New York, N. Y	Nov. 18, 1873	1, 532
Glue	Beader, Adamson & Co	Philadelphia, Pa	Feb. 28, 1871	175
Gold-foil	S. S. White	Philadelphia, Pa	Mar. 25, 1873	1, 184
Gold ring	The Dueber Watch-Case Manufacturing Company.	Cincinnati, Ohio	Sept. 9, 1873	1, 450
Governor, Huntoon steam	J. A. Lynch & Co	Boston, Mass	Nov. 22, 1870	68
Governor, Steam-engine	J. A. Lynch and E. B. Buckingham.	Boston, Mass	June 20, 1871	334
Grinding-mill	I. Straub & Co	Cincinnati, Ohio	Oct. 14, 1873	1, 497
Grinding-mill	The Straub Mill Company	Cincinnati, Ohio	Apr. 24, 1873	1, 230
Grinding-mill	A. W. Winall	Cincinnati, Ohio	June 3, 1873	1, 295
Guano	Guanahani Guano Company	Petersburgh, Pa	Nov. 25, 1873	1, 538
Guano	B. M. Rhodes & Co	Baltimore, Md	Aug. 5, 1873	1, 395
Guano, Soluble sea-island	R. W. L. Rasin	Baltimore, Md	Nov. 1, 1870	45
Gum, Aqueous solution of balsamic	O. Oldberg	Washington, D. C	Jan. 9, 1872	630
Gunpowder	Laflin and Rand Powder Company.	New York, N. Y	July 9, 1872	885
Gunpowder	The Miami Powder Company	Xenia, Ohio	July 16, 1872	909
H.				
Hair and face dressing, &c., Compound for	O. Clark	Brattleborough, Vt	Oct. 3, 1871	456
Hair-dressing	E. A. E. Meyer	Watertown, N. Y	Apr. 22, 1873	1, 223
Hair, Preparation for the	J. C. Barclay	New York, N. Y	May 23, 1871	267
Hair, Preparation for the	D. Barnes	Brooklyn, N. Y	May 2, 1871	235
Hair, Preparation for the	M. T. Clackner	Baltimore, Md	Sept. 2, 1873	1, 431
Hair, Preparation for the	C. E. Georger	New York, N. Y	Feb. 14, 1871	162
Hair, Preparation for the	R. Green	Manchester, N. H	Nov. 1, 1870	21
Hair, Preparation for the	J. L. Martin	Baltimore, Md	Nov. 8, 1870	58
Hair-restorer	E. A. Warren	Worcester, Mass	Sept. 19, 1871	445
Ham	Evans Brothers	Cincinnati, Ohio	Feb. 4, 1873	1, 115
Ham	Evans, Lippincott & Cunningham.	Cincinnati, Ohio	July 16, 1872	894
Ham	W. Ryan	Dubuque, Iowa	Oct. 25, 1870	11
Ham and bacon, Sugar-cured	R. Beresford & Co	Cincinnati, Ohio	Dec. 17, 1872	1, 082–1, 083
Ham and cured meat	W. G. Bell & Co	Boston, Mass	Apr. 8, 1873	1, 199
Ham and shoulder of pork	F. P. Woodbury	New York, N. Y	Apr. 1, 1873	1, 196–1, 198
Ham, bacon, &c., Sugar-cured	H. Ames & Co	Saint Louis, Mo	Sept. 3, 1872	976
Ham, shoulder, bacon, &c	W. J. Rieman & Son	Baltimore, Md	Aug. 12, 1873	1, 408
Ham, shoulder, tongue, &c	S. Davis, jr., & Co	Cincinnati, Ohio	July 16, 1872	902
Ham, Sugar-cured	Backman & Wilson	Cincinnati, Ohio	Nov. 26, 1872	1, 066
Ham, Sugar-cured	Evans, Lippincott & Cunningham.	Cincinnati, Ohio	May 13, 1873	1, 268
Ham, Sugar-cured	J. Grubb & Co	Cincinnati, Ohio	Dec. 3, 1872	1, 078
Ham, &c., Sugar-cured	J. Morrison & Co	Cincinnati, Ohio	Mar. 12, 1872	697
Ham, Sugar-cured	Oakford & Co	Baltimore, Md	July 1, 1873	1, 346
Ham, Sugar-cured	A. Schoeffel	Louisville, Ky	Nov. 12, 1872	1, 059
Ham, Sugar-cured	F. Whittaker & Sons	Saint Louis, Mo	July 16, 1872	920
Hame	Baker, Burr & Co	Andover, N. H	May 14, 1872	811
Hardware, cutlery, guns, pistols, and lead-pencils	T. Hessenbruch	Philadelphia, Pa	Dec. 2, 1873	1, 546
Harmonica	Strasburger & Pfeiffer	New York, N. Y	Nov. 19, 1872	1, 065
Harness	J. R. Hill & Co	Concord, N. H	Dec. 5, 1871	567
Harness cleaning and dressing compound	S. E. Cox & Co	New York, N. Y	Feb. 25, 1873	1, 144
Harrow	J. J. Thomas & Co	Geneva, N. Y	Jan. 16, 1872	635
Harvester	Harris Manufacturing Company.	Janesville, Wis	Aug. 22, 1871	428
Harvester-cutter	Sweet, Barnes & Co	Syracuse, N. Y	Dec. 5, 1871	571
Harvester guard-finger, knife-section, &c	Whiteley, Fassler and Kelly	Springfield, Ohio	Feb. 11, 1873	1, 129
Harvester self-rake, dropper, reel, &c	Whiteley, Fassler and Kelly	Springfield, Ohio	Feb. 11, 1873	1, 128
Harvesting-machine	D. M. Osborne & Co	Auburn, N. Y	Apr. 29, 1873	1, 241
Harvesting-machine	Whiteley, Fassler and Kelly	Springfield, Ohio	Feb. 11, 1873	1, 127
Harvesting-machines, Section for cutters of	W. A. Wood Mowing and Reaping Machine Company.	Hoosick Falls, N. Y	May 13, 1873	1, 262
Hat	N. A. Baldwin, J. H. Prentice, and J. R. Waller.	Milford, Conn., and Brooklyn and New York, N. Y.	Mar. 7, 1871	182
Hat	O. Benedict & Co	Bethel, Conn	Dec. 23, 1873	1, 578–1, 580
Hat	J. S. Fayerweather & Co	Danbury, Conn	Sept. 9, 1873	1, 445
Hat	Yates, Wharton & Co	Newark, N. J	July 4, 1871	369
Hat, cap, and straw-goods	Dunlap & Co	New York, N. Y	Feb. 21, 1871	170
Hay-elevator and other agricultural implements	A. J. Nellis	Pittsburgh, Pa	Jan. 3, 1871	124
Heater	The Gold Heating Company	New York, N. Y	July 22, 1873	1, 381
Heater and stove	Stuart, Peterson & Co	Philadelphia, Pa	Mar. 19, 1872	710
Heater, Fire-place	Richardson, Boynton & Co	New York, N. Y	Oct. 24, 1871	501
Heel, Boot	F. Hacker and F. Richardson	Providence, R. I	Mar. 14, 1871	188
Hog-products	G. Cassard & Son	Baltimore, Md	June 10, 1873	1, 301
Horse-nail	Northwestern Horse-Nail Company.	Chicago, Ill	May 23, 1871	277
Horse-radish	Heinz, Noble & Co	Pittsburgh, Pa	Aug. 26, 1873	1, 426
Hose and belting, Rubber	National Rubber Company	Bristol, R. I	Mar. 11, 1873	1, 162
Hose, Rubber	The Boston Elastic Fabric Company.	Boston, Mass	Mar. 18, 1873	1, 174–1, 175
Hose, Woolen	A. P. Oxsendam	Manchester, N. H	Oct. 25, 1870	10
Hosiery	Smyth & Co	Balbriggan, Ireland	Sept. 9, 1873	1, 449

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Invention.	Inventor.	Residence.	Date.	No.
Hosiery, trimmings, and gentlemen's furnishing goods.	J. P. Loring	Charlestown, Mass	July 4, 1871	363
I.				
Ice	Knickerbocker Ice Company	New York, N. Y	Nov. 11, 1873	1,524
Ice	Sweet & Crouch	Chicago, Ill	Apr. 30, 1872	798
Ink	Carter Brothers & Co	Boston, Mass	July 25, 1871	388
Ink and varnish, Printing	L. H. Gein	New York, N. Y	Apr. 1, 1873	1,190
Ink, Burnishing	Fletcher & Dwyer	Lynn, Mass	Apr. 29, 1873	1,236
Ink, Printer's	C. E. Johnson	Philadelphia, Pa	Apr. 25, 1871	228
Ink, Writing	Adams & Fay	Cleveland, Ohio	July 16, 1872	912
Ink, Writing	Adams & Fay	Cleveland, Ohio	July 23, 1872	921–922
Insect-powder	D. Barnes	Brooklyn, N. Y	May 2, 1871	234
Insect-powder	J. M. Hughes	Brooklyn, N. Y	June 20, 1871	332
Insect-powder	P. Reynard	Saint Louis, Mo., and Louisville, Ky.	June 17, 1873	1,326
Iron and steel	Leng & Ogden	New York, N. Y	Oct. 7, 1873	1,482
Iron, Black and galvanized sheet	Marshall Bros. & Co	Philadelphia, Pa	May 20, 1873	1,274
Iron, Galvanized sheet	McCullough Iron Company	Philadelphia, Pa	Feb. 4, 1873	1,117–1,118
Iron goods, Wrought	J. & J. Rogers	Jay and Black Brook, N. Y	Jan. 2, 1872	619
Iron, Pig	Bay State Iron Company	Boston, Mass	July 2, 1872	874
Iron pipe, Wrought	Evans, Clow, Dalzell & Co	Pittsburgh, Pa	Oct. 25, 1870	6
Iron, Sheet	Rogers & Burchfield	Pittsburgh, Pa	Dec. 19, 1871	595
Iron, Sheet and plate	A. Wood & Co	Philadelphia, Pa	Nov. 28, 1871	564
Iron, Sheet or plate	A. Wood & Co	Philadelphia, Pa	Oct. 24, 1871	505
Isinglass	Cape Ann Isinglass and Glue Company.	Rockport, Mass	Dec. 3, 1872	1,076
J.				
Jewelry	W. M. Elias & Bro	New York, N. Y	May 9, 1871	237
Jewelry	Joslin, Palmer & Williams	Leominster, Mass	Apr. 2, 1872	730
Jewelry	J. P. Turner	Birmingham, England	Aug. 1, 1871	415
Jewelry and watch	S. Landsberg	New York, N. Y	Aug. 8, 1871	419
K.				
Kaleidoscope	C. G. Bush & Co	Providence, R. I	Aug. 26, 1873	1,417
Kerosene	R. W. Cameron & Co	New York, N. Y	May 30, 1871	292
Kerosene and spirits of turpentine	F. Spies	New York, N. Y	Jan. 17, 1871	139
Knit goods and fabrics	P. M. Hardee	Philmont, N. Y	Oct. 24, 1871	497
Knit scarf or tippet	J. W. Tuttle	Watertown, Mass	Nov. 4, 1873	1,519
Knitting-cotton	J. Atwell, jr	New York, N. Y	Feb. 20, 1872	660–661
L.				
Label and show-card	S. Crump	New York, N. Y	Oct. 3, 1871	457
Label and show-card	S. Crump	New York, N. Y	Jan. 23, 1872	637
Label and show-card for manufacturers	S. Crump	New York, N. Y	Oct. 1, 1872	1,011
Lace goods	A. G. Jennings	New York, N. Y	Feb. 14, 1871	163
Lager beer	T. Remmeney	Williamsburgh, N. Y	June 17, 1873	1,327
Lamp-chimney	C. F. A. Henrichs	New York, N. Y	Jan. 9, 1872	628
Lantern	Chicago Manufacturing Company.	Chicago, Ill	Apr. 2, 1872	722
Lard	R. Ballymore	Buffalo, N. Y	July 2, 1872	876
Lard, Hog's	W. H. Popham	New York, N. Y	Sept. 10, 1872	987
Last, Boot and shoe	J. McComber	Chicago, Ill	May 9, 1871	250
Lead	Forest River Lead Company	Salem, Mass	June 4, 1872	847
Lead for painter's use	Boston Lead Company	Boston, Mass	Mar. 26, 1872	714
Lead pipe, Tin-lined	The Colwells, Shaw, and Willard Manufacturing Company.	New York, N. Y	June 18, 1872	867
Lead, White	The Atlantic White Lead Company.	New York, N. Y	Nov. 22, 1870	71
Lead, White	Beymer, Bauman & Co	Pittsburgh, Pa	Sept. 2, 1873	1,439
Lead, White	Brooklyn White Lead Company	New York, N. Y	Nov. 8, 1870	53–55
Lead, White	R. Lewenthal & Co	New York, N. Y	Apr. 16, 1872	769
Lead, &c., White	F. S. Pease	Buffalo, N. Y	July 2, 1872	881
Leather	J. Davis & Son	Pawtucket, R. I	May 7, 1872	801
Leather	Eagle Tanning Works	Chicago, Ill	Sept. 26, 1871	449
Leather	J. Hanau	New York, N. Y	Dec. 31, 1872	1,096
Leather	E. Larrabee & Sons	Baltimore, Md	Nov. 26, 1872	1,071
Leather	G. F. & C. T. Page	Franklin, N. H	Dec. 13, 1870	105
Leather	G. F. & C. T. Page	Franklin, N. H	Sept. 12, 1871	441
Leather	Walker, Oakley & Co	Chicago, Ill	May 23, 1871	289
Leather, Composition for softening, polishing and preserving.	J. G. North	Brookline, Mass	July 29, 1873	1,386
Leather, Compound for stuffing	J. B. Young	Chicago, Ill	May 14, 1872	820
Leather-dressing	C. L. Hanthaway & Sons	Boston, Mass	Nov. 29, 1870	78
Leather-dressing	E. B. Palmer	Boston, Mass	Jan. 2, 1872	615
Leather, Lace	W. Cowpe & Co	South Attleborough, Mass.	Aug. 13, 1872	951
Licorice, Mass	Hoffmar, Lee & Co	Baltimore, Md	Sept. 16, 1873	1,455
Licorice-paste	D. V. Arguimbau	New York, N. Y	July 15, 1873	1,361
Licorice-paste	D. V. Arguimbau	Brooklyn, N. Y	Sept. 9, 1873	1,442
Licorice-paste	Hoffman, Lee & Co	Baltimore, Md	Sept. 16, 1873	1,456
Lightning-rod	S. J. Mitchell	Saint Louis, Mo	June 27, 1871	354
Linen goods and fabrics containing linen	J. Bullocke	New York, N. Y	June 20, 1871	327
Liniment	W. H. Adams and F. A. Young	Bangor, Me	Sept. 26, 1871	446
Liniment	D. Barnes	Brooklyn, N. Y	May 2, 1871	233
Liniment	C. F. Brown Chemical Company	New York, N. Y	May 7, 1872	800
Liniment	G. O. Clark	College Point, N. Y	Aug. 13, 1872	950
Liniment	Cloud, Akin & Co	Evansville, Ind	Apr. 23, 1872	779
Liniment	W. Crow	New York, N. Y	July 23, 1872	926
Liniment	W. Kidder	Goffstown, N. H	Dec. 23, 1873	1,587
Liniment	Merchants' Gargling Oil Company.	Lockport, N. Y	Apr. 15, 1873	1,214–1,215
Liniment	W. H. Rainey	Brunswick, Ga	Aug. 26, 1873	1,422
Liniment	Ridenour, Coblentz & Co	Springfield, Ohio	Dec. 6, 1870	93
Liniment	J. Schember	Bangor, Me	May 16, 1871	263
Liniment	J. Vallier	New York, N. Y	Dec. 2, 1873	1,563

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Invention.	Inventor.	Residence.	Date.	No.
Liniment and morning star lamp-oil, All-healing.	Teter & Hite	Moffatt's Creek, Va	Nov. 1, 1870	47
Liniment, Hemlock	S. H. Kennedy & Co	Johnstown, N. Y	Dec. 10, 1872	1,080
Liquor	Cazade & Crooks	New York, N. Y	Apr. 9, 1872	739
Liquor	C. H. Ross & Co	Baltimore, Md	Dec. 27, 1870	119
Liquor-package	R. George	New York, N. Y	Feb. 27, 1872	671
Liquors and wines, Spirituous	Clarke & Schultz	New York, N. Y	Apr. 2, 1872	723
Liquors, Distilled	M. M. Smith & Brother	Chicago, Ill	Oct. 7, 1873	1,483–1,486
Liquors, Medicated	M. Vergnole	New Orleans, La	Aug. 12, 1873	1,409
Liquors, Spirituous	G. W. Kidd & Co	New York, N. Y	Sept. 23, 1873	1,468
Liquors, wines, bitters, sirups, and cordials	W. S. Dunham	New York, N. Y	July 1, 1873	1,340
Lock and hardware	Hillebrand & Wolf	Philadelphia, Pa	Feb. 28, 1871	178
Loom-temple	Dutcher Temple Company	Hopedale, Mass	Oct. 24, 1871	496
Lozenge	F. L. Pommer	New York, N. Y	July 16, 1872	905
Lozenge and sirup	Townsend & Co	New York, N. Y	Apr. 8, 1873	1,210
Lubricating-compound	G. M. Denison	Essex, Conn	Oct. 31, 1871	506
Lubricating-compound	Gerdom, Cook & Co	New York, N. Y	Apr. 15, 1873	1,212
Lye, Condensed	J. H. Seibert	Philadelphia, Pa	Apr. 23, 1872	785
M.				
Machinery	J. Cooper	Mount Vernon, Ohio	May 23, 1871	269
Maizola, (a product of corn)	Warder & Cooper	Valley Junction, Ohio	Mar. 11, 1873	1,165
Marquetry	J. Dill	Boston, Mass	May 7, 1872	802
Match	Bock, Genin & Co	New York, N. Y	June 27, 1871	332
Match, Friction	J. L. Clark	Oshkosh, Wis	Sept. 24, 1872	1,003
Mathematical instrument	Heller & Brightly	Philadelphia, Pa	Sept. 12, 1871	440
Mattresses, cushions, &c., Prepared cotton for	Patent Elastic Felt Company	New York, N. Y	Oct. 3, 1871	464
Meat and smoked beef, Sugar-cured	G. Phipps & Co	Cincinnati, Ohio	July 8, 1873	1,354
Meat, Cured	W. H. Davis & Co	Cincinnati, Ohio	Dec. 9, 1873	1,566
Meat, Cured	G. Schrauder	Cincinnati, Ohio	Aug. 13, 1872	955
Medal	Hartell & Letchworth	Philadelphia, Pa	May 20, 1873	1,271
Medicine	F. H. Ayres	New Orleans, La	July 16, 1872	901
Medicine	F. W. Barnum & Co	Danbury, Conn	June 24, 1873	1,329
Medicine	H. M. Billings	New York, N. Y	July 25, 1871	387
Medicine	W. A. Bishop	Dodgeville, Wis	Nov. 21, 1871	545
Medicine	S. Bonsall	Philadelphia, Pa	Sept. 16, 1873	1,451
Medicine	T. Boyce and F. McKenzie	San Francisco, Cal	Nov. 5, 1872	1,048
Medicine	C. D. Bradley	Taunton, Mass	July 29, 1873	1,389
Medicine	E. R. Burnham	Chicago, Ill	May 27, 1873	1,282
Medicine	W. D. Chamberlain	Lynn, Mass	July 16, 1872	913
Medicine	E. Chiles	Philadelphia, Pa	Dec. 12, 1871	574
Medicine	Cloud, Akin & Co	Evansville, Ind	Nov. 28, 1871	554
Medicine	J. S. Coleman	San Francisco, Cal	Oct. 29, 1872	1,040
Medicine	P. Davis & Son	Providence, R. I	Aug. 8, 1871	416
Medicine	S. De Grath	Jersey City, N. J	June 10, 1873	1,302
Medicine	S. De Grath	Jersey City, N. J	Aug. 5, 1873	1,394
Medicine	V. Delaney	Santa Fé, Ill	Nov. 12, 1872	1,054
Medicine	D. Dick	New York, N. Y	July 4, 1871	362
Medicine	D. Dick	New York, N. Y	July 22, 1873	1,373
Medicine	W. B. Douglass & Co	Washington, D. C	July 16, 1872	893
Medicine	Dunn & Co	London, England	Sept. 26, 1871	448
Medicine	T. S. Fellows and J. R. Smith	Wells, Minn	Aug. 12, 1873	1,403
Medicine	Fenton Manufacturing Company.	Cleveland, Ohio	Sept. 9, 1873	1,446
Medicine	H. G. G. Fink	Pittsburgh, Pa	Jan. 2, 1872	611
Medicine	G. H. Fish & Son	Saratoga Springs, N. Y	Oct. 1, 1872	1,013
Medicine	C. Fleming	Sewickley, Pa	Apr. 9, 1872	756–758
Medicine	E. Frese	San Francisco, Cal	Feb. 11, 1873	1,124
Medicine	H. W. Fuller	Chicago, Ill	May 13, 1873	1,265
Medicine	G. C. Furber	Yreka, Cal	Dec. 13, 1870	99
Medicine	S. Gilliland	Pittsburgh, Pa	Apr. 2, 1872	728
Medicine	J. L. Graham	Pittsburgh, Pa	Oct. 14, 1873	1,501
Medicine	W. H. Gregg & Co	Elmira, N. Y	Nov. 18, 1873	1,531
Medicine	J. J. Haley	San Francisco, Cal	Nov. 14, 1871	532
Medicine	J. L. S. Hall	Wheeling, W. Va	Aug. 1, 1871	408
Medicine	Hall & Alger	Taunton, Mass	Apr. 9, 1872	745
Medicine	J. N. Harris & Co	Cincinnati, Ohio	Aug. 8, 1871	417
Medicine	H. J. Hartwell	Philadelphia, Pa	June 20, 1871	346
Medicine	H. H. Hay	Portland, Me	Mar. 28, 1871	208
Medicine	T. S. Hodgson & Co	McKeesport, Pa	May 2, 1871	238
Medicine	Holloway & Co	New York, N. Y	Dec. 19, 1871	598–599
Medicine	A. J. Hopkins	Providence, R. I	Nov. 14, 1871	534
Medicine	J. H. Hopkins	Providence, R. I	Apr. 8, 1873	1,206
Medicine	Hostetter & Smith	Pittsburgh, Pa	Apr. 18, 1871	223
Medicine	R. Hoyt	New York, N. Y	Mar. 25, 1873	1,178
Medicine	N. Jenkins	New Orleans, La	Apr. 9, 1872	746
Medicine	T. E. Jenkins	Louisville, Ky	June 6, 1871	310
Medicine	I. S. Johnson & Co	Bangor, Me	July 16, 1872	918
Medicine	J. Q. Kellogg	Brooklyn, N. Y	July 25, 1871	396
Medicine	S. H. Kennedy	Johnstown, N. Y	July 18, 1871	380
Medicine	Lee & Brother	Ridgewood, N. Y	June 20, 1871	333
Medicine	J. & C. Maguire	Saint Louis, Mo	July 16, 1872	896
Medicine	J. A. McKinnon	Selma, Ala	Nov. 1, 1870	42
Medicine	J. R. Nichols & Co	Boston, Mass	Mar. 19, 1872	707
Medicine	Pacific Balm Company	New York, N. Y	May 27, 1873	1,284
Medicine	Pemberton, Taylor & Co	Atlanta, Ga	Feb. 14, 1871	166
Medicine	M. E. Perrin	Montreal, Canada	July 4, 1871	367
Medicine	Pettit & Barker	Fredonia, N. Y	May 14, 1872	817
Medicine	E. R. Phillips & Co	Assonet Village, (Freetown,) Mass.	June 27, 1871	337
Medicine	J. Purley & Co	Atlanta, Ga	July 16, 1872	906
Medicine	D. Ransom, Son & Co	Buffalo, N. Y	May 13, 1873	1,257–1,261
Medicine	R. Rattinger	Saint Louis, Mo	Apr. 1, 1873	1,193
Medicine	W. R. Read	Brooklyn, N. Y	Oct. 15, 1872	1,032
Medicine	W. Renne & Sons	Pittsfield, Mass	May 7, 1872	806
Medicine	G. Reno	Titusville, Pa	May 23, 1871	280

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Medicine	F. L. Richardson	Lowell, Mass	Oct. 17, 1871	486
Medicine	Ridenour, Coblentz & Co	Springfield, Ohio	Mar. 7, 1871	186
Medicine	Russell & Seabold	Saint Louis, Mo	May 7, 1872	808
Medicine	J. Scott	New York, N. Y	Sept. 26, 1871	452
Medicine	S. S. Seely	Bath, N. Y	Dec. 27, 1870	120
Medicine	A. F. Shannon	Quincy, Ill	Oct. 3, 1871	465
Medicine	E. S. Sharp	Salem, N. J	Aug. 15, 1871	423
Medicine	N. Smith	Syracuse, N. Y	Apr. 30, 1872	797
Medicine	Thompson, Steel and Price Manufacturing Company.	Chicago, Ill	Sept. 26, 1871	453
Medicine	G. B. Thurston	Lynn, Mass	May 2, 1871	247
Medicine	H. A. Tilden	New Lebanon, N. Y	Mar. 4, 1873	1,156
Medicine	Tilden & Co	New Lebanon, N. Y	Aug. 8, 1871	421
Medicine	D. D. Tomlinson	San José, Cal	Apr. 1, 1873	1,195
Medicine	E. M. Tubbs & Co	Manchester, N. H	June 10, 1873	1,313
Medicine	United States Proprietary Medicine Company.	Cincinnati, Ohio	Nov. 22, 1870	74
Medicine	E. S. Wayne	Cincinnati, Ohio	June 20, 1871	345
Medicine	W. N. Wells	Boston, Mass	Nov. 22, 1870	76
Medicine	W. S. Wells and J. J. Stell	New York, N. Y	Feb. 14, 1871	167-168
Medicine	G. H. York & Co	Cambridge, Mass	Feb. 21, 1871	174
Medicine	J. H. Zeilin & Co	Macon, Ga	Nov. 1, 1870	52
Medicine	C. C. Zimmerman	Shoemakersville, Pa	June 3, 1873	1,296
[Medicine.] Ague and fever	D. W. Myer	Baltimore, Md	Oct. 1, 1872	1,014
[Medicine.] Bitters	H. S. Flint & Co	Providence, R. I	June 4, 1872	845-846
[Medicine.] Bitters	C. Frank & Co	Cincinnati, Ohio	Oct. 15, 1872	1,028
[Medicine.] Bitters	S. B. Hartman & Co	Lancaster, Pa	Apr. 11, 1871	218
[Medicine.] Bitters	W. H. Knoepfel	New York, N. Y	Dec. 12, 1871	580
[Medicine.] Bitters	J. Niederlander & Co	Columbus, Ohio	July 16, 1872	898
[Medicine.] Bitters	A. Orth	Milwaukee, Wis	Mar. 28, 1871	211
[Medicine.] Bitters	W. H. Penn	Lindley's Mills, Pa	July 30, 1872	938
[Medicine.] Bitters, Ginger tonic	W. M. Tileston	New York, N. Y	July 16, 1872	899
[Medicine.] Bitters, Honolulu orange	R. Des Auges	New York, N. Y	Dec. 27, 1870	114
[Medicine.] Bitters, Pipifax	Walter & Shaeffer	San Francisco, Cal	Aug. 22, 1871	434
[Medicine.] Bitters, Quinine tonic	A. Littlefield	Boston, Mass	Dec. 24, 1872	1,091
[Medicine.] Bitters, Root and herb	Flint & Co	Providence, R. I	Dec. 13, 1870	98
[Medicine.] Bitters, Stomach	J. Demarest	New York, N. Y	May 16, 1871	257
[Medicine.] Bitters, Stomach	J. Dreyfus	New Orleans, La	Aug. 6, 1872	940
[Medicine.] Bitters, Stomach	J. A. Jackson & Co	Saint Louis, Mo	Nov. 1, 1870	39
[Medicine.] Bitters, Strengthening	J. T. Webber & Co	Springfield, Mass	May 28, 1872	841
[Medicine.] Bitters, Strengthening-cordial	A. L. Lacroix	Saint Louis, Mo	Sept. 17, 1872	996
[Medicine.] Bitters, Wild blackberry	I. Landsberger & Co	San Francisco, Cal	May 14, 1872	814
Medicine, Cattle	D. P. Mathews	Winthrop, Mass	Oct. 24, 1871	499
Medicine, Cholera	Atchison & Bro	Frankfort, Ind	Sept. 26, 1871	447
[Medicine.] Condition-powder	C. Garlick	Montreal, Canada	Oct. 3, 1871	459
[Medicine.] Cough-balsam	W. Maddox	Ripley, Ohio	Nov. 15, 1870	62
[Medicine.] Cough-sirup	J. S. Pemberton	Atlanta, Ga	May 14, 1872	816
Medicine for rheumatism	Moyer & Co	Philadelphia, Pa	Dec. 2, 1873	1,564
Medicine, Globule for homeopathic	Smith & Parks	Cincinnati, Ohio	July 15, 1873	1,369
[Medicine.] Wine-tonic	C. W. Benson	Baltimore, Md	Aug. 13, 1872	945
[Medicine.] Troche, Bronchial	J. I. Brown & Sons	Boston, Mass	Oct 17, 1871	475
[Medicine.] Yerba Santa	A. McDermott and Redington, Hostetter & Co.	Oroville and San Francisco, Cal.	Nov. 22, 1870	69
Medicinal preparations, Alimentary and	J. M. O. Tamin	New York, N. Y	Aug. 6, 1872	943
Medicinal preparations, Proprietary	The Wilson Carbolated Cod-Liver Oil Company.	New York, N. Y	July 29, 1873	1,392
Metal	The Patent Metal Company	Philadelphia, Pa	Nov. 22, 1870	73
Metal, American sterling	American Sterling Company	New York, N. Y	Mar. 12, 1872	694
Metal and journal-bearing, Anti-friction	I. X. L. Metal Company	Saint Louis, Mo., and Sacramento, Cal.	Feb. 4, 1873	1,116
Metal, Plate	Bay State Iron Company	Boston, Mass	July 2, 1872	875
Metal tube, Seamless	American Tube Works	Boston, Mass	Nov. 1, 1870	17
Mince-meat	Atmore & Son	Philadelphia, Pa	Aug. 29, 1871	436
Mineral-water	G. R. Bishop	New York, N. Y	Oct. 24, 1871	495
Mineral-water	Congress and Empire Spring Company.	Saratoga Springs and New-York, N. Y.	July 25, 1871	398
Mineral-water	C. and E. E. Dunbar	Waukesha, Wis	July 22, 1873	1,374
Mineral-water	Saratoga Seltzer Spring Company.	Saratoga Springs, N. Y	Mar. 28, 1871	213
Mineral-water	Siloam Mineral Spring Company.	Milwaukee, Wis	Apr. 22, 1873	1,228
Mohair	W. I. Peake	New York, N. Y	May 16, 1871	260-261
Molasses	A. Thomson & Co	New Orleans, La	July 23, 1872	931
Molasses	A. Thomson & Co	New Orleans, La	Aug. 27, 1872	972
Molasses	A. Thomson & Co	New Orleans, La	Aug. 27, 1872	974
Molasses	A. Thomson & Co	New Orleans, La	Sept. 3, 1872	983
Molasses-gate	G. S. Lincoln & Co	Hartford, Conn	Jan. 31, 1871	146
Mowing and reaping machine	Adriance, Platt & Co	Poughkeepsie and New York, N. Y.	Dec. 3, 1872	1,075
Mowing, reaping, and harvesting tool	The Greenwoods Scythe Company.	New Hartford, Conn	Apr. 9, 1872	749-754
Mowing, reaping, and harvesting tool	The Greenwoods Scythe Company.	New Hartford, Conn	Apr. 16, 1872	773
Mowing, reaping, and harvesting tool	The Greenwoods Scythe Company.	New Hartford, Conn	Apr. 23, 1872	788
Mucilage	Carter Bros. & Co	Boston, Mass	Nov. 21, 1871	546
Mustard	J. B. Baldy & Co	Toledo, Ohio	Oct. 25, 1870	2
Mustard	Farrington, Campbell & Co	Detroit, Mich	July 30, 1872	936
Mustard	H. C. Hudson & Co	San Francisco, Cal	Nov. 5, 1872	1,050
Mustard	Swain, Earle & Co	Boston, Mass	July 16, 1872	919
Mustard and spice	G. S. Adams	New York, N. Y	Apr. 30, 1872	790
N.				
Nails, Selected	J. Coyne	Pittsburgh, Pa	Aug. 19, 1873	1,413
Neck-tie, bow, &c	Hurlbut & Shantz	Philadelphia, Pa	Feb. 27, 1872	673
Neck-tie, cravat, &c., Shield for	W. H. Hart, jr., & Bro	Philadelphia, Pa	Oct. 3, 1871	460
Needle	R. J. Roberts	New York, N. Y	June 27, 1871	358

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Invention.	Inventor.	Residence.	Date.	No.
Net and lace	A. G. Jennings	New York, N. Y	June 6, 1871	311–313
Net and lace goods	A. G. Jennings	New York, N. Y	July 25, 1871	391–395
Net, Hair	A. G. Jennings	New York, N. Y	Mar. 26, 1872	717–718
Newspaper	F. C. Barksdale	New York, N. Y	Aug. 22, 1871	424
O.				
Oat-meal	J. McCann	Beaumond Mills, Ireland	Oct. 21, 1873	1, 509
Oil	Cary & Co	New York, N. Y	Dec. 24, 1872	1, 092
Oil	M., T. D., & S. Hodkinson	Marietta, Ohio, and Louisville, Ky.	June 17, 1873	1, 324
Oil	C. Pratt	New York, N. Y	Dec. 13, 1870	107
Oil and burner, Carbon-gas light	M. B. Dyott	Philadelphia, Pa	Mar. 19, 1872	706
Oil, Axle	C. C. Richmond	Boston, Mass	Apr. 16, 1872	771
Oil-can	J. P. Haines	Irvington, N. Y	Dec. 5, 1871	566
Oil-can	I. C. Smith	New York, N. Y	July 9, 1872	888
Oil can or package	Meissner, Ackermann & Co	New York, N. Y	July 8, 1873	1, 357
Oil, Castor	H. J. Baker & Bro	New York, N. Y	July 18, 1871	373–374
Oil, Clock and watch	E. Kelley	New Bedford, Mass	May 6, 1873	1, 249
Oil, Coal	W. A. Kowalski	New Orleans, La	Feb. 18, 1873	1, 133
Oil, Cod-liver	H. M. Rogers & Co	New York, N. Y	June 10, 1873	1, 312
Oil, Composition	Butler & Baynes	Bangor, Me	Feb. 7, 1871	148
Oil, Engine	Harmon, Merrick & Co	Cleveland, Ohio	Sept. 12, 1871	439
Oil, Factory	C. L. Morehouse	Cleveland, Ohio	Feb. 7, 1871	154
Oil for medical purposes	M. S. Goodrich & Co	Flint, Mich	Apr. 29, 1873	1, 237
Oil, Hydrocarbon	R. S., W. B., & J. Merrill	Boston, Mass	Nov. 28, 1871	557
Oil, Illuminating	The Devoe Manufacturing Company.	New York, N. Y	June 24, 1873	1, 337–1, 338
Oil, Illuminating	C. L. Morehouse	Cleveland, Ohio	Feb. 7, 1871	152
Oil, Illuminating	J. D. Spang	Dayton, Ohio	Jan. 17, 1871	138
Oil, Illuminating mineral	Bostwick & Tilford	New York, N. Y	July 18, 1871	376–377
Oil, Lamp	Sharp & Craig	Princeton, Ind	Apr. 2, 1872	736
Oil, Lubricating	F. M. Backus	Cleveland, Ohio	May 23, 1871	266
Oil, Lubricating	The Galena Oil Works	Franklin, Pa	Apr. 16, 1872	772
Oil, Lubricating	Leonard & Ellis	New York and Brooklyn, N. Y.	Oct. 14, 1873	1, 502
Oil, Lubricating	C. L. Morehouse	Cleveland, Ohio	Feb. 7, 1871	153
Oil, Lubricating	Warfield & Co	Rochester, N. Y	Jan. 24, 1871	145
Oil, Lubricating	The West Virginia Oil and Oil Land Company.	Petroleum, W. Va	Nov. 1, 1870	48
Oil, Machinery	C. L. Morehouse	Cleveland, Ohio	Feb. 7, 1871	151
Oil, Medicinal	E. F. Libby	Allegheny City, Pa	May 6, 1873	1, 252
Oil of soap	J. M. Rall & Co	Saint Louis, Mo	Jan. 2, 1872	617
Oil or burning-fluid, Illuminating	W. C. Jervey	New Orleans, La	Feb. 14, 1871	164
Oil, Preparation of cod-liver	E. H. Truex	New York, N. Y	Apr. 9, 1872	764
Oil, Refined boiled-linseed	The Atlantic White Lead Company.	New York, N. Y	Nov. 22, 1870	72
Oil, &c., Substitute for linseed	E. Murdock, jr	Winchendon, Mass	Jan. 2, 1872	614
Oil, wax, and tallow	J. C. Moore & Co	Philadelphia, Pa	May 21, 1872	827
Oils and chemicals, Essential	C. H. Phillips	New York, N. Y	Nov. 26, 1872	1, 072
Oiling-apparatus	S. Hutchinson, jr	Salem, Mass	May 21, 1872	824
Ointment, Salt-rheum	F. H. Kimberly	Springfield, Mass	Apr. 29, 1873	1, 239
Opera and field glasses and other telescopes	Sussfield, Lorsch & Co	New York, N. Y	Apr. 22, 1873	1, 231
Organ	G. Woods & Co	Cambridgeport, Mass	Nov. 25, 1873	1, 544
Organ, Cabinet	Redington & Co	Syracuse, N. Y	June 20, 1871	336
Organ, Reed	J. Esty & Co	Brattleborough, Vt	Oct. 3, 1871	468
Organs, Stop for reed	J. Esty & Co	Brattleborough, Vt	Jan. 23, 1872	638
Overshoe	E. F. Bickford	Malden, Mass	June 4, 1872	844
Overshoe	H. E. Starrett	Lawrence, Kans	June 25, 1872	871
Oxygen-water, Compound	G. R. Starkey	Philadelphia, Pa	Nov. 19, 1872	1, 064
Oyster-packing	W. L. Ellis & Co	Baltimore, Md	Oct. 25, 1870	5
Oysters	O. W. Miller & Co	Baltimore, Md	Dec. 9, 1873	1, 573
Oysters and fruit, Canned	D. D. Mallory & Co	Baltimore, Md	Sept. 10, 1872	985
Oysters and fruits, Packed	Barnes, Adams & Co	Baltimore, Md	Sept. 30, 1873	1, 474
Oysters, fish, &c	S. H. Davis & Co	Detroit, Mich	Apr. 2, 1872	725
Oysters, fruit, and vegetables, Packed	Wentz & Barndollar	Baltimore, Md	Aug. 19, 1873	1, 412
P.				
Packing for car-journals, Tallow	I. U. Coles & Co	New York, N. Y	Feb. 27, 1872	668
Packing for engines, Steam	The Silver Lake Company	Newtonville, Mass	Aug. 5, 1873	1, 397–1, 399
Packing for railway-car journal-boxes	P. S. Devlan	New York, N. Y	Sept. 23, 1873	1, 463
Packing, Miller's soap-stone	Sellers Brothers	Philadelphia, Pa	July 22, 1873	1, 379
Packing, &c., Steam	J. Glanding & Co	Philadelphia, Pa	Sept 2, 1873	1, 435–1, 436
Packing, Steam and hydraulic	W. M. Canfield	Philadelphia, Pa	July 4, 1871	360
Paint	Averill Chemical Paint Company.	New York, N. Y., and Cleveland, Ohio.	Jan. 10, 1871	128
Paint	The Averill Chemical Paint Company.	New York, N. Y., and Cleveland, Ohio.	Apr. 18, 1871	224
Paint	The Averill Chemical Paint Company.	New York, N. Y., and Cleveland, Ohio.	July 18, 1871	384
Paint	N. L. Dearborn	Dover, N. H	Jan. 16, 1872	632
Paint	Holden, Tascott & Co	Chicago, Ill	Oct. 3, 1871	469–471
Paint	O. Johnson & Co	Providence, R. I	July 18, 1871	379
Paint	Maxwell & Clarke	Brooklyn, N. Y	Sept. 24, 1872	1, 007
Paint	T. McKeon	New York, N. Y	Oct. 17, 1871	484
Paint	R. F. Seaman	New York, N. Y	Aug. 29, 1871	437
Paint	J. L. Smith & Co	New York, N. Y	Feb. 21, 1871	173
Paint	Walter & Fielding	New York, N. Y	Oct. 17, 1871	493–494
Paint	H. P. Webb	New York, N. Y	June 24, 1873	1, 336
Paint	G. T. Young & Co	Plainfield, N. J	July 18, 1871	385–386
Paint, Averill chemical	Averill Chemical Paint Company.	New York, N. Y	Jan. 24, 1871	143
Paint, Chemical	Averill Chemical Paint Company.	New York, N. Y., and Cleveland, Ohio.	Jan. 10, 1871	130
Paint-dryer	A. Wheeler	Boston, Mass	May 21, 1872	832
Paint, Liquid	The Averill Chemical Paint Company.	New York, N. Y	Oct. 25, 1870	1

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Invention.	Inventor.	Residence.	Date.	No.
Paint, Liquid chemical	Averill Chemical Paint Company.	New York, N. Y., and Cleveland, Ohio.	Jan. 10, 1871	129
Paint, Metallic	F. G. Bourke & Co	New York, N. Y	May 16, 1871	255
Paint, Metallic	Prince's Metallic Paint Company.	Weissport, Pa	Feb. 18, 1873	1, 135
Paint, Metallic	Prince's Metallic Paint Company.	New York, N. Y	Aug. 12, 1873	1, 406
Paint, Rubber	Rubber Paint Company	Cleveland, Ohio	Dec. 12, 1871	582
Paint, Rubber	The Rubber Paint Company	Cleveland, Ohio	Apr. 8, 1873	1, 208–1, 209
Paint, White zinc	Wadsworth Brothers & Co	New York, N. Y	May 27, 1873	1, 285
Paints, colors, and painting materials	D. F. Tiemann & Co	New York, N. Y	Oct. 22, 1872	1, 039
Paints and colors	Harrison Brothers & Co	Philadelphia, Pa	Apr. 8, 1873	1, 202
Paints and colors	McCloskey, Bro. & Co	Philadelphia, Pa	Aug. 12, 1873	1, 404
Painters' and builders' supplies	E. D. & W. A. French	Camden, N. J	Dec. 17, 1872	1, 084
Paper	Rock River Paper Company	Beloit, Mich	May 23, 1871	281
Paper	Union Manufacturing Company.	Springfield, Mass	Mar. 7, 1871	187
Paper and envelope, Writing	L. F. Du Martinet	Angoulême, France	Sept. 17, 1872	994
Paper, Bluing	Dale Brothers	Boston, Mass	July 29, 1873	1, 384
Paper, cloth, &c., pattern	The Domestic Sewing-Machine Company.	New York, N. Y	Aug. 12, 1873	1, 401
Paper, Letter	Schmidt & Curtius	New York, N. Y	Aug. 20, 1872	968
Paper, Medicated Manila	J. Robertson & Son	Putney, Vt	Sept. 16, 1873	1, 458
Paper, Motto	T. Van Skelline	Brooklyn, N. Y	Dec. 23, 1873	1, 584
Paper, Prepared plastering	The Rock River Paper Company.	Beloit, Wis	Jan. 16, 1872	634
Paper, Writing	A. Beach	Iowa City, Iowa	Jan. 28, 1873	1, 107
Paper, Writing	J. M. Goodall	London, England	May 7, 1872	874
Paper, Writing	B. & P. Lawrence	New York, N. Y	July 30, 1872	937
Paring machine, Apple	D. H. Goodell	Antrim, N. H	July 29, 1873	1, 385
Pastille	Stowell & Co	Charlestown, Mass	Jan. 2, 1872	622
Pen, Gold	C. M. Fisher	New York, N. Y	Nov. 11, 1873	1, 522
Pen, Writing	C. H. Clifton	Pittsburgh, Pa	June 27, 1871	353
Pencil	American Lead-Pencil Company.	New York, N. Y	Sept. 2, 1873	1, 430
Pencil, Lead	O. Cleveland	Jersey City, N. J	Aug. 20, 1872	956–966
Pencil, Lead	Cutter, Tower & Co	Boston, Mass	Sept. 24, 1872	1, 005
Pencil, Lead	E. Faber	New York, N. Y	Nov. 1, 1870	19
Pencil, Lead	E. Faber	New York, N. Y	Dec. 27, 1870	117
Pepsin	Lilly & Phelan	Evansville, Ind	Aug. 26, 1873	1, 421
Perfume	Phalon & Son	New York, N. Y	June 13, 1871	325
Perfume	J. Rose	Dover, N. H	May 7, 1872	807
Perfume, medicine, &c	G. J. Wenck	New York, N. Y	Dec. 16, 1873	1, 577
Perfume, soap, &c	Deniker & Melville	New York, N. Y	Jan. 2, 1872	609
Perfume, Toilet	Lanman & Kemp	New York, N. Y	Dec. 24, 1872	1, 094
Perfumery	T. E. Jenkins	Louisville, Ky	July 8, 1873	1, 356
Perfumery, &c	Thomson, Langdon & Co	New York, N. Y	Oct. 8, 1872	1, 025–1, 026
Perfumery and toilet articles	F. Prot & Co	Paris, France	Nov. 25, 1873	1, 540
Perfumery, drugs, and medicines	W. A. Weed & Co	Chicago, Ill	Apr. 16, 1872	775
Periodical	C. C. Hine	New York, N. Y	July 16, 1872	903
Petroleum	The Atlantic Refining Company.	Philadelphia, Pa	Sept. 16, 1873	1, 460
Petroleum	Brown Brothers	Erie, Pa	June 3, 1873	1, 286
Petroleum-product	J. Chandler	Pioneer, Pa	Mar. 25, 1873	1, 176
Petroleum-product	E. F. Houghton	Philadelphia, Pa	Nov. 8, 1870	56
Petroleum, Refined	F. M. Backus & Co	Cleveland, Ohio	Jan. 30, 1872	640
Petroleum, Refined	J. L. Thomas & Co	Exeter, England	Sept. 17, 1872	999
Petroleum, Refined	C. West & Sons	Baltimore, Md	Nov. 4, 1873	1, 520
Photo-engraving	Rockwood Photo-Engraving Company.	New York, N. Y	June 20, 1871	337–338
Piano	Ohio Valley Piano Company	Ripley, Ohio	Apr. 30, 1872	795
Pickles and sauce	Crane & Co	New York, N. Y	Feb. 25, 1873	1, 145
Picture-frame, bracket, &c	M. J. Rice	Boston, Mass	Aug. 1, 1871	413
Pigment	J. H. Nason	Boston, Mass	Apr. 25, 1871	229
Pile-remedy	J. P. Miller	Baltimore, Md	Apr. 15, 1873	1, 216
Pile-remedy	M. H. Stoner	Skaneateles, N. Y	Feb. 25, 1873	1, 151
Pills, Castor-oil	W. Scruton	New York, N. Y	Aug. 26, 1873	1, 424
Pistol	The American Standard Tool Company.	Newark, N. J	June 6, 1871	318
Pistol	A. Farr	New York, N. Y	Oct. 22, 1872	1, 036
Pistol, Revolving	Merwin, Hulbert & Co	New York, N. Y	June 17, 1873	1, 322–1, 323
Pitch-fork	Bouton, Whitehead & Co	Naperville, Ill	Dec. 19, 1871	591
Pitcher, Ice	Adams, Hallock & Co	Brooklyn, N. Y	Nov. 18, 1873	1, 527
Planter, Corn	D. W. Hughes	Palmyra, Mo	Nov. 1, 1870	38
Planter, Corn	Pope & Baldwin	Quincy, Ill	Dec. 6, 1870	91
Planter, Corn	J. Selby & Co	Peoria, Ill	Jan. 24, 1871	144
Plaster, Strengthening	C. W. Massonneau	Red Hook, N. Y	Sept. 26, 1871	450
Plow	Bouton, Whitehead & Co	Naperville, Ill	Jan. 9, 1872	647
Plow	Bucher, Gibbs & Co	Canton, Ohio	Apr. 11, 1871	217
Plow	The Collins Company	Collinsville, Conn	Nov. 7, 1871	523
Plow	Hunter & Frost	Fredericksburgh, Va	Nov. 25, 1873	1, 539
Plow	J. Oliver	South Bend, Ind	May 20, 1873	1, 275
Plow	E. Remington & Sons	Ilion, N. Y	Feb. 25, 1873	1, 149
Plow	Springfield Iron Works	Springfield, Mo	Sept. 24, 1872	1, 009
Plow and cultivator	Moline Plow Company	Moline, Ill	May 9, 1871	251
Plow and other agricultural implements	J. C. Bidwell	Pittsburgh, Pa	Feb. 14, 1871	155
Plow, cultivator, &c	Wiard & Hough	East Avon, N. Y	May 14, 1872	819
Plumbago-grease	American Graphite Company	New York, N. Y	Mar. 21, 1871	197
Plumbago or graphite lubricant	American Graphite Company	New York, N. Y	Apr. 9, 1872	737
Plumbago, Prepared	Morse Bros	Canton, Mass	Oct. 29, 1872	1, 042
Polish for metals	F. J. Finkham	New York, N. Y	June 11, 1872	859
Polish for metal-ware	W. S. and T. S. Witherspoon and T. Wren.	Fairview, W. Va	Oct. 3, 1871	466
Polishing-compound	E. Morgan's Sons	New York, N. Y	June 13, 1871	323–324
Polishing-material	Coffin, Reddington & Co. and Reddington & Co.	New York, N. Y., and San Francisco, Cal.	May 13, 1873	1, 267
Polishing-preparation	The Buffalo Magic Polishing Company.	Buffalo, N. Y	Oct. 25, 1870	13

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Invention.	Inventor.	Residence.	Date.	No.
Pomatum	P. Davis & Son	Montreal, Canada	Aug. 27, 1872	970
Preserved and canned food	Gordon & Dilworth	New York, N. Y	Oct. 21, 1873	1, 508
Print	J. R. Osgood & Co	Boston, Mass	Apr. 15, 1873	1, 217
Printed publication	F. & J. Rives & G. A. Bailey	Washington, D. C	Mar. 11, 1873	1, 163
Printed publication	D. Williams	New York, N. Y	Feb. 25, 1873	1, 152
Printing-press	V. E. Mauger	New York, N. Y	May 21, 1872	826
Printing-press, &c	J. C. Tripp	Fairhaven, Mass	Jan. 21, 1873	1, 106
Printing machinery and materials	V. E. Mauger	New York, N. Y	July 9, 1872	886
Pruning-shears	Christy & Hughes	Clyde, Ohio	Jan. 28, 1873	1, 108
Pump	C. G. Blatchley	Philadelphia, Pa	Mar. 21, 1871	198
Pump	H. Smith	Hillsdale, N. Y	Aug. 22, 1871	432
Pump, Fountain	J. A. Whitman	Cranston, R. I	June 24, 1873	1, 339
Pump, Steam	Norwalk Iron Works	South Norwalk, Conn	Oct. 1, 1872	1, 015
Pump, Wood	Rich & Burlingham	New York, N. Y	May 2, 1871	243
Pyroxyline	Celluloid Manufacturing Company.	Albany, N. Y	Jan. 14, 1873	1, 102
Q.				
Quicksilver-flask	The Quicksilver Mining Company.	New Almaden, Cal	Oct. 14, 1873	1, 490
R.				
Range	The Scranton Stove and Manufacturing Company.	Scranton, Pa	June 20, 1871	342
Range and stove	Abendroth Bros	New York, N. Y	June 6, 1871	306–307
Range, Kitchen	Bartlett, Robbins & Co	Baltimore, Md	Nov. 7, 1871	513
Railway-grease	A. Gunnison & Co	Cincinnati, Ohio	July 8, 1873	1, 353
Raisins	F. C. Lewis	Trenton, N. J	June 10, 1873	1, 310
Rake and other handles	Smith & Montross	Galien, Mich	Apr. 29, 1873	1, 240
Razor	H. Boker & Co	New York, N. Y	Oct. 21, 1873	1, 504
Razor	R. J. Roberts	New York, N. Y	May 30, 1871	299–300
Razor and cutlery	Friedmann & Lauterjung	New York, N. Y	July 15, 1873	1, 367
Razor-steel	R. J. Roberts	New York, N. Y	July 4, 1871	368
Razor-strap	B. F. Badger	Everett, Mass	Dec. 13, 1870	96
Razor-strap	B. F. Badger	Charlestown, Mass	Aug. 13, 1872	944
Refrigerating-apparatus	D. C. & G. F. Taylor	New York, N. Y	Apr. 23, 1872	787
Refrigerator and water-cooler	A. M. Lesley	New York, N. Y	Feb. 20, 1872	664
Roofing, Material for felt	The New England Felt-Roofing Company.	Boston, Mass	Mar. 26, 1872	721
Roofing-slate	T. W. Parry	Lehigh Township, Northampton County, Pa.	July 1, 1873	1, 347
Rubber goods	M. A. Cately	New York, N. Y	Oct. 21, 1873	1, 505
Rubber goods	National Rubber Company	Bristol, R. I	Apr. 23, 1872	783
Ruffle and dress-trimming	J. V. Rockwell	New York, N. Y	Apr. 1, 1873	1, 194
Rum, Medford	D. Lawrence & Sons	Boston, Mass	Feb. 14, 1871	165
S.				
Saddle-tree	S. E. Tompkins & Co	Sing Sing, N. Y	July 15, 1873	1, 366
Saddle-tree	S. E. Tompkins	Sing Sing, N. Y	Dec. 30, 1873	1, 589
Saddlers' hardware	Van Wart, Son & Co	Birmingham, England	Sept. 10, 1872	992
Saddlery-hardware	Coleman, Walker & Co	Elizabethport, N. J	Sept. 3, 1872	978
Salmon, Packed fresh	L. H. Newton	Brooklyn, N. Y	Feb. 11, 1873	1, 125
Salmon, Spiced	I. Rich & Co	Boston, Mass	Jan. 2, 1872	618
Salt	F. Baker	Boston, Mass	July 18, 1871	372
Salt	Stone & Spencer	Syracuse, N. Y	May 20, 1873	1, 276
Salve	R. Dobbins	Binghamton, N. Y	Mar. 7, 1871	184
Salve	L. Harwood & Son	Warren, Mass	May 20, 1873	1, 272
Salve	G. Long	Keytesville, Mo	Feb. 25, 1873	1, 147
Salve	O. M. Palmer	New York, N.Y	Mar. 28, 1871	212
Salve	M. A. Paullin	Philadelphia, Pa	June 11, 1872	857
Salve, Corn	J. McKee	New Orleans, La	Sept. 26, 1871	451
Salve, Eye	W. T. Blow	Saint Louis, Mo	Feb. 25, 1873	1, 142
Salve, Nipple	J. Lovett	Allegheny City, Pa	Oct. 31, 1871	508
Sauce	A. P. Agresta and A. Meucci	New York, N. Y	Oct. 21, 1873	1, 503
Sauce, Celery	Heinz, Noble & Co	Pittsburgh, Pa	Aug. 26, 1873	1, 425
Sauce, Table	Halford Sauce Company	Boston, Mass	May 21, 1872	822
Sauce, Table	W. King	Springfield, Ill	Nov. 8, 1870	57
Sauce, Table	J. K. MacGowan & Co	Philadelphia, Pa	Feb. 18, 1873	1, 134
Saw	The Bissell and Moore Manufacturing Company.	New York, N. Y	June 20, 1871	341
Saw	E. M. Boynton	New York, N. Y	Jan. 23, 1872	636
Saw	Wheeler, Madden & Clemson	Middletown, N. Y	Nov. 26, 1872	1, 074
Saw, Cross-cut wood	E. C. Atkins & Co	Indianapolis, Ind	July 22, 1873	1, 371
Saw hangings, Muley	W. S. Colwell	Allegheny, Pa	Apr. 9, 1872	740
Saw, tool, steel, and file	H. Disston & Sons	Philadelphia, Pa	Sept. 16, 1873	1, 452
Saw, tool, steel, and file	H. Disston & Sons	Philadelphia, Pa	Sept. 23, 1873	1, 464
Scales	Victor Scale Company	Dixon, Ill	Nov. 1, 1870	49
Scales, Weighing	E. F. Jones	Binghamton, N. Y	Mar. 21, 1871	200
Scarf, tie, and bow	Brownson Bros. & Co	Chicago, Ill	July 22, 1873	1, 372
Scissors	R. J. Roberts	New York, N. Y	May 16, 1871	262
Screw-wrench	A. G. Coes & Co	Worcester, Mass	July 4, 1871	361
Scythe	Beardsley Scythe Company	West Winsted, Conn	June 4, 1872	843
Scythe	The Dunn Edge-Tool Company	West Waterville, Me	Nov. 28, 1871	562–563
Sealing-wax	R. B. Dovell's Son	New York, N. Y	Apr. 29, 1873	1, 235
Seeds	Briggs & Brother	Rochester, N. Y	Sept. 19, 1871	422–443
Seeds	D. M. Ferry & Co	Detroit, Mich	Sept. 9, 1873	1, 447
Seeds, bulbs, vines, and cuttings	Chase Brothers & Woodward	Rochester, N. Y., and Augusta, Me.	Aug. 26, 1873	1, 418
Sewing-machine	The Domestic Sewing-Machine Company.	Norwalk, Ohio	Aug. 1, 1871	414
Sewing-machine	The Finkle and Lyon Manufacturing Company.	Middletown, Conn	Jan. 9, 1872	631
Sewing-machine	The Florence Sewing-Machine Company.	Florence, Mass	Dec. 10, 1872	1, 031
Sewing-machine	Grover and Baker Sewing-Machine Company.	Boston, Mass	Oct. 8, 1872	1, 019
Sewing-machine	The Remington Empire Sewing-Machine Company.	Ilion, N. Y	Nov. 21, 1871	552

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Invention.	Inventor.	Residence.	Date.	No.
Sewing-machine	Weed Sewing-Machine Company.	Hartford, Conn	Nov. 1, 1870	51
Sewing-machine	Wheeler and Wilson Manufacturing Company.	Bridgeport, Conn	Feb. 28, 1871	181
Sewing-machine	J. H. Whitney	Paterson, N. J	July 25, 1871	399
Sewing-machine	Wilson Sewing-Machine Company.	Cleveland, Ohio	Feb. 27, 1872	679
Sewing-machine attachment	Domestic Sewing-Machine Company.	Toledo, Ohio	Nov. 14, 1871	530
Sewing-machine needle	Excelsior Needle Company	Wolcottville, Conn	Nov. 12, 1872	1,056
Sewing-machine needle, Cold-swaged	Bridgeport Cold-Swaged Needle Company.	Bridgeport, Conn	Apr. 29, 1873	1,232
Sewing-machine shuttles, Machine-wound bobbin or spool for.	J. H. Bullard	Chicopee Falls, Mass	July 1, 1873	1,344
Shawl	T. Dolan	Philadelphia, Pa	Oct. 22, 1872	1,035
Shawl	F. Steffan & Co	Philadelphia, Pa	July 25, 1871	397
Shawls, cloakings, beavers, &c	Home Woolen Company	Hartford, Conn	Dec. 5, 1871	568
Sheet-metal ware and trimming	H. W. Shepard and R. Seaman	New York, N. Y	June 20, 1871	343
Sheetings and flannels of cotton	Paton & Co	New York, N. Y	May 28, 1872	839
Sheeting, &c., Cotton	The Jackson Company	Nashua, N. H	Nov. 14, 1871	538
Shell goods	S. F. Knight	Providence, R. I	Oct. 15, 1872	1,030
Shingles	L. M. M. Blakely	New York, N. Y	Oct. 28, 1873	1,511
Shirt	Finlay, Gourlay & Finch	New York, N. Y	Sept. 23, 1873	1,465
Shirt	Hutchinson & Thomas	Baltimore, Md	May 23, 1871	273
Shirt	C. W. Jenks	Somerville, Mass	Jan. 7, 1873	1,100
Shirt	Kohn, Leberman & Co	Philadelphia, Pa	Oct. 14, 1873	1,492
Shirt	L. Levi	New York, N. Y	Feb. 28, 1871	179
Shirt	Marley & Cook	Newark, N. J	July 16, 1872	897
Shirt	Miller & Bro	Philadelphia, Pa	Jan. 2, 1872	613
Shirt	Morrison, Son & Hutchinson	New York, N. Y	Mar. 21, 1871	202
Shirt	Stern & Co	New York, N. Y	Sept. 10, 1872	991
Shirt	T. W. Stevens	Albany, N. Y	July 16, 1872	908
Shirt	Warren A. Farr & Co	Boston, Mass	June 3, 1873	1,288
Shirt-bosom	S. Sibley	Boston, Mass	Nov. 19, 1872	1,063
Shirt, drawers, &c	L. & S. Sternberger	Philadelphia, Pa	May 9, 1871	253
Shirt, drawers, &c	Thalheimer & Hirsch	Philadelphia, Pa	May 7, 1872	809
Shirt, Linen and muslin	T. J. Irving & Co	Baltimore, Md	Mar. 11, 1873	1,161
Shirt, shirt-front, &c	L. Sternberger	Philadelphia, Pa	Mar. 19, 1872	709
Shirt, shirt-front, &c	L. Sternberger	Philadelphia, Pa	Mar. 4, 1873	1,154
Shirting	W. E. Joslin	Nashua, N. H	Oct. 24, 1871	498
Shirting, &c	Langdon Manufacturing Company.	Manchester, N. H	Mar. 26, 1872	719
Shirting	J. L. Moss, jr., and N. F. Moss	Westerly, R. I., and New York, N. Y.	July 8, 1873	1,358
Shirting, Cheviot	Fisk, Clark & Flagg	New York, N. Y	May 9, 1871	249
Shirting, Cotton	B. B. & R. Knight	Providence, R. I	Aug. 8, 1871	418
Shirting, Fine cotton	Harris Manufacturing Company.	Coventry, R. I	Oct. 17, 1871	479
Shoe	G. A. Reynolds	Utica, N. Y	Aug. 12, 1873	1,407
Shoe, brogan, and boot	E. F. Jones	Farmington, N. H	Feb. 7, 1871	149
Shoes, Ladies' and children's	Kenny & McPartland	New York, N. Y	Nov. 4, 1873	1,516
Silica, &c	Lesher, Whitman & Co	New York, N. Y	June 10, 1873	1,304
Silk and machine-twist, Sewing	Brainerd, Armstrong & Co	New York, N. Y	Sept. 24, 1872	1,000
Silk and machine-twist, Sewing	Calhoun, Robbins & Co	New York, N. Y	Apr. 9, 1872	738
Silver and plated ware	Lippiatt Silver Plate and Engraving Company.	New York, N. Y	Nov. 1, 1870	41
Silver-ware	Rogers & Bro	Waterbury, Conn	Apr. 30, 1872	796
Sirup	Fairbanks & Gilman	New Orleans, La	Mar. 18, 1873	1,169
Sirup	Fairbanks & Gilman	New Orleans, La	Mar. 18, 1873	1,170
Sirup	W. Moller & Sons	New York, N. Y	Mar. 14, 1871	195
Sirup	A. Thomson & Co	New Orleans, La	Aug. 27, 1872	973
Sirup and molasses	W. Moller & Sons	New York, N. Y	June 20, 1871	348
Skirt	Thomson, Langdon & Co	New York, N. Y	Nov. 14, 1871	540
Skirt and corset	Thomson, Langdon & Co	New York, N. Y	Nov. 14, 1871	543
Slate, &c	The Silicate Slate Company	New York, N. Y	Mar. 21, 1871	205
Slating, &c., Liquid	J. D. Wilder	Chicago, Ill	Oct. 31, 1871	511
Stationery and memorandum-books	The Mercantile Loan and Warehouse Company.	New York, N. Y	June 4, 1872	851
Snap-hook	New York Wire Snap Company.	New York, N. Y	Oct. 21, 1873	1,510
Snuff	Appleby & Helme	New York, N. Y	Nov. 15, 1870	61
Snuff	W. E. Garrett & Sons	Philadelphia, Pa	Oct. 25, 1870	7
Snuff	A. Ralph	Philadelphia, Pa	Apr. 9, 1872	748
Soap	J. P. Babcock & Co	Stonington, Conn	Feb. 27, 1872	667
Soap	G. Baker and I. Bullock	Lima, Pa	Oct. 17, 1871	473
Soap	R. W. Bell & Co	Buffalo, N. Y	Apr. 22, 1873	1,218
Soap	R. M. Bishop & Co	Cincinnati, Ohio	Sept. 3, 1872	977
Soap	R. M. Bishop & Co	Cincinnati, Ohio	Dec. 9, 1873	1,565
Soap	J. Buchan & Co	New York, N. Y	July 23, 1872	924
Soap	C. Davis	Cambridgeport, Mass	Feb. 27, 1872	669–670
Soap	J. O. Draper & Co	Pawtucket, R. I	July 29, 1873	1,390
Soap	W. Dreydoppel	Philadelphia, Pa	Nov. 28, 1871	555
Soap	J. Eavenson & Sons	Philadelphia, Pa	Dec. 23, 1873	1,586
Soap	J. S. & T. Elkinton	Philadelphia, Pa	Mar. 11, 1873	1,160
Soap	J. K. Hogg	Frederick, Md	Oct. 25, 1870	9
Soap	Liberman & Co	Philadelphia, Pa	Mar. 7, 1871	185
Soap	Liberman & Co	Philadelphia, Pa	Mar. 14, 1871	189
Soap	S. W. McBride & Co	Chicago, Ill	Nov. 12, 1872	1,058
Soap	J. Oakley	New York, N. Y	Feb. 6, 1872	648
Soap	J. Oakley	New York, N. Y	Apr. 16, 1872	770
Soap	J. Oakley & Co	New York and Newburgh, N. Y.	June 3, 1873	1,291
Soap	Rappleye & Knight	Philadelphia, Pa	Aug. 22, 1871	431
Soap	Sherwood & Genin	Buffalo, N. Y	July 1, 1873	1,343
Soap	J. W. Swalley	Erie, Pa	Nov. 12, 1872	1,060
Soap	W. L. Troxell	Brooklyn, N. Y	Oct. 7, 1873	1,487
Soap	A. Warfield	Philadelphia, Pa	Nov. 8, 1870	59
Soap	C. E. Willetts	Chicago, Ill	May 30, 1871	305

Index of trade-marks registered in the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Soap	J. B. Williams & Co	Glastenbury, Conn	Mar. 25, 1873	1,185–1,186
Soap and toilet-preparations	Colgate & Co	New York, N. Y	July 16, 1872	914–915
Soap, candles, oils, &c	Proctor & Gamble	Cincinnati, Ohio	July 9, 1872	887
Soap, Glycerine	Marx & Rawolle	New York, N. Y	July 4, 1871	364
Soap, Hard	O. Cutts & Co	Port au Prince, Hayti	Sept. 23, 1873	1,462
Soap, Indigo	H. C. Borgner	Lebanon, Pa	Apr. 23, 1872	776
Soap-powder	B. T. Babbitt	New York, N. Y	Nov. 18, 1873	1,528
Soap, Toilet	Deniker & Melville	New York, N. Y	Dec. 6, 1870	85
Soda-water	S. F. Simes	Philadelphia, Pa	May 21, 1872	829
Soda-water apparatus	J. W. Tufts	Medford, Mass	Feb. 27, 1872	678
Spectacles	J. Diamond	Pittsburgh, Pa	Oct. 31, 1871	507
Spectacles and eye-glass	The Spencer Manufacturing Company.	New Haven, Conn	Oct. 8, 1872	1,022–1,024
Spice	Stickney & Poor	Boston, Mass	Feb. 27, 1872	674–676
Spice for seasoning meats, &c., Compound	E. R. Durkee & Co	New York, N. Y	Nov. 18, 1873	1,530
Spice, mustard, soda, and cream of tartar	E. R. Durkee & Co	New York, N. Y	Aug. 26, 1873	1,419
Spices, groceries, and drugs	E. R. Durkee & Co	New York, N. Y	Dec. 26, 1871	603–606
Spirits	Robur Distillery Company	London, England	Dec. 31, 1872	1,097
Split-bottom chair	J. G. Strain	Delaware, Ohio	Oct. 24, 1871	504
Spool-cotton	J. and P. Coats	Paisley, Scotland	Apr. 2, 1872	724
Spool-cotton	L. Coleman & Co	Boston, Mass	Mar. 7, 1871	183
Spool-thread	Clark Thread Company	Newark, N. J	Aug. 13, 1872	949
Spoon, fork, &c	Hall, Elton & Co	Wallingford, Conn	Jan. 28, 1873	1,110
Starch	T. Kingsford & Son	Oswego, N. Y	Apr. 16, 1872	768
Starch	Proctor & Gamble	Cincinnati, Ohio	Apr. 22, 1873	1,226
Starch, Rice	W. J. Rand	New York, N. Y	May 13, 1873	1,269
Stationers' hardware	T. S. Hudson	East Cambridge, Mass	Apr. 11, 1871	219
Steam-gauge, &c	The Utica Steam-Gauge Company.	Utica, N. Y	July 22, 1873	1,382
Steam-boiler, Decrusting-compound for	J. T. Tyler	Wheeling, W. Va	Dec. 17, 1872	1,087
Steam-engine	J. Sharp	Salem, Ohio	Jan. 10, 1871	133
Steel and castings, Cast	W. Butcher & Co	Lewistown, Pa	Dec. 12, 1871	573
Steel and iron	Leng & Ogden	New York, N. Y	July 22, 1873	1,377
Steel and iron ware	Sweet, Barnes & Co	Syracuse, N. Y	July 22, 1873	1,380
Steel, Cast	Singer, Nimick & Co	Pittsburgh, Pa	Oct. 17, 1871	487
Steel spring and axle	Fort Plain Spring and Axle Works.	Fort Plain, N. Y	Dec. 31, 1872	1,095
Stocking-supporter clasp and suspenders	C. A. Shaw	Boston, Mass	June 24, 1873	1,335
Stove	P. D. Beckwith	Dowagiac, Mich	Dec. 24, 1872	1,089
Stove	Comstock, Castle & Co	Quincy, Ill	May 30, 1871	295
Stove	I. Droege & Co	Covington, Ky	Feb. 14, 1871	161
Stove	W. J. Keep	Troy, N. Y	Jan. 2, 1872	624–625
Stove	W. J. Keep	Troy, N. Y	Sept. 16, 1873	1,457
Stove	Michigan Stove Company	Detroit, Mich	Sept. 3, 1872	982
Stove	Redway & Burton	Cincinnati, Ohio	Nov. 7, 1871	520
Stove	J. Spear & Co	Philadelphia, Pa	Oct. 14, 1873	1,496
Stove	The Scranton Stove and Manufacturing Company.	Scranton, Pa	May 23, 1871	287
Stove	The Union Stove and Manufacturing Company.	Pittston, Pa	Nov. 4, 1873	1,518
Stove and stove-trimmings	Culter & Proctor	Peoria, Ill	Nov. 26, 1872	1,068
Stove-blacking	H. A. Bartlett & Co	Philadelphia, Pa	Nov. 1, 1870	18
Stove, Cooking	Bussey, McLeod & Co	Troy, N. Y	Mar. 25, 1873	1,182
Stove, Cooking	G. F. Filley	Saint Louis, Mo	June 20, 1871	328
Stove, Cooking	Perry & Co	Albany, N. Y	May 23, 1871	278
Stove, Cooking	Shinnick, Woodside & Gibbons	Zanesville, Ohio	Sept. 10, 1872	989
Stove, Cooking, &c	Bridgeford & Co	Louisville, Ky	Dec. 19, 1871	592
Stove, Cylinder	Southard, Robertson & Co	New York, N. Y	July 15, 1873	1,370
Stove, heater, and range	Hicks & Wolfe	Troy, N. Y	June 10, 1873	1,303
Stove-polish	R. E. Cherrington	South Boston, Mass	Apr. 25, 1871	227
Stove-polish	Fletcher & Dwyer	Lynn, Mass	July 22, 1873	1,375
Stove-polish	J. L. Prescott	North Berwick, Me	Dec. 20, 1870	109
Sugar	W. Moller & Sons	New York, N. Y	June 20, 1871	349
Sugar and lemons, Compound of	Preston & Merrill	Boston, Mass	Mar. 25, 1873	1,183
Sugar, sirup, and molasses	W. Moller & Sons	New York, N. Y	Feb. 7, 1871	150
Sugar, sirup, and molasses	A. Thomson & Co	New Orleans, La	Sept. 17, 1872	998
Superphosphate	Wattson & Clark	Philadelphia, Pa	Nov. 8, 1870	60
Surgeons' instruments	S. Maw, Son & Thompson	London, England	Aug. 22, 1871	430
Suspenders	Fisk, Clark & Flagg	New York, N. Y	Apr. 9, 1872	744
Suspenders and elastic webbing	J. W. Watkles	Canton, Mass	Nov. 1, 1870	50
Syringe, Vaginal	W. Molesworth	New York, N. Y	May 28, 1872	838
T.				
Tag and label	C. S. Schenck	New York, N. Y	Oct. 29, 1872	1,046
Tea	Allen, Shapleigh & Co	Boston, Mass	Nov. 14, 1871	527
Tea	Castle Bros	San Francisco, Cal	May 14, 1872	812
Tea	The Fusiyama Tea-Importing Company.	Pittsburgh, Pa	May 23, 1871	286
Tea	S. A. King	New York, N. Y	May 21, 1872	825
Tea	Kwong on Cheong	San Francisco, Cal	Aug. 1, 1871	409
Tea	C. A. Low & Co	San Francisco, Cal	May 2, 1871	240
Tea	Newton Brothers & Co	San Francisco, Cal	Sept. 23, 1873	1,470
Tea	E. Pavenstedt & Co	New York, N. Y	Mar. 26, 1872	720
Tea	Williams, Blanchard & Co	San Francisco, Cal	Mar. 28, 1871	214
Tea and coffee	The Great Eastern Tea Company.	Terre Haute, Ind	Nov. 25, 1873	1,543
Tea and coffee	The Great New York Tea Company.	Baltimore, Md	Nov. 7, 1871	524
Tea, coffee, and spice	J. G. Worth	New York, N. Y	May 28, 1872	842
Teeth, Artificial	U. K. Mayo	Boston, Mass	July 16, 1872	904
Thermometer-tube	The Buffalo Dental Manufacturing Company.	Buffalo, N. Y	Nov. 11, 1873	1,525
Thrashing-machine	J. Brayley	Buffalo, N. Y	Apr. 11, 1871	216
Thrashing-machine	J. Brayley	Buffalo, N. Y	June 6, 1871	308
Thread, Linen	J. Knox, Jr	Kilbirnie, Scotland	Oct. 17, 1871	482
Thread, Spool	Clark Thread Company	Newark, N. J	Aug. 27, 1872	969
Ticking and cotton fabric	Amoskeag Manufacturing Company.	Manchester, N. H	Mar. 26, 1872	713

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Invention.	Inventor.	Residence.	Date.	No.
Tobacco	L. L. Armistead	Lynchburgh, Va	May 2, 1871	231
Tobacco	W. A. & F. R. Brown	Dickinson, Va	Oct. 3, 1871	467
Tobacco	Goodwin & Co	New York, N. Y	Dec. 26, 1871	607
Tobacco	W. S. Kimball & Co	Rochester, N. Y	May 23, 1871	274
Tobacco	E. J. Oppelt	Baltimore, Md	Mar. 21, 1871	203
Tobacco	A. Pearl	New York, N. Y	June 20, 1871	350
Tobacco	R. R. Randolph	New York, N. Y	Dec. 20, 1870	110
Tobacco	J. & L. Whorley	Nashville, Tenn	May 7, 1872	810
Tobacco	T. C. Williams and J. Thomas, jr.	Richmond, Va	July 25, 1871	400
Tobacco	Wilson, Sorg & Co	Middletown, Ohio	July 16, 1872	910
Tobacco	Winfree & Loyd	Lynchburgh, Va	July 25, 1871	402
Tobacco and snuff	G. W. Gail & Ax	Baltimore, Md	June 17, 1873	1,320
Tobacco, Chewing	Allen & Ellis	Cincinnati, Ohio	Feb. 18, 1873	1,137–1,139
Tobacco, Chewing	Allen & Ellis	Cincinnati, Ohio	June 17, 1873	1,314–1,318
Tobacco, Chewing	Harris, Beebe & Co	Quincy, Ill	Sept. 3, 1872	979
Tobacco, Chewing	C. R Messinger	Toledo, Ohio	Dec. 5, 1871	570
Tobacco, Chewing	Walker, McGraw & Co	Detroit, Mich	May 6, 1873	1,250
Tobacco, Chewing	Wall, Belvin & Day	Saint Louis, Mo	July 29, 1873	1,388
Tobacco, Durham	W. T. Blackwell	Durham, N. C	Jan. 3, 1871	122
Tobacco, Fine-cut chewing	J. Brown & Co	Detroit, Mich	Dec. 24, 1872	1,090
Tobacco, Fine-cut chewing	A. Gillender & Co	New York, N. Y	Apr. 16, 1872	767
Tobacco, Fine-cut chewing	Walker, McGraw & Co	Detroit, Mich	Feb. 18, 1873	1,136
Tobacco, Fine-cut chewing or smoking	Robinson Tobacco Manufacturing Company.	Louisville, Ky	Mar. 18, 1873	1,173
Tobacco, Leaf	S. Hernsheim	New Orleans, La	May 23, 1871	272
Tobacco, Leaf	Weiss, Eller & Kaeppel	New York, N. Y	Sept. 23, 1873	1,471–1,472
Tobacco, Manufactured	A. W. Foote	Brooklyn, N. Y	Nov. 1, 1870	20
Tobacco, Manufactured	J. W. Stone	Lynchburgh, Va	Mar. 4, 1873	1,155
Tobacco, Plug chewing	Earickson & Harris	Saint Louis, Mo	Feb. 18, 1873	1,132
Tobacco, Plug chewing	Harris, Beebe & Co	Quincy, Ill	July 23, 1872	928–930
Tobacco, Plug chewing	Liggett & Myers	Saint Louis, Mo	May 6, 1873	1,253–1,256
Tobacco, Plug chewing	Liggett & Myers	Saint Louis, Mo	June 10, 1873	1,311
Tobacco, Plug chewing	Liggett & Myers	Saint Louis, Mo	June 24, 1873	1,331–1,332
Tobacco, Pressed chewing	Myers & Drummond	Alton, Ill	Oct. 8, 1872	1,021
Tobacco, Smoking	L. L. Armistead	Lynchburgh, Va	Nov. 7, 1871	512
Tobacco, Smoking	W. T. Blackwell	Durham, N. C	Oct. 3, 1871	454
Tobacco, Smoking	J. W. Carroll	Lynchburgh, Va	Feb. 14, 1871	156–158
Tobacco, Smoking	Loewenthal, Kaufman & Co	Chicago, Ill	July 22, 1873	1,378
Tobacco, Smoking	C. R. Messinger	Toledo, Ohio	Nov. 28, 1871	558–559
Tobacco, Smoking	C. R. Messinger	Toledo, Ohio	Oct. 29, 1872	1,041
Tobacco, Smoking	Robinson Tobacco Manufacturing Company.	Louisville, Ky	Mar. 18, 1873	1,172
Tobacco, Smoking	J. Schriber	Cleveland, Ohio	Sept. 10, 1872	988
Tobacco, Smoking	J. W. Stone	Lynchburgh, Va	Mar. 4, 1873	1,159
Tobacco, Smoking	Winfree & Loyd	Lynchburgh, Va	Mar. 5, 1872	689–690
Tobacco, Smoking and chewing	L. Bremer's Sons	Philadelphia, Pa	Mar. 18, 1873	1,166–1,167
Tobacco, Smoking and chewing	E. T. Pilkinton	Richmond, Va	May 23, 1871	279
Tobacco, Twist	R. W. Cameron & Co	New York, N. Y	May 30, 1871	291
Toilet-preparation	S. S. Fitch & Son	New York, N. Y	Apr. 2, 1872	726
Tool, Mechanical	Worcester County Free Institute of Industrial Science.	Worcester, Mass	July 16, 1872	911
Tools, implements, &c., Metal	G. W. Hallett & Co	West Meriden, Conn	Apr. 2, 1872	729
Toothache, Preparation for	R. A. Tracy	Brooklyn, N. Y	July 1, 1873	1,351
Towel, Rough bathing	The Stark Mills	Manchester, N. H	July 8, 1873	1,360
Toy	Althof, Bergmann & Co	New York, N. Y	May 7, 1872	799
Toy-wheel	S. T. Wheelwright and C. L. Locke.	Buffalo, N. Y	Nov. 4, 1873	1,521
Toys and fancy goods	Strasburger, Fritz & Pfeiffer	New York, N. Y	May 2, 1871	246
Trees, shrubs, &c., Nursery	J. A. Bayles	Lee's Summit, Mo	June 25, 1872	869
Truss	Bartlett & Butman	Boston, Mass	July 30, 1872	933
Trimming, Clothiers' and tailors'	Harris, Richmond & Shafer	New York, N. Y	June 20, 1871	329–331
Trimming for ladies' wear	Erskine & Co	New York, N. Y	Apr. 8, 1873	1,205
Twine, warp, yarn, &c	E. W. Keeler	Yardville, N. J	May 2, 1871	239
Twine, yarn, shoe-thread, &c	Cable Flax Mills	Schaghticoke, N. Y	Apr. 30, 1872	792
U.				
Umbrella	A. M. & R. Davies	New York, N. Y	Oct. 21, 1873	1,507
Umbrella	H. T. Robbins	Hyde Park, Mass	June 6, 1871	315
Umbrella, Alpaca-finished	Dawes & Fanning	New York, N. Y	Feb. 6, 1872	644
Umbrella and parasol	Dawes & Fanning	New York, N. Y	Jan. 21, 1873	1,104
Umbrella and parasol	Dawes, Fiske & Fanning	New York, N. Y	Dec. 6, 1870	84
Umbrella and parasol	Elwell, Fiske & Worth	New York, N. Y	Aug. 1, 1871	406–407
Umbrella and parasol	J. T. Smith	New York, N. Y	Dec. 6, 1870	94
Unions, lastings, and serge-de-Berries	W. & H. Foster	Denholme, England	Aug. 22, 1871	427
V.				
Vaccine	J. Milhau's Sons	New York, N. Y	May 28, 1872	837
Varnish	C. F. Hollwede	New York, N. Y	June 18, 1872	863
Varnish	L. L. Mandel	New York, N. Y	July 15, 1873	1,368
Varnish, oil, and naphtha	Forest City Varnish, Oil, and Naphtha Company.	Cleveland, Ohio	Apr. 2, 1872	727
Vegetables, fruits, pickles, sauces, and honey, Preserved, canned, or bottled.	Sleeper, Wells & Aldrich	Burlington, N. J	July 8, 1873	1,355
Velvet ribbon	G. Frères	St. Etienne, France	Nov. 26, 1872	1,069
Velvet ribbon	S. Trischet and J. Boudy	New York, N. Y	July 30, 1872	939
Vinegar and cider	Rome, Graves & Co	Chicago, Ill	May 23, 1871	283
W.				
Wagon	S. N. Brown & Co	Dayton, Ohio	Nov. 14, 1871	528
Wagon-axle	D. A. Brown & Co	Fisherville, N. H	Dec. 13, 1870	37
Watch	Courvoisier, Wilcox & Co	New York, N. Y	June 3, 1873	1,287
Watch	H. Hirsh and S. Oppenheimer	New York, N. Y	Nov. 1, 1870	36
Watch	The National Watch Company	Elgin, Ill	Nov. 11, 1873	1,526
Watch	The National Watch Company	Elgin, Ill	Dec. 2, 1873	1,547–1,562

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Invention.	Inventor.	Residence.	Date.	No.
Watch	J. E. Robert & Co	New York, N. Y	Sept. 17, 1872	997
Watch and jewelry	Aikin, Lambert & Co	New York, N. Y	Oct. 17, 1871	472
Watch and watch-materials	Bourquin Brothers	New York, N. Y	Apr. 1, 1873	1,187
Watch-case	J. C. Dueber	Cincinnati, Ohio	Sept. 9, 1873	1,444
Watch-glass	J. B. Laurencot	Hoboken, N. J	May 20, 1873	1,273
Watch-key	L. F. English	Springfield, Mass	Nov. 19, 1872	1,062
Water-gage for steam-boilers	Tomey & Sons	Perth, Scotland	July 8, 1873	1,359
Water-proof garments	H. Kuhlman	Boston, Mass	Feb. 13, 1872	654
Water-proof goods	C. Toppan and M. F. Winn	Wakefield and Woburn, Mass.	Dec. 20, 1870	111
Water-proof material	A. A. Hawley	Methuen, Mass	Feb. 27, 1872	672
Wax, Sealing	G. Waterston & Son	Edinburgh, Scotland	Oct. 8, 1872	1,027
Well point and drill, Driven	W. P. Smith	New Orleans, La	Sept. 10, 1872	990
Well working barrel or pump, Petroleum	Woodbury, Booth & Co	Rochester, N. Y	Aug. 22, 1871	435
Wheat	J. E. Weaver	Havelock, Pa	Jan. 2, 1872	623
Wheat, Crushed white	F. E. Smith & Co	Brooklyn, N. Y	June 11, 1872	858
Wheat, Pearl	J. B. Clow	Allegheny City, Pa	Feb. 25, 1873	1,143
Whisky	Adams & Taylor	Boston, Mass	Feb. 13, 1872	659
Whisky	Adams & Taylor	Boston, Mass	Mar. 5, 1872	692
Whisky	Adams, Blake & Taylor	Boston, Mass	Mar. 19, 1872	703
Whisky	A. W. Balch & Co	New York, N. Y	Dec 19, 1871	586–587
Whisky	A. W. Balch & Co	New York, N. Y	Dec. 26, 1871	601–602
Whisky	Barkhouse Bros. & Co	Louisville, Ky	Jan. 9, 1872	626
Whisky	J. L. Bernecker	Saint Louis, Mo	Mar. 28, 1871	207
Whisky	H. Block & Co	Cincinnati, Ohio	Dec. 27, 1870	112
Whisky	D. C. Brady & Co	Louisville, Ky	Mar. 19, 1872	704
Whisky	J. Bumgardner & Sons	Staunton, Va	June 10, 1873	1,300
Whisky	Cuhn, Belt & Co	Baltimore, Md	Aug. 13, 1872	947–948
Whisky	Capel & Roebuck	Cincinnati, Ohio	July 11, 1871	370–371
Whisky	J. E. Cassidy	Boston, Mass	Sept. 24, 1872	1,002
Whisky	J. E. Cassidy	Boston, Mass	Aug. 5, 1873	1,393
Whisky	F. Chevalier & Co	San Francisco, Cal	Nov. 5, 1872	1,049
Whisky	G. Clark	New York, N. Y	Oct. 22, 1872	1,034
Whisky	J. R. Conway & Son	Baltimore, Md	July 30, 1872	935
Whisky	M. R. Cook & Co	New York, N. Y	Apr. 9, 1872	741–743
Whisky	M. Crichton	Baltimore, Md	July 2, 1872	877
Whisky	M. Crichton	Baltimore, Md	July 23, 1872	925
Whisky	Derby & Day	Saint Louis, Mo	Sept. 9, 1873	1,443
Whisky	J. Dorn	Louisville, Ky	July 25, 1871	389
Whisky	B. H. Engelke	Saint Louis, Mo	Mar. 25, 1873	1,177
Whisky	Fechheimer & Workum	Detroit, Mich	Oct. 1, 1872	1,012
Whisky	Flack Brothers	Canton, Md	Feb. 18, 1873	1,140
Whisky	W. M. Fliess & Co	New York, N. Y	Sept. 9, 1873	1,448
Whisky	Frieberg & Workum	Cincinnati, Ohio	Dec. 6, 1870	89
Whisky	Frieberg & Workum	Cincinnati, Ohio	Mar. 12, 1872	696
Whisky	W. A. Gaines & Co	Frankfort, Ky	Dec. 13, 1870	101–104
Whisky	A. H. Gillett	Syracuse, N. Y	June 13, 1871	321
Whisky	Hastings & Berlin	Saint Louis, Mo	June 17, 1873	1,321
Whisky	D. V. B. Henarie	San Francisco, Cal	Mar. 28, 1871	209
Whisky	Hoffheimer Bros	Cincinnati, Ohio	Nov. 29, 1870	79
Whisky	E. Howe	New York, N. Y	Dec. 9, 1873	1,572
Whisky	Livingston & Co	San Francisco, Cal	Nov. 4, 1873	1,517
Whisky	E. Martin & Co	San Francisco, Cal	Mar. 28, 1871	210
Whisky	J. J. McClelland	Austin, Tex	Mar. 25, 1873	1,181
Whisky	Mills, Johnson & Co	Cincinnati, Ohio	Mar. 14, 1871	191–194
Whisky	Mills, Johnson & Co	Cincinnati, Ohio	Mar. 21, 1871	201
Whisky	Mills, Johnson & Co	Cincinnati, Ohio	Apr. 4, 1871	215
Whisky	Mills, Johnson & Co	Cincinnati, Ohio	May 2, 1871	241
Whisky	Mills, Johnson & Co	Cincinnati, Ohio	Oct. 3, 1871	461–463
Whisky	J. A. Monks & Sons	Saint Louis, Mo	June 27, 1871	355
Whisky	J. A. Monks & Sons	Saint Louis, Mo	Aug. 1, 1871	410–412
Whisky	J. Moore & Co	Louisville, Ky	June 13, 1871	322
Whisky	T. E. Moore	Snawhan, Ky	Feb. 13, 1872	656–657
Whisky	C. P. Moorman	Louisville, Ky	Nov. 15, 1870	63
Whisky	C. P. Moorman and M. J. Hardy	Louisville, Ky., and New York, N. Y.	Nov. 15, 1870	64
Whisky	C. P. Moorman and M. J. Hardy	Louisville, Ky., and New York, N. Y.	Dec. 6, 1870	90
Whisky	Morehead, Young & Co	Saint Louis, Mo., and Leavenworth, Kans.	Apr. 8, 1873	1,207
Whisky	J. M. O'Donnell	Staten Island, N. Y	Feb. 6, 1872	649–651
Whisky	J. T. M. Orendorf	Baltimore, Md	June 3, 1873	1,297
Whisky	D. Porter	San Francisco, Cal	Dec. 16, 1873	1,576
Whisky	B. K. Reynolds	Boyd's Station, Ky	Apr. 11, 1871	221
Whisky	C. H. Ross & Co	Baltimore, Md	June 20, 1871	339–340
Whisky	C. H. Ross & Co	Baltimore, Md	Nov. 21, 1871	550
Whisky	C. H. Ross & Co	Baltimore, Md	Feb. 6, 1872	632
Whisky	Rowland, Raphael & Co	Philadelphia, Pa	Aug. 13, 1872	954
Whisky	Seltzer & Miller	Philadelphia, Pa	May 30, 1871	301
Whisky	D. A. Stanley	New York, N. Y	Oct. 17, 1871	488
Whisky	E. H. Taylor, jr	Frankfort, Ky	Oct. 8, 1872	1,022
Whisky	H. K. Thurber & Co	New York, N. Y	Oct. 25, 1870	15
Whisky	H. K. Thurber & Co	New York, N. Y	July 9, 1872	889
Whisky	Vidvard & Sheehan	Utica, N. Y	Feb. 28, 1871	180
Whisky	Vidvard & Sheehan	Utica, N. Y	Apr. 18, 1871	226
Whisky	Walsh, Brooks & Kellogg	Cincinnati, Ohio	Oct. 17, 1871	489–492
Whisky	Walsh, Brooks & Kellogg	Cincinnati, Ohio	Mar. 12, 1872	702
Whisky	Walsh, Brooks & Kellogg	Cincinnati, Ohio, and Covington, Ky.	June 3, 1873	1,292–1,294
Whisky	E. Walters	Baltimore, Md	May 21, 1872	830
Whisky	E. Walters	Baltimore, Md	June 25, 1872	873
Whisky	H. Webster & Co	San Francisco, Cal	Jan. 17, 1871	142
Whisky	White & Alexander	Paris, Ky	Nov. 22, 1870	77
Whisky and bitters	A. K. Lewis & Co	Covington, Ky	May 23, 1871	275
Whisky, Barrel of	Derby & Day	Saint Louis, Mo	Oct. 14, 1873	1,490
Whisky, Barrel of	W. S. Stewart	Saint Louis, Mo	Sept. 16, 1873	1,459
Whisky, Bourbon	Du Viner & Co	New York, N. Y	Apr. 22, 1873	1,219
Whisky, Bourbon	Du Viner & Co	New York, N. Y	Apr. 22, 1873	1,221

Index of trade-marks registered in the United States Patent Office from 1790 to 1873, inclusive—Continued.

Invention.	Inventor.	Residence.	Date.	No.
Whisky, Bourbon	E. A. Fargo & Co	San Francisco, Cal	Dec. 9, 1873	1,568
Whisky, Bourbon	H. Livingston	Albany, N. Y	May 27, 1873	1,279
Whisky, Casks and other packages of	Howe & Hubbell	Cincinnati, Ohio	July 15, 1873	1,364
Whisky, Rye	Du Viner & Co	New York, N. Y	Apr. 22, 1873	1,220
Whisky, Rye	Du Viner & Co	New York, N. Y	Apr. 22, 1873	1,222
Whisky, Rye	P. Fegan	Washington, D. C	Nov. 12, 1872	1,057
Whisky, Rye	T. L. Hume	Washington, D. C	Aug. 26, 1873	1,427
Whisky, Rye	T. E. Moore	Shawhan, Ky	Mar. 19, 1872	711
Whisky, Rye	W. T. Pitt and C. McCann	Baltimore, Md	Oct. 15, 1872	1,031
Whisky, Rye and Bourbon	T. & J. W. Gaff & Co	Aurora, Ind	Apr. 23, 1872	781
Windmill	Atwell & Bodwell	San Francisco, Cal	Sept. 30, 1873	1,473
Window and mirror polish	H. M. Wade	Philadelphia, Pa	Oct. 14, 1873	1,500
Wine	A. W. Balch & Co	New York, N. Y	Dec. 19, 1871	590
Wine	M. Werks & Sons	Cincinnati, Ohio	Mar. 21, 1871	206
Wine and liquor	E. Simpson & Co	New York, N. Y	Jan. 2, 1872	620
Wine and liquor	A. W. Balch & Co	New York, N. Y	June 11, 1872	852
Wine and liquor	Morrow, Chamberlain & Co	New York, N. Y	June 24, 1873	1,333
Wine and liquor	O. Schloemer	New York, N. Y	Aug. 26, 1873	1,423
Wine, liquor, &c	I. Fuller	New Haven, Conn	Nov. 7, 1871	517
Wine, liquor, beer, mineral-water, &c	S. McCullagh	London, England	Aug. 19, 1873	1,416
Wine of allspice	G. D. Cordova	New York, N. Y	Sept. 10, 1872	984
Wine, Sherry	L. Myers & Co	New York, N. Y	July 4, 1871	366
Wood carpeting, wainscoting, &c	National Wood Manufacturing Company.	New York, N. Y	Nov. 7, 1871	519
Wood-carvings	Sorento Wood-Carving Company.	Boston, Mass	Jan. 23, 1872	639
Wood-working	McBeth, Bentel & Margedant	Hamilton, Ohio	July 18, 1871	381
Wool detergent and bleaching compound	Myers & Co	Philadelphia, Pa	Sept. 10, 1872	986
Woolen cloth	Middlesex Company	Lowell, Mass	Feb. 13, 1872	655
Woolen fabric	San Francisco Pioneer Woolen Factory.	San Francisco, Cal	Aug. 8, 1871	420
Woolen goods	G. F. Ellis	Terra Haute, Ind	May 13, 1873	1,264
Woolen goods	W. P. Gibbs, R. G. Ross, and I. N. and W. B. Field.	Saint Charles City, Mo	Mar. 21, 1871	199
Worsted goods	S. McLean & Co	New York, N. Y	Jan. 17, 1871	136
Woven and knitted goods	M. Landenberger & Co	Philadelphia, Pa	May 28, 1872	834-835
Woven fabric	S. J. Solms	Philadelphia, Pa	Nov. 7, 1871	522
Woven silk fabric and passementerie goods	Bernstein & Mack	New York, N. Y	Sept. 23, 1873	1,461
Y.				
Yeast	Fleischmann & Co	Cincinnati, Ohio	May 21, 1872	821
Yeast	National Yeast Company	Seneca Falls, N. Y	Jan. 3, 1871	127
Yeast	E. T. Smith	Hartford, Conn	Nov. 28, 1871	561
Yeast-powder	Preston & Merrill	Boston, Mass	Apr. 22, 1873	1,225
Yeast-powder	H. K. Thurber & Co	New York, N. Y	Oct. 25, 1870	14

ALPHABETICAL LIST OF ADDITIONAL IMPROVEMENTS.

Index of additional improvements filed in the United States Patent Office from 1790 to 1873, inclusive.

Invention.	Inventor.	Residence.	Original date.	Date of filing.	No.
A.					
Adding numbers, Arithmometer for	O. L. Castle	Upper Alton, Ill	Nov. 2, 1858	Apr. 19, 1859	229
Altitude instrument, Solar	F. Yeiser	Lexington, Ky	Feb. 8, 1859	Aug. 9, 1859	247
Altitude instrument, Solar	F. Yeiser	Indianapolis, Ind	Feb. 8, 1859	July 17, 1860	289
Animal trap, Wild	F. Reuthe	Hartford, Conn	May 12, 1857	July 6, 1858	203
Apple-grinding machine	B. Mackerley	New Petersburgh, Ohio	Nov. 4, 1856	Jan. 19, 1858	187
Axle and gudgeon box	I. Babbitt	Boston, Mass	July 17, 1839	Sept. 4, 1840	33
Axles, Machinery for manufacture of	J. Simmons	Cohoes, N. Y	Mar. 1, 1853	Mar. 22, 1859	227
B.					
Bag-holder	A. Stoner	Mount Joy, Pa	Apr. 28, 1857	Dec. 29, 1857	183
Bailing wheel, Steamboat	H. D. Forbes	New York, N. Y	May 26, 1843	June 14, 1845	76
Bales, Clasp for metallic hoops for cotton	J. R. Speer	Pittsburgh, Pa	Dec. 1, 1857	Mar. 23, 1858	195
Bales, Clasp for metallic hoops for cotton	J. R. Speer	Pittsburgh, Pa	Dec. 1, 1857	Oct. 26, 1858	207
Bed-bottom, Spring	H. T. Smith	Washington, D. C	Oct. 6, 1857	Feb. 22, 1859	220
Bed-bottom, Spring	H. Tucker	Cambridgeport, Mass	July 3, 1855	June 9, 1857	165
Bedstead	H. Pace, sr	Cincinnati, Ohio	Dec. 10, 1846	Nov. 4, 1851	99
Bedstead-fastening	O. Robinson	Rochester, N. Y	Dec. 28, 1858	Mar. 22, 1859	224
Bedstead for the sick	W. Woolley	New York, N. Y	Aug. 30, 1834	Feb. 22, 1838	3
Bee-hive	W. M. Hall	Wallingford, Conn	Dec. 27, 1839	Mar. 29, 1841	39
Blind holder, Window	H. A. Frost	Worcester, Mass	Jan. 23, 1855	May 6, 1856	143
Bolts, nuts, &c., Squaring and finishing heads of.	J. B. Bellemers	Philadelphia, Pa	Sept. 25, 1839	Sept. 10, 1840	34
Boom-derrick	J. S. Savage	Boston, Mass	Feb. 15, 1838	Sept. 13, 1839	23
Box-fitting apparatus	J. Shearer	Reading, Pa	Jan. 13, 1857	July 14, 1857	170
Brick-burning	J. M. Andrews	Norristown, Pa	Mar. 21, 1843	Apr. 4, 1846	78
Brick-machine, Rotary	G. Crangle	Philadelphia, Pa	June 3, 1856	Sept. 9, 1856	151
Brick machine, Rotary	G. Crangle	Philadelphia, Pa	June 3, 1856	Nov. 25, 1856	154
Brick-press	N. Sawyer		Apr. 8, 1835	Aug. 13, 1838	10
Butter-mold	H. L. De Zeng	Geneva, N. Y	Mar. 31, 1857	Feb. 16, 1858	190
Butter working and pressing machine	T. D. Gail	Eden, N. Y	Oct. 10, 1840	July 20, 1841	47
Burner, Gas	C. H. Johnson	Boston, Mass	June 26, 1855	Mar. 18, 1856	138
Burner, Lamp	M. B. Dyott	Philadelphia, Pa	Aug. 25, 1840	Mar. 18, 1841	37
C.					
Cake-cutting apparatus	J. H. Shrote	Baltimore, Md	Oct. 11, 1859	June 26, 1860	286
Canal-lock gate	D. Wilkinson	Cohoes, N. Y	May 14, 1836	Apr. 24, 1838	7
Candles, Separating stearine from elain	J. H. Smith	Brooklyn, N. Y	Apr. 1, 1843	Apr. 9, 1850	94
Candle-stick	A. Whiteley	Springfield, Ohio	Jan. 8, 1856	Feb. 5, 1856	133
Cap guard, Priming	F. D. Newbury	Albany, N. Y	June 12, 1855	May 1, 1860	278
Car-bearings and oil-box. (Reissued June 14, 1844.)	J. H. Tims	Newark, N. J	Oct. 31, 1839	July 1, 1844	70
Car-brake, Automatic	W. R. Jackson	Baltimore, Md	Sept. 8, 1857	Mar. 30, 1858	197
Car coupling, Railway	P. Aloerson	New Haven, Conn	Sept. 8, 1838	Oct. 25, 1838	16
Car heater and ventilator	J. Shear	Philadelphia, Pa	July 7, 1857	Mar. 22, 1859	226
Car heater and ventilator, Railway	G. F. Foote	Buffalo, N. Y	July 11, 1854	Apr. 8, 1856	139
Car, Railway	J. Harrison, jr	Philadelphia, Pa	Apr. 24, 1838	Nov. 21, 1842	59
Car roof and hurricane-deck of vessels, Railway.	A. P. Winslow	Cleveland, Ohio	Aug. 9, 1859	July 31, 1860	292
Car seat, Railway	A. M. Holmes	Morrisville, N. Y	Sept. 14, 1858	Dec. 21, 1858	214
Car spring, Railway	A. B. Davis	Philadelphia, Pa	Feb. 15, 1859	June 28, 1859	241
Car ventilating, Railway	D. H. Fox and J. Fink	Reading, Pa	May 8, 1855	May 10, 1859	235
Cars and locomotives, Lubricating the journals of railway.	W. Baker	Utica, N. Y	Aug. 11, 1857	May 3, 1859	233
Cars, Couch-seat for railway	J. Hartman	Philadelphia, Pa	Sept. 7, 1858	Feb. 26, 1861	314
Cars, Bumper coupling or connection for railway.	A. H. Rowand	Allegheny, Pa	Jan. 1, 1861	Feb. 26, 1861	315
Carriage-bodies, Hanging	J. M. Jones	Palmyra, N. Y	June 22, 1851	Mar. 30, 1858	196
Carriage-coupling	A. J. Gibson	Clinton, Mass	Sept. 12, 1854	May 27, 1856	144
Carriage-seat	N. Cowles and A. Hulbert.	Edgefield, S. C	Oct. 11, 1859	Mar. 13, 1860	271
Carriage-tops, Apparatus for raising and lowering.	A. Quigley	Sheldrake, N. Y	Apr. 22, 1856	Aug. 26, 1856	150
Chairs, sofas, &c., Construction of	C. Robinson	Cambridgeport, Mass	Mar. 9, 1858	June 14, 1859	240
Chimney-cowl	S. M. Allen	Boston, Mass	Apr. 21, 1842	July 12, 1843	65
Churn	M. L. Bander	Cleveland, Ohio	Jan. 19, 1858	Aug. 7, 1860	293
Churn	A. G. Brush	Great Bend, Pa	June 15, 1858	Jan. 10, 1860	261
Churn, Atmospheric	J. O'Neil	Xenia, Ohio	July 30, 1850	May 13, 1851	97
Clapboards, Machine for sawing and planing	E. Parker	Rock Island, Ill	Dec. 20, 1853	May 15, 1855	123
Clothes-pins, Machine for manufacturing	E. Parker	Marlow, N. H	Jan. 15, 1856	Dec. 13, 1859	259
Clover-huller	A. Overocker	McHenry, Ill	July 5, 1859	July 24, 1860	291
Coal breaking and screening machine	J. Battin	Philadelphia, Pa	Oct. 6, 1843	Jan. 20, 1844	67
Cock, Hydrant	R. K. Colvin	Columbia, Pa	July 20, 1843	Jan. 16, 1845	72
Coffee-pot	H. P. Gatchell	Ravenna, Ohio	Nov. 22, 1859	Apr. 3, 1860	276
Cop-tubes, Machine for making	N. Whitmore	Lynn, Mass	June 12, 1847	Jan. 25, 1848	86
Corn husking and shelling machine	S. S. Allen	Miamisburgh, Ohio	Jan. 1, 1840	Mar. 29, 1841	40
Corn-shelling machine	W. Wells	Boston, Mass	Jan. 4, 1859	Apr. 26, 1859	232
Cotton-gin-feeding device	J. Prescott	Memphis, Tenn	Oct. 13, 1857	Nov. 30, 1858	210
Cotton-press	J. E. Kelsey and J. A. Potter.	Poughkeepsie, N.Y., and Providence, R. I.	Sept. 25, 1840	Feb. 1, 1842	50
Cultivator-irons	J. M. Garnett	Essex, Va	Feb. 3, 1836	Oct. 13, 1838	14
Cultivator-teeth, Fastening	E. L. Freeman	Belleville, N. Y	June 21, 1853	Jan. 3, 1854	107
Curtain-fixtures	J. F. Hall	Bangor, Me	Mar. 9, 1858	Oct. 25, 1859	254
D.					
Daguerreotype-case	J. F. Mascher	Philadelphia, Pa	Mar. 8, 1853	Feb. 19, 1856	134
Dial, Sun	J. P. Gardner	Columbia, Tenn	Dec. 5, 1843	June 7, 1845	75

Index of additional improvements filed in the United States Patent Office from 1790 *to* 1873, *inclusive*—Continued.

Invention.	Inventor.	Residence.	Original date.	Date of filing.	No.
Door-lock	L. R. Livingston, J. J. Roggen, and C. Adams.	Pittsburgh, Pa	May 1, 1849	June 5, 1849	88
Drawing-rolls, Covering for	J. M. Smith	Manchester, N. H	July 7, 1857	Jan. 26, 1858	188
Dyeing yarn from the beam, Machine for. (Reissued May 28, 1840.)	W. Spencer	Lowell, Mass	Sept. 25, 1838	Apr. 17, 1841	41
E.					
Evaporating-furnace for sugar-juice	L. Lefebore	New Orleans, La	Nov. 23, 1858	Jan. 24, 1860	263
Excavating-machine	J. J. Savage	New York, N. Y	Jan. 8, 1856	Mar. 11, 1856	136
F.					
Farm-gate	C. N. Cole	Pleasant Valley, N. Y	May 13, 1856	June 9, 1857	164
Faucet	M. Woodbury	Boston, Mass	Mar. 11, 1856	May 6, 1856	142
Feed-water heater for locomotives	D. Matthew	Philadelphia, Pa	July 17, 1855	Dec. 11, 1855	130
Felt fabrics, Manufacture of ornamental	O. B Tomlinson	Athens, Pa	June 5, 1855	Feb. 5, 1856	132
Fermentation, Vinous	C. C. Edday	Cincinnati, Ohio	Mar. 4, 1842	Nov. 28, 1842	62
File, Paper and letter	J. B. McEnally	Clearfield, Pa	Feb. 28, 1860	Oct. 2, 1860	300
File-machine	I. H. Coller	Poughkeepsie, N. Y	Feb. 24, 1857	Jan. 12, 1858	185
Filter	D. N. B. Coffin, jr	Newton Centre, Mass	Sept. 2, 1856	Apr. 14, 1857	162
Fire-arm	W. Jenks	Columbia, S. C	May 25, 1838	July 9, 1839	22
Fire-arm	F. Newburg	Albany, N. Y	Mar. 20, 1855	July 31, 1855	126
Fire-arm	F. D. Newburg	Albany, N. Y	June 29, 1858	Sept. 28, 1858	204
Fire-arm, Breech-loading	F. D. Newburg	Albany, N. Y	Aug. 12, 1856	Sept. 16, 1856	152
Fire-arm, Breech-loading	F. D. Newburg	Albany, N. Y	Aug. 12, 1856	Mar. 31, 1857	161
Fire-arm, Breech-loading	F. D. Newburg	Albany, N. Y	Aug. 12, 1856	July 14, 1857	171
Fire-arm, Breech-loading	A. N. Newton	Richmond, Ind	June 27, 1854	June 17, 1856	145
Fire-arm, Breech-loading	A. N. Newton	Richmond, Ind	June 27, 1854	Dec. 23, 1856	157
Fire-arm lock	J. S. Butterfield	Philadelphia, Pa	Jan. 2, 1855	Dec. 11, 1855	129
Fire-arm, Revolver. (Reissued September 6, 1859.)	J. Ells	Pittsburgh, Pa	Aug. 1, 1854	Feb. 21, 1860	265
Fire-arm, Self loading and priming	S. Day	New York, N. Y	Aug. 31, 1837	Jan. 23, 1838	2
Fire-place and fender, Combined	J. W. Truslow	Lewisburgh, Va	July 15, 1856	Sept. 30, 1856	153
Fire-place, Open-grate	J. Tiberi	Saint Louis, Mo	Sept. 6, 1859	July 17, 1860	288
Flour-mill, Cutting	J. Burdge	Cincinnati, Ohio	June 10, 1856	Mar. 9, 1858	193
Fly-trap	W. Riley	Madison, Miss	Apr. 27, 1858	Mar. 1, 1859	223
Forge and furnace back	L. Wilder	Leominster, Mass	Mar. 17, 1838	Aug. 23, 1838	12
Forging, stamping, and cutting machine, Steam. (Reissued September 10, 1846.)	J. Nasmyth	Manchester, England	June 9, 1842	Apr. 24, 1847	82
Furnace regulator, Hot-water	T. T. Tasker	Philadelphia, Pa	Dec. 5, 1854	May 8, 1855	122
G.					
Gas-heater	W. F. Shaw	Boston, Mass	Jan. 23, 1855	July 22, 1856	149
Gas-lighting apparatus, Electrical	S. B. H. Vance	New York, N. Y	Feb. 5, 1861	Mar. 12, 1861	318
Gas-meter, Wet	G. J. Willson and D. H. Fox.	Reading, Pa	Aug. 21, 1860	Feb. 26, 1861	316
Gate	J. Johnson	Genesco, N. Y	Mar. 6, 1860	Jan. 29, 1861	312
Gates, Opening and closing apparatus for. (Reissued January 31, 1854.)	S. G. Dugdale	Richmond, Ind	Oct. 11, 1853	Mar. 7, 1854	110
Gold from quartz, rock, and earth, Machine for obtaining.	J. C. Dickey	Saratoga Springs, N. Y	May 8, 1860	June 12, 1860	282
Gold-washer	M. Nelson	New York, N. Y	Oct. 4, 1859	Nov. 8, 1859	255
Governor, Steam-engine	A. Anderson	Lancaster, Ohio	Aug. 3, 1858	Mar. 20, 1860	272
Grinding-mill. (Reissued January 29, 1856)	A. Felton	Troy, N. Y	Jan. 2, 1855	Feb. 26, 1856	135
Grinding-mill	O. Nichols	Lowell, Mass	Oct. 12, 1852	May 30, 1854	111
H.					
Hame, Horse	N. Post	Madrid, N. Y	June 15, 1844	July 14, 1846	80
Harness-saddle	J. W. Briggs	Cleveland, Ohio	May 22, 1849	Dec. 11, 1849	92
Harness-saddle tree	T. Mardock and W. C. Kellar.	Cincinnati, Ohio	Oct. 12, 1852	Aug. 1, 1854	113
Harvester	G. Esterly	Heart Prairie, Wis	Oct. 22, 1844	Nov. 25, 1856	155
Harvester	R. J. Morrison	Richmond, Va	Dec. 16, 1856	Jan. 20, 1857	158
Harvester	G. W. N. Yost	Pittsburgh, Pa	Jan. 1, 1856	Apr. 8, 1856	140
Harvester-cutter	J. Gore	Brattleborough, Vt	Feb. 16, 1858	Apr. 10, 1860	277
Hatchways, &c., Closing	W. H. Thompson and E. P. Morgan.	Biddeford, Me	June 24, 1856	Apr. 14, 1857	163
Hay, Loading	T. J. Jolly	Olean, Ind	June 26, 1860	Sept. 4, 1860	296
Heating and ventilating buildings	H. Ruttan	Cobourg, Canada	Dec. 5, 1848	Nov. 6, 1855	128
Heel for boot and shoe, Metallic	J. V. Dinsmore	Auburn, Me	Apr. 3, 1860	Jan. 15, 1861	311
Heels, Machine for cutting and finishing shoe.	W. F. Edson	Philadelphia, Pa	Sept. 6, 1859	July 24, 1860	290
Hoisting-machinery	G. Kilburn	Walpole, N. H	Aug. 25, 1838	Dec. 31, 1838	20
Hominy-mortar	J. Keezer	Chillicothe, Ohio	Mar. 2, 1858	Jan. 18, 1859	216
Horse-power	I. J. Richardson	New York, N. Y	Feb. 10, 1846	May 16, 1848	87
Horse-rake, Revolving	H. Hunt	Bridgewater, N. Y	Dec. 10, 1836	Oct. 15, 1838	15
Horseshoe-nails, Machine for making	M. Burnett	Boston, Mass	Apr. 1, 1851	Apr. 13, 1852	100
Hot-air furnace	G. S. G. Spence	Boston, Mass	Aug. 17, 1852	Dec. 8, 1852	103
Hub, carriage, &c	J. Smith	Delaware, Ohio	Feb. 19, 1856	Dec. 16, 1856	156
Hub-boring cutter, Wheel	L. S. Maring	Fall River, Mass	Oct. 4, 1853	June 16, 1857	166
Hydraulic heater	L. W. Leeds and R. M. Smith.	Philadelphia, Pa	May 16, 1854	Feb. 5, 1856	131
I.					
Ice-cream freezer	H. B. Masser	Sunbury, Pa	Dec. 12, 1848	Jan. 1, 1850	93
Inking machine, Type	F. J. Austin	New York, N. Y	Feb. 20, 1841	Oct. 12, 1842	57
Inkstand	G. Burnham	Philadelphia, Pa	Dec. 30, 1841	Nov. 28, 1842	61
Inkstand	K. Goddard	Philadelphia, Pa	Apr. 28, 1857	Nov. 3, 1857	179
Insects, Composition to prevent depredations of.	F. G. Johnson	Brooklyn, N. Y	Mar. 27, 1860	Dec. 18, 1860	309
J.					
Journals or bearings of shafting, Mechanism for oiling or lubricating the.	D. B. Jordan	Cumberland, R. I	Mar. 15, 1859	Aug. 30, 1859	250

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Invention.	Inventor.	Residence.	Original date.	Date of filing.	No.
K.					
Kneading-machine	J. L. Rolland	Paris, France	Jan. 9, 1855	July 21, 1857	172
Knob shank, Door	L. R. Livingston, J. J. Roggen, and C. Adams.	Pittsburgh, Pa	July 7, 1846	Dec. 11, 1847	84
L.					
Lamp	I. Jennings	New York, N. Y	Sept. 2, 1836	Mar. 15, 1838	4
Lamp, Camphene	E. B. Horn	Boston, Mass	Jan. 8, 1842	Dec. 17, 1842	63
Lamp, Lard	J. Neal	Middlebury, Ohio	May 4, 1842	Nov. 28, 1842	60
Lamp, Oil	G. T. Parkhurst	Baltimore, Md	Sept. 13, 1859	Oct. 2, 1860	301
Lamp or burner	A. V. H. Webb	New York, N. Y	Nov. 23, 1838	Sept. 25, 1839	24
Lamp or burner	A. V. H. Webb	New York, N. Y	Feb. 19, 1839	Sept. 25, 1839	25
Lamp, Vapor	A. Geiger	Dayton, Ohio	May 29, 1860	Aug. 14, 1860	294
Lamps to lanterns, Attaching	J. Fleming	Pittsburgh, Pa	July 6, 1858	Nov. 2, 1858	208
Lantern, Steamboat	J. M. Read	Louisville, Ky	Dec. 28, 1838	Apr. 25, 1839	21
Lathes, Polishing-apparatus for watchmakers'.	J. M. Bottum	New York, N. Y	Mar. 13, 1855	June 8, 1858	201
Leather splitting and stretching apparatus	B. Rowe	Albany, N. Y	Apr. 30, 1850	Sept. 10, 1850	96
Life-preserver berth	E. Foster	Hartford, Conn	Sept. 1, 1857	Feb. 16, 1858	191
Lime, Burning	S. Garber and H. Swartzengrover.	Norristown, Pa	Mar. 25, 1837	June 19, 1841	45
Lime-kiln	P. Griscom and C. S. Denn.	Baltimore, Md	Nov. 17, 1857	Feb. 23, 1858	192
Lock	E. Finney	Cleveland, Ohio	June 18, 1839	July 14, 1840	29
Lock	A. A. Richards	Urbana, Ohio	Feb. 15, 1859	Aug. 9, 1859	246
Locomotive-engines, Consumption of smoke in.	J. E. McConnell	Wolverton, England	June 2, 1857	Oct. 6, 1857	177
Log-brace, Self-adjusting	B. Cushwa	Clair Spring, Md	July 15, 1840	June 19, 1841	46
Loom	J. O. Leach	Ballston, N. Y	Oct. 30, 1855	July 8, 1856	147
Loom	J. O. Leach	Ballston, N. Y	Oct. 30, 1855	Mar. 3, 1857	159
Loom for cloth. (Reissued September 1, 1857.)	D. W. Snell and S. S. Bartlett.	Woonsocket, R. I	Jan. 13, 1857	Oct. 6, 1857	176
Loom for figured fabrics, Power	S. and J. Eccles	Philadelphia, Pa	Aug. 3, 1852	July 18, 1854	112
Loom-harness heddle	J. Senneff	Philadelphia, Pa	Jan. 13, 1852	July 20, 1852	102
Lubricator	R. M. Wade	Wadesville, Va	June 6, 1854	Mar. 27, 1855	119
M.					
Madder, Dye-stuffs from spent	F. Pfanner	Providence, R. I	Sept. 13, 1845	Sept. 2, 1851	98
Maps, &c., Coloring	L. Stebbins	Hartford, Conn	Mar. 12, 1840	Sept. 4, 1840	32
Maps, Coloring	L. Stebbins	Hartford, Conn	Mar. 12, 1840	June 16, 1846	79
Mash in distilleries, Cooling	F. Seitz	Easton, Pa	Jan. 20, 1852	July 13, 1852	101
Mash-machine	A. Hammer	Philadelphia, Pa	Jan. 9, 1855	Mar. 18, 1856	137
Mangle	D. Cumming, jr	Mobile, Ala	July 27, 1858	May 3, 1859	234
Measure, Tailor's	A. Stocker	Ogdensburgh, N. Y	May 28, 1850	Sept. 3, 1850	95
Measuring-instrument for cutting out garments.	D. Williams	New York, N. Y	Apr. 26, 1839	Feb. 18, 1840	31
Mill-spindles, Oiling	E. W. Welsh	Paris, Va	Jan. 28, 1840	Feb. 18, 1840	30
Millstone corn-crusher	A. Glover	Powhatan Point, Ohio	June 5, 1860	Nov. 20, 1860	303
Millstone dress	C. R. Barnes	New York, N. Y	Feb. 20, 1855	Jan. 26, 1858	189
Millstone-dressing machinery	S. W. and R. M. Draper	South Dedham, Mass	May 13, 1856	Apr. 19, 1859	230
Molding-machine	E. M. Smith	Indianapolis, Ind	Feb. 21, 1860	June 26, 1860	297
Mortising-machine	T. H. Hoskings	Springfield, Ohio	June 30, 1837	Apr. 21, 1838	6
Mowing-machine	G. Esterly	Heart Prairie, Wis	June 27, 1854	Apr. 22, 1856	141
Musical instruments, Reed	F. A. Gleason	Rome, N. Y	June 20, 1854	Nov. 14, 1854	117
N.					
Naval architecture	B. F. Wells	Georgetown, D. C	Oct. 18, 1859	Nov. 22, 1859	257
Nursing or easy chair	A. Woods	Charlestown, Va	June 28, 1836	Apr. 15, 1838	8
O.					
Oil, Mode of gelatinizing cod-liver	E. Quern	New York, N. Y	Aug. 30, 1859	Jan. 24, 1860	264
Ore-crushing-machine	S. F. Hodge	Detroit, Mich	May 26, 1857	May 17, 1859	236
P.					
Paper and other fabrics incorrodible, Rendering.	T. G. Chase	Philadelphia, Pa	Nov. 9, 1858	Dec. 11, 1860	307
Paper-hangings, Machine for trimming edges of.	J. Waugh	Elmira, N. Y	Oct. 5, 1858	Feb. 15, 1859	219
Penholder	E. W. Hanson	Philadelphia, Pa	Dec. 6, 1853	Apr. 10, 1855	120
Permutation-locks, Revolving tumbler of	H. W. Covert	Rochester, N. Y	Sept. 15, 1857	Mar. 1, 1859	222
Piano, Organ	R. Nutting, 2d	Hudson, Ohio	Feb. 8, 1848	Feb. 8, 1853	104
Piles for wharves, piers, &c., Mode of staying and bracing. (Reissued March 6, 1860.)	E. H. Angamar	New Orleans, La	July 12, 1859	Mar. 6, 1860	270
Pistons and stuffing-boxes, Packing	P. Clark	Rahway, N. J	June 2, 1857	July 28, 1857	173
Plane-stock, Cast-iron	W. Foster	Washington, D. C	Nov. 24, 1843	Mar. 16, 1844	68
Planter and seed-sower, Corn	C. Olds	Marlborough, Vt	Jan. 20, 1841	July 16, 1842	55
Planter, Corn, &c	L. and S. H. Bachelder	Hampstead, N. H	Apr. 13, 1840	Apr. 1, 1842	51
Planter, Corn	W. C. Banks	Como Depot, Miss	May 1, 1860	Sept. 4, 1860	295
Planter, Corn	A., W., and J. Campbell	Harrison, Ohio	June 28, 1859	Oct. 4, 1859	251
Planter, Corn	N. Drake	Newton, N. J	Feb. 2, 1858	Sept. 28, 1858	205
Planter, Seed	I. G. Macfarlane	Perry County, Pa	Mar. 14, 1854	Feb. 6, 1855	118
Planter, Seed	J. D. Willoughby	Chambersburgh, Pa	June 5, 1849	Nov. 20, 1849	91
Plow	W. H. Johnson	Richmond, Ark	Feb. 14, 1860	Oct. 2, 1860	299
Plow	H. H. Robertson	Kingston, Mo	July 10, 1860	Nov. 27, 1860	304
Plow	G. Watt	Richmond, Va	Feb. 9, 1858	Aug. 2, 1859	245
Plow	B. Woodcock	Mount Pleasant, Pa	June 14, 1837	Sept. 20, 1838	13
Plow and harrow, Combined	D. Swartz	Tom's Brook, Va	June 22, 1852	Feb. 28, 1854	109
Plow, Mole	M. Bales	Big Plain, Ohio	Feb. 15, 1859	Aug. 23, 1859	248
Plow, Rotary	B. C. Hoyt	Port Washington, Wis	Sept. 2, 1856	Jan. 5, 1858	184
Plow, Self-sharpening	I. Snider	Carrolltown, Pa	July 9, 1837	May 11, 1841	44
Plow, Steam	P. Klingle	Washington County, D. C	Feb. 23, 1858	Mar. 9, 1858	194
Portable chair	Z. Lyford	Lowell, Mass	May 13, 1856	Dec. 8, 1857	180
Primer, Tape	T. T. S. Laidley	United States Army	Feb. 15, 1859	Oct. 9, 1860	302

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Printing press, Hand	S. J. Smith	New York, N. Y	Nov. 3, 1857	Apr. 6, 1858	198
Propeller	H. Link	Little Falls, N. Y	May 8, 1855	Nov. 16, 1858	209
Propeller, Canal-boat	R. Cartwright	Ithaca, N. Y	July 19, 1859	Apr. 3, 1860	274
Propeller, Vessel	W. D. Jones	Poughkeepsie, N. Y	Apr. 17, 1855	Aug 21, 1855	127
Protractor	J. Lyman	Lenox, Mass	May 25, 1858	May 15, 1860	280
Pump, Oscillating	W. Race	Seneca Falls, N. Y	Nov. 24, 1857	Feb. 28, 1860	267
Pump, Rotary	L. Burnell	Milwaukee, Wis	Aug. 31, 1858	Dec. 14, 1858	211
Pump, Wind	J. W. Goodwin and M. C. Hawkins.	Edinborough, Pa	Apr. 8, 1856	July 15, 1856	148
Q.					
Quartz-crusher	J. Hamitlon	New York, N. Y	Jan. 3, 1854	May 22, 1855	124
R.					
Railway, Apparatus for watering and sweeping.	W. C. Allison	Philadelphia, Pa	Sept. 6, 1859	Nov. 15, 1859	256
Rake	H. Haynes	Middletown, Vt	June 18, 1839	Feb. 12, 1845	73
Ram, Water	B. S. Benson	Baltimore, Md	Aug. 5, 1845	Oct. 29, 1846	81
Refrigerator	W. M. Baker	Walpole, Ind	Apr. 3, 1860	July 15, 1861	310
Refrigerator	W. Sims	Dayton, Ohio	Feb. 8, 1859	Dec. 13, 1859	260
Refrigerator	W. Sims	New York, N. Y	Feb. 8, 1859	Dec. 4, 1860	305
Rice-cleaning machine	D. H. Southworth	Little Falls, N. Y	Aug. 23, 1838	Aug. 12, 1841	48
Rocking-chair and fan, Combined	C. Horst	New Orleans, La	Feb. 9, 1847	Aug. 7, 1847	83
Rotary chair, Blast-producing	L. R. Breisach	New York, N. Y	Feb. 16, 1858	June 1, 1858	199
S.					
Saccharine juices, Apparatus for evaporating	L. P. Harris	Mansfield, Ohio	Jan. 18, 1859	May 31, 1859	239
Saddle-tree	W. E. Jones	United States Army	June 13, 1854	Apr. 17, 1855	121
Sash balancing, Window	T. F. Hall	Marietta, Ohio	Dec. 21, 1858	July 26, 1859	243
Saw filing and setting machine	C. Lafferty	York Springs, Pa	Aug. 21, 1847	Jan. 25, 1848	85
Saw-mill	J. Haw	Old Church, Va	June 23, 1857	July 26, 1859	244
Saw-mill head and tail block	L. Heald	Bartlett, Ohio	June 3, 1843	Oct. 28, 1843	66
Saws, Hanging and operating reciprocating	C. Whipple	Cleveland, Ohio	Jan. 13, 1857	Feb. 1, 1859	218
Sawing-machine	A. Heth and G. Hall	Adams Centre, N. Y	Aug. 24, 1858	Jan. 11, 1859	215
Sawing-machine. (Reissued March 25, 1856)	W. P. Wood	Washington, D. C	Feb. 26, 1856	June 23, 1857	168
Scales, Counter	B. Morrison	Milton, Pa	Feb. 16, 1837	Aug. 16, 1838	11
Scales, Counter	B. Morrison	Harrisburgh, Pa	Feb. 16, 1837	Mar. 29, 1841	38
Scales for canals, railways, &c., Lever	E. Ellicott and S. A. Abbott.	Philadelphia, Pa	Feb. 6, 1849	Aug. 14, 1849	89
Screw-threading machine	H. Crum	Charlestown, N. Y	Nov. 14, 1836	Nov. 21, 1839	28
Screw-wrench	L. D. Gilman	Troy, N. Y	Mar. 27, 1855	July 17, 1855	125
Seeding-machine	F. Chamberlin	Berlin, Wis	Apr. 10, 1860	Feb. 26, 1861	313
Seeding-machine	J. Huston	Ottawa, Ill	Jan. 19, 1858	Mar. 6, 1860	269
Seeding-machine	C. C. James	Dayton, Ohio	Dec. 15, 1857	Apr. 5, 1859	228
Shingle-machine. (Reissued September 28, 1858.)	J. Crary	Middleport, Ohio	Nov. 24, 1857	Feb. 1, 1850	217
Shingle-machine	E. Webber	Gardiner, Me	July 28, 1857	June 15, 1858	203
Shutter-fastenings, Swing-bolt for	J. Gunner, jr	New York, N. Y	May 20, 1856	Sept. 28, 1858	206
Skate	T. P. Costello	Buffalo, N. Y	Dec. 6, 1859	Feb. 28, 1860	266
Skate	F. Klein	Newark, N. J	Apr. 1, 1856	Dec. 22, 1857	182
Skate	T. S. Whitman	New York, N. Y	Dec. 20, 1859	June 19, 1860	283
Skins, Unhairing, scouring, and setting	R. Shailer	Haddam, Conn	June 19, 1837	Feb. 9, 1841	35
Slates, Method of preparing and mounting	H. Beebe	New Haven, Conn	Mar. 29, 1859	July 5, 1859	242
Smut-machine	J. Benner	Liberty, Pa	Sept. 11, 1847	Feb. 14, 1854	108
Soap	D. Crawford	Toronto, Canada	Mar. 13, 1858	Dec. 14, 1858	212
Sowing and planting machine, Seed	J. Gibbons	Adrian, Mich	Aug. 5, 1840	May 4, 1841	43
Spark-arrester for locomotives, &c	J. P. Fairlamb	Philadelphia, Pa	Mar. 3, 1838	June 14, 1838	9
Spinning, Regulating the drag of the yarn in	J. Whitehead	Manchester, Va	June 18, 1842	Dec. 21, 1842	64
Spinning-speeder for cotton roping, Counter-twist.	J. Whitehead	Manchester, Va	May 29, 1841	Oct. 11, 1841	49
Spoke-machine	O. Redmond	Rochester, N. Y	Oct. 30, 1855	June 23, 1857	167
Spoke-tenoning device	J. J. Croy	Caledonia, Mo	Feb. 3, 1857	Mar. 1, 1859	221
Spoke-tenoning machine	M. Gregg	Philadelphia, Pa	Feb. 9, 1858	May 15, 1860	279
Stave-sawing machines, Mode of holding the block in.	H. H. Evarts	Chicago, Ill	May 17, 1859	Mar. 6, 1860	268
Steamboats, ships, &c., Sheet-iron	J. Kerr, W. Grant, and J. Potter.	Pittsburgh, Pa	May 7, 1842	Oct. 14, 1842	56
Steam-boiler explosion, Mode of preventing	T. S. Easton	Mobile, Ala	Feb. 12, 1842	May 17, 1842	53
Steam-boilers, Sediment-receiver for	J. Kirkpatrick	Baltimore, Md	May 29, 1835	Oct. 6, 1837	1
Steering apparatus, Vessel	D. Jones	Boston, Mass	Feb. 21, 1860	June 26, 1860	285
Stereotype-composition, Gutta-percha	L. Westbrook	New York, N. Y	July 19, 1853	July 20, 1857	174
Still-worm	J. G. Webb	Albany, N. Y	Feb. 11, 1834	Apr. 7, 1838	5
Straw-cutter	C. T. Botts	Richmond, Va	Mar. 15, 1839	Oct. 15, 1839	27
Straw-cutter	W. W. Hollman	Eddyville, Ky	Mar. 30, 1858	Nov. 29, 1859	258
Straw-cutting machine	C. T. Botts	Richmond, Va	Mar. 15, 1839	Oct. 12, 1842	58
Straw-cutting machine	L. J. Wicks	Boston, Mass	Nov. 13, 1855	Oct. 13, 1857	178
Stove	G. J. Kingsbury	Rochester, N. Y	Apr. 12, 1859	Sept. 18, 1860	297
Stove. (Reissued November 21, 1840)	D. Williams	Troy, N. Y	Feb. 3, 1836	Mar. 26, 1844	69
Stove and range, Cooking	J. Spear	Philadelphia, Pa	June 1, 1858	Mar. 22, 1859	225
Stove, Cooking	J. Cross	Morrisville, N. Y	June 7, 1838	Feb. 18, 1841	36
Stove, Cooking	W. L. Potter	Clifton Park, N. Y	Dec. 19, 1844	July 5, 1845	77
Stove, Cooking	S. B. Spaulding	Brandon, Vt	June 22, 1858	May 17, 1859	237
Stove, Cooking and heating	J. Cox and W. Auld	Philadelphia, Pa., and Baltimore, Md.	May 30, 1837	Dec. 5, 1838	18
Stove, Open and close	E. G. Currier	Warner, N. H	June 2, 1836	Nov. 8, 1838	17
Sugar-evaporator	L. P. Harris	Mansfield, Ohio	Jan. 18, 1859	Aug. 23, 1859	249
Sugar-kettles, Setting	J. Malory	New Orleans, La	Sept. 20, 1838	Dec. 11, 1838	19
T.					
Tailor's shears	H. Wendt	New York, N. Y	Mar. 23, 1842	June 2, 1845	74
Thrashing and cleaning machine	E. S. Snyder	Charlestown, Va	June 13, 1848	Aug. 23, 1853	105
Thrashing and winnowing machine	G. F. S. Zimmerman	Charlestown, Va	Feb. 8, 1853	Sept. 13, 1853	106
Thrashing-machine shoe	B. G. H. Hathaway	Rock Stream, N. Y	July 5, 1848	Nov. 6, 1849	90

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Thill-coupling	J. Sadler	Egremont, Mass	July 24, 1860	Dec. 18, 1860	308
Thill to vehicles, Attaching	D. Bly	Rochester, N. Y	Apr. 12, 1859	Oct. 11, 1859	253
Thill to vehicles, Attaching	D. Bly	Rochester, N. Y	Apr. 12, 1859	Mar. 12, 1861	317
Tiles, Apparatus for laying drain	B. B. Briggs	Sharon, Ohio	Oct. 4, 1859	June 26, 1860	284
Tire-tightening	R. B. Scott	Philadelphia, Pa	Mar. 23, 1858	June 8, 1858	200
Tobacco-press	W. R. Musser and J. Coleman.	Lynchburgh, Va	Feb. 2, 1858	Oct. 4, 1859	252
Truss	J. Hungerford	Dover, N. Y	Dec. 26, 1837	July 2, 1842	54
V.					
Valve, Steam-boiler safety	W. Duff	Baltimore, Md	July 28, 1843	Nov. 26, 1844	71
Vessel	T. Bell	Bellport, N. Y	Nov. 14, 1838	Sept. 30, 1839	26
Vessels, Bulwarks for war	W. Ballard	New York, N. Y	Nov. 1, 1853	July 1, 1856	146
W.					
Warps, Dressing and sizing	W. Bradley	Manchester, Va	May 11, 1858	Dec. 21, 1858	213
Washing-machine	C. Pendleton	Galena, Ill	July 12, 1859	May 29, 1860	281
Washing-machine	J. F. Pond	Cleveland, Ohio	Oct. 26, 1858	Mar. 27, 1860	273
Washing-machine	A. Wilkinson	Shelbyville, Ind	Sept. 20, 1859	Dec. 4, 1860	306
Watch-key and guard-bar	D. F. Elmer	Haydenville, Mass	June 26, 1860	Oct. 2, 1860	298
Water-wheel	S. Richardson	Jericho, Vt	May 17, 1859	Jan. 17, 1860	262
Wheels, Safety-washer for	W. Thornley	Philadelphia, Pa	Sept. 19, 1854	Oct. 31, 1854	116
Whiffletree, Bow	F. Monroe	Romeo, Mich	Aug. 24, 1858	May 24, 1859	238
Whiffletree-hook	M. Newman, 2d, N. C. Whitcomb, and G. C. Cole.	Lanesborough, Pa., and Hartford, Conn.	Feb. 21, 1854	Oct. 31, 1854	115
Whip-button	R. S. Brown	Philadelphia, Pa	Feb. 21, 1842	Apr. 1, 1842	52
Whips, Machine for polishing rawhide	C. Beader	New York, N. Y	May 21, 1850	Oct. 7, 1854	114
Winch, Ship's	J. Bryant	Brooklyn, N. Y	Apr. 7, 1857	Aug. 11, 1857	175
Windlass, Ship's	J. Emerson	Boston, Mass	Aug. 28, 1855	Apr. 3, 1860	275
Winnower and grain-cleaner	T. J. Doyle	Staunton, Va	Apr. 20, 1852	Dec. 15, 1857	181
Winnowing-machine	J. Keech and S. Stilwell	Waterloo, N. Y	June 13, 1854	July 7, 1857	169
Wooden surfaces, Machine for smoothing planed.	B. D. Whitney	Winchendon, Mass	Aug. 11, 1857	Jan. 12, 1858	186
Wool-packing machine	C. Carlisle	Woodstock, Vt	Oct. 6, 1857	Apr. 26, 1859	231
Worm destroyer, Canker	D. Newhall	Lynn, Mass	Oct. 31, 1840	Apr. 24, 1841	42

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